City Council Chamber
1515 6th Street, Coachella, California
(760) 398-3502 ◆ www.coachella.org

AGENDA

OF A REGULAR MEETING
OF THE
CITY OF COACHELLA
PLANNING COMMISSION

October 7, 2026
6:00 PM

In-Person Meeting Location: City Council Chamber 1515 6th Street, Coachella, CA	**If you would like to attend the meeting via Zoom, here is the link:** https://us02web.zoom.us/j/84544257915?pwd=VTdHWitpYVdOUk1NQW8vZ1pqUm0zQT09 Or One tap mobile : +16694449171,,84544257915#,,,,*380084# Or Telephone: US: +1 669 900 6833 **Webinar ID: 845 4425 7915** **Passcode: 380084** **Spanish:** El idioma español está disponible en Zoom seleccionado la opción en la parte de abajo de la pantalla

- Public comments may be received **either in person, via email, telephonically, or via Zoom** with a limit of **250 words, or three minutes:**
  - **In Real Time:**

    If participating in real time via Zoom or phone, during the Public Comment Period, use the **"raise hand"** function on your computer, or when using a phone, participants can raise their hand by pressing *9 on the keypad.
  - **In Writing:**

    Written comments may be submitted to the Planning Commission electronically via email to **planning@coachella.org.** Transmittal **must be completed by 12:00 pm** on the day of the meeting is required. All written comments received will be forwarded to the Planning Commission and entered into the record.
  - If you wish, you may leave a message at (760) 398-3102 Ext. 122 before 12:00 p.m. on the day of the meeting.
- The **live stream** of the meeting may be **viewed online** by accessing the city's website at **www.coachella.org**, and clicking on the "**Watch Council Meetings**" tab located on the home page, and then clicking on the "live" button.

CALL TO ORDER:

PLEDGE OF ALLEGIANCE:

ROLL CALL:

APPROVAL OF AGENDA:

"At this time the Commission may announce any items being pulled from the agenda or continued to another date or request the moving of an item on the agenda."

APPROVAL OF THE MINUTES:

1. Planning Commission Meeting Minutes – July 15, 2026

WRITTEN COMMUNICATIONS:

PUBLIC COMMENTS (NON-AGENDA ITEMS):

"The public may address the Commission on any item of interest to the public that is not on the agenda, but is within the subject matter jurisdiction thereof. Please limit your comments to three (3) minutes."

REPORTS AND REQUESTS:

NON-HEARING ITEMS:

PUBLIC HEARING CALENDAR (QUASI-JUDICIAL):

2. A Public Hearing to Consider Resolution No. PC2026-26, Resolution No. PC2026-27, Resolution No. PC2026-28, Resolution No. PC2026-29, Resolution No. PC2026-30, Resolution No. PC2026-31, and Resolution No. PC2026-32 of the Planning Commission of the City of Coachella for a recommendation to conditionally approve: (1) Tentative Tract Map No. 39330; (2) Zoning Ordinance Amendment No. 26-02 to allow single-family residential uses in conjunction with a resort use as a conditional use within the Regional Commercial zone; (3) Zoning Ordinance Amendment No. 26-03 to modify the Short Term Rental Ordinance; (4) Conditional Use Permit No. 396 to approve the proposed bars and cocktail lounges, liquor sales, and special event establishment uses (5) Conditional Use Permit No. 407 to approve the proposed single-family residential use in conjunction with a resort use; (6) Architectural Review No. 25-07 to approve the site plan, architecture, associated structures and improvements, (7) Development Agreement No. 25-01 to approve a Development Agreement, for the "COVA" project proposing the development of a hotel, resort, residential, and commercial public beach club located on approximately 87 acres on four contiguous parcels (APNs 780-040-001, 780-040-003, 780-060-001, and 780-060-002) south of Avenue 52, west of Van Buren Street and east of Calhoun Street, and finding that the Project is exempt from further environmental review pursuant to Public Resources Code section 21083.3 and State CEQA Guidelines section 15183Applicant: Relevant Coachella Owner, LLC

INFORMATIONAL:

ADJOURNMENT:

Complete Agenda Packets are available for public inspection at the City Clerk's Office at 53-462 Enterprise Way, Coachella, California, and on the City's website www.coachella.org.

THIS MEETING IS ACCESSIBLE TO PERSONS WITH DISABILITIES

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AGENDA

DE UNA REUNIÓN DE LA

COMISIÓN DE PLANIFICACIÓN

PLANNING COMMISSION

7 de Octubre de 2026
6:00 PM

Lugar de la reunión en persona: Cámara del Ayuntamiento 1515 6th Street, Coachella, CA	**Si desea asistir a la reunión a través de Zoom, aquí está el enlace:** **https://us02web.zoom.us/j/84544257915?pwd=VTdHWitpYVdOUk1NQW8vZ1pqUm0zQT09** **O one tap mobile: Us: +16699006833,, 84544257915#,,,,* 380084# US** **O teléfono:** **Us: +1 669 900 6833** **ID del webinar: 845 4425 7915** **Código de acceso: 380084** **Español: El idioma español está disponible en Zoom seleccionado la opción en la parte de abajo de la pantalla**

- Los comentarios públicos se pueden recibir por correo electrónico, por teléfono o por zoom con un límite de 250 palabras o tres minutos:

    - **En vivo:**
      Si participa en vivo a través de zoom o teléfono, durante el período de comentarios públicos, use la función "levantar la mano" en su computadora, o cuando use un teléfono, los participantes pueden levantar la mano presionando *9 en el teclado.

    - **Por escrito:**
      Los comentarios escritos pueden enviarse a la comisión electrónicamente por correo electrónico a **planning@coachella.org.** El envío debe completarse a más tardar a las 12:00 p.m. del día de la reunión. Todos los comentarios escritos recibidos se remitirán a la Comisión de Planificación y se incorporarán al registro. Ya incorporé esta traducción en la agenda y estoy terminando la revisión del formato.

    - Si Lo Desea, puede dejar un mensaje en el (760) 398-3102, extensión 122, antes de las 12:00 p.m. del día de la reunió.

- La transmisión en vivo de la reunión podrá verse en línea accediendo al sitio web de la Ciudad en www.coachella.org, haciendo clic en la pestaña “Watch Council Meetings” ubicada en la página principal y, posteriormente, haciendo clic en el botón “Live”.

LLAMADO AL ORDEN:

JURAMENTO A LA BANDERA:

PASE DE LISTA:

APROBACIÓN DE LA

AGENDA:

"En este momento, la Comisión puede anunciar cualquier punto que está siendo retirado de la agenda o continuado a otra fecha o solicitar el traslado de un punto de la agenda".

APROBACION DE LAS ACTAS:

1. Minutos de la Comisión de Planificación – 15 de Julio de 2026.

COMUNICACIONES ESCRITAS:

COMENTARIOS DEL PÚBLICO (PUNTOS QUE NO ESTÁN EN LA AGENDA):

"El público puede dirigirse a la Comisión sobre cualquier tema de interés para el público que no esté en la agenda, pero que esté dentro de la jurisdicción de la materia de la misma. Por favor limite sus comentarios a tres (3) minutos".

INFORMES Y SOLICITUDES:

SESIÓN DE ESTUDIO

PUNTOS QUE NO SON DE AUDIENCIA:

CALENDARIO DE AUDIENCIAS PÚBLICAS (CUASI-JUDICIAL):

2. Audiencia pública para considerar las Resoluciones Nos. PC2026-26, PC2026-27, PC2026-28, PC2026-29, PC2026-30, PC2026-31 y PC2026-32 de la Comisión de Planificación de la Ciudad de Coachella, con el fin de recomendar la aprobación condicionada de: (1) Mapa Tentativo de Subdivisión No. 39330; (2) Enmienda a la Ordenanza de Zonificación No. 26-02 para permitir usos residenciales unifamiliares en conjunto con un complejo turístico como uso condicional dentro de la zona Comercial Regional; (3) Enmienda a la Ordenanza de Zonificación No. 26-03 para modificar la Ordenanza de Alquileres a Corto Plazo; (4) Permiso de Uso Condicional No. 396 para aprobar los usos propuestos de bares y salones de cócteles, venta de bebidas alcohólicas y establecimientos para eventos especiales; (5) Permiso de Uso Condicional No. 407 para aprobar el uso residencial unifamiliar propuesto en conjunto con un complejo turístico; (6) Revisión Arquitectónica No. 25-07 para aprobar el plano del sitio, la arquitectura, las estructuras y las mejoras asociadas; y (7) Acuerdo de Desarrollo No. 25-01 para aprobar un acuerdo de desarrollo para el proyecto «COVA», que propone el desarrollo de un hotel, un complejo turístico, usos residenciales y un club de playa comercial abierto al público, ubicado en aproximadamente 87 acres en cuatro parcelas contiguas (APNs 780-040-001, 780-040-003, 780-060-001 y 780-060-002), al sur de Avenue 52, al oeste de Van Buren Street y al este de Calhoun Street, y determinar que el Proyecto está exento de revisión ambiental adicional de conformidad con la sección 21083.3 del Código de Recursos Públicos y la sección 15183 de las Directrices Estatales de la CEQA.
3. Solicitante: Relevant Coachella Owner, LLC

INFORMATIVO:

SE SUSPENDE LA SESIÓN:

Los paquetes completos de la agenda están disponibles para inspección pública en el Departamento de Servicios de Desarrollo en 53-990 Enterprise Way, Coachella, California, y en el sitio web de la ciudad www.coachella.org.

ESTA REUNIÓN ES ACCESIBLE PARA PERSONAS CON DISCAPACIDAD

City Council Chamber
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MINUTES

OF A REGULAR MEETING
OF THE
CITY OF COACHELLA
PLANNING COMMISSION

July 15, 2026
6:00 PM

In-Person Meeting Location: City Council Chamber 1515 6th Street, Coachella, CA	**If you would like to attend the meeting via Zoom, here is the link:** https://us02web.zoom.us/j/84544257915?pwd=VTdHWitpYVdOUk1NQW8vZ1pqUm0zQT09 Or One tap mobile : +16694449171,,84544257915#,,,,*380084# Or Telephone: US: +1 669 900 6833 **Webinar ID: 845 4425 7915** **Passcode: 380084** **Spanish:** El idioma español está disponible en Zoom seleccionado la opción en la parte de abajo de la pantalla

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CALL TO ORDER:

Chairperson Lara called the meeting to order at 6:00 P.M.

PLEDGE OF ALLEGIANCE:

Chairperson Lara leg the Pledge of Allegiance.

ROLL CALL:

Present: Commissioner Ordorica, Commissioner Fonseca, Vice Chairperson Torres and Chairperson Lara

Absent: Alternate Commissioner Ambriz and Commissioner Murillo

APPROVAL OF AGENDA:

"At this time the Commission may announce any items being pulled from the agenda or continued to another date or request the moving of an item on the agenda."

Motion: To approve the agenda.

Made by: Vice Chairperson Torres
Seconded by: Commissioner Fonseca
Approved: 4-0

AYES: Commissioner Ordorica, Commissioner Fonseca, Vice Chairperson Torres and Chairperson Lara
NOES: None
ABSTAIN: None
ABSENT: Commissioner Murillo

APPROVAL OF THE MINUTES:

1. Planning Commission Meeting Minutes - July 1, 2026

Motion: To approve the Planning Commission Meeting Minutes - July 1, 2026

Made by: Chairperson Lara
Seconded by: Vice Chairperson Torres
Approved: 4-0

AYES: Commissioner Ordorica, Commissioner Fonseca, Vice Chairperson Torres and Chairperson Lara
NOES: None
ABSTAIN: None
ABSENT: Commissioner Murillo

WRITTEN COMMUNICATIONS:

1. Riley Maddox
2. Caitlan Womack
3. James Rodriguez
4. America Noriega
5. Celeste Villanueva
6. Mindy Lee Ramos
7. Deanna
8. Alexus Ambriz
9. Juan Vargas
10. Consuelo Vargas
11. Andy
12. Leslie Lemus
13. Noel Medina
14. Asher Isquierdo
15. Alma Bautista
16. Brianna Diaz
17. Citlalli Haro
18. Gianna Zarco
19. Ma Eugenia Ramirez
20. Sophia Tarallo
21. Jazlin Prieto
22. Ariana Granillo
23. Odalys Rangel
24. Riley Maddox
25. Caitlin Womack
26. Sandra Andrade
27. Olivia Rodriguez
28. Jamilet Felix-Cardenas
29. Maria Torres
30. Clementina Barragan
31. Samme Chittum
32. Kate Santos-Patron
33. F-Alexei Espinoza Caro
34. Esmeralda Chicas
35. Lorraine Salas
36. Roman Lopez
37. Georgina Villanueva, Victor Villanueva and George Villanueva
38. Judith and Daniel Tamburrino
39. Juliana Taboada
40. Sandy Garcia-Cuevas
41. Barbara Boyer-Hoffman
42. JoAnne Lamas
43. Camilla Iribe
44. Consuelo Marquez
45. Emile Lee
46. Diana Castellanos

47. Katie Arias
48. Rebecca Zaragoza
49. Kaylee De Anda
50. Brenda Ortiz
51. Jazmin Ibarra
52. Alondra Beltran
53. Vicki Jaime
54. Eloisa Jaime
55. Gustavo Leon
56. Patrick Lucero
57. Vanessa Becerra
58. Edith Cabreros
59. Cynthia Cardenas
60. Kathleen Becerra
61. Renelle Palmer
62. Rubyd Olvera
63. Trevor Dakskov
64. Cecilia L
65. Carla Rocha
66. Arturo Castallanos
67. Karina Villalpando

PUBLIC COMMENTS (NON-AGENDA ITEMS):

"The public may address the Commission on any item of interest to the public that is not on the agenda, but is within the subject matter jurisdiction thereof. Please limit your comments to three (3) minutes."

1. Ash B.
2. Francisco Molina

REPORTS AND REQUESTS:

None

NON-HEARING ITEMS:

PUBLIC HEARING CALENDAR (QUASI-JUDICIAL):

2. Resolution No. PC 2026-23 Recommending that City Council Adopt an Ordinance Adding Chapter 17.92 to Title XVII of the Coachella Municipal Code to Prohibit Data Centers Uses Within the City of Coachella

Public Comments:

1. America Noriega
2. Jazmin Ibarra
3. Krystal Otworth
4. Ash B
5. Francisco Molina
6. Loretta Perez

7. Sandra Andrade
8. Violeta
9. Katie Arias
10. Rene Rivera

Motion: To approve Resolution No. PC 2026-23 Recommending that City Council Adopt an Ordinance Adding Chapter 17.92 to Title XVII of the Coachella Municipal Code to Prohibit Data Centers Uses Within the City of Coachella with the recommendation to further define the definitions of all four exemptions and have staff research how to include this in the ballot for voters to vote for the ban

Made by: Chairperson Lara
Seconded by: Vice Chairperson Torres
Approved: 4-0

AYES: Commissioner Ordorica, Commissioner Fonseca, Vice Chairperson Torres and Chairperson Lara
NOES: None
ABSTAIN: None
ABSENT: Commissioner Murillo

INFORMATIONAL:

Item #2 along with the recommendations will be going before the City Council on the 8/12/2026 Meeting.

ADJOURNMENT:

Chairperson Lara adjourns the meeting at 6:58 p.m.

_____
Adrian Moreno
Planning Commission Secretary

STAFF REPORT
10/7/2026

TO: Planning Commission Chair and Commissioners

FROM: Kendra Reif, Community Development Director

Adrian Moreno, Senior Planner

SUBJECT: A Public Hearing to Consider Resolution No. PC2026-26, Resolution No. PC2026-27, Resolution No. PC2026-28, Resolution No. PC2026-29, Resolution No. PC2026-30, Resolution No. PC2026-31, and Resolution No. PC2026-32 of the Planning Commission of the City of Coachella for a recommendation to conditionally approve: (1) Tentative Tract Map No. 39330; (2) Zoning Ordinance Amendment No. 26-02 to allow single-family residential uses in conjunction with a resort use as a conditional use within the Regional Commercial zone; (3) Zoning Ordinance Amendment No. 26-03 to modify the Short Term Rental Ordinance; (4) Conditional Use Permit No. 396 to approve the proposed bars and cocktail lounges, liquor sales, and special event establishment uses (5) Conditional Use Permit No. 407 to approve the proposed single-family residential use in conjunction with a resort use; (6) Architectural Review No. 25-07 to approve the site plan, architecture, associated structures and improvements, (7) Development Agreement No. 25-01 to approve a Development Agreement, for the "COVA" project proposing the development of a hotel, resort, residential, and commercial public beach club located on approximately 87 acres on four contiguous parcels (APNs 780-040-001, 780-040-003, 780-060-001, and 780-060-002) south of Avenue 52, west of Van Buren Street and east of Calhoun Street, and finding that the Project is exempt from further environmental review pursuant to Public Resources Code section 21083.3 and State CEQA Guidelines section 15183Applicant: Relevant Coachella Owner, LLC

PROJECT DESCRIPTION

The Applicant is proposing a hospitality focused, mixed-use development on the 87-acre site. The project will feature two primary components: a private sector and public sector. The private sector will consist of 240 condo cottages, 162 single-family residential units comprised of estate lots, zero lot line lots, bungalow condominiums, and VIP suites (collectively, the "SFR Units"). Of the 240 condo cottages approximately 120 will be owned by a single entity and operated as short term rentals by a hotel operator/hotel flag ("Hotel Condo Units"). The SFR Units and approximately 120 condo cottages other than the Hotel Condo Units will operate under fractional ownership, timeshare, second homes, and/or short-term rental models that will function together with the Hotel Condo Units as an integrated hospitality-oriented resort community organized around a central lagoon. These accommodations will be complemented by on-site resort amenities (i.e., recreation center, courts, spa/pool, beaches, bar and entertainment, library, restaurant), which will be used by guests/owners of this sector. The public sector will consist of an 11,950-square-foot beach club, 7,690-square-foot restaurant, and a 6,048-square-foot sports bar. These sub-areas are anticipated to operate with an assumed typical weekday capacity of 500 persons and an assumed weekend capacity of 1,500.

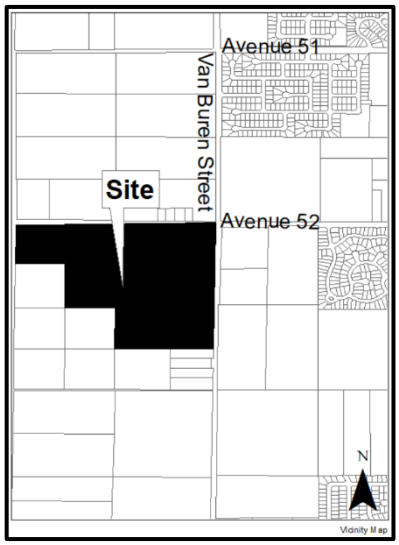


Figure 1 - Vicinity Map

Development of the project would also include landscaping, street improvements, drive aisles, and parking. Access to the project will be provided from two entry points on Avenue 52, two access points on Calhoun Street, and two access points on Van Buren Street. The project proposes 951 parking spaces and 193 cart spaces onsite.

The project proposes a mixed-use development, consisting of a total of 402 units on approximately 28 acres (14.4 du/acre), which is consistent with the General Plan residential density range of 10 – 15 dwelling units per acre. The private sector also includes complimentary resort features including water amenities, club amenities, health and wellness spaces, sports and recreational amenities, additional areas for events and restaurants, roadways, and open space on the remainder of the site.

The private sector will consist of:

- 162 single-family residential units comprised of estate lots, zero lot line lots, bungalow lots, and VIP suites
- 240 condo hotel cottages
- On-site resort amenities: recreational courts, spa/pool, lagoon and water features, bar and entertainment, library, restaurant

The public sector is situated on approximately six acres in the northwest corner of the site and will consist of a:

- 11,950-square-foot beach club
- 28,800-square-foot beach club lounging area
- 7,690-square-foot restaurant

- 6,048-square-foot sports bar
- 11,907-square-foot back-of-house area
- 103,297-square-foot parking garage

The public sector uses have a combined FAR of approximately 0.65 and will require a future City-approved CUP and Entertainment permit, which will be sought once the plans and details for these uses are further defined during project implementation.

To facilitate the intended hospitality focus, the proposed SFR Units and condo cottages not under a single ownership will operate under fractional ownership, timeshare, second homes, and/or short-term rental models. The on-site resort amenities (i.e., recreational courts, spa/pool, lagoon and water features, bar and entertainment, library, restaurant) will be used by guests/owners of the private sector. Exhibit 4 shows the illustrative site plan and Exhibits 5 through 7 illustrate the general areas of the resort, residential and beach club uses. To avoid any conflicts with the City's short-term rental ordinance (CMC Section 5.80), the Developer is seeking an amendment to that ordinance to provide that projects with an approved Development Agreement are exempt from the provisions of that ordinance limiting the number of units that can be owned by one owner and limiting the percent of units that can be permitted for short-term rentals, as well as any other provisions of the ordinance specifically modified in the approved Development Agreement.

The project proposes a 9.4-acre main lagoon ("Hotel Lagoon"), which will provide waterfront properties and beach uses shared between the single-family residential and resort uses. A 2.5-acre lake will be situated in the southern portion of the site. The lake will act as a detention basin and collect onsite runoff. No water contact sports will be permitted in the lake. The table below indicates the proposed sizes of the water amenities. A 0.4-acre lagoon is proposed in the public sector ("Beach Club Lagoon") and similar to the Hotel Lagoon, will allow swimming and recreational uses.

Table 1 – Water Amenities

	Acres
Hotel Lagoon	9.4
Lake (no contact)	2.5
Beach Club Lagoon	0.4
Total	*12.3*

As discussed above and indicated in Table 2, the project proposes a 9.4-acre lagoon and a 0.4-acre beach club lagoon. The proposed lagoons will be developed with Crystal Lagoon® technology. The Crystal Lagoon technology utilizes a patented solution consisting of the application of controlled pulses of small amounts of oxidants/microbicides, such as chlorine, into water in specific patterns and cycles to maintain water quality. The application cycles are determined by the system's algorithms according to the growth cycles of algae and bacteria, as well as ambient conditions and the weather. This avoids the need for maintaining a significant residual chemical level in the water. The application of additives is coordinated remotely by sensors and injectors/nozzles strategically located throughout the Hotel Lagoon and Beach Club Lagoon. The applied additives comply with National Sanitation Foundation (NSF) 60 Standards for drinking water treatment. NSF 60 Standards establish minimum health-effects requirements

to ensure that chemicals used in drinking water treatment do not introduce contaminants or impurities that could pose a risk to public health. The pulse-based disinfectants in the water achieve consistent quality and avoid water contamination from external agents, such as swimmers.

Development of the site would also include landscaping, street improvements, drive aisles, and parking.

STAFF RECOMMENDATION

Staff recommends that the Planning Commission open the public hearing, receive public testimony, and conditionally approve Resolution No. PC2026-26, Resolution No. PC2026-27, Resolution No. PC2026-28, Resolution No. PC2026-29, Resolution No. PC2026-30, Resolution No. PC2026-31, and Resolution No. PC2026-32 of the Planning Commission of the City of Coachella for a recommendation to conditionally approve: (1) Tentative Tract Map No. 39330; (2) Zoning Ordinance Amendment No. 26-02 to allow single-family residential uses in conjunction with a resort use as a conditional use within the Regional Commercial zone; (3) Zoning Ordinance Amendment No. 26-03 to modify the Short Term Rental Ordinance; (4) Conditional Use Permit No. 396 to approve the proposed bars and cocktail lounges, liquor sales, and special event establishment uses (5) Conditional Use Permit No. 407 to approve the proposed single-family residential use in conjunction with a resort use; (6) Architectural Review No. 25-07 to approve the site plan, architecture, associated structures and improvements, (7) Development Agreement No. 25-01 to approve a Development Agreement, for the "COVA" project proposing the development of a hotel, resort, residential, and commercial public beach club located on approximately 87 acres on four contiguous parcels (APNs 780-040-001, 780-040-003, 780-060-001, and 780-060-002) south of Avenue 52, west of Van Buren Street and east of Calhoun Street, and finding that the project is exempt from further environmental review pursuant to Public Resources Code Section 21083.3 and State CEQA Guidelines Section 15183.

FISCAL IMPACT:

The applicant submitted a market study prepared by HVS Consulting & Valuation for the proposed COVA project, transmitted November 14, 2025. The study evaluates the market potential and financial performance of the proposed lodging, whole-ownership, fractional-ownership, and membership components. It provides information relevant to potential City revenues but does not calculate the project's net fiscal impact on the city.

The study assumes phased development beginning March 1, 2030, with stabilized lodging operations in 2033/34. It projects lodging occupancy increasing from 61 percent in the first operating year to 69 percent at stabilization, with the projected average daily rate increasing from approximately $1,532 to $1,860. Applying a 13 percent transient occupancy tax (TOT) rate to the study's projected room revenues produces the following illustrative gross revenue estimates:

Table 2 – HVS Market Study

HVS operating year	Projected room revenue	Illustrative gross TOT at 13%

2030/31	$81.52 million	$10.60 million
2031/32	$122.71 million	$15.95 million
2032/33	$141.44 million	$18.39 million
2033/34 — stabilized year	$148.97 million	$19.37 million
2034/35	$153.44 million	$19.95 million

Source: HVS Market Study, Figures 7-5 and 7-23. TOT estimates are calculated for this staff report and are not projections prepared by HVS. The operating years begin March 1 and do not correspond to the City's fiscal year.

These estimates represent gross potential TOT before the proposed rebate and other adjustments. They assume all projected room revenue constitutes taxable rent and that the 13 percent rate remains applicable. Actual receipts would depend on taxable rental activity, owner occupancy, tax-exempt stays, collection performance, and other applicable adjustments. Additional taxable charges not included in the room revenue forecast are excluded.

Proposed Transient Occupancy Tax Incentive

Section 4.5 of the proposed Development Agreement provides for a rebate of 50 percent of eligible annual TOT collections exceeding the applicable City retention threshold during the first 15 years following resort opening at Phase 1 buildout. The cumulative rebate would not exceed $25 million.

The proposed annual retention thresholds are:

Table 3 – Annual Retention Thresholds

Development milestone	Total units at milestone	Annual TOT retained by City before rebate
Phase 1 buildout	167	First $1,000,000 of actual collections
Phase 2 completion	273	First $1,500,000 of actual collections
Full resort buildout	402	First $2,000,000 of actual collections

The City would retain the applicable threshold from actual annual collections, together with 50 percent of eligible collections above that threshold. Once the 15-year incentive period expires or the $25 million rebate cap is reached, the City would retain all project TOT, subject to applicable tax requirements.

Other Revenues and Financial Obligations

The HVS study projects food and beverage revenue of approximately $41.62 million in the first operating year and $63.13 million in the stabilized year. Taxable commercial transactions may generate additional sales and transactions tax revenue. City receipts would depend on the taxable portion of sales and applicable allocation rules.

Development may also generate the City's allocated share of property taxes, applicable business taxes, permit and processing fees, and development impact fees. The proposed agreement establishes a 15-year freeze on specified development impact fees, subject to annual inflation adjustments tied to the Construction Cost Index. Applicable development fees would be payable at issuance of the certificate of occupancy for the applicable unit or structure.

The developer would construct required public improvements, extend water and sewer facilities, participate in necessary electrical infrastructure, and maintain enhanced frontage landscaping. The agreement also requires construction or funding of a portion of off-site sewer main upsizing serving other planned housing developments. These obligations may offset certain public costs, subject to the final improvement specifications, financing arrangements, credits, and reimbursement provisions.

EXECUTIVE SUMMARY:

The applicant, Relevant Coachella Owner, LLC requests that the Planning Commission recommend to the City Council the conditional approval of TTM No. 39330, Conditional Use Permit No. 396, Conditional Use Permit No. 407, Architectural Review No. 25-07, Development Agreement No. 25-01, Zoning Ordinance Amendment No. 26-02, and Zoning Ordinance Amendment No. 26-03:

- **Resolution No. PC2026-26 - Tentative Tract Map (TTM) No. 39330** proposes a hospitality focused, mixed-use development on the 87-acre site. The project will feature two primary components: a private sector and public sector. The private sector will consist of 240 condo cottages, 162 single-family residential units comprised of estate lots, zero lot line lots, bungalow condominiums, and VIP suites ("SFR Units"). The public sector will consist of an 11,950-square-foot beach club, 7,690-square-foot restaurant, and a 6,048-square-foot sports bar. Development of the project would also include landscaping, street improvements, drive aisles, and parking. Access to the project will be provided from two entry points on Avenue 52, two access points on Calhoun Street, and two access points on Van Buren Street. The project proposes 951 parking spaces and 193 cart spaces onsite.

- **Resolution No. PC2026-27 – Zoning Ordinance Amendment No. 26-02** would amend Chapter 17.28 – R-C Regional Commercial Zone of the Zoning Ordinance to allow single-family residential uses in conjunction with a resort use as a conditional use within the R-C zoning district.

- **Resolution No. PC2026-28 – Zoning Ordinance Amendment No. 26-03** would amend Chapter 5.80 - Regulation of Short-Term Vacation Rentals of the Business Licenses and Regulations Ordinance. The amendment would allow projects with an approved Development Agreement to be exempt from the provisions of Chapter 5.80 - Regulation of Short-Term Vacation Rentals limiting the number of units that can be owned by one owner and limiting the percent of units that can be permitted for short-term rentals, as well as any

other provisions of the ordinance specifically modified in the approved Development Agreement.

- **Resolution No. PC2026-29 – Conditional Use Permit No. 396** to approve the proposed bars and cocktail lounges, liquor sales, and special event establishment uses for the project. The special event establishment uses would include the event spaces within the private-sector hotel and resort, including the event barn and outdoor DJ island, as well as the public-sector beach club. The single-family residential uses would include

- **Resolution No. PC2026-30 – Conditional Use Permit No. 407** to approve the residential uses for the project. The private sector component of the project will consist of 240 condo cottages, 162 single-family residential units comprised of estate lots, zero lot line lots, bungalow condominiums, and VIP suites ("SFR Units"). The public sector will consist of an 11,950-square-foot beach club, 7,690-square-foot restaurant, and a 6,048-square-foot sports bar.

- **Resolution No. PC2026-31 – Architectural Review No. 25-07** to approve the 240 condo cottages, 162 single-family residential units comprised of estate lots, zero lot line lots, bungalow condominiums, VIP suites ("SFR Units"), 11,950-square-foot beach club, 7,690-square-foot restaurant, 6,048-square-foot sports bar, site plan, and associated structures and improvements.

- **Resolution No. PC2026-32 – Development Agreement No. 25-01** to approve the Development Agreement for the project.



Figure 2 - Vicinity Map

BACKGROUND:

The project site is located in the southwest portion of the City of Coachella and currently includes agricultural fields with date palm trees and grape vines. The project site also contains an irrigation pond in the central-northern area of the site, with nearby pump housing and approximately three existing support structures. These are dilapidated and uninhabitable structures with a combined estimated building footprint of approximately 6,143 square feet, and they appear to have been used in connection with past agricultural operations.

On July 7, 2025, applicant Relevant Coachella Owner, LLC submitted an application for a Tentative Tract Map, Architectural Review, Conditional Use Permit, Environmental Assessment, and Development Agreement. The applicant subsequently submitted an application for a Zoning Ordinance Amendment Application. The "COVA" project, proposes the development of a hotel, resort, residential, and commercial public beach club located on approximately 87 acres on four contiguous parcels (APNs 780-040-001, 780-040-003, 780-060-001, and 780-060-002) south of Avenue 52, west of Van Buren Street and east of Calhoun Street.

Table 4 – General Plan, Zoning, and Surrounding Existing Uses

Location	General Plan	Zoning	Surrounding Existing Uses

Site:	Regional Retail District	(R-C) Regional Commercial	Agriculture
North:	Regional Retail District	(R-C) Regional Commercial	Single-Family Residences (Navarra Community)
South:	Riverside County	Riverside County	Residential, Agriculture
East:	Regional Retail District, General Neighborhood	(R-C) Regional Commercial, (G-N) General Neighborhood	Residential, Agriculture (Leja Dates)
West:	Riverside County	Riverside County	Ranch

DISCUSSION/ANALYSIS

ARCHITECTURE:

The project will feature two primary components: a private sector and public sector. The private sector will consist of 240 condo cottages, 162 single-family residential units comprised of estate lots, zero lot line lots, bungalow condominiums, and VIP suites ("SFR Units"). The public sector will consist of an 11,950-square-foot beach club, 7,690-square-foot restaurant, and a 6,048-square-foot sports bar. The private-sector architectural design reflects a contemporary modern style characterized by an earth-tone color palette, wood siding, dark metal-framed windows, and metal roofing. The public-sector architectural design reflects a contemporary modern style that is consistent with the overall architectural character of the public-sector buildings. The public beach club incorporates a distinctive agave flower-inspired design, providing a unique architectural feature that contributes to the overall visual identity of the development.

Private Sector - Hotel/Residential



Hotel Cottages



Hotel Village



Bungalow



Single Family Residence + ADU



Grand Estate Villa

Public Sector - Beach Club



Beach Club VIP Villas



Public Beach Club

LANDSCAPE COMMON AREA AND FENCE:

The project common area includes a separated sidewalk design that includes a 4-foot curb adjacent landscape buffer, 6-foot sidewalk, equestrian fence, 10-foot d.g. equestrian trail, and additional landscaping that provides a total 30-foot landscape and sidewalk common area along the entire project frontage along Calhoun Street, Avenue 52, and Van Buren Street. The Calhoun and Van

Buren Street common areas are characterized by two rows of palm trees, while Avenue 52 features a combination of palm trees and shade trees. The project includes decorative landscape lighting throughout the common areas, including tree uplighting, palm-ring lighting, and entry sign illumination. The Van Buren Street median includes tree uplighting and light poles. The common areas feature a desert native inspired landscape design incorporating drought-tolerant plant species, along with decorative gravel and boulders of varying sizes. The proposed project will provide a stucco face block wall design for fencing visible from perimeter streets with a decorative cap.

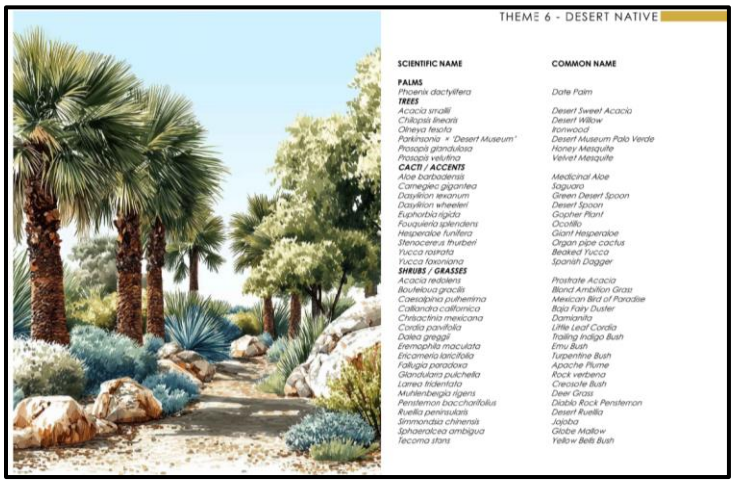


Figure 3 - Desert Native Theme - Calhoun, Avenue 52, and Van Buren Streets

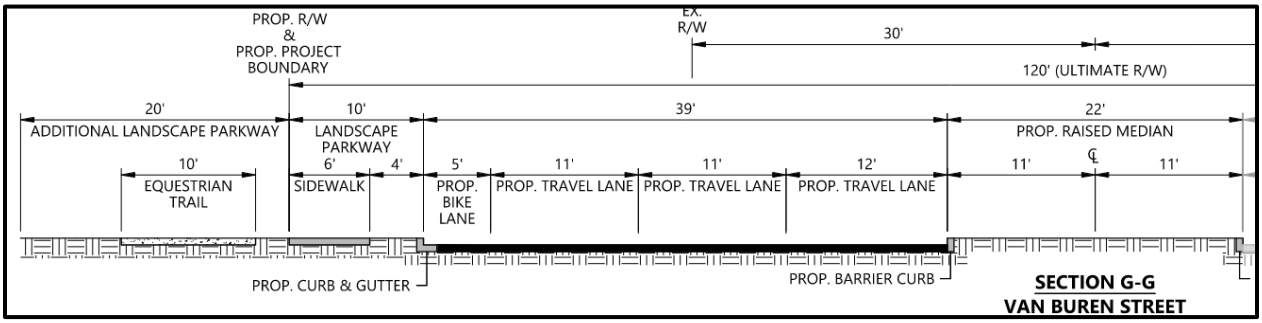


Figure 4 - Avenue 52 Common Area

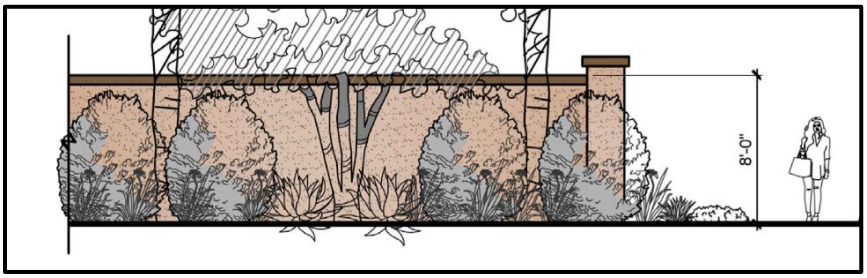


Figure 5 - Perimeter Wall Elevation

CIRCULATION:

The project will feature two primary components: a private sector and public sector. The primary entrance to the private sector is located on Avenue 52, and a secondary site entrance is located on Van Buren Street. There is a separate entrance on Van Buren Street for back of house. The public Center includes a primary entrance on Calhoun Street, and separate vehicular access points on Calhoun Street and Avenue 52.

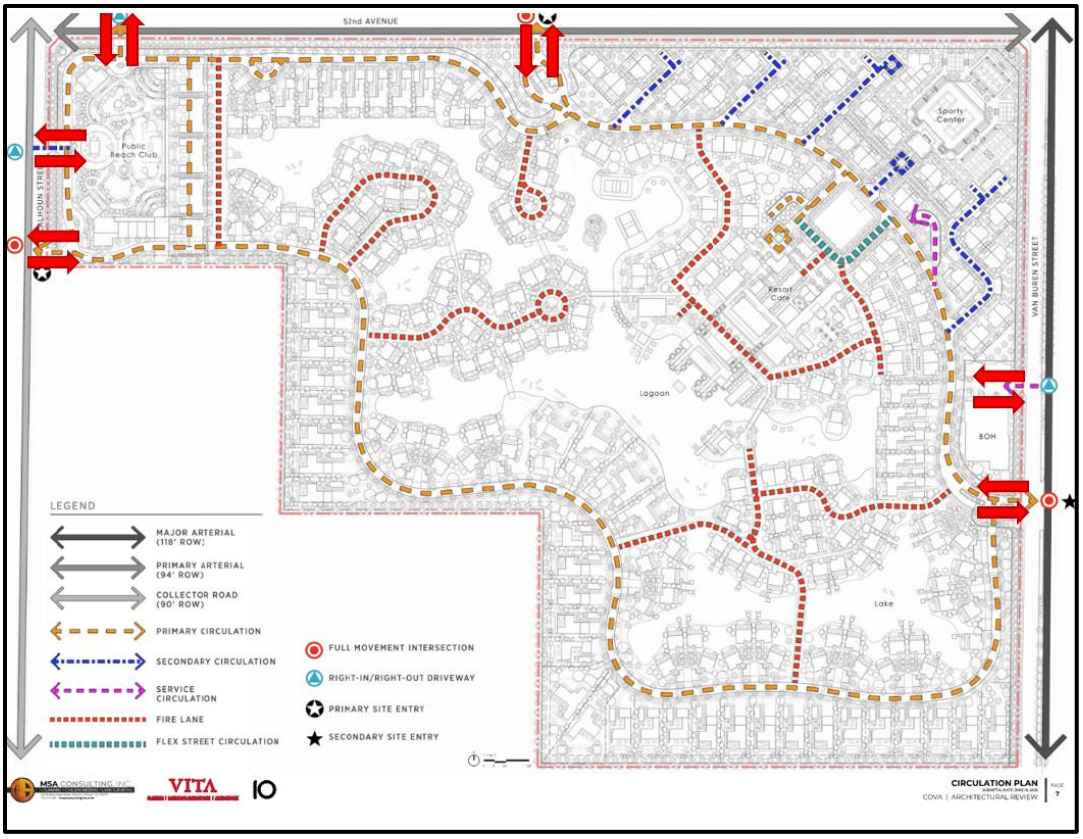


Figure 6 - COVA Circulation

PARKING:

The project provides a total of 951 parking spaces, including 202 spaces for residential uses, 428 spaces for the hotel, and 321 spaces for the beach club. Residential parking will be provided through a combination of enclosed garage spaces and off-street parking spaces. Hotel parking will be provided through a combination of surface parking, employee parking, and a 2-level underground parking structure. Beach Club parking will be provided through a two story above ground parking structure. Staff creating a parking analysis that found that there was a total of 183 missing parking spaces for the public sector, and 48 missing spaces for the private sector. As required by the conditions of approval of this project, prior to issuance of a Certificate of Occupancy for the Beach Club commercial area the applicant shall execute a signed and notarized off-site parking agreement, complete required off-site parking improvements, or implement other equivalent measures, to the satisfaction of the Community Development Director and City Engineer. As allowed by the conditions of approval of the project, The applicant may request approval of a reduced number of parking spaces by submitting a parking

analysis or other documentation to the satisfaction of city staff that demonstrates that fewer parking spaces will adequately serve the proposed use and operational characteristics of the project.

As required by the conditions of approval for this project, the city may require additional parking measures during the duration of this active use, if it is determined by the Community Development Director or City Engineer that the Beach Club Commercial or resort area traffic impacts are significant and not sufficiently mitigated with existing parking measures for the site. Additional parking measures may include the requirement of additional off-site parking, or the implementation of other equivalent measures as determined by the Community Development Director and the City Engineer. These parking measures required by staff determination shall be implemented by the property owner.

ALCOHOL USE:

As a condition of approval of this project, the project shall comply with all applicable provisions of the City of Coachella Alcohol Ordinance and the requirements of the California Department of Alcoholic Beverage Control (ABC). The applicant shall demonstrate compliance with all applicable alcohol-related zoning requirements to the satisfaction of the Community Development Director. The applicant, property owner, or operator shall submit an application for a modification to the Conditional Use Permit or, as applicable, a separate Conditional Use Permit to establish or clarify alcohol-related uses proposed by specific vendors or operators.

DEVELOPMENT AGREEMENT:

Development Agreement No. 25-01 would establish the terms governing development and operation of the COVA project, including vested development rights, infrastructure obligations, development fees, fiscal incentives, and community benefits. The proposed agreement has a 50-year term, with a 20-year period for project buildout.

The developer would be responsible for required public improvements, including streets, sidewalks, drainage, water and sewer facilities, and necessary electrical infrastructure, subject to the agreement's financing, credit, and reimbursement provisions. Improvements necessary to serve each phase would generally be completed before issuance of the first certificate of occupancy within that phase. The agreement also requires maintenance of enhanced frontage landscaping and construction or funding of a portion of off-site sewer main upsizing serving other planned housing developments.

The agreement proposes a 15-year transient occupancy tax incentive consisting of a rebate of 50 percent of eligible TOT collections above specified annual City retention thresholds, subject to a cumulative rebate cap of $25 million. The City would retain the first $1 million of actual annual collections at Phase 1 buildout, $1.5 million upon Phase 2 completion, and $2 million at full buildout. These thresholds are not guaranteed payments, and the developer would not be required to cover a collection shortfall.

The agreement also proposes a 15-year freeze on specified development impact fees, subject to annual inflation adjustments, payment of applicable development fees at certificate of occupancy, and credits for qualifying public improvements. It establishes proposed treatment of the private resort's short-term rental operations, subject to the related ordinance amendment and final agreement requirements.

Annual compliance review would provide a mechanism for monitoring the developer's performance. The final agreement, exhibits, and related approvals must establish consistent infrastructure, operational, mitigation, and continuing maintenance requirements. The agreement's fiscal implications are discussed in the Fiscal Impact section below.

CONSISTENCY WITH GENERAL PLAN:

The Project site is within the Regional Retail land use designation of the City's General Plan 2035 Update (General Plan). This designation provides opportunities for a wide range of shopping and entertainment in a variety of urban and suburban formats. These include regional shopping centers, mixed destination centers or similar uses. The uses allowed in this designation will cater to regional clientele and provide a unique amenity to all residents of the Coachella Valley and an important revenue source for the City. The primary purpose of the District is to provide for commercial opportunities, with residential uses supporting the retail environment. Like the other Centers and Districts of Coachella, the Regional Retail District is organized into blocks by a combination of public and private streets that provide addresses for the businesses and organize access and parking for them. The blocks of this District may be the largest in Coachella, with buildings, landscape and signage similarly scaled up in size, but not neglecting the importance of creating a comfortable and attractive pedestrian environment for shoppers.

Allowed land uses retail, lodging, entertainment and residential uses. The allowed development intensity is 10-15 DU/AC and a FAR of .35 and 2.0. The general plan also includes standards for network and connectivity, street design, parks and open space and urban form guidelines. The project proposes a mixed-use development, consisting of a total of 402 units on approximately 28 acres (14.4 du/ac), which is consistent with the General Plan residential density range of 10 to 15 dwelling units per acre. The public sector uses have a combined FAR of approximately 0.65, which is consistent with the Regional Retail standard of 0.35 to 2.0. The project meets the intent and purpose, intended physical character, allowed land uses, and development intensity allowed in the Regional Retail District general plan designation. The project is compatible with the design standards for network connectivity, street design, parks and open space, and urban form guidelines of the Regional Retail District general plan designation.

The project is within Subarea 3 – Van Buren Corridor. The Van Buren Corridor extends from approximately 50th to 53rd Avenues along Van Buren. Existing uses along the corridor include single-family, retail, schools and vacant land. The Van Buren Corridor is at a key location between Indio, Coachella, and La Quinta and much of the land through the corridor is still available for quality development, providing Coachella with a great opportunity to create a strong neighborhood center and regional shopping district. The Van Buren Corridor will transform into a major sub-regional retail destination that will provide a wide variety of goods and services for Coachella residents, as well as neighboring communities. The large format, regional-serving retail will be

built in a fashion so it coexists with existing and future neighborhood development in and around the Van Buren Corridor. The new commercial development will promote walkability with a mix of appropriately scaled buildings fronting the streets and large, blockscale buildings throughout. While walkable, the retail area will also provide ample parking for visitors. The commercial development will be connected to the surrounding new and existing residential areas, allowing a high degree of access and balancing the impact of traffic on the community. The project proposes a hotel, resort, residential, and commercial public beach club that is consistent with the uses and policy direction envisioned in Subarea 3 – Van Buren Corridor.

The project is consistent with the following General Plan policies.

Table 5 – General Plan Land Use and Community Character Policies

Goal	Policy	Project Consistency Analysis
Goal 2. Growth and Development. The successful transformation of Coachella from a small town into a medium-sized, full-service City that is a major economic center for the Coachella Valley.	**2.5 - High quality construction and architecture**. Require high-quality and long-lasting building materials on all new development projects in the City. Encourage innovative and quality architecture in the City with all new public and private projects.	The proposed contemporary architecture incorporates an earth-tone palette, wood siding, dark metal-framed windows, and metal roofing.
	2.6 - Architectural diversity. A diversity of architectural styles is encouraged, particularly those that have their roots in the heritage of Southern California and the Desert Southwest.	The project contributes architectural diversity through contemporary resort buildings and an agave-inspired beach club that draws on the plant forms associated with the Desert Southwest. The resort landscaping will also reintegrate existing date palms from the property, maintaining a connection to the site's agricultural history and the Coachella Valley's landscape character. Together, these features establish a distinctive resort identity connected to its regional setting.
Goal 3. Healthy Community Design. Development patterns and urban design comprised of complete, walkable, attractive,	**3.7 - Culture and entertainment hub**. Create opportunities for leisure/cultural activities in Coachella such as a movie theater, music and dancing venue, museum/gallery, cafe, or bowling alley, among many other	The proposed dining, music, entertainment, and recreational facilities contribute to the policy's leisure and entertainment objectives.

family-friendly neighborhoods, districts and corridors that support healthy and active lifestyles.	facilities to ensure teens and young adults have safe ways to enrich their social lives.	
Goal 7. Districts. A series of unique, destination-oriented districts throughout Coachella that provide space for large-format retail, industrial and resort uses in order to increase access to jobs, provide amenities for residents and improve the fiscal stability of the City.	**7.8 - Regional retail districts**. Establish major regional serving commercial centers that provide a mix of uses in a pedestrian oriented format and become vibrant destinations for people to live, work, shop and congregate. Allow a wide variety of uses to locate in Regional Retail Districts including destination retail centers, mixed use town centers, theme parks, sports venues, entertainment complexes and hotels, among other uses.	The project creates a regional destination combining lodging, dining, entertainment, recreation, and supporting residential uses. The publicly accessible beach club and commercial facilities provide gathering opportunities, while frontage sidewalks and required pedestrian connections support the pedestrian-oriented mix of uses.
	7.10 Resorts. Actively pursue the establishment of multiple resort complexes in Coachella. Locate resorts in areas of the City where city-wide connectivity will not be negatively affected by the design of the project. Such locations include adjacent to hillsides, on the edge of the Sphere of Influence and city limit where additional annexation is not expected to occur and adjacent to rivers and canals.	The project advances the objective of attracting resort development. The proposed project will be making infrastructure improvements that are consistent with what is required per the Mobility Element of the General Plan.
Goal 9. Corridors and Connectivity. A network of transportation and open space corridors throughout the City that provides a high level of connectivity for vehicles, cyclists and pedestrians.	**9.4 - Transportation corridors**. Plan and reserve transportation corridors in coordination with land use. - **Van Buren Corridor**. Facilitate the development of the Van Buren Corridor into a beautiful, shaded, pedestrian-friendly avenue that provides regional retail commercial and serves to repair the edges of existing neighborhoods of the surrounding area. - **Avenues 50 and 52.** Establish Avenues 50 and 52 as	Separated sidewalks, bicycle lanes, and landscaped frontage improvements support corridor enhancement. Shade, crossings, and connections to destinations are documented in the proposed landscape and circulation plans.

	important cross-town corridors that connect Coachella, serve as transitions between neighborhoods, provide opportunities for local-serving retail and balance the needs of multiple transport modes.	
Goal 11. Economic Development. A broad-based and long-term economic development environment for Coachella that is supportive of existing businesses and will attract new business and tourism.	**11.2 Regional presence**. Encourage economic development strategies that will cause Coachella to become a major city in the Coachella Valley and a driving force behind the area's economy.	The proposed lodging, resort, commercial, and entertainment facilities would broaden the City's regional visitor offerings.
	11.5 Jobs-housing balance. Strive to improve the jobs-housing balance in the City by actively pursuing employment uses to the City.	Resort operations, restaurants, commercial facilities, and maintenance activities would create additional employment opportunities.
	11.7 Job training. Expand job training opportunities for Coachella residents.	The Development Agreement will require the project to establish internships with the local high school and colleges and universities in the area. These partnerships will provide students with practical work experience and exposure to career opportunities associated with resort operations, supporting expanded employment training opportunities for Coachella residents.
	11.15 Creative Economy. Prioritize strategies that will create an economy full of diverse talents, trades and goods for the City. For long lasting economic success, a range of services, arts, music, entertainment and retail should be supported on all scales of the City's economy.	The project supports a diverse creative economy through proposed farmers markets and vending opportunities for local artists within the publicly accessible amenity areas. These activities provide opportunities for local vendors to showcase their products and artwork while complementing the project's dining, entertainment, and recreational uses.

Goal 12. Diversity of uses for economic development. Non-residential uses that creates a complete city and diversifies the local economy.	**12.7 Hospitality.** Expand the number and variety of hospitality options with Coachella as a means of providing jobs for residents and expanding the local tax base.	The project expands Coachella's hospitality offerings through integrated hotel and resort accommodations, dining, and recreational amenities, creating employment opportunities and additional tax revenue.
	12.9 Retail base. Encourage economic development of all scales of retail development within Coachella in order to create a stronger tax base and increase the City's tax revenue.	Taxable food, beverage, and other commercial sales may expand the City's revenue base. The proposed project will also host special event farmers markets and vending opportunities for local artists within the publicly accessible amenity areas.
Goal 13. Fiscal Stability. A City with thorough economic development strategies and reasoned decisions based on sound fiscal policies.	**13.4 Diverse tax base**. Provide a fiscally sound City with a sustainable tax base and user fees including property tax, sales tax, transient occupancy tax, utilities user tax and user fees that pay for cost of services.	Taxable lodging and commercial activity provide opportunities to diversify City revenues.
General Plan – Mobility Element		
Goals 3. Pedestrian Network. A safe pedestrian network that provides direct connections between residences, employment, shopping and civic uses.	**3.1 Pedestrian network**. Improve health outcomes by creating a safe and convenient circulation system for pedestrians that focuses on crosswalks, improves the connections between neighborhoods and commercial areas, provides places to sit or gather, pedestrian-scaled street lighting, buffers from moving vehicle traffic, and includes amenities that attract people of all ages and abilities.	The proposed separated frontage sidewalks and landscaped buffers support safe and convenient pedestrian circulation. Required pedestrian routes, driveway crossings, lighting, and connections to publicly accessible amenities are incorporated into the proposed plans and conditions of approval. The proposed project will also be conditioned to complete a decomposed granite equestrian trail on the property frontages to help ensure safe pedestrian access.
	3.4 Pedestrian connections for development. Require that all development or redevelopment projects provide pedestrian connections to the external pedestrian network.	The project shall provide direct pedestrian connections from the external sidewalk network to publicly accessible commercial and recreational facilities. The proposed project will also be

		conditioned to complete separated sidewalks and a decomposed granite equestrian trail on the property frontages to help ensure safe pedestrian access.
General Plan – Community Health + Wellness Element		
Goal 4. Public Safety and Social Support. Close-knit and safe communities.	**4.2 Community programs**. Work with community partners to create programs that provide opportunities for volunteerism and multi-generational interaction.	Proposed farmers markets and vending opportunities for local artists within the publicly accessible amenity areas will provide settings for community gathering and interaction among different generations.
Goal 4. Public Safety and Social Support. Close-knit and safe communities. **Goal 7. Jobs, Prosperity and Economic Development**. Improved economic prosperity and vibrancy of households and businesses.	**4.6 Collaboration for youth**. Explore opportunities to collaborate with Coachella Valley Unified School District along with faith-based and non-profit organizations to better serve youth.	The Development Agreement will require an internship partnership with Coachella Valley Unified School District, providing local high-school students with practical work experience and exposure to hospitality careers.
	7.2 Targeted employment training. Work with local schools, colleges, trade schools and non-profit scholarship organizations to ensure a trained and qualified workforce is available to meet the needs of projected growing industries that provide living wages for persons most in need.	The required internship partnerships will connect local educational institutions with the project's employment opportunities and provide practical experience relevant to the hospitality industry.

CONSISTENCY WITH ZONING:

The Project site is within the Regional Commercial (R-C) zoning designation of the city's Official Zoning Map. The Project is subject to the Zoning Ordinance of the City of Coachella which includes Chapter 17.28 R-C Regional Commercial Zone and Chapter 17.19 Supplemental Standards for Single-Family Residential of the Coachella Municipal Code (CMC). The project proposes a hotel, resort, residential, and commercial public beach club is consistent with the permitted uses of the R-C zone, including Hotel, Resort, Restaurant, and Private Swimming Pool uses. The project requires approval of a Conditional Use Permit (CUP) to allow bars and cocktail lounges, liquor sales, and a special event establishment. The project requires approval of a CUP to allow single-family residential uses on the project site. The project includes a Zoning Ordinance Amendment to establish single-family residential uses as a conditionally permitted use in the R-C zone. The project proposes a mixed-use development, consisting of a total of 402 units on approximately 28 acres (14.4 du/ac), which is consistent with the R-C zoning residential density

range of 10 to 15 dwelling units per acre. The project is complaint with Chapter 17.28 R-C Regional Commercial Zone and Chapter 17.19 Supplemental Standards for Single Family Residential of the CMC, except for certain development standards that comply with the standards allowed pursuant to the project Development Agreement in accordance with Chapter 17.100 – Development Agreements of the CMC.

Table 1 – (R-C) Property Development Standards Compliance

Zoning Ordinance	Complies with Code?
Residential Density. 10-15 du/ac	**Yes**. 14.4 du/ac
Design Standards. All new single-family residential development shall be designed pursuant to the design standards included in Chapter 17.19 (Supplemental Standards for Single-Family Residential).	**Yes.** The private-sector architectural design reflects a contemporary modern style characterized by an earth-tone color palette, wood siding, dark metal-framed windows, and metal roofing. The single-family residential architecture incorporates varied façade designs with building modulation and architectural articulation, contributing to a cohesive, high-quality contemporary modern aesthetic.
Lot Requirements. 1.Minimum Lot Size. (20,000) square feet for commercial uses. 2.Minimum Lot Width. None. 3.Minimum Lot Depth. None. 4.Maximum Lot Coverage. None.	**Yes.** The public club and associated parking are located at the southwest corner of Avenue 52 and Calhoun Street and consist of Lots 58 and 59 of the Tentative Tract Map. Lot 59 is approximately 4.2 acres, and Lot 58 is approximately 1.8 acres. As a result, the minimum lot size of the commercial public beach club is in compliance with the minimum lot size requirements of the Regional Commercial property development standards.
Yard Requirements Front Yard. 15 feet, except where one or both adjoining zones are residential, in which case the required yard shall be increased to equal the average of the required front yards of the adjoining zones Side Yard. There shall be no side yard requirement except where a R-C (Regional Commercial) zone adjoins a street or a	**Yes.** The project does not immediately abut any residentially zoned properties within the City of Coachella's jurisdiction. The western property frontage abuts Calhoun Street, the northern property frontage abuts Avenue 52, and the eastern property frontage abuts Van Buren Street. To the east of the project is the General Neighborhood property; however, Van Buren Street, a major arterial roadway

residential zone, in which case there shall be a side yard of not less than ten (10) feet on the side or sides adjoining said street or residential zones Rear Yard. There shall be no rear yard requirement except where the R-C (Regional Commercial) zone adjoins a residential zone, in which case there shall be a rear yard of not less than ten (10) feet adjoining that residential zone. Permitted Encroachments in Required Yards. All landscape areas shall be maintained consistent with approved landscape plans. Landscape modifications shall be approved by the planning director and referred to the planning commission for review at the director's discretion	with associated bicycle facilities, provides a separation and sufficient buffer between the project and the adjacent use. The project provides a minimum 30-foot landscape common area along all project frontage abutting perimeter streets. The southern property line abuts existing residential uses located within Riverside County and outside the City of Coachella's jurisdiction. However, the project provides a minimum 20-foot-wide landscaped setback along the southern property line, which provides additional separation and a sufficient buffer between the project and the adjacent residential uses. There are no applicable encroachments on the subject property. The landscape areas are required to be maintained in accordance with the approved landscape plans. Failure to maintain the landscaping as required by the approved landscape plans may result in code enforcement action to ensure compliance.
<u>Height Limits</u> The maximum height of all other buildings shall be two stories or thirty-five (35) feet, whichever is less, except that hotels shall have a maximum height of eighty-five (85) feet.	**Yes.** The project meets height standards allowed per the Development Agreement.
<u>Landscape Setback.</u> The minimum perimeter landscape setback for residential or hotel projects without frontage of buildings along perimeter street shall equal at minimum ten (10) feet at any point and have an average perimeter landscape setback of twenty (20) feet for the entire frontage. Equestrian and agricultural themed improvements including equestrian rail fencing, agrarian lighting, agrarian signage, 10-foot-wide decomposed granite multi-purpose trail and date palms planted twenty (20) feet on center shall be installed along Avenue 52, Van Buren Street, and Calhoun Street.	**Yes.** The project provides a minimum 30-foot landscape common area frontage along all perimeter streets. The landscape common area includes 6-foot separated sidewalk, 10-foot decomposed granite equestrian trail, landscape lighting, equally spaced palm trees along all perimeter streets which includes Avenue 52, Van Buren Street, and Calhoun Street.

Energy Efficient Design and Heat Island Reduction Strategies.	**Yes.** The project conditions of approval require the applicant to submit an energy efficient design and heat island reduction plan. At the direction of the Community Development Director, may require substitutions in trees, paving, or other items to address the energy efficient design and heat reduction plan strategies, and as described in this condition of approval.
Distance Between Buildings. No requirements, except that buildings not actually adjoining shall be determined through site plan review.	Yes. The project site plan was reviewed by City staff and the Riverside County Fire Department, and no issues were identified regarding the building separation distances shown on the site plan. As indicated above, the project complies with the applicable minimum yard setback requirements and therefore provides sufficient separation and buffering between the project and adjacent uses.
Off-Street Parking and Loading. Off-street parking and loading facilities shall be provided in accordance with the provisions of Section 17.54.010.	**Yes.** The project conditions of approval will ensure parking requirements are met.
Screening. Where the R-C zone abuts upon a residential zone, there shall be provided screening not less than six feet, or more than eight feet in height on the zone boundary line. Said screening shall be reduced to forty-two (42) inches in height within a required yard adjacent to a street or highway.	**Yes.** The subject property does not directly abut adjacent properties within the Coachella Jurisdiction Boundary. The subject property provides an eight-foot perimeter wall along Van Buren Street and Avenue 52. The subject property provides an 8-foot combination wall along the southern property line. There is an approximately 10-foot-wide vegetation swale along the southern property line which assists with reducing potential project impacts on southern adjacent properties.
Other Property Development Standards. 1.All uses shall be conducted entirely within a completely enclosed building, except for off-street parking and loading facilities, those	**Yes.** The project incorporates a Conditional Use Permit (CUP) for the special event establishment use. As required by the project's

outdoor uses permitted by Section 17.28.020(A)(7), and certain uses permitted subject to a conditional use permit by Section 17.28.020(D). 2.No building or structure having exterior walls of sheet metal shall be erected in this zone.	Conditions of Approval, prior to issuance of a Certificate of Occupancy, the applicant shall submit an Entertainment Permit application for review and approval by the City Council. This requirement ensures that outdoor activities are conducted in accordance with the development standards applicable to the Regional Commercial (R-C) Zone and that the proposed operation is subject to public review and approval through the Entertainment Permit process prior to occupancy. The project does not incorporate sheet metal as an exterior wall finish.
Architectural Review. All development in the R-C (Regional Commercial) zone, is subject to architectural review as set forth in Section 17.72.010 of this title.	**Yes.** The project will feature two primary components: a private sector and public sector. The private sector will consist of 240 condo cottages, 162 single-family residential units comprised of estate lots, zero lot line lots, bungalow condominiums, and VIP suites ("SFR Units"). The public sector will consist of an 11,950-square-foot beach club, 7,690-square-foot restaurant, and a 6,048-square-foot sports bar. The private-sector architectural design reflects a contemporary modern style characterized by an earth-tone color palette, wood siding, dark metal-framed windows, and metal roofing. The public-sector architectural design reflects a contemporary modern style that is consistent with the overall architectural character of the public-sector buildings. The public beach club incorporates a distinctive agave flower-inspired design, providing a unique architectural feature that contributes to the overall visual identity of the development. Overall, the project's architectural elements work together to create a cohesive, distinctive, and high-quality contemporary modern aesthetic.

FINDINGS:

Tentative Tract Map

Pursuant to Government Code Section 66474 and Coachella Municipal Code Section Chapter 16.12, subject to the provisions of this chapter, the Planning Commission must make the following findings for the recommendation of Tentative Map approval to the City Council:

The Planning Commission shall recommend denial of a tentative map to the City Council, as required by the Subdivision Map Act, if it makes the following findings:

1. That the proposed map is not consistent with applicable general and specific plans;

The Project site is within the Regional Retail District land use designation of the City of Coachella's General Plan 2035 Update (General Plan). This designation provides opportunities for a wide range of shopping and entertainment in a variety of urban and suburban formats. These include regional shopping centers, mixed destination centers or similar uses. The uses allowed in this designation will cater to regional clientele and provide a unique amenity to all residents of the Coachella Valley and an important revenue source for the City. The primary purpose of the District is to provide for commercial opportunities, with residential uses supporting the retail environment. Like the other Centers and Districts of Coachella, the Regional Retail District is organized into blocks by a combination of public and private streets that provide addresses for the businesses and organize access and parking for them. The blocks of this District may be the largest in Coachella, with buildings, landscape and signage similarly scaled up in size, but not neglecting the importance of creating a comfortable and attractive pedestrian environment for shoppers.

This designation accommodates retail, lodging, entertainment, and single-family residential uses, with commercial activities serving regional clientele and residential uses supporting the commercial environment. The proposed COVA development integrates hotel and resort accommodations, residential units, recreational amenities, restaurants, and a public beach club within a coordinated development.

The residential component consists of 402 units, including 162 single-family residential units and 240 condominium cottages, within approximately 28 acres. Residential density is calculated using the acreage devoted to these units and excludes the commercial components of the project. The resulting density is approximately 14.4 dwelling units per acre (du/ac). The allowed development intensity in the Regional Retail District density range is 10-15 DU/AC. The Regional Retail District allows for a floor area ratio (FAR) between 0.35 and 2.0. The public sector uses have a combined FAR of approximately 0.65, which is consistent with the Regional Retail District standard of 0.35 to 2.0.

The project meets the intent and purpose, intended physical character, allowed land uses, and development intensity allowed in the Regional Retail District general plan designation. The project is compatible with the design standards for network connectivity, street design, parks and open space, and urban form guidelines of the Regional Retail District general plan designation.

The project site is located within Subarea 3 – Van Buren Corridor of the General Plan's Land Use and Community Character Element. The subarea envisions a regional commercial destination that serves Coachella and neighboring communities while integrating new

commercial development with surrounding neighborhoods. The proposed subdivision supports this vision by establishing lots for an integrated hospitality, residential, recreation, dining, and entertainment development. Its consistency with the applicable subarea policies is addressed below.

Subarea Policy 1 — Diversity of Retail and Services

The project would broaden the range of commercial services and visitor amenities available along the corridor through hotel and resort accommodations, restaurants, a public beach club, and recreational and entertainment facilities. These uses would serve visitors and provide additional dining and recreation opportunities for residents of Coachella and surrounding communities. The subdivision accommodates these activities within a coordinated development, supporting the policy's objective of capitalizing on the corridor's regional location.

Subarea Policy 2 — Larger Commercial Uses

The proposed resort and public beach club are regional-serving commercial uses requiring coordinated areas for accommodations, recreation, parking, circulation, and supporting facilities. The subdivision provides separate lots for these functions while integrating them through common access and infrastructure. This arrangement supports the policy's allowance for larger commercial developments along the corridor.

Subarea Policy 3 — Transitions to Adjacent Residential Neighborhoods

The project incorporates perimeter landscaping, setbacks, walls, and designated access points to establish a transition between the development and surrounding properties. Proposed frontage improvements include landscaped buffers, sidewalks, and an equestrian trail along Calhoun Street, Avenue 52, and Van Buren Street. These features provide separation from project activities while improving the appearance and function of the adjoining streets.

The proposed conditions of approval will require that the project meet all operational requirements and standards as outlined in the Coachella Municipal Code pertaining to lighting, noise, commercial operations, and special events. Together, the site design and operational requirements are intended to limit conflicts between the resort and commercial activities and nearby residential uses.

Subarea Policy 4 — Connections to Adjacent Areas

The project proposes six vehicular access points distributed along Avenue 52, Calhoun Street, and Van Buren Street. Perimeter sidewalks and trail improvements would provide routes along the project frontage, while the internal circulation system would connect the residential accommodations, resort amenities, and commercial facilities.

These connections, together with the frontage improvements, support access between the development and adjacent areas.

Subarea Policy 5 — Pedestrian Amenities and Access to Commercial Entrances

The proposed frontage design includes separated six-foot sidewalks, landscaped buffers, trees, and an equestrian trail. These improvements would provide pedestrian facilities and landscaped separation along the adjoining streets.

With these features incorporated into the approved plans and conditions, the project would support the subarea's objective of providing a comfortable pedestrian environment and convenient access to commercial services.

Subarea Consistency Conclusion:

The proposed subdivision advances Subarea 3's commercial development objectives by accommodating regional-serving hospitality, dining, recreation, and entertainment uses. Its perimeter improvements and required compatibility measures support integration with surrounding development. Consistency with the subarea's connectivity and pedestrian design policies is supported by the public connections, crossing improvements, and entrance-access features identified in the proposed plans and conditions of approval.

The proposed subdivision accommodates an integrated mix of residential, lodging, recreation, dining, and entertainment uses consistent with the Regional Retail District designation. The residential component includes 402 units within approximately 28 acres, resulting in a density of approximately 14.4 dwelling units per acre. Commercial acreage is excluded from this residential density calculation.

As discussed above, the subdivision supports the applicable development objectives of Subarea 3 - Van Buren Corridor through its regional-serving commercial uses, frontage improvements, connections, and measures addressing compatibility with surrounding development. Based on this analysis and the required improvements identified in the conditions of approval, the proposed map is consistent with the General Plan. No applicable specific plan has been identified for the project site.

Implementation of the subdivision's single-family residential component is contingent upon City Council adoption and effectiveness of Zoning Ordinance Amendment No. 26-02, allowing single-family residential uses in conjunction with a resort use within the Regional Commercial (R-C) zone, and approval of Conditional Use Permit No. 407 authorizing those uses. The tentative map and accompanying project approvals shall incorporate this requirement.

2. That the design or improvement of the proposed subdivision is not consistent with applicable general and specific plans;

The proposed subdivision organizes residential, condominium, commercial, recreational, and open-space uses within an integrated development consistent with the General Plan's Regional Retail District designation. The subdivision includes internal circulation facilities, common-access

and emergency-vehicle easements, utility improvements, drainage facilities, and frontage improvements serving the resulting lots.

The Regional Retail District recognizes that block sizes may vary depending on the uses accommodated, while encouraging pedestrian and bicycle connections within larger developments. The project includes frontage improvements along Calhoun Street, Avenue 52, and Van Buren Street consisting of six-foot separated sidewalks, landscaped buffers, an equestrian trail, and associated landscaping. These improvements provide circulation along the project perimeter and access to project entrances. The internal circulation system connects the residential and lodging accommodations with resort amenities and supporting facilities.

The private resort component does not provide connections at every interval suggested by the General Plan. However, the combination of perimeter routes, distributed access points, and internal circulation supports movement around and within the development. Publicly accessible commercial facilities must provide pedestrian access from adjoining public sidewalks, with the applicable access improvements incorporated into the proposed plans and conditions of approval.

The project also supports Subarea 3 — Van Buren Corridor by accommodating regional-serving commercial activities, providing frontage improvements, and incorporating landscaped transitions between the development and surrounding properties. Grading, drainage, utility, and circulation improvements are subject to City review and the applicable conditions of approval.

For these reasons, the proposed subdivision design and required improvements are consistent with the City of Coachella General Plan. No applicable specific plan has been identified for the project site.

3. That the site is not physically suitable for the type of development;

The approximately 87-acre site provides land for the proposed residential and condominium development, hotel and resort uses, public beach club, supporting commercial facilities, recreational amenities, internal circulation, and drainage improvements. The proposed project is physically suitable for the proposed development project. The project is compatible with general plan guidelines of the Regional Retail District general plan designation. The project is in compliance with density requirements of the Regional Retail District general plan designation. In addition to meeting the proposed density requirements, the project proposed two access points along Avenue 52, two along Calhoun Street, and two along Van Buren Street to serve its public commercial and private resort components.

The conditions of approval require a comprehensive drainage report, precise grading and improvement plans, water and sewer plans, and compliance with the applicable engineering studies. These requirements address site grading, stormwater management, utility connections, and the improvements necessary to serve the resulting lots. Fire Department requirements address emergency access, fire protection water supply, and required fire flow.

Based on the supporting engineering and geotechnical analyses, and with implementation of the required improvements and applicable conditions of the approval, the site is physically suitable for the proposed type of development.

4. That the site is not physically suitable for the proposed density of development;

The site is physically suitable for the proposed density of development. Allowed land uses in the Regional Retail District general plan designation include retail, lodging, entertainment, and residential uses at a development intensity of 10 - 15 DU/AC. The proposed project is for the development of a hotel, resort, residential, and commercial public beach club. The project proposes a mixed-use development, consisting of a total of 402 units on approximately 28 acres (14.4 du/acre), which is consistent with the General Plan residential density range of 10 – 15 dwelling units per acre. The commercial component of the proposed project has a combined FAR of approximately 0.65, which is consistent with the Regional Retail District standard of 0.35 to 2.0.

The residential component is situated within a larger development that provides additional areas for circulation, recreational amenities, open space, drainage, and supporting infrastructure. The proposed subdivision establishes lots and access arrangements to accommodate these functions.

The conditions of approval require the applicant to provide the water, sewer, drainage, circulation, and fire protection improvements necessary to serve the proposed development. The required improvements must accommodate the residential component together with the demands of the commercial and resort uses, consistent with the supporting engineering studies and service-provider requirements.

Based on the proposed development arrangement and implementation of the required improvements, the site is physically suitable for the proposed density.

5. That the design of the subdivision or the proposed improvements are likely to cause substantial environmental damage or substantially and unavoidably injure fish or wildlife or their habitat;

Pursuant to the California Environmental Quality Act (CEQA) and the State CEQA Guidelines, the City is the lead agency for purposes of CEQA for this Project. The City prepared a Modified Initial Study/ 15183 Checklist (15183 Checklist) to evaluate whether the proposed Project requires further review under the California Environmental Quality Act (CEQA).

The General Plan Update Environment Impact Report (EIR) determined that biological-resource impacts would be less than significant.[1] Although growth projected under the GPU could result in the loss of foraging habitat for migratory species, those impacts are expected to be less than significant due to the significant tracts of land that would be set aside as open space as proposed by the GPU Land Use Plan.[2]

The Project site consists primarily of agricultural development including date palms, grapevines, and other cultivated areas, together with disturbed and developed areas. . An irrigation pond occurs in the central-northern area of the site with nearby pump housing and additional support structures. Disturbances have eliminated the natural plant communities that historically occurred on the project site. The biological assessment prepared by ELMT Consulting identified no native or

1 City of Coachella, 2035 GPU Draft EIR, Biological Resources, at 4.3-28.
2 *Ibid*.

special-status natural communities, jurisdictional drainage or wetland features, designated critical habitat, or mapped wildlife corridors or linkages. The irrigation pond is an artificial agricultural feature that does not support fish, riparian habitat, or hydrophytic vegetation. The site is also outside a CVMSHCP Conservation Area, and the CVMSHCP does not identify modeled habitat for a covered species within or adjacent to the site. No special-status species were observed during the field survey, and the assessment found no burrowing owls, owl sign, or suitable burrows.

To ensure no impact occurs to migratory birds, the biological report suggests a pre-construction nesting bird clearance survey which will be conducted prior to ground disturbance if construction occurs between February 1st and August 31st. This recommendation is consistent with the requirements of the MBTA, California Fish and Game Code, and USFWS.

The project would be consistent with the biological-resources analysis within the GPU EIR. The project would not create new impacts or increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

6. That the design of the subdivision or the type of improvements is likely to cause serious public health problems; and

The proposed subdivision is subject to conditions requiring approved water and sewer plans, necessary utility connections and improvements, and drainage facilities designed to manage on-site runoff and existing tributary flows. The applicant must construct the improvements necessary to serve the development in accordance with City and applicable service-provider requirements.

The conditions of approval also require stormwater quality management, construction stormwater controls, and dust and erosion control measures. Fire protection requirements address emergency access, adequate fire protection water supply, and required fire flow.

The recreational lagoons must comply with applicable health and sanitation requirements and obtain the necessary agency approvals for their construction and operation. Water treatment, disinfection, and recreational use must meet the requirements of the Riverside County Department of Environmental Health. The proposed stormwater detention lake is separate from the recreational lagoons and is not intended for swimming or other water-contact recreation.

The Section 15183 Checklist determined that construction and operational emissions would remain below applicable South Coast AQMD regional and localized significance thresholds, including at nearby sensitive receptors, and would not result in a peculiar, new, or substantially more severe air-quality impact than analyzed in the General Plan EIR. Compliance with South Coast AQMD Rules 402, 403, and 403.1 and Chapter 8.20 of the Municipal Code would control nuisance emissions and fugitive dust.

With implementation of the required utility, drainage, fire protection, and sanitation requirements, the subdivision design and proposed improvements are not likely to cause serious public health problems.

7. That the design of the subdivision or the type of improvements will conflict with easements, acquired by the public at large, for access through or use of property within the proposed subdivision. In this connection, the governing body may approve a map if it finds that alternate easements, for access or for use, will be provided, and that these will be substantially equivalent to ones previously acquired by the public.

The proposed map will not conflict with any public easements acquired for access or use by the public at large within the proposed development project. The Riverside County Office of the Fire Marshal, City of Coachella Engineering Department/Public Works Department, Coachella Water Authority, and the County of Riverside have reviewed the proposed project and no concerns pertaining to easements were identified. The subdivision of land will not conflict with easements for access through or use of property and as such, the development project's design is confirmed to be in harmony with existing public easements.

Conclusion:

Staff concludes, based on the foregoing analysis and supporting project documentation, that the proposed subdivision and its required improvements are consistent with the City of Coachella General Plan and that the grounds for denial identified in Government Code Section 66474 and Coachella Municipal Code Chapter 17.28.030 do not apply to Tentative Tract Map No. 39330.

The proposed parcel subdivision is consistent with the City of Coachella General Plan and the Coachella Municipal Code. The parcel subdivision will not conflict with easements acquired by the public at large, for access through or use of property within the proposed parcel subdivision, and it will not cause substantial environmental damage or substantially avoidably injure fish, wildlife, or their habitat. The required conditions of approval ensure the Project will not be detrimental to the public health, safety, or welfare, and the conditions prevent material injury to properties or improvements in the vicinity.

Implementation of the single-family residential component is contingent upon City Council adoption and effectiveness of Zoning Ordinance Amendment No. 26-02 and approval of Conditional Use Permit No. 407. This requirement shall be incorporated into the tentative map resolution and conditions of approval.

FINDINGS:

Zoning Ordinance Amendment No. 26-02 – Single-Family Residential Uses in the Regional Commercial (R-C) Zone.

Pursuant to Coachella Municipal Code Section 17.80.010 and Government Code Section 65860, staff recommends that the Planning Commission recommend City Council adoption of Zoning Ordinance Amendment No. 26-02 based on the following findings:

1. The amendment is consistent with and implements the General Plan's purposes, objectives, and land use provisions.

The General Plan's Regional Retail District designation allows residential uses at a density of 10 to 15 dwelling units per acre, with residential uses supporting the district's commercial

environment. The existing Regional Commercial (R-C) zoning provisions accommodate multi-family residential uses subject to a Conditional Use Permit but do not expressly provide a corresponding approval pathway for single-family residential uses.

This difference prompted the proposed amendment, which would allow single-family residential uses in conjunction with a resort, subject to a Conditional Use Permit. The amendment brings the zoning code into closer alignment with the residential uses contemplated by the General Plan while preserving the commercial purpose of the R-C zone.

For the COVA project, the amendment would provide a land use approval pathway for single-family units intended to accommodate fractional ownership within an integrated resort development. The ownership arrangement does not replace the requirement to demonstrate compliance with applicable density requirements, General Plan policies, and project approval conditions.

2. The amendment is justified by public necessity and convenience.

The amendment establishes a defined approval process for single-family residential uses associated with resort development. It responds to the difference between the General Plan's broader allowance for residential uses and the zoning code's existing conditional allowance for multi-family residential uses.

Requiring a Conditional Use Permit for single-family residential uses provides comparable discretionary review of both residential building types. Applicants may propose a residential configuration suited to an integrated resort, while the City retains the ability to evaluate whether the proposed uses are appropriate for the site and consistent with applicable policies and standards.

The amendment therefore serves public necessity and convenience by providing regulatory clarity and a consistent review mechanism for residential uses within the R-C zone.

3. The amendment promotes the general welfare.

The amendment balances flexibility for resort development with the preservation of land for regional-serving commercial activities. Requiring single-family residential uses to occur in conjunction with a resort limits the proposed allowance to integrated resort developments rather than establishing a general allowance for independent single-family subdivisions throughout the R-C zone.

The Conditional Use Permit process allows the City to evaluate whether the residential component supports the resort and maintains the development's commercial function. Review also addresses compatibility, circulation, parking, infrastructure, noise, lighting, and other relevant development and operational characteristics.

This approach promotes the general welfare by accommodating residential uses contemplated by the General Plan while retaining commercial development opportunities and review of potential conflicts with surrounding properties.

4. The amendment constitutes good zoning practice.

The amendment establishes a conditional approval pathway for single-family residential uses that is comparable to the existing Conditional Use Permit requirement for multi-family residential uses. This approach allows consideration of different residential building types while maintaining discretionary review.

Limiting the allowance to single-family residential uses in conjunction with a resort preserves the R-C zone's primary commercial purpose and reduces the potential for commercial properties to be developed as independent single-family subdivisions under this amendment. Each proposal must demonstrate an integrated relationship between its residential and resort components and satisfy the applicable Conditional Use Permit findings.

The amendment authorizes a land use category rather than independently approving fractional ownership arrangements, short-term rental operations, or a particular development. Those matters remain subject to applicable regulations and project approvals. Accordingly, the amendment provides flexibility and regulatory clarity while protecting the intended function of the commercial zone.

Conclusion

Staff concludes that Zoning Ordinance Amendment No. 26-02 brings the Regional Commercial zoning provisions into closer alignment with the General Plan's allowance for residential uses while preserving the zone's commercial purpose. The amendment provides comparable Conditional Use Permit review for single-family and multi-family residential uses and limits the proposed single-family allowance to uses developed in conjunction with a resort.

The amendment is consistent with the General Plan and is justified by public necessity, convenience, general welfare, and good zoning practice. Staff recommends that the Planning Commission adopt Resolution No. PC2026-27 recommending City Council adoption of Zoning Ordinance Amendment No. 26-02. The COVA project's single-family residential component remains subject to approval of Conditional Use Permit No. 407.

FINDINGS:

Zoning Ordinance Amendment No. 26-03 – Amendments to Chapter 5.80 – Regulation of Short-Term Vacation Rentals of the Business Licenses and Regulations Ordinance.

Zoning Ordinance Amendment No. 26-03 would amend Chapter 5.80 of Title 5, Business Licenses and Regulations, to provide exceptions for projects with approved development agreements to the short-term vacation rental permit limit per owner and the percentage limit on units permitted for short-term rental use. Additional modifications would apply only as expressly

authorized by the amended ordinance and approved development agreement. Staff recommends approval based on the following findings:

1. The amendment is consistent with and supports the General Plan's purposes and objectives.

The amendment provides flexibility to accommodate integrated hospitality developments containing residential accommodations, resort amenities, dining, recreation, and entertainment. For the COVA project, this flexibility would support the proposed relationship between residential ownership, including fractional ownership, and short-term rental operations within the resort.

Land Use and Community Character Element Policy 13.4, Diverse Tax Base, calls for a fiscally sound City supported by a sustainable and diversified tax base and user fees, including property tax, sales tax, transient occupancy tax, utilities user tax, and fees supporting the cost of services. The amendment supports this policy by accommodating visitor-serving developments that may contribute to applicable City tax revenues.

The amendment also supports Policy 13.3, Efficient Growth, by allowing the City to evaluate potential revenues alongside infrastructure obligations, public service demands, and community compatibility through the development agreement and accompanying project approvals.

2. The amendment is justified by public necessity and convenience.

Chapter 5.80 establishes limits on permit ownership and the concentration of short-term vacation rentals. These limitations regulate vacation rental activity within residential areas but may constrain integrated hospitality developments where short-term accommodations are an intended component of the approved development.

The amendment establishes a defined mechanism for accommodating these developments through approved development agreements. It allows the City to coordinate applicable rental provisions with the project's ownership structure, operating arrangements, and development obligations.

This approach provides regulatory clarity for applicants, property owners, operators, and City staff while retaining City Council review of the development agreement and the project-specific provisions governing rental operations.

3. The amendment promotes the general welfare.

The amendment allows the City to address short-term rental operations in conjunction with negotiated development obligations and enforceable project requirements. Development agreements and accompanying approvals can address management responsibilities, complaint response, security, parking, noise, infrastructure, and applicable tax reporting and payment obligations.

The justification for exceptions must address the characteristics of the qualifying development and how its operating framework protects surrounding properties and community interests. Requirements of Chapter 5.80 that are not lawfully modified remain applicable.

Accordingly, the amendment provides flexibility for qualifying developments while retaining mechanisms to address public health, safety, neighborhood compatibility, and the demands placed on City services.

4. The amendment constitutes good regulatory practice.

The amendment establishes an express framework for coordinating Chapter 5.80 with City-approved development agreements. It clarifies the availability of exceptions to permit ownership and concentration limits and provides a documented basis for administering project-specific requirements.

Each development agreement must clearly identify the property and operations it covers, together with any additional authorized modifications and applicable obligations. The amendment does not independently approve a development, establish compliance with zoning requirements, or authorize rental operations without the applicable permits and project approvals.

This approach accommodates coordinated hospitality developments while maintaining a clear distinction between the exceptions authorized by the ordinance and additional provisions expressly established through a development agreement.

Conclusion

Staff concludes that Zoning Ordinance Amendment No. 26-03 supports the General Plan's objectives for a diversified tax base and fiscally sustainable growth and is justified by public necessity, convenience, general welfare, and good regulatory practice. The amendment provides flexibility for projects with approved development agreements while retaining applicable regulatory requirements and project-specific review.

Staff recommends that the Planning Commission adopt Resolution No. PC2026-28 recommending City Council adoption of Zoning Ordinance Amendment No. 26-03. Exceptions and operating provisions applicable to the COVA project shall be coordinated with Development Agreement No. 25-01 and the accompanying project approvals.

FINDINGS:

Conditional Use – Special Event Establish Use in the (R-C) Regional Commercial Zone & Conditional Use – Single-Family Residential in conjunction with a Resort Use.

Pursuant to Coachella Municipal Guidelines Chapter 17.74, Conditional Uses, subject to the provisions of this chapter, the Planning Commission must make the following findings for conditional use approval:

Conditional Use Permit No. 396 — Bar/ Cocktail Lounges, Special Event Establishment Uses

Pursuant to Coachella Municipal Code Section 17.74.020(B), staff recommends conditional approval of the proposed special event establishment uses based on the following findings:

1. The proposed use will be in harmony with and in accordance with the objectives of the General Plan.

The proposed bars and cocktail lounges, liquor sales, and special event establishment uses are consistent with and supportive of the Regional Retail District land use designation applicable to the Project site. The proposed uses are components of the larger COVA resort development and are intended to provide dining, beverage, recreation, entertainment, and visitor-serving amenities in conjunction with the Project's hotel, resort, residential, restaurant, and other commercial uses.

The bars and cocktail lounges and associated liquor sales will complement the hospitality and visitor-serving functions of the Project, while the special event establishments will serve as a principal recreational and visitor-serving amenity within the overall resort. These uses support the development of the Project as an integrated destination rather than as a conventional residential development and are consistent with General Plan objectives encouraging commercial, hospitality, recreational, and visitor-serving development and a diversified local economy.

2. The proposed use will be compatible with the existing or intended character of the general vicinity and will not change its essential character.

The proposed bars and cocktail lounges, liquor sales, and special event establishment uses have been incorporated into the comprehensive design of the COVA resort development and are compatible with the intended hospitality, commercial, recreational, and entertainment character of the Project.

The beach club is proposed as an integral recreational and visitor-serving component of the resort rather than as an independent use unrelated to the overall development. Similarly, the bars and cocktail lounges and liquor sales are intended to operate in conjunction with the Project's hospitality, restaurant, recreational, and visitor-serving uses.

The Project's site planning and prescribed conditions of approval provide mechanisms to address potential operational effects associated with these uses, including noise, lighting, security, parking, circulation, hours of operation, alcohol service, and fire and life safety. Alcohol sales and service will also remain subject to applicable requirements of the California Department of Alcoholic Beverage Control.

With implementation of the conditions of approval and compliance with applicable City and State requirements, the proposed uses will be located, designed, constructed, operated, and maintained in a manner compatible with the intended character of the Project and surrounding area and will not change the essential character of the area.

3. Consideration has been given to scale, bulk, coverage, density, public facilities, utilities, neighborhood character, traffic generation, street capacity, and other relevant impacts.

The scale, bulk, coverage, and intensity of the proposed bars and cocktail lounges, liquor sales, and special event establishment uses have been considered as part of the overall COVA

development and the associated Architectural Review, Tentative Tract Map, Conditional Use Permits, and other Project entitlements.

The special event establishment uses and food-and-beverage uses are integrated into the overall Project site plan and will be served by the Project's proposed vehicular and pedestrian circulation systems, parking facilities, utilities, water and sewer facilities, drainage improvements, emergency access, landscaping, lighting, and other infrastructure.

The Project is subject to conditions of approval requiring the construction of necessary infrastructure and compliance with applicable requirements of the City and other responsible agencies. Potential effects associated with traffic, parking, noise, lighting, alcohol service, security, and operation of the proposed uses are addressed through the Project design, applicable Municipal Code requirements, and prescribed conditions of approval.

4. Any potentially hazardous or disturbing characteristics are justified by the common public interest as a benefit to the community as a whole.

The proposed bars and cocktail lounges, liquor sales, and special event establishment uses may have the potential to generate operational effects associated with noise, alcohol consumption, security, lighting, parking, traffic, and hours of operation. However, the proposed uses are located within and have been designed as integral components of the larger COVA resort development rather than as stand-alone uses. The proposed Project is consistent with the land use framework established by the City of Coachella General Plan and evaluated in the certified General Plan Environmental Impact Report. The General Plan EIR evaluated and contemplated the potential environmental effects associated with development of the Project area consistent with the General Plan, including potential noise impacts associated with the types and intensity of development anticipated for the area.

Potential operational impacts associated with the proposed uses have been further addressed through the Project design, applicable provisions of the Coachella Municipal Code, applicable requirements of the California Department of Alcoholic Beverage Control, and the conditions of approval imposed on Conditional Use Permit No. 396 and the Project as a whole. These requirements provide mechanisms to address noise, security, lighting, parking, circulation, alcohol service, and other operational considerations and to ensure that the uses operate in a manner compatible with surrounding and reasonably anticipated uses.

The proposed bars and cocktail lounges, liquor sales, and special event establishment uses will provide dining, recreational, entertainment, hospitality, and visitor-serving amenities that support the intended function of the COVA development as an integrated resort destination. The beach club will provide a recreational and visitor-serving amenity, while the bars, cocktail lounges, and associated liquor sales will complement the Project's restaurant, hospitality, recreational, and commercial components.

5. Vehicular approaches are designed to reasonably minimize interference with traffic on surrounding public streets or roads.

Vehicular access to the proposed bars and cocktail lounges, liquor sales, and special event establishment uses will occur through the access and internal circulation system designed for the overall COVA development. The proposed conditional uses will not rely upon separate uncontrolled access points directly serving the individual uses from surrounding public streets.

The Project provides coordinated vehicular access from the surrounding roadway network and an internal circulation system designed to distribute vehicles among the resort, residential, commercial, recreational, and visitor-serving components of the development. Parking and pedestrian circulation serving the proposed uses are similarly incorporated into the overall Project design.

The Project is subject to conditions of approval requiring compliance with applicable City engineering, circulation, access, fire, and public safety requirements. As designed and conditioned, vehicular approaches serving the proposed conditional uses will provide reasonable access while minimizing interference with traffic on surrounding public streets.

Conclusion

Based on the analysis contained in the staff report, the findings set forth herein, and the conditions of approval, the proposed bars and cocktail lounges, liquor sales, and special event establishment uses are appropriate conditional uses within the COVA development. The uses are consistent with the City of Coachella General Plan and the intended commercial, hospitality, recreational, and visitor-serving character of the Project. The General Plan EIR evaluated and contemplated potential environmental effects associated with development of the Project area consistent with the General Plan, including potential noise and land use compatibility impacts associated with the types and intensity of development anticipated for the area.

The proposed uses have been incorporated into the overall design and operation of the COVA resort development, and potential impacts related to noise, alcohol service, security, lighting, parking, traffic, circulation, and other operational characteristics have addressed through the Project design, applicable provisions of the Coachella Municipal Code, applicable State requirements, and the prescribed conditions of approval.

Conditional Use Permit No. 407 — Single-Family Residential Uses in Conjunction with a Resort

Pursuant to Coachella Municipal Code Section 17.74.020(B), staff recommends conditional approval of the proposed single-family residential uses in conjunction with a resort based on the following findings:

1. The proposed use will be in harmony with and in accordance with the objectives of the General Plan.

The General Plan's Regional Retail District designation accommodates residential uses supporting a regional-serving commercial environment. The proposed single-family residential component would be integrated with the COVA resort's lodging, recreational amenities, dining, and other commercial facilities rather than developed as an independent residential subdivision.

The overall residential component includes 162 single-family residential units and 240 condominium cottages, totaling 402 units within approximately 28 residential acres. Commercial acreage is excluded from this calculation. The resulting density is approximately 14.4 dwelling units per acre, within the General Plan's Regional Retail District range of 10 to 15 dwelling units per acre.

The integrated development supports Policy 7.8's mix of regional-serving uses and Policy 7.10's encouragement of resort development, subject to the applicable compatibility and connectivity requirements. It also supports Subarea 3's objectives for coordinated commercial development and appropriate transitions to surrounding properties.

Authorization of the single-family use is contingent upon adoption and effectiveness of Zoning Ordinance Amendment No. 26-02.

2. The proposed use will be compatible with the existing or intended character of the general vicinity and will not change its essential character.

The single-family units would be developed in conjunction with the resort and would share its circulation system, recreational amenities, infrastructure, and coordinated development framework. This relationship maintains the residential component's connection to the intended commercial function of the Regional Commercial zone.

Architecture, landscaping, setbacks, perimeter improvements, and applicable operating requirements address compatibility within the development and with surrounding properties. The relationship between residential accommodations and nearby entertainment activities must also be addressed through the project's noise analysis and approved design and operating controls.

The CUP shall require the single-family component to remain integrated with the resort as authorized by the approved plans and conditions. As conditioned, the use will be compatible with the intended character of the area.

3. Consideration has been given to scale, bulk, coverage, density, public facilities, utilities, neighborhood character, traffic generation, street capacity, and other relevant impacts.

The single-family component is evaluated together with the overall resort development through the tentative map, architectural review, environmental analysis, and infrastructure and circulation review. The overall residential density of approximately 14.4 dwelling units per acre falls within the applicable General Plan range.

The proposed project is compatible with the network and connectivity guidelines of the Regional Retail District general plan designation. The proposed project provides a block length of approximately 600 feet on Calhoun Street, 2,543 feet on Avenue 52, and 1,880 feet on Van Buren Street. In total the block length is approximately 5,023 feet. Although the project has a long block size and perimeter, the project is conditioned to construct 6-foot sidewalks, bicycle paths and multi-use paths along the entire project frontage along Calhoun Street, Avenue 52, and Van Buren Street. The project common area includes a separated sidewalk design that includes a 4-foot curb adjacent landscape buffer, 6-foot sidewalk, equestrian fence, 10-foot d.g. equestrian trail, and

additional landscaping that provides a total 30-foot landscape and sidewalk common area along the entire project frontage along Calhoun Street, Avenue 52, and Van Buren Street.

The Calhoun and Van Buren Street common areas are characterized by two rows of palm trees, while Avenue 52 features a combination of palm trees and shade trees. The project includes decorative landscape lighting throughout the common areas, including tree uplighting, palm-ring lighting, and entry sign illumination. The Van Buren Street median includes tree uplighting and light poles. The common areas feature a desert native inspired landscape design incorporating drought-tolerant plant species, along with decorative gravel and boulders of varying sizes. The proposed project will also reintegrate the existing date palms on the site into the new development design. The proposed project will provide a stucco face block wall design for fencing visible from perimeter streets with a decorative cap. Overall, these common area improvements help offset the longer block lengths by providing enhanced pedestrian connectivity, landscaping, and lighting that contribute to visual interest and enhance the overall design of the common areas along Calhoun Street, Avenue 52, and Van Buren Street.

The project's public area does provide network connectivity access points within every 400 to 500 feet as envisioned by the general plan network and connectivity guidelines. The project's public area does not provide "Virtual Blocks" due to the smaller size of the area. The project's private area does not provide network connectivity access points at 400- to 500-foot intervals. However, the perimeter common-area design and internal street network provide a high-quality circulation system that helps offset the greater spacing between network connectivity access points. The project's private area does not provide "Virtual Blocks", as the internal private street network is designed to serve the hotel, residential, and resort uses. The project design provides direct and convenient access to project amenities, and guests and residents are anticipated to navigate the site primarily by walking and golf carts, as evidenced by the 193 golf cart parking spaces planned for the project. Overall, the design of the project internal street network provides a design that serves the specific hotel, residential, resort, and commercial uses of the project. As a result, the project is consistent with the network and connectivity guidelines of the Regional Retail District general plan designation.

The proposed project is compatible with the street design guidelines of the Regional Retail District general plan designation. As indicated above, internal private street network is designed to serve the hotel, residential, and resort uses. The project design provides direct and convenient access to project amenities, and guests and residents are anticipated to navigate the site primarily by walking and golf carts, as evidenced by the 193 golf cart parking spaces planned for the project. Overall, the design of the project internal street network provides a design that serves the specific hotel, residential, resort, and commercial uses of the project. The project internal street design provides substantial palm tree cover along internal streets that are in line with the private area resort, hotel, and residential use. As a result, the project is consistent with the street design guidelines of the Regional Retail District general plan designation.

The proposed project is compatible with the parks and open space guidelines of the Regional Retail District general plan designation. The project public area provides an open space lagoon and water features that serves as an on-site resort amenity for the residents and guests of the public area.

The proposed project is compatible with the urban form guidelines of the Regional Retail District general plan designation. The buildings throughout the project are designed to be high quality and compatible with the retail, lodging, entertainment, and residential uses envisioned by the General Plan. The private-sector architectural design reflects a contemporary modern style, with building heights limited to a maximum of four stories for the proposed hotel uses. The public beach club incorporates a distinctive lotus flower-inspired design and a waterfall feature, providing unique architectural features that contributes to the overall visual identity and character of the development. The development is designed for the comfort and wayfinding of shoppers within the Regional Retail District, as the distinctive lotus flower-inspired design and waterfall feature of the public sector projects a unique and compelling image from the adjoining streets to entice passersby to visit the District. The ground-floor shopfronts are generally located near the sidewalk, creating an active and pedestrian-oriented frontage along the public right-of-way. While some shopfronts incorporate service functions facing the street, these elements do not detract from the development's architectural character or views from the public right-of-way. Parking for the project is integrated into the overall site design, and provided via private streets. Drainage improvements for the project are required to comply with city engineering conditions of approval to ensure adequate stormwater flow and drainage throughout the site. The project is also required to incorporate drought-tolerant landscaping consistent with city requirements. As a result, the project is consistent with the urban form guidelines of the Regional Retail District.

As a result, the proposed use will be located, designed, constructed, operated and maintained so as to be compatible with the existing or intended character of the general vicinity and shall not change the essential character of the same area.

The required water, sewer, drainage, fire protection, and circulation improvements must accommodate the residential units together with the commercial and resort uses.

The project's identified parking deficiencies must be resolved through an approved and implemented parking arrangement serving the affected uses.

4. Any potentially hazardous or disturbing characteristics are justified by the common public interest as a benefit to the community as a whole.

The single-family use provides a residential accommodation type within an integrated resort development while retaining commercial activities and amenities. The CUP framework allows this residential building type to be considered through discretionary review comparable to that required for multi-family residential uses.

The proposed use may accommodate fractional ownership, but ownership arrangements do not replace land use, safety, or operating requirements. Any short-term rental operations remain subject to applicable regulations, authorized development agreement provisions, and project conditions.

Potential conflicts involving residential occupancy, resort entertainment, vehicle activity, and property management must be addressed through approved design and operating requirements. As conditioned, the use supports the community interest in coordinated resort development while maintaining compatibility and protecting surrounding properties.

5. Vehicular approaches are designed to reasonably minimize interference with traffic on surrounding public streets or roads.

The private resort component is served by an entrance on Avenue 52 and two access points on Van Buren Street, including the proposed back-of-house access. Internal circulation connects the residential accommodations with resort amenities and supporting facilities.

Required engineering and Fire Department review addresses driveway design, internal circulation, emergency access, and required improvements. Residential parking, guest arrivals, service activities, and passenger pickup must be accommodated within the approved circulation and parking framework.

Subject to the supporting traffic analysis and implementation of the approved improvements, the vehicular approaches will reasonably minimize interference with surrounding streets.

Conclusion

Staff recommends conditional approval of Conditional Use Permit No. 407 for single-family residential uses in conjunction with the COVA resort. Implementation is contingent upon adoption and effectiveness of Zoning Ordinance Amendment No. 26-02 and compliance with the approved plans, applicable development standards, and conditions of approval.

The approval authorizes single-family residential uses as part of the integrated resort development. It does not authorize their operation as an independent residential subdivision or independently approve short-term rental operations.

Architectural Review

Pursuant to Coachella Municipal Guidelines Chapter 17.72, Architectural Review, subject to the provisions of this chapter, the Planning Commission must make the following findings for Architectural Review approval:

1. The proposed project is consistent with the General Plan.

The approximately 87-acre project site is designated Regional Retail District in the City of Coachella General Plan and is located within Subarea 3 – Van Buren Corridor. The project integrates hotel and resort accommodations, residential units, a publicly accessible commercial beach club, restaurants, entertainment uses, and recreational amenities. This combination supports the designation’s intended mix of commercial, lodging, entertainment, and supporting residential development.

For purposes of the residential density calculation, all 402 units are included within approximately 28 acres allocated to residential development, resulting in approximately 14.4 dwelling units per acre. The commercial components are excluded from this residential acreage calculation. The resulting residential density falls within the General Plan range of 10 to 15 dwelling units per acre. The public sector uses have a combined FAR of approximately 0.65, which is consistent with the Regional Retail standard of 0.35 to 2.0. The project meets the intent and purpose, intended physical character, allowed land uses, and development intensity allowed in the Regional Retail District general plan designation. The project is compatible with the design standards for network connectivity, street design, parks and open space, and urban form guidelines of the Regional Retail District general plan designation.

The project supports the Subarea 3 direction for regional commercial destinations that coexist with surrounding neighborhoods. Its proposed landscaped frontage improvements along Avenue 52, Calhoun Street, and Van Buren Street include separated sidewalks, landscaping, and an equestrian trail. The Van Buren Corridor is at a key location between Indio, Coachella, and La Quinta and much of the land through the corridor is still available for quality development, providing Coachella with a great opportunity to create a strong neighborhood center and regional shopping district. The Van Buren Corridor will transform into a major sub-regional retail destination that will provide a wide variety of goods and services for Coachella residents, as well as neighboring communities. The large format, regional-serving retail will be built in a fashion so it coexists with existing and future neighborhood development in and around the Van Buren Corridor. The new commercial development will promote walkability with a mix of appropriately scaled buildings fronting the streets and large, block scale buildings throughout. These improvements enhance the project's interface with surrounding streets and contribute to the corridor's intended pedestrian environment.

Together, the integrated land uses, compliant residential density, architectural treatment, frontage improvements, and documented circulation design support consistency with the applicable General Plan designation and Subarea 3 policies.

2. The proposed project complies with zoning regulations.

The project site is zoned Regional Commercial (R-C). The Project is subject to the Zoning Ordinance of the City of Coachella which includes Chapter 17.28 R-C Regional Commercial Zone and Chapter 17.19 Supplemental Standards for Single-Family Residential of the Coachella Municipal Code (CMC). The project proposes a hotel, resort, residential, and commercial public beach club is consistent with the permitted uses of the R-C zone, including Hotel, Resort, Restaurant, and Private Swimming Pool uses. The project requires approval of a Conditional Use Permit (CUP) to allow bars and cocktail lounges, liquor sales, and a special event establishment. The project requires approval of a CUP to allow single-family residential uses in conjunction with resort uses on the project site. The project includes a Zoning Ordinance Amendment to establish single-family residential uses in conjunction with resort uses as a conditionally permitted use in the R-C zone. The project proposes a mixed-use development, consisting of a total of 402 units on approximately 28 acres (14.4 du/ac), which is consistent with the R-C zoning residential density range of 10 to 15 dwelling units per acre. The project is complaint with Chapter 17.28 R-C Regional Commercial Zone and Chapter 17.19 Supplemental Standards

for Single Family Residential of the CMC, except for certain development standards that comply with the standards allowed pursuant to the project Development Agreement in accordance with Chapter 17.100 – Development Agreements of the CMC.

The project is compliant with the residential density requirements, supplemental standards for single-family residential, yard requirements, landscape setback requirements, Energy Efficient Design and Heat Island Reduction Strategies, distance between building requirements, off-street parking and loading requirements, screening requirements, other property development standards, and architectural review standards as required by Chapter 17.28 – R-C Regional Commercial Zone. The project height requirements will be allowed flexible standards pursuant to the project Development Agreement in accordance with Chapter 17.100 – Development Agreements of the CMC.

The proposed single-family residential component requires adoption and effectiveness of Zoning Ordinance Amendment No. 26-02 to establish single-family residential uses in conjunction with a resort as a conditionally permitted use within the R-C zone, together with approval of Conditional Use Permit No. 407. Implementation of the single-family residential component shall be contingent upon those approvals.

3. The proposed project is consistent with the City's design guidelines.

The project provides a coordinated architectural and landscape design for the commercial, residential, and lodging components within both the publicly accessible and private resort areas. The contemporary architectural character, complementary materials, earth-tone colors, and coordinated landscape treatments establish a cohesive development while distinguishing the buildings according to their functions.

Within the publicly accessible component, the agave-inspired beach club provides an architectural focal point complemented by the restaurants, supporting commercial facilities, lodging and residential buildings, and recreational amenities. Coordinated building placement, pedestrian connections, landscaping, and screening of service areas support compatibility among these uses.

Within the private resort component, the residential and lodging buildings incorporate complementary façade treatments, wood siding, dark metal-framed windows, and metal roofing. These features establish a consistent architectural character throughout the resort. Incorporation of existing date palms and drought-tolerant landscaping further integrates the public and private components with the surrounding desert environment.

Each commercial, lodging, and residential building shall comply with the City's applicable design requirements for its approved use and building type, including applicable single-family residential supplemental standards and multifamily objective design standards where applicable. Final plans shall demonstrate compliance with required building articulation, entry treatments, materials, screening, privacy, lighting, and pedestrian access provisions. Implementation of the single-family residential component remains contingent upon adoption and effectiveness of Zoning Ordinance Amendment No. 26-02 and approval of Conditional Use Permit No. 407.

The project is required to comply with the Supplemental Standards for Single-Family Residential, as required by the Regional Commercial zone. The project is compliant with the access and connectivity, street and pathway landscaping, parking, service and utilities, refuse and recycling, architectural variability, façade modulation and articulation, window trim and recess, building entries, building roofs, colors and materials, transitions and privacy, and accessory structures standards for single-family residential of the Coachella Municipal Code (CMC). As a result, the project is in compliance with the city's design guidelines.

Based on these design features and subject to the applicable approvals and conditions of approval, the commercial and residential components within both the publicly accessible and private resort areas are consistent with the City's applicable design guidelines.

4. The proposed development will not be detrimental to public health, safety, or welfare, or materially injurious to nearby properties and improvements.

The project's site design separates public commercial access from private resort access and includes a separate back-of-house entrance. This arrangement provides a basis for managing visitor, resident, employee, service, and emergency circulation.

The approved plans and conditions shall require accessible pedestrian routes, safe crossings where pedestrian routes intersect vehicular circulation, required emergency access, and compliance with applicable building and fire requirements. Parking and loading shall comply with applicable requirements or an expressly authorized alternative supported by the required analysis.

Exterior lighting shall be designed and directed to control glare and light spill onto adjoining properties and public streets. Refuse areas, loading areas, mechanical equipment, and utility facilities shall receive appropriate screening. Required grading, drainage, utility, and geotechnical improvements shall be incorporated into the final construction plans.

Special event and alcohol-related operations remain subject to their respective CUP requirements, including applicable controls addressing noise, attendance, hours, security, and parking. With implementation of these design requirements and operational conditions, the development will protect public health, safety, and welfare and avoid material injury to surrounding properties.

A comprehensive environmental evaluation has been completed for the project as documented in the attached §15183 Exemption Checklist. This evaluation concludes that the project qualifies for an exemption from additional environmental review because it is consistent with the development density and use characteristics established by the City General Plan, as analyzed by the City GPU EIR (SCH #2009021007), and all required findings can be made.

In accordance with CEQA Guidelines §15183, the project qualifies for an exemption because the following findings can be made:

1. The project is consistent with the development density established by existing zoning, community plan or general plan policies for which an EIR was certified.

The project is located within the City's General Plan Regional Retail District, and Regional Commercial (R-C) zoning designation. Regional Retail Districts and R-C zones allow 10 – 15 dwelling units per acre and a floor area ratio (FAR) of 0.35 – 2.0. The project would be consistent with the Regional Retail District land use designation identified for the site in the GPU. Similarly, the project would be consistent with the Regional Commercial (R-C) zoning designation for the site in the Zoning Map once the application to amend the City's Zoning Code is approved. The project proposes 14.4 dwelling units per acre and 0.65 FAR, which is consistent with the Regional Retail Districts and R-C zone.

2. There are no project specific effects which are peculiar to the project or its site, and which the GPU EIR failed to analyze as significant effects.

The subject property currently operates as a combination of an active date palm grove and grape vines that have been allowed to go fallow. The site is surrounded by agricultural uses, vacant land, and scattered residential properties. Currently, the subject property operates similarly to the surrounding uses. The project proposes to develop a hospitality project with resort, residential, and recreational uses. The project is consistent with the City's Regional Retail District land use designation and Regional Commercial zoning designation. The project will not result in project-specific effects which are peculiar to the project or its site. The project site does not contain any unique or peculiar environmental features that would result in environmental effects beyond those previously identified and analyzed.

In addition, as explained further in the §15183 Exemption Checklist below, all project impacts were adequately analyzed by the GPU EIR. Applicable mitigation measures specified within the GPU EIR have been applied to the project.

3. There are no potentially significant off-site and/or cumulative impacts which the GPU EIR failed to evaluate.

Preparation of the §15183 Exemption Checklist did not identify any significant off-site and/or cumulative impacts which the GPU EIR failed to evaluate.

4. There is no substantial new information which results in more severe impacts than anticipated by the GPU EIR.

As explained in the §15183 Exemption Checklist below, no new information has been identified which would result in a determination of a more severe impact than what had been anticipated by the GPU EIR.

5. The project will undertake feasible mitigation measures specified in the GPU EIR.

As explained in the §15183 Exemption Checklist, the project will undertake feasible mitigation measures specified in the GPU EIR. These GPU EIR mitigation measures will be undertaken

through project design, compliance with regulations and ordinances, or through the project's conditions of approval.

5. The project is compatible with the existing or intended character of the surrounding area and will not change its essential character.

The project's integrated commercial, resort, entertainment, and residential components are compatible with the intended Regional Retail District character of the Van Buren Corridor. The publicly accessible commercial component preserves the site's role as a regional destination, while the residential component is integrated with the resort.

The coordinated architectural materials and colors, distinctive beach club design, landscaped frontages, and decorative perimeter walls establish a consistent visual character. Required setbacks, building placement, landscape buffers, screening, and privacy treatments shall provide transitions between the project and nearby residential properties.

Compatibility also depends on the approved building heights, pedestrian connections, lighting controls, service-area treatment, and operational restrictions. These requirements shall be maintained throughout the life of the project. With these measures, the development will be compatible with the area's existing residential context and intended regional commercial character without changing its essential character.

Conclusion

Staff concludes that the findings required by Coachella Municipal Code Section 17.72.010(I) can be made for Architectural Review No. 25-07 based on the approved plans, documented standards analysis, and conditions of approval. Implementation shall be contingent upon the adoption and effectiveness of Zoning Ordinance Amendment No. 26-02, approval of the applicable conditional use permits, and effectiveness of any related approval necessary to authorize the proposed development standards. The project shall be constructed and maintained in accordance with the approved architectural, landscape, lighting, and site plans.

Development Agreement

Pursuant to Coachella Municipal Guidelines Chapter 17.100, Development Agreement, subject to the provisions of this chapter, the Planning Commission must make the following findings for Development Agreement approval:

A. Is consistent with the objectives, policies, general land uses and programs specified in the general plan and any applicable specific plan;

The approximately 87-acre project site is designated Regional Retail District and is located within Subarea 3 – Van Buren Corridor. The Development Agreement establishes a framework for implementing an integrated hotel, resort, residential, dining, entertainment, and recreational development. The publicly accessible Commercial Beach Club Sector provides commercial and recreational opportunities for residents and visitors, while the Private Resort Sector combines lodging and supporting residential accommodations with shared resort amenities.

For General Plan density purposes, all 402 units are included within approximately 28 acres allocated to residential development, resulting in approximately 14.4 dwelling units per acre. Commercial acreage is excluded from this residential density calculation. The proposed density falls within the applicable range of 10 to 15 dwelling units per acre.

The agreement supports the Regional Retail District's destination-oriented mix of uses and Subarea 3's direction for commercial development that is compatible with surrounding neighborhoods. Its obligations for public improvements and frontage landscape maintenance support implementation of the project's approved site design. The project's pedestrian connections, external connectivity, commercial intensity, and transitions to adjacent development are addressed through the General Plan consistency analysis and required project improvements.

Together with the related project approvals and documented General Plan consistency analysis, the agreement implements the applicable land use and community character objectives. No specific plan applies to the project site.

B. Is compatible with the uses authorized in and the regulations prescribed for the land use district in which the real property is located;

The project site is zoned Regional Commercial (R-C). The proposed hotel and resort use, beach club, restaurants, and supporting amenities are compatible with the commercial and hospitality uses authorized within the district, subject to applicable development standards and required permits. Special event and alcohol-related uses are subject to Conditional Use Permit No. 396 and any additional required approvals.

The single-family residential component requires adoption and effectiveness of Zoning Ordinance Amendment No. 26-02 and approval of Conditional Use Permit No. 407. These approvals would authorize single-family residential uses in conjunction with the resort while retaining the site's integrated commercial and hospitality function.

The agreement establishes development rights by reference to the approved project and applicable regulations. Any departure from otherwise applicable development standards shall be specifically identified and lawfully authorized in the final approvals. Short-term rental treatment shall conform to the adopted provisions of Zoning Ordinance Amendment No. 26-03 and the express operational requirements of the final agreement.

With effectiveness of the required amendments and permits, and incorporation of the authorized development standards, the agreement is compatible with the uses and regulations applicable to the R-C district.

C. Is in conformity with the public necessity, public convenience, general welfare and good land use practices;

The agreement coordinates development of the project with the provision of infrastructure and facilities necessary to serve its approved uses. Section 3.8.1 of the Development Agreement requires the developer to design, engineer, and construct required public improvements and

generally complete improvements serving each phase before issuance of the first certificate of occupancy within that phase, unless an earlier deadline applies.

The agreement also requires water and sewer extensions, participation in necessary electrical infrastructure, and construction or funding of a portion of off-site sewer main upsizing serving other planned housing developments. Section 4.6 of the Development Agreement requires maintenance of enhanced landscaping along the project's public street frontages.

The publicly accessible beach club, restaurants, and entertainment facilities would expand recreational and commercial opportunities. Development and operation would also create construction and permanent employment opportunities.

The agreement's infrastructure obligations, phased implementation framework, and compliance review provisions support coordinated development and delivery of the identified public benefits. Together with the related project approvals and conditions, these provisions conform to public convenience, general welfare, and good land use practices.

D. Will be detrimental to the health, safety and general welfare;

The agreement requires development in accordance with the project approvals and applicable requirements. Section 2.3 of the Development Agreement preserves application of the California Building Standards Code and applicable construction codes. Section 2.4 of the Development Agreement retains City authority to address dangerous or hazardous conditions, subject to the procedures established in the agreement.

Required improvements and conditions address emergency access, fire protection, grading, drainage, geotechnical conditions, utility service, pedestrian safety, and parking. Special event and alcohol-related operations remain subject to applicable permit requirements and approved controls governing noise, attendance, hours, security, and circulation.

The agreement's environmental provisions require compliance with CEQA, including additional review where legally required for subsequent approvals. Applicable mitigation measures and essential health and safety conditions shall remain enforceable under the final agreement.

With implementation of these requirements and safeguards, the agreement will not be detrimental to public health, safety, or general welfare.

E. Will adversely affect the orderly development of property or the preservation of property values;

The agreement provides a coordinated framework for the project's land uses, infrastructure, phasing, and continuing operational responsibilities. Required public improvements serving each phase must be completed in accordance with the agreement and project approvals, supporting orderly development and avoiding occupancy before necessary improvements are available.

The approved architectural design, landscape treatments, setbacks, screening, lighting controls, and operational conditions provide transitions between the project and surrounding properties. The developer's obligation to maintain enhanced frontage landscaping contributes to the continuing appearance of the development along Avenue 52, Calhoun Street, and Van Buren Street.

Annual compliance review and applicable enforcement procedures provide mechanisms for monitoring performance of agreement obligations. Continuing resort management, maintenance, and operational requirements shall be established in the final agreement and related approvals for the applicable properties and successors.

These provisions support orderly development and maintenance of the site while protecting surrounding properties from incompatible physical and operational effects. Accordingly, the agreement will not adversely affect orderly development or preservation of property values.

F. Will have a positive fiscal impact on the city.

The project would generate potential City revenues through taxable lodging, commercial activity, property taxes, and applicable fees. Section 4.5 of the Development Agreement proposes a rebate of 50 percent of eligible transient occupancy tax revenue exceeding the applicable annual retention threshold for the first 15 years following resort opening at Phase 1 buildout, subject to a cumulative rebate cap of $25 million.

The City would retain the first $1 million of actual annual TOT collections at Phase 1 buildout of 167 units, the first $1.5 million upon Phase 2 completion at 273 units, and the first $2 million at full buildout of 402 units. These thresholds establish priority retention of actual collections and do not constitute guaranteed developer payments. The developer is not obligated to cover a shortfall. The City would retain all project TOT after the incentive period expires or the rebate cap is reached, subject to applicable tax requirements.

PUBLIC HEARING NOTICE:

A notice of public hearing to consider the Project was published in the Desert Sun, the newspaper of record, on September 17, 2026, and a public hearing notice was mailed to property owners within a radius of 300- feet of the subject property on September 17, 2026, pursuant to Section 17.74.010G of the Coachella Municipal Code. At the time of issuance of this staff report, staff had not received public comments on this application.

ENVIRONMENTAL REVIEW:

Pursuant to the California Environmental Quality Act (CEQA) and the State CEQA Guidelines, the City is the lead agency for the Project. Public Resources Code section 21083.3 and State CEQA Guidelines section 15183 provide that a project consistent with the development density established by existing general plan policies for which an environmental impact report (EIR) was certified does not require additional environmental review except as necessary to evaluate certain project-specific environmental effects.

To determine whether the Project qualifies for streamlined review under State CEQA Guidelines section 15183, the City prepared a Modified Initial Study/Section 15183 Checklist for the Project (the "15183 Checklist"). The 15183 Checklist evaluates whether the Project is consistent with the development density established by the Coachella General Plan Update 2035 (GPU) and whether the Project may result in environmental effects that: (1) are peculiar to the Project or the parcel on which the Project would be located; (2) were not analyzed as significant effects in the GPU EIR; (3) are potentially significant off-site or cumulative impacts that were not discussed in the GPU EIR; or (4) are previously identified significant effects that, as a result of substantial new information not known when the GPU EIR was certified, are determined to have a more severe adverse impact than discussed in the GPU EIR.

The 15183 Consistency Analysis concludes that the Project is consistent with the development density established by the GPU and that none of the environmental effects identified in State CEQA Guidelines section 15183, subdivision (b), would occur. The analysis further concludes that the potential environmental effects associated with the Project were adequately analyzed in the GPU EIR and that all feasible mitigation measures from the GPU EIR applicable to the Project, together with applicable uniformly applied development policies and standards, have been incorporated into or otherwise apply to the Project. Accordingly, the Project is exempt from further environmental review pursuant to Public Resources Code section 21083.3 and State CEQA Guidelines section 15183.

Upon approval of the Project, a Notice of Exemption will be prepared and filed in accordance with CEQA.

TTM NO. 39330 ALTERNATIVES:

1) Approve Resolution No. PC2026-26 recommending that the City Council approve TTM No. 39330 with the findings and conditions as recommended by Staff.

2) Approve Resolution No. PC2026-26 recommending that the City Council approve TTM No. 39330 with the findings and conditions as recommended by Staff, with modifications as proposed by the Planning Commission.

3) Deny Resolution No. PC2026-26.

4) Continue this item and provide staff and the applicant with direction.

ZOA NO. 26-02 ALTERNATIVES (SFR):

1) Approve Resolution No. PC2026-27 recommending that the City Council approve ZOA No. 26-02 with the findings and conditions as recommended by Staff.

2) Approve Resolution No. PC2026-27 recommending that the City Council approve ZOA No. 26-02 with the findings and conditions as recommended by Staff, with modifications as proposed by the Planning Commission.

3) Deny Resolution No. PC2026-27.

4) Continue this item and provide staff and the applicant with direction.

ZOA NO. 26-03 ALTERNATIVES (STR):

1) Approve Resolution No. PC2026-28 recommending that the City Council approve ZOA No. 26-03 with the findings and conditions as recommended by Staff.

2) Approve Resolution No. PC2026-28 recommending that the City Council approve ZOA No. 26-03 with the findings and conditions as recommended by Staff, with modifications as proposed by the Planning Commission.

3) Deny Resolution No. PC2026-28.

4) Continue this item and provide staff and the applicant with direction.

CUP NO. 396 ALTERNATIVES (SPECIAL EVENT USE):

1) Approve Resolution No. PC2026-29 recommending that the City Council approve CUP No. 396 with the findings and conditions as recommended by Staff.

2) Approve Resolution No. PC2026-29 recommending that the City Council approve CUP No. 396 with the findings and conditions as recommended by Staff, with modifications as proposed by the Planning Commission.

3) Deny Resolution No. PC2026-29.

4) Continue this item and provide staff and the applicant with direction.

CUP NO. 407 ALTERNATIVES (SFR USE):

1) Approve Resolution No. PC2026-30 recommending that the City Council approve CUP No. 407 with the findings and conditions as recommended by Staff.

2) Approve Resolution No. PC2026-30 recommending that the City Council approve CUP No. 407 with the findings and conditions as recommended by Staff, with modifications as proposed by the Planning Commission.

3) Deny Resolution No. PC2026-30.

4) Continue this item and provide staff and the applicant with direction.

AR NO. 25-07 ALTERNATIVES:

1) Approve Resolution No. PC2026-31 recommending that the City Council approve AR No. 25-07 with the findings and conditions as recommended by Staff.

2) Approve Resolution No. PC2026-31 recommending that the City Council approve AR No. 25-07 with the findings and conditions as recommended by Staff, with modifications as proposed by the Planning Commission.

3) Deny Resolution No. PC2026-31.

4) Continue this item and provide staff and the applicant with direction.

DA NO. 25-01 ALTERNATIVES:

1) Approve Resolution No. PC2026-32 recommending that the City Council approve AR No. 25-01 with the findings and conditions as recommended by Staff.

2) Approve Resolution No. PC2026-32 recommending that the City Council approve AR No. 25-01 with the findings and conditions as recommended by Staff, with modifications as proposed by the Planning Commission.

3) Deny Resolution No. PC2026-32.

4) Continue this item and provide staff and the applicant with direction.

RECOMMENDED ALTERNATIVE(S):

Staff recommends Alternative #1 for TTM No. 39330, ZOA No. 26-02, ZOA No. 26-03, CUP No. 396, CUP No. 407, AR No. 25-07, and DA No. 25-01

Attachments:

1. Resolution No. PC2026-26 (TTM)
    a. Exhibit A – Conditions of Approval
    b. Exhibit B – Tentative Tract Map
    c. Exhibit C – Site Plan
    d. Exhibit D – Development Plan Set
2. Resolution No. PC2026-27 (ZOA - SFR)
    a. Attachment A – Zoning Ordinance Amendment
    b. Exhibit A – Redline Amendment Exhibit
3. Resolution No. PC2026-28 (ZOA – STR)
    a. Attachment A – Zoning Ordinance Amendment
    b. Exhibit A – Redline Amendment Exhibit
4. Resolution No. PC2026-29 (CUP – Special Event Use)
    a. Exhibit A – Conditions of Approval
5. Resolution No. PC2026-30 (CUP – SFR Use)
    a. Exhibit A – Conditions of Approval
6. Resolution No. PC2026-31 (AR)
    a. Exhibit A – Conditions of Approval

7. Resolution No. PC2026-32 (DA)
    a. Exhibit A – Conditions of Approval
    b. Exhibit B – Development Agreement
8. Energy Efficient Design and Heat Island Reduction Plan (COVA)
9. Public Improvement Exhibit (COVA)
10. Grading Exhibit
11. Published Copy of the Notice of Public Hearing
12. COVA Coachella Market Study
13. 15183 Checklist and Appendices
14. Civil – COVA Prelim Water-Sewer Exhibit
15. Civil – COVA Prelim WQMP Report
16. COVA Water Supply Assessment
17. Fire – COVA Fire Access and Hose Reach Exhibit

RESOLUTION NO. PC2026-26

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF COACHELLA RECOMMENDING THAT THE CITY COUNCIL CONDITIONALLY APPROVE TENTATIVE TRACT MAP NO. 39330 FOR THE "COVA" PROJECT PROPOSING THE DEVELOPMENT OF A HOTEL, RESORT, RESIDENTIAL, AND COMMERCIAL PUBLIC BEACH CLUB LOCATED ON APPROXIMATELY 87 ACRES ON FOUR CONTIGUOUS PARCELS (APNS 780-040-001, 780-040-003, 780-060-001, AND 780-060-002) SOUTH OF AVENUE 52, WEST OF VAN BUREN STREET AND EAST OF CALHOUN STREET, AND DETERMINE, PURSUANT TO STATE CEQA GUIDELINES SECTION 15183, THAT NO FURTHER ENVIRONMENTAL REVIEW IS REQUIRED. APPLICANT: RELEVANT COACHELLA OWNER, LLC

WHEREAS, on April 22, 2015, the City approved Resolution No. 2015-03 certifying the Program Environmental Impact Report ("EIR") (SCH #2009021007) for the City of Coachella General Plan Update 2035 ("General Plan") and Climate Action Plan; adopting environmental findings, a mitigation monitoring and reporting program, and a statement of overriding considerations; and approving the General Plan and Climate Action Plan pursuant to the California Environmental Quality Act, herein incorporated by reference; and

WHEREAS, on July 7, 2025, Relevant Coachella Owner, LLC ("Applicant"), submitted an application for a Tentative Tract Map, Architectural Review, Conditional Use Permit, Environmental Assessment, and Development Agreement for the proposed "COVA" project, consisting of hotel, resort, residential, and commercial, and public beach club uses on approximately 87 acres comprising four contiguous parcels (APNs 780-040-001, 780-040-003, 780-060-001, and 780-060-002) located south of Avenue 52, west of Van Buren Street and east of Calhoun Street ("Project"); and

WHEREAS, the Applicant subsequently submitted an application for a Zoning Ordinance Amendment related to the Project; and

WHEREAS, Tentative Tract Map No. 39330 proposes the subdivision of the approximately 87-acre Project site to accommodate an integrated hospitality-focused mixed-use development consisting of 240 condominium cottages, 162 single-family residential units, hotel and resort amenities, a public beach club, restaurant and sports bar, together with associated circulation, drainage, utility, landscaping, parking, and other infrastructure improvements; and

WHEREAS, the Project site has a zoning designation of (R-C) Regional Commercial and a General Plan land use designation of Regional Retail District, which allows a residential density of 10 to 15 dwelling units per acre and a floor area ratio of 0.35 to 2.0. The Project proposes a residential density of approximately 14.4 dwelling units per acre and a floor area ratio of approximately 0.65, consistent with the development density

and intensity established by the General Plan; and,

WHEREAS, implementation of the single-family residential component shown on Tentative Tract Map No. 39330 is contingent upon the City Council's adoption and effectiveness of Zoning Ordinance Amendment No. 26-02, allowing single-family residential uses in conjunction with a resort use within the Regional Commercial (R-C) zone, and approval of Conditional Use Permit No. 407 authorizing such uses; and

WHEREAS, the proposed Project is consistent with and intended to implement the vision of the Coachella Municipal Code and the General Plan pertaining to land use patterns, building and site design, and public right-of-way improvements; and,

WHEREAS, Public Resources Code section 21083.3 and State CEQA Guidelines section 15183 provide that a project consistent with the development density established by an existing general plan for which an EIR was certified does not require additional environmental review except as necessary to examine whether the project would result in project-specific significant effects peculiar to the project or its site; and

WHEREAS, the City, as lead agency under the CEQA, prepared a Modified Initial Study/Section 15183 Checklist for the Project (the "15183 Checklist"), to determine whether further environmental review of the Project is required; and

WHEREAS, the 15183 Checklist concludes that the Project would not result in any environmental effects that (1) are peculiar to the Project or the parcel on which the Project would be located; (2) were not analyzed as significant effects in the certified General Plan EIR; (3) are potentially significant off-site or cumulative impacts that were not discussed in the General Plan EIR; or (4) are previously identified significant effects that, as a result of substantial new information not known when the General Plan EIR was certified, are determined to have a more severe adverse impact than discussed in the General Plan EIR. The 15183 Checklist further concludes that the potential environmental effects associated with the Project are within the scope of the impacts analyzed in the General Plan EIR and that all feasible mitigation measures from the General Plan EIR applicable to the Project, together with applicable uniformly applied development policies and standards, have been incorporated into or otherwise apply to the Project; and

WHEREAS, the Project site is located within Subarea 3 – Van Buren Corridor of the General Plan's Land Use and Community Character Element, and the proposed subdivision supports the Subarea's regional commercial development, connectivity, pedestrian access, and compatibility objectives through its proposed mix of uses, distributed access points, frontage improvements, landscaping, sidewalks, trails, and other required improvements; and

WHEREAS, the Subdivision Map Act also requires that, prior to any map approval, the City must find that the proposed subdivision, together with the provisions for its design and improvement of any tentative map or a parcel map, is consistent with the general plan and any applicable specific plan, and that the site is physically suitable for that type of development and the proposed density, and that the design of the subdivision is not likely

to cause serious public health problems, conflict with easements, or cause substantial environmental damage or substantially and avoidably injure fish, wildlife, or their habitat (Government Code Section 66473.5); and

WHEREAS, the Tentative Tract Map is consistent with the General Plan and meets the Regional Retail District land use designation requirements and is consistent with the requirements outlined in the Coachella Municipal Code; and

WHEREAS, the Tentative Tract Map will not conflict with easements acquired by the public at large, for access through or use of property within the proposed tract map as all such improvements will be constructed to be adequate for the Project, and it will not cause substantial environmental damage or substantially avoidably injure fish, wildlife, or their habitat; and

WHEREAS, the proposed design of the tract map improvements contemplated by the proposed parcel subdivision is not likely to be detrimental to public health, safety, or welfare as adequate sewer and water systems will be available to the tract map. The parcels have the necessary infrastructure to adequately serve the proposed development and all proposed uses as allowed by the zoning ordinances that regulate the Project Site; and

WHEREAS, a notice of a public hearing to consider Tentative Tract Map No. 39330, Zoning Ordinance Amendment No. 26-02, Zoning Ordinance Amendment No. 26-03, Conditional Use Permit No. 396, Conditional Use Permit No. 407, Architectural Review No. 25-07, and Development Agreement No. 25-01 was issued in accordance with Coachella Municipal Code Section 16.12.110, 17.72.010J, 17.74.010G, 17.80.010E, and 17.100.060 inclusive of the publication on September 17, 2026, of a legal public hearing notice which was published in the Desert Sun, the City's newspaper of record and mailing of a public hearing notice to a certified list of property owners within 300 feet of the subject properties on September 17, 2026; and,

WHEREAS, on October 7, 2026, the Planning Commission held a duly noticed public hearing to consider the application for the Project during which evidence, both written and oral, including the staff report and supporting documents, was presented at said hearing; and,

WHEREAS, all other legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, BE IT RESOLVED, THE PLANNING COMMISSION OF THE CITY OF COACHELLA, CALIFORNIA DOES HEREBY FIND DETERMINE AND RESOLVE AS FOLLOWS:

SECTION 1. **Incorporation of Recitals.** The Planning Commission hereby specifically finds that all of the facts set forth in the recitals of this Resolution are true and correct and are incorporated into this Resolution by reference and constitute a material part of this Resolution.

SECTION 2. Compliance with California Environmental Quality Act. The Planning Commission has reviewed and considered the previously certified Coachella General Plan Update 2035 EIR (SCH No. 2009021007), the 15183 Checklist and supporting technical studies prepared for the Project, the staff report, all written and oral comments received, and the entire administrative record. Based on substantial evidence in the record, the Planning Commission recommends that the City Council make the following determinations:

1) The 15183 Checklist was prepared in compliance with CEQA and the State CEQA Guidelines and reflects the City's independent judgment and analysis.
2) The Project is consistent with the City's General Plan Update 2035 for which an EIR was certified.
3) The Project would not result in any environmental effects that: (a) are peculiar to the Project or the parcel on which the Project would be located; (b) were not analyzed as significant effects in the certified General Plan EIR; (c) are potentially significant off-site or cumulative impacts that were not discussed in the General Plan EIR; or (d) are previously identified significant effects that, as a result of substantial new information not known at the time the General Plan EIR was certified, are determined to have a more severe adverse impact than discussed in the General Plan EIR.
4) All potential environmental effects associated with the Project are within the scope of the impacts analyzed in the General Plan EIR, and all feasible mitigation measures from the General Plan EIR applicable to the Project, together with applicable uniformly applied development policies and standards, have been incorporated into or otherwise apply to the Project.
5) The Project is exempt from further environmental review pursuant to Public Resources Code section 21083.3 and State CEQA Guidelines section 15183.

The applicable mitigation measures adopted in connection with the General Plan Update 2035 EIR shall remain applicable to the Project and shall be incorporated into the Project's mitigation monitoring and reporting requirements.

SECTION 3. Tentative Tract Map Findings. Based upon the evidence presented at the hearing, including the staff report and written and verbal testimony, which are all incorporated herein by reference, the Planning commission hereby recommends to City Council the below findings and recommends a determination the Project complies with the necessary findings as required by Coachella Municipal Code Section 16.12 and the Subdivision Map Act. The Subdivision Map Act, in Government Code Section 66474, sets forth the findings required for tentative maps and are summarized as follows:

1. That the proposed map is not consistent with applicable general and specific plans;
The Project site is within the Regional Retail District land use designation of the City of Coachella's General Plan 2035 Update (General Plan). This designation provides opportunities for a wide range of shopping and entertainment in a variety of urban and suburban formats. These include regional shopping centers, mixed destination centers or similar uses. The uses allowed in this designation will cater to regional clientele and provide

a unique amenity to all residents of the Coachella Valley and an important revenue source for the City. The primary purpose of the District is to provide for commercial opportunities, with residential uses supporting the retail environment. Like the other Centers and Districts of Coachella, the Regional Retail District is organized into blocks by a combination of public and private streets that provide addresses for the businesses and organize access and parking for them. The blocks of this District may be the largest in Coachella, with buildings, landscape and signage similarly scaled up in size, but not neglecting the importance of creating a comfortable and attractive pedestrian environment for shoppers.

This designation accommodates retail, lodging, entertainment, and single-family residential uses, with commercial activities serving regional clientele and residential uses supporting the commercial environment. The proposed COVA development integrates hotel and resort accommodations, residential units, recreational amenities, restaurants, and a public beach club within a coordinated development.

The residential component consists of 402 units, including 162 single-family residential units and 240 condominium cottages, within approximately 28 acres. Residential density is calculated using the acreage devoted to these units and excludes the commercial components of the project. The resulting density is approximately 14.4 dwelling units per acre (du/ac). The allowed development intensity in the Regional Retail District density range is 10-15 DU/AC. The Regional Retail District allows for a floor area ratio (FAR) between 0.35 and 2.0. The public sector uses have a combined FAR of approximately 0.65, which is consistent with the Regional Retail District standard of 0.35 to 2.0.

The project meets the intent and purpose, intended physical character, allowed land uses, and development intensity allowed in the Regional Retail District general plan designation. The project is compatible with the design standards for network connectivity, street design, parks and open space, and urban form guidelines of the Regional Retail District general plan designation.

The project site is located within Subarea 3 – Van Buren Corridor of the General Plan's Land Use and Community Character Element. The subarea envisions a regional commercial destination that serves Coachella and neighboring communities while integrating new commercial development with surrounding neighborhoods. The proposed subdivision supports this vision by establishing lots for an integrated hospitality, residential, recreation, dining, and entertainment development. Its consistency with the applicable subarea policies is addressed below.

Subarea Policy 1 — Diversity of Retail and Services

The project would broaden the range of commercial services and visitor amenities available along the corridor through hotel and resort accommodations, restaurants, a public beach club, and recreational and entertainment facilities. These uses would serve visitors and provide additional dining and recreation opportunities for residents of Coachella and surrounding communities. The subdivision accommodates these activities within a

coordinated development, supporting the policy's objective of capitalizing on the corridor's regional location.

Subarea Policy 2 — Larger Commercial Uses

The proposed resort and public beach club are regional-serving commercial uses requiring coordinated areas for accommodations, recreation, parking, circulation, and supporting facilities. The subdivision provides separate lots for these functions while integrating them through common access and infrastructure. This arrangement supports the policy's allowance for larger commercial developments along the corridor.

Subarea Policy 3 — Transitions to Adjacent Residential Neighborhoods

The project incorporates perimeter landscaping, setbacks, walls, and designated access points to establish a transition between the development and surrounding properties. Proposed frontage improvements include landscaped buffers, sidewalks, and an equestrian trail along Calhoun Street, Avenue 52, and Van Buren Street. These features provide separation from project activities while improving the appearance and function of the adjoining streets.

The proposed conditions of approval will require that the project meet all operational requirements and standards as outlined in the Coachella Municipal Code pertaining to lighting, noise, commercial operations, and special events. Together, the site design and operational requirements are intended to limit conflicts between the resort and commercial activities and nearby residential uses.

Subarea Policy 4 — Connections to Adjacent Areas

The project proposes six vehicular access points distributed along Avenue 52, Calhoun Street, and Van Buren Street. Perimeter sidewalks and trail improvements would provide routes along the project frontage, while the internal circulation system would connect the residential accommodations, resort amenities, and commercial facilities.

These connections, together with the frontage improvements, support access between the development and adjacent areas.

Subarea Policy 5 — Pedestrian Amenities and Access to Commercial Entrances

The proposed frontage design includes separated six-foot sidewalks, landscaped buffers, trees, and an equestrian trail. These improvements would provide pedestrian facilities and landscaped separation along the adjoining streets.

With these features incorporated into the approved plans and conditions, the project would support the subarea's objective of providing a comfortable pedestrian environment and convenient access to commercial services.

Subarea Consistency Conclusion:

The proposed subdivision advances Subarea 3's commercial development objectives by accommodating regional-serving hospitality, dining, recreation, and entertainment uses. Its perimeter improvements and required compatibility measures support integration with surrounding development. Consistency with the subarea's connectivity and pedestrian design policies is supported by the public connections, crossing improvements, and entrance-access features identified in the proposed plans and conditions of approval.

The proposed subdivision accommodates an integrated mix of residential, lodging, recreation, dining, and entertainment uses consistent with the Regional Retail District designation. The residential component includes 402 units within approximately 28 acres, resulting in a density of approximately 14.4 dwelling units per acre. Commercial acreage is excluded from this residential density calculation.

As discussed above, the subdivision supports the applicable development objectives of Subarea 3 - Van Buren Corridor through its regional-serving commercial uses, frontage improvements, connections, and measures addressing compatibility with surrounding development. Based on this analysis and the required improvements identified in the conditions of approval, the proposed map is consistent with the General Plan. No applicable specific plan has been identified for the project site.

Implementation of the subdivision's single-family residential component is contingent upon City Council adoption and effectiveness of Zoning Ordinance Amendment No. 26-02, allowing single-family residential uses in conjunction with a resort use within the Regional Commercial (R-C) zone, and approval of Conditional Use Permit No. 407 authorizing those uses. The tentative map and accompanying project approvals shall incorporate this requirement.

2. That the design or improvement of the proposed subdivision is not consistent with applicable general and specific plans;

The proposed subdivision organizes residential, condominium, commercial, recreational, and open-space uses within an integrated development consistent with the General Plan's Regional Retail District designation. The subdivision includes internal circulation facilities, common-access and emergency-vehicle easements, utility improvements, drainage facilities, and frontage improvements serving the resulting lots.

The Regional Retail District recognizes that block sizes may vary depending on the uses accommodated, while encouraging pedestrian and bicycle connections within larger developments. The project includes frontage improvements along Calhoun Street, Avenue 52, and Van Buren Street consisting of six-foot separated sidewalks, landscaped buffers, an equestrian trail, and associated landscaping. These improvements provide circulation along the project perimeter and access to project entrances. The internal circulation system connects the residential and lodging accommodations with resort amenities and supporting facilities.

The private resort component does not provide connections at every interval suggested by the General Plan. However, the combination of perimeter routes, distributed access points, and internal circulation supports movement around and within the development. Publicly

accessible commercial facilities must provide pedestrian access from adjoining public sidewalks, with the applicable access improvements incorporated into the proposed plans and conditions of approval.

The project also supports Subarea 3 — Van Buren Corridor by accommodating regional-serving commercial activities, providing frontage improvements, and incorporating landscaped transitions between the development and surrounding properties. Grading, drainage, utility, and circulation improvements are subject to City review and the applicable conditions of approval.

For these reasons, the proposed subdivision design and required improvements are consistent with the City of Coachella General Plan. No applicable specific plan has been identified for the project site.

3. That the site is not physically suitable for the type of development;

The approximately 87-acre site provides land for the proposed residential and condominium development, hotel and resort uses, public beach club, supporting commercial facilities, recreational amenities, internal circulation, and drainage improvements. The proposed project is physically suitable for the proposed development project. The project is compatible with general plan guidelines of the Regional Retail District general plan designation. The project is in compliance with density requirements of the Regional Retail District general plan designation. In addition to meeting the proposed density requirements, the project proposed two access points along Avenue 52, two along Calhoun Street, and two along Van Buren Street to serve its public commercial and private resort components.

The conditions of approval require a comprehensive drainage report, precise grading and improvement plans, water and sewer plans, and compliance with the applicable engineering studies. These requirements address site grading, stormwater management, utility connections, and the improvements necessary to serve the resulting lots. Fire Department requirements address emergency access, fire protection water supply, and required fire flow.

Based on the supporting engineering and geotechnical analyses, and with implementation of the required improvements and applicable conditions of the approval, the site is physically suitable for the proposed type of development.

4. That the site is not physically suitable for the proposed density of development;

The site is physically suitable for the proposed density of development. Allowed land uses in the Regional Retail District general plan designation include retail, lodging, entertainment, and residential uses at a development intensity of 10 - 15 DU/AC. The proposed project is for the development of a hotel, resort, residential, and commercial public beach club. The project proposes a mixed-use development, consisting of a total of 402 units on approximately 28 acres (14.4 du/acre), which is consistent with the General Plan residential density range of 10 – 15 dwelling units per acre. The commercial component of the proposed project has a combined FAR of approximately 0.65, which is consistent with the Regional Retail District standard of 0.35 to 2.0.

The residential component is situated within a larger development that provides additional areas for circulation, recreational amenities, open space, drainage, and supporting infrastructure. The proposed subdivision establishes lots and access arrangements to accommodate these functions.

The conditions of approval require the applicant to provide the water, sewer, drainage, circulation, and fire protection improvements necessary to serve the proposed development. The required improvements must accommodate the residential component together with the demands of the commercial and resort uses, consistent with the supporting engineering studies and service-provider requirements.

Based on the proposed development arrangement and implementation of the required improvements, the site is physically suitable for the proposed density.

5. That the design of the subdivision or the proposed improvements are likely to cause substantial environmental damage or substantially and unavoidably injure fish or wildlife or their habitat;

Pursuant to the California Environmental Quality Act (CEQA) and the State CEQA Guidelines, the City is the lead agency for purposes of CEQA for this Project. The City prepared a Modified Initial Study/ 15183 Checklist (15183 Checklist) to evaluate whether the proposed Project requires further review under the California Environmental Quality Act (CEQA).

The General Plan Update Environment Impact Report (EIR) determined that biological-resource impacts would be less than significant.[1] Although growth projected under the GPU could result in the loss of foraging habitat for migratory species, those impacts are expected to be less than significant due to the significant tracts of land that would be set aside as open space as proposed by the GPU Land Use Plan.[2]

The Project site consists primarily of agricultural development including date palms, grapevines, and other cultivated areas, together with disturbed and developed areas. . An irrigation pond occurs in the central-northern area of the site with nearby pump housing and additional support structures. Disturbances have eliminated the natural plant communities that historically occurred on the project site. The biological assessment prepared by ELMT Consulting identified no native or special-status natural communities, jurisdictional drainage or wetland features, designated critical habitat, or mapped wildlife corridors or linkages. The irrigation pond is an artificial agricultural feature that does not support fish, riparian habitat, or hydrophytic vegetation. The site is also outside a CVMSHCP Conservation Area, and the CVMSHCP does not identify modeled habitat for a covered species within or adjacent to the site. No special-status species were observed during the field survey, and the assessment found no burrowing owls, owl sign, or suitable burrows.

1 City of Coachella, 2035 GPU Draft EIR, Biological Resources, at 4.3-28.
2 *Ibid*.

To ensure no impact occurs to migratory birds, the biological report suggests a pre-construction nesting bird clearance survey which will be conducted prior to ground disturbance if construction occurs between February 1st and August 31st. This recommendation is consistent with the requirements of the MBTA, California Fish and Game Code, and USFWS.

The project would be consistent with the biological-resources analysis within the GPU EIR. The project would not create new impacts or increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

6. That the design of the subdivision or the type of improvements is likely to cause serious public health problems; and

The proposed subdivision is subject to conditions requiring approved water and sewer plans, necessary utility connections and improvements, and drainage facilities designed to manage on-site runoff and existing tributary flows. The applicant must construct the improvements necessary to serve the development in accordance with City and applicable service-provider requirements.

The conditions of approval also require stormwater quality management, construction stormwater controls, and dust and erosion control measures. Fire protection requirements address emergency access, adequate fire protection water supply, and required fire flow.

The recreational lagoons must comply with applicable health and sanitation requirements and obtain the necessary agency approvals for their construction and operation. Water treatment, disinfection, and recreational use must meet the requirements of the Riverside County Department of Environmental Health. The proposed stormwater detention lake is separate from the recreational lagoons and is not intended for swimming or other water-contact recreation.

The Section 15183 Checklist determined that construction and operational emissions would remain below applicable South Coast AQMD regional and localized significance thresholds, including at nearby sensitive receptors, and would not result in a peculiar, new, or substantially more severe air-quality impact than analyzed in the General Plan EIR. Compliance with South Coast AQMD Rules 402, 403, and 403.1 and Chapter 8.20 of the Municipal Code would control nuisance emissions and fugitive dust.

With implementation of the required utility, drainage, fire protection, and sanitation requirements, the subdivision design and proposed improvements are not likely to cause serious public health problems.

7. That the design of the subdivision or the type of improvements will conflict with easements, acquired by the public at large, for access through or use of property within the proposed subdivision. In this connection, the governing body may approve a map if it finds that alternate easements, for access or for use, will be provided, and that these will be substantially equivalent to ones previously acquired by the public.

The proposed map will not conflict with any public easements acquired for access or use by the public at large within the proposed development project. The Riverside County Office of the Fire Marshal, City of Coachella Engineering Department/Public Works Department, Coachella Water Authority, and the County of Riverside have reviewed the proposed project and no concerns pertaining to easements were identified. The subdivision of land will not conflict with easements for access through or use of property and as such, the development project's design is confirmed to be in harmony with existing public easements.

SECTION 4. Location and Custodian of Records. The documents and materials that constitute the record of proceedings on which these findings are based are located at Coachella Civic Center. The Community Development Director is the custodian of the record of proceedings.

SECTION 5. Execution of Resolution. The Planning Commission Chairperson shall sign this Resolution and the Planning Commission Secretary shall attest and certify to the passage and adoption thereof.

SECTION 6. Recommendation to City Council. Based on the foregoing recitals and findings above, and the written and oral comments, facts and evidence presented, the City of Coachella Planning Commission recommends that the City Council conditionally approve Tentative Tract Map No. 39330 for the "COVA" project proposing the development of a hotel, resort, residential, and commercial public beach club located on approximately 87 acres on four contiguous parcels (APNs 780-040-001, 780-040-003, 780-060-001, and 780-060-002) south of Avenue 52, west of Van Buren Street and east of Calhoun Street ("Project"). The applicant shall demonstrate compliance with ALL Conditions of Approval, as set forth in Exhibit "A", Tentative Tract Map in "Exhibit B", Site Plan "Exhibit C", and Development Plan Set in "Exhibit D" of this Resolution. Failure to demonstrate compliance with these conditions of approval may result in the delay of the Proposed Use or the rescinding of the City of Coachella's conditional approval. Where the term "Applicant" is used in any condition of approval, this term shall also apply to the Property Owner, any developer, or any successor in the interest of the Applicant. It is the Applicant's or Applicant's successor in interest responsibility to fully comply with the conditions of approval unless subsequently modified in accordance with the City's required processes and procedures.

SECTION 7. Severability. If any section, subsection, sentence, clause, phrase, or portion of this Resolution is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Resolution. The Planning Commission of the City of Coachella hereby declares that it would have adopted this Resolution and each section, subsection, sentence, clause, phrase, or portion thereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, phrases, or portions be declared invalid or unconstitutional.

PASSED APPROVED and ADOPTED this 7th day of October 2026.

AYES:

NOES:

ABSENT:

ABSTAIN:

_____
Eva Lara, Chairperson
City of Coachella

ATTEST:

_____
Kendra Reif
Planning Commission Secretary

APPROVED AS TO FORM:

_____
Best Best & Krieger
City Attorney

Exhibit A – Resolution No. PC2026-26

CONDITIONS OF APPROVAL FOR TENTATIVE MAP NO. 39330

General Conditions

1. Tentative Tract Map 39330 is approved for the "COVA" project proposing the development of a hotel, resort, residential, and public beach club located on approximately 87 acres on four contiguous parcels (APNs 780-040-001, 780-040-003, 780-060-001, and 780-060-002) south of Avenue 52, west of Van Buren Street and east of Calhoun Street, and finding that the previously certified Environmental Impact Report adequately address all environmental impacts and no further environmental review is necessary pursuant to Public Resources Code section 21166 and CEQA Guidelines section 15183.

2. The applicant shall defend, indemnify and hold harmless the City of Coachella, its officials, officers, employees, and agents from and against any claim, action, or proceeding against the City, its officials, officers, employees or agents to attack, set aside, void or annul any project approval or condition of approval of the city concerning this project, including but not limited to any approval or condition of approval or mitigation measure imposed by the City Council or Planning Commission. The City shall promptly notify the applicant of any claim, action, or proceeding concerning the project and the City shall cooperate fully in the defense of the matter. The City reserves the right, at its own option, to choose its own attorney to represent the City, its officials, officers, employees and agents in the defense of the City Attorney, within five days of the effective date of this approval.

3. The working drawings shall include within the first four pages a list of all conditions of approval included in this resolution.

4. CC&R's. The Project shall adopt Conditions, Covenants and Restrictions (CC&R's), and act as a liaison to the City for review of the placement, type, architectural style, materials, and landscaping of all units and lots. The proposed CC&R's shall be submitted for City and Riverside County Fire review prior to recordation of final map and the City shall be a signatory of the CC&R's. The CC&Rs shall stipulate a restriction on the duration of stay for any Resort patron, to no more than 30 days. The Resort includes the hotel, villas, and residences within the Resort area. The CC&R's shall stipulate the maintenance of all common area improvements and perimeter walls, or landscape maintenance required may be stipulated through a separate Landscape Maintenance Agreement to be submitted and approved by the city.

5. Prior to the recordation of the final map the applicant shall submit detailed landscaping irrigation plans and sign plans for review and approval by the City Engineer and Development Services Director.

6. Landscape. The landscape plans for the street medians and the common area frontages along Van Buren Street, Avenue 52, and Calhoun Street shall be revised to remove any proposed decomposed granite and replace it with a minimum three-quarter inch (¾-inch) gravel, subject to the discretion, review, and approval of the Community Development Director. This requirement shall not apply to the required 10-foot-wide decomposed granite multi-purpose trail. Landscape medians shall be designed in accordance with the

2008 median design guidelines to the satisfaction of the Community Development Director.

7. Landscape. A landscape weed barrier shall be provided on city-maintained landscape areas, at the discretion of the Community Development Director and Public Works Director.

8. Landscape. The common area landscape frontages along Avenue 52 and Van Buren Street shall include a minimum 10-foot-wide decomposed granite multi-purpose trail with metal landscape edging or concrete mow curb on both edges of the trail and equestrian rail fencing, subject to review and approval by the Community Development Director.

9. Lighting. Final design of the light poles visible from the public right-of-way shall be subject to the discretion, review, and approval of the Community Development Director and Public Works Director.

10. Landscape. Landscaping and irrigation shall be provided in accordance with Section 17.54.010(J) of the Municipal Code and in accordance with the State Model Water Efficient Landscape Ordinance (AB 1881). Water budget calculations, including the Maximum Applied Water Allowance (MAWA) and Estimated Total Water Use (ETWU) shall be provided as part of the landscaping and irrigation plan.

11. Landscape. The applicant shall submit, and must obtain approval from the Community Development Director, a letter from a registered landscape architect confirming that landscaping and irrigation have been installed in accordance with the approved plans prior to issuance of a certificate of occupancy. Any damaged, dead or decayed landscaping landscape areas shall be replaced per approved landscape plans upon landscape inspection by the Community Development Department and prior to issuance of a certificate of occupancy.

12. Landscape. The Planning Division may request minor substitutions of plant materials or request additional sizing or quantity of materials during plan check.

13. Signage. Identification signs for the project shall include high quality and durable design with accent lighting. A detailed sign plan shall be submitted to the Community Development Director and the final design shall be approved by the Community Development Director. The Community Development Director may, at their discretion, elevate the review of the proposed monument signage to the Planning Commission for review as a non-hearing item.

14. Artwork. Installation of artwork visible from the public right-of-way shall be in accordance with the Coachella Municipal Code. Prior to placement of an approved artwork, applicant and the owner of the site shall execute and record a covenant in a form approved by the city for maintenance of the artwork. Review by the Public Arts Commission shall be required per municipal code requirements.

15. Entertainment Permit. Prior to issuance of a Certificate of Occupancy for the project, the applicant shall submit an Entertainment Permit application for review and approval by the City Council.

16. Parking. Applicant shall submit off-site parking agreements or equivalent parking measures to the City for review and approval. Prior to issuance of a Certificate of Occupancy for the Beach Club commercial area the applicant shall execute a signed and notarized off-site parking agreement, complete required off-site parking improvements, or implement other equivalent measures, to the satisfaction of the Community Development Director and City Engineer. If the applicant proposes to satisfy this requirement through the construction of off-site parking improvements, the construction of off-site parking improvements shall be subject to an Architectural Review public hearing in accordance with the requirements of the Municipal Code.

17. Based on the City's parking analysis, the project shall be required to provide up to 183 parking spaces for the Beach Club commercial area and 48 parking spaces for the resort component. The applicant may request approval of a reduced number of parking spaces by submitting a parking analysis or other documentation to the satisfaction of city staff that demonstrates that fewer parking spaces will adequately serve the proposed use and operational characteristics of the project. Approval of a reduction of up to ten percent (10%) of the minimum required parking identified above shall be submitted to the Community Development Director for consideration and approval as a Minor Modification. Approval or denial of the Minor Modification shall be at the discretion of the Community Development Director. If a reduction exceeding ten percent (10%) of the minimum required parking is requested by the applicant, the request shall be considered through a public hearing item as either a Modification to the approved project or Variance request from the applicant. The Planning Commission shall have the discretion to approve, conditionally approve, or deny the request.

18. Parking. The city may require additional parking measures during the duration of this active use, if it is determined by the Community Development Director or City Engineer that the Beach Club Commercial or resort area traffic impacts are significant and not sufficiently mitigated with existing parking measures for the site. Additional parking measures may include the requirement of additional off-site parking, or the implementation of other equivalent measures as determined by the Community Development Director and the City Engineer. These parking measures required by staff determination shall be implemented by the property owner.

19. Phasing. Prior to the first certificate of occupancy for Phase 1, all off-site common areas and median landscape and irrigation improvements shall be completed. This condition shall be met at the discretion of the Community Development Director.

20. Energy Efficient Design and Heat Island Reduction Strategies. New development shall submit an energy efficient design and heat island reduction plan that incorporates heat island reduction strategies such as light-colored cool roofs, light-colored paving, permeable paving, substantial shade tree coverage, shade structures and shaded asphalt paving. Energy efficient building and site design strategies shall be incorporated such as appropriate solar orientation, thermal mass, use of natural daylight and ventilation, and

shading. Shade tree plantings in surface parking areas shall be installed to provide shade over fifty (50) percent of the parking area within ten (10) years. Solar photovoltaic shade structures or shade structures with cool roofing materials shall be permitted in whole or in part in lieu of shade tree plantings. At the direction of the Community Development Director, may require substitutions in trees, paving, or other items to address the energy efficient design and heat reduction plan strategies, and as described in this condition of approval.

21. The project shall comply with all applicable provisions of the City of Coachella Alcohol Ordinance and the requirements of the California Department of Alcoholic Beverage Control (ABC). The applicant shall demonstrate compliance with all applicable alcohol-related zoning requirements to the satisfaction of the Community Development Director. The applicant, property owner, or operator shall submit an application for a modification to the Conditional Use Permit or, as applicable, a separate Conditional Use Permit to establish or clarify alcohol-related uses proposed by specific vendors or operators.

22. The project shall implement all mitigation measures as recommended by the Project CEQA 15183 Consistency Analysis Memorandum.

Building

23. All amenities shall be accessible and on an accessible path of travel.

24. Because of the anticipated demand for building inspections associated with this project and the city's limited resources for building inspectors, the owner shall compensate the city for an inspector/s or record. The inspector of record will be selected and report to the City Building Official.

25. Include required electrical vehicle charging stations and electrical vehicle charging ready spaces in parking demand calculations. (CGBSC-5.106.5)

26. Include bicycle parking in parking demand calculations. (CGBSC 5.106.4)

Utilities

27. The project is located within the service area of the City's Coachella Water Authority and Coachella Sanitary District.

28. The applicant shall submit water and sewer plans for approval.

29. The first submittal shall not be accepted without the completion of the hydraulic model.

30. A $5,000 deposit is required to initiate hydraulic modeling.

31. The City of Coachella may need additional facilities to provide for the orderly expansion of its domestic water and sanitation systems. These facilities may include pipelines, wells, reservoirs, booster pumping stations, lift stations and other facilities. The developer may

be required to install these facilities and provide land and/or easements on which some of these facilities will be located.

32. New water and sewer connections are subject to the collection of impact fees.

33. All fire lines require the installation of Double Check Detector Assemblies.

34. Backflow devices are required on all non-residential connections installed within 12" of the meter box.

35. All buildings may require individual meters.

36. Irrigation may require its own meter.

37. All water connections shall install 4G AMI master meters.

38. All service lines shall be copper tubing per the approved list of materials.

39. All materials shall be per the approved list of materials provided by the Engineering Department or the Utilities Department.

40. No new water connections shall be shown on landscaping plans, all connections shall be in the water improvement plans.

41. Trees/shrubs must have a minimum of 15' separation distance from the Utilities water/sewer laterals. Or minimum 10' separation distance from water/sewer laterals with root barrier.

42. Provide plumbing blueprints depicting sanitary, industrial, and/or grease waste line. (all lines that are applicable)

43. Illustrate domestic water and sewer point of connection to the City's utilities.

44. Provide plumbing code fixture schedule with total DFU's listed.

45. Business establishments must complete Utilities Department's wastewater discharge survey and submit to Development Services.
    a. For tenant improvements, current and proposed plumbing code fixture schedule must be provided

46. Pretreatment equipment/Sample box: (if applicable) Provide manufacture specifications and sizing chart.
    a. Pretreatment Equipment Minimum Requirements:
        i. 750 gal minimum
        ii. Clean outs and vents before and after pretreatment equipment
        iii. Sample box immediately downstream of the pretreatment equipment
        iv. Multi suite buildings requesting pretreatment installation require separate sewer lateral connection per pretreatment device
        v. Made from precast concrete form

47. Outside drains connected to the sanitary sewer are prohibited unless drains are protected from rain water by having a permanent berm within a shade structure. Storm water is prohibited from entering the sanitary sewer.

Engineering

PRIOR TO APPROVAL OF ENGINEERING PLANS or ISSUANCE OF ENGINEERING PERMITS:

Tentative Map

48. A focused Traffic Impact Analysis (TIA) shall be prepared for the project by an appropriately licensed professional engineer. Prior to the preparation of the TIA, the engineer shall submit a scoping letter for the TIA for the City Engineer's approval. The TA shall include but not limited to identification of trip generation, traffic distribution and impact on existing transportation facilities and at time of General Plan build-out, all relevant, ingress and egress movements, lines of sight, queuing analysis, and alignment studies (preliminary signing and striping plan). Applicant shall obtain approval of site access and circulation from the Fire Marshall.

49. A preliminary soils report shall be prepared for the project by an appropriately licensed professional engineer. At a minimum, the soils report shall provide specific analyses and recommendations for grading, pavement structural sections, and infiltration.

50. A comprehensive drainage report, prepared by California Registered Civil Engineer, shall be submitted for review and approval by the City Engineer prior to issuance of any permits. The report shall contain pre- and post-development hydrology maps showing on-site and off-site tributary drainage areas and shall be prepared in accordance with the requirements of the Riverside County Flood Control District. Adequate provisions shall be made to accept and conduct the existing tributary drainage flows around or through the site in a manner which will not adversely affect adjacent or downstream properties. If the design of the project includes a retention basin, it shall be sized to contain the runoff resulting from a 10-year storm event and the runoff from a 100-year storm event shall be contained within basin with shallow ponding (3.5' max.). The basin shall be designed to evacuate a 10-year storm event within 72 hours. The size of the retention basin(s) shall be determined by the hydrology report and be approved by the City Engineer. Retention basin shall be provided with a minimum of 2.00 feet sandy soil if determined to contain silt or clay materials. Maximum allowable percolation rate for design shall be 10 gal./s.f./day unless otherwise approved by the City Engineer. A percolation test for this site is required to be submitted. A combination drywell vertical drain field shall be constructed at all points where runoff enters the retention basin. Drywell & vertical drain field design shall be based on soils borings made at the proposed drywell locations after the retention basins have been rough graded. Minimum depth shall be 45-feet. A log that includes sieve analysis for each strata of the borings shall be submitted to the City Engineer for confirmation of depth of the vertical drain fields. Underground retention under the proposed parking area will be considered as an alternative to surface retention subject to the approval of the City Engineer.

51. Identify and clearly show all necessary drainage easements to implement the project in accordance with drainage law.

52. Applicant shall submit for review and approval by the City Engineer all documents related to any existing and proposed on-site and off-site easements that may affect the development of the site. All easements shall be identified on the engineering plans.

53. Applicant shall obtain approval of site access and circulation from Fire Marshall.

Final Map

54. The Final Map shall comply with the Subdivision Map Act and City of Coachella Subdivision Ordinance.

55. All public streets shall be dedicated to City of Coachella.

56. Prior to submittal of the final map to the City Council for approval, the applicant shall post securities (Bonds) to guarantee the installation of required improvements and a Subdivision Improvement Agreement shall be submitted to Engineering Division for City Engineer and City Attorney approval.

57. Prior to approval of the Final Map, the applicant shall resolve potential CVWD issues related to existing tile drains or irrigation mains located within the tract boundary or along the streets adjacent to the tract. If necessary, tile drains and irrigation lines shall be relocated and easement documents prepared for the new location of any such lines. The easement shall be shown on the final map. Plans for the tile drain or irrigation relocation shall be submitted to CVWD for approval and a copy of the plans shall be submitted to the City for evaluation regarding possible conflict with City facilities. The applicant shall submit to the City approved copies of any such relocation plans.

58. All Primary streets, including 52nd Avenue, Calhoun Street, Van Buren Street and Interior streets shall be completed prior to final occupancy for the first structure at the Tract.

59. Prepare and record necessary drainage easements, access easements and utility easements to implement the project in accordance with drainage law and site conditions to the satisfaction of the City Engineer prior to approval of the Final Maps.

60. Full Street Improvements plans, Street Improvements Bonds and Monument Bonds shall be approved prior to Approval of the Final Maps. Street improvement plans shall be in conformance with recommendations outlined in an approved Traffic Impact Analysis and may include off site intersection improvements, engineering analysis of fair share off site improvements and fully executed agreements for phasing of fair share payments if needed per the Traffic Impact analysis.

61. Internal roads shall be complete prior to final occupancy of any adjacent house.

GENERAL:

62. All proposed development shall conform to the approved engineering studies and environmental migration measures as identified in the approved traffic, drainage, soils, hydrology, etc. studies developed under the tentative and final map process.

63. A storm water quality management plan shall be prepared for the project by California Registered Civil Engineer in compliance with NPDES and State Water Quality Control Board regulations. The project shall be designed to specify preferential use of Low Impact Development Best Management Practices that reduce pollutants and runoff volume.

64. Applicant shall comply with the valley wide NPDES permit requirements including but not limited to submittal of a WQMP for plan review accompanied by a $3,000 plan check deposit for approval including executed maintenance agreement. All unused plan check fees will be refunded to the applicant upon approval of the Final WQMP.

65. The developer shall submit a Fugitive Dust Control and Erosion Control plan in accordance with Guidelines set forth by CMC and SCAQMD to maintain wind and drainage erosion and dust control for all areas disturbed by grading. Exact method(s) of such control shall be subject to review and approval by the City Engineer. No sediment is to leave the site. Additional securities, in bond form, in amount of $2,000.00 per acre of gross area, and a one-time cash deposit of $2,000.00 are required to insure compliance with this requirement. No work may be started on or off site unless the PM-10 plan has been approved, the original plans, and executed dust control agreement, are filed in the engineering department at the City of Coachella.

66. Site access improvements shall be in conformance with the requirements of Title 24 of the California Administrative Code. This shall include access ramps for off-site and on-site streets as required.

67. The applicant shall provide necessary utility easements for IID and underground overhead distribution lines within the project boundaries. Applicant shall submit to the City a letter from IID that satisfies this requirement.

68. The applicant shall pay all necessary plan check, permit and inspection fees. Fees will be determined when plans are submitted to the City Engineering Department for plan check.

ROUGH GRADING:

69. Prepare and submit rough grading and erosion control plans for the project.

70. The project's soils engineer shall certify to the adequacy of the grading plan.

71. All projects developing one (1) acre or more of total land area, or which are part of a larger phased development that will disturb one acre of land, are required to obtain coverage under the State Water Resources Control Board's (SWRCB) General Permit for storm water discharges associated with construction activity. Proof of filing a Notice of Intent (NOI) with the SWRCB for coverage under this permit is required. The Waste Discharger's Identification Number (WDID), issued by the SWRCB, must be shown on the grading plans. The project's Storm Water Pollution Prevention Plan shall be submitted for the City's review and approval.

PRECISE GRADING:

72. A precise grading/improvement plan, prepared by a California Registered Civil Engineer, showing building footprints, pad elevations, finished grades, drainage routes, retaining walls, erosion control, slope easements, and all other pertinent information shall be submitted for review and approval by the City Engineer.

73. Rough grading shall be certified by the project soils engineer prior to issuance of a permit for precise grading or building construction.

74. Provide and record a reciprocal use and maintenance agreement to assure common ingress and egress and joint maintenance of all common access, parking areas and drives.

75. If applicant is planning to build a wall, separate permits shall be required for wall construction. The maximum height of any wall shall be limited to six (6) feet as measured from an average of the ground elevations on either side.

STREET IMPROVEMENTS:

76. Street improvement plans prepared by a California Registered Civil Engineer shall be submitted for review and approval by the City Engineer. All street improvements including street lights shall be designed and constructed in conformance with City Municipal Code, General Plan, and Standards and Specifications. Street flow line grade shall have a minimum slope of 0.35 %.

77. Applicant shall construct all off-site and on-site improvements including street pavement, curb, gutter, sidewalk, street trees, perimeter walls, perimeter landscaping and irrigation, storm drain, street lights, and any other incidental works necessary to complete the improvements. Driveways shall conform to City of Coachella standards for commercial driveways with a minimum width of 24.00 feet and curbed radius entrances.

78. Applicant shall construct and dedicate the following streets and street improvements to conform to the General Plan and/or requirements of Traffic Study.

    1) 52nd Avenue- Public Roadway as shown on the RAC and per these comments shall include the following:

        a. Dedication of land within project limits is required. This street will be required to be dedicated to the ultimate General Plan width as a Primary Arterial with Bicycle Lanes with 94 feet of right-of-way as per City of Coachella General Plan.

        b. Street measured at Center line to Southerly curb shall have a width of 37-foot.

        c. Applicant shall construct all appurtenant roadway components within project limits such as, but not limited to: sidewalk, ADA ramps, Traffic control striping, legends, Traffic control signs, full

improvements for Street median and Traffic signal light, Street Lights and street name signs to the satisfaction of the City Engineer.

d. Applicant shall install curb and gutter transitions to uniformly connect to existing adjacent improvements and coordinate installation and/or relocation of fire hydrants, water meters, storm drains, wells, street lights, any kind of tree and all other appurtenances as required to the satisfaction of the City Engineer.

e. Applicant shall improve Intersection at the Southwest corner of 52nd Avenue Van Buren Street including new ADA ramps, Traffic Signal relocation and/or modification (if required), Striping and Landscaping to the Satisfaction of the City Engineer and per the requirements of an approved Traffic Impact Analysis.

f. Applicant shall underground all existing dry utilities if existing within project limits such as, but not limited to: power poles, telecommunication poles and all other existing dry utilities.

g. Additional offsite improvements, such as intersection improvements at 52nd Avenue and Calhoun Street, installation of turning lanes, lane widening, etc. shall be installed to the Satisfaction of the City Engineer and per the requirements of an approved Traffic Impact Analysis.

2) Calhoun Street- Public Roadway as shown on the RAC and per these comments shall include the following:

a. Dedication of land along northbound lane within the entire project limits is required. This street is classified as Collector with Bicycle Lanes with 90 feet of right-of-way as per City of Coachella General Plan.

b. Street measured at Center line to Easterly curb shall have a width of 35-foot.

c. Applicant shall construct all appurtenant roadway components within project limits such as, but not limited to: sidewalk, ADA ramps, Traffic control striping, legends, Traffic control signs, Street Lights, street name signs, turn left or right pocket to the satisfaction of the City Engineer.

d. Applicant shall construct transition street lanes south of the property limits as required to the satisfaction of the City Engineer and per the requirements of an approved Traffic Impact Analysis.

e. Applicant shall install curb and gutter transitions to uniformly connect to existing adjacent improvements and coordinate installation and/or relocation of fire hydrants, water meters, storm

drains, wells, street lights, any kind of tree and all other appurtenances as required to the satisfaction of the City Engineer.

f. Applicant shall underground all existing dry utilities if existing at northbound lane within project limits such as, but not limited to: power poles, telecommunication poles and all other existing dry utilities.

g. Applicant shall improve Full intersection of 52nd Avenue and Calhoun Street including new ADA ramps, Traffic Signal), Striping and Landscaping to the Satisfaction of the City Engineer and per the requirements of an approved Traffic Impact Analysis.

h. Additional offsite improvements, such as intersection improvements, installation of turning lanes, lane widening, etc. shall be installed to the Satisfaction of the City Engineer and per the requirements of an approved Traffic Impact Analysis.

3) Van Buren Street- Public Roadway as shown on the RAC and per these comments shall include the following:

a. Dedication of land along southbound lane within the entire project limits is required. This street is classified as Major Arterial with Bicycle Lanes with 118 feet of right-of-way as per City of Coachella General Plan.

b. Street measured at Center line to Westerly curb shall have a width of 49-foot.

c. Applicant shall construct all appurtenant roadway components within project limits such as, but not limited to: sidewalk, ADA ramps, Traffic control striping, legends, Traffic control signs, Street Lights, street name signs, full improvements for Street median and Traffic signal light to the satisfaction of the City Engineer.

d. Applicant shall construct transition street lanes south of the property limits as required to the satisfaction of the City Engineer and per the requirements of an approved Traffic Impact Analysis.

e. Applicant shall install curb and gutter transitions to uniformly connect to existing adjacent improvements and coordinate installation and/or relocation of fire hydrants, water meters, storm drains, wells, street lights, any kind of tree and all other appurtenances as required to the satisfaction of the City Engineer.

f. Applicant shall underground all existing dry utilities if existing at southbound lane within project limits such as, but not limited to: power poles, telecommunication poles and all other existing dry utilities.

g. Applicant shall improve Southwest intersection of 52nd Avenue and Van Buren Street including new ADA ramps, relocate or modified Traffic Signal (If require), Striping and Landscaping to the Satisfaction of the City Engineer and per the requirements of an approved Traffic Impact Analysis.

h. Additional offsite improvements, such as intersection improvements, installation of turning lanes, lane widening, etc. shall be installed to the Satisfaction of the City Engineer and per the requirements of an approved Traffic Impact Analysis.

4) Interior Street - Private Roadway as shown on the RAC and per these comments shall include the following:

a. Interior streets within project limits shall be maintained by Homeowners association and classified as Private Streets. These streets are classified as Suburban Residential with Parking with 56 feet of right-of-way as per City of Coachella General Plan.

b. Applicant shall construct all appurtenant roadway components within project limits such as, but not limited to: sidewalk, ADA ramps, Traffic control striping, legends, Traffic control signs, Street Lights and street name signs to the satisfaction of the City Engineer.

c. Applicant shall install curb and gutter transitions to uniformly connect to existing adjacent improvements and coordinate installation and/or relocation of fire hydrants, water meters, storm drains, wells, street lights Traffic signal, and all other appurtenances as required to the satisfaction of the City Engineer.

SEWER and WATER IMPROVEMENTS:

79. Sewer & Water Improvement Plans prepared by a California Registered Civil Engineer shall be submitted for engineering plan check and City Engineer approval.

80. Applicant shall construct all off-site and on-site water improvements and any other incidental works necessary to complete the improvements. Size and location of sewer and water improvements shall be approved by the City Engineer.

PRIOR TO ISSUANCE OF BUILDING PERMITS:

81. A final soils report, compaction report and rough grading certificate shall be submitted and approved prior to issuance of any building permits.

82. Provide a set of proposed Covenants, Conditions and Restrictions (CC&R) for review and approval. The proposed CC&Rs shall contain the Association's/Owner's maintenance obligations with respect to various facilities including, but not limited to, right-of-way and private landscaping, private streets, sidewalks, utilities, street lights, and Water Quality

Management Plan (WQMP) features. This document must be submitted to and approved by the City before it is submitted to any other governmental entity.

83. Prior to issuance of building permits, all required public improvements, including landscaping and lighting of the retention basins, and landscaped areas along the exterior streets, shall be completed or secured with appropriate sureties to the satisfaction of the City Engineer. An engineering final inspection is required. "As-built" plans shall be submitted to and approved by the City Engineer. Prior to acceptance of the improvements by the City, such plans, once approved, shall be given to the city on compact disk in AutoCad format. All off-site and on-site improvements shall be completed to the satisfaction of the City Engineer prior to acceptance of improvements for maintenance by the City.

84. The applicant's Civil Engineer shall field verify and certify that all BMPs are designed, constructed, and functional in accordance with the approved WQMP.

PRIOR TO RELEASE OF OCCUPANCY PERMITS/ACCEPTANCE OF PUBLIC IMPROVEMENTS:

85. Prior to issuance of certificate of occupancy, all public improvements, including landscaping and lighting of the retention basins, and landscaped areas along the exterior streets, shall be completed to the satisfaction of the City Engineer. An engineering final inspection is required. "As-built" plans shall be submitted to and approved by the City Engineer. Prior to acceptance of the improvements by the City, such plans, once approved, shall be given to the city on compact disk in AutoCad format. All off-site and on-site improvements shall be completed to the satisfaction of the City Engineer prior to acceptance of improvements for maintenance by the City.

Fire

86. Fire Department Fire Protection Water Supply and Access Review – The Fire Department will require a submittal of a site plan, building information and other supporting documentation for the review of required fire protection water supply and access. Reference CFC as amended.

87. Fire Protection Water Supplies/Fire Flow - Minimum fire flow for the construction of all buildings is required per CFC Appendix B (, NFPA 1142) or other approved method. Prior to building permit issuance for new construction, the applicant shall provide documentation to show there exists a water system capable of delivering the required fire flow. Specific design features may increase or decrease the required fire flow. Reference CFC as amended.

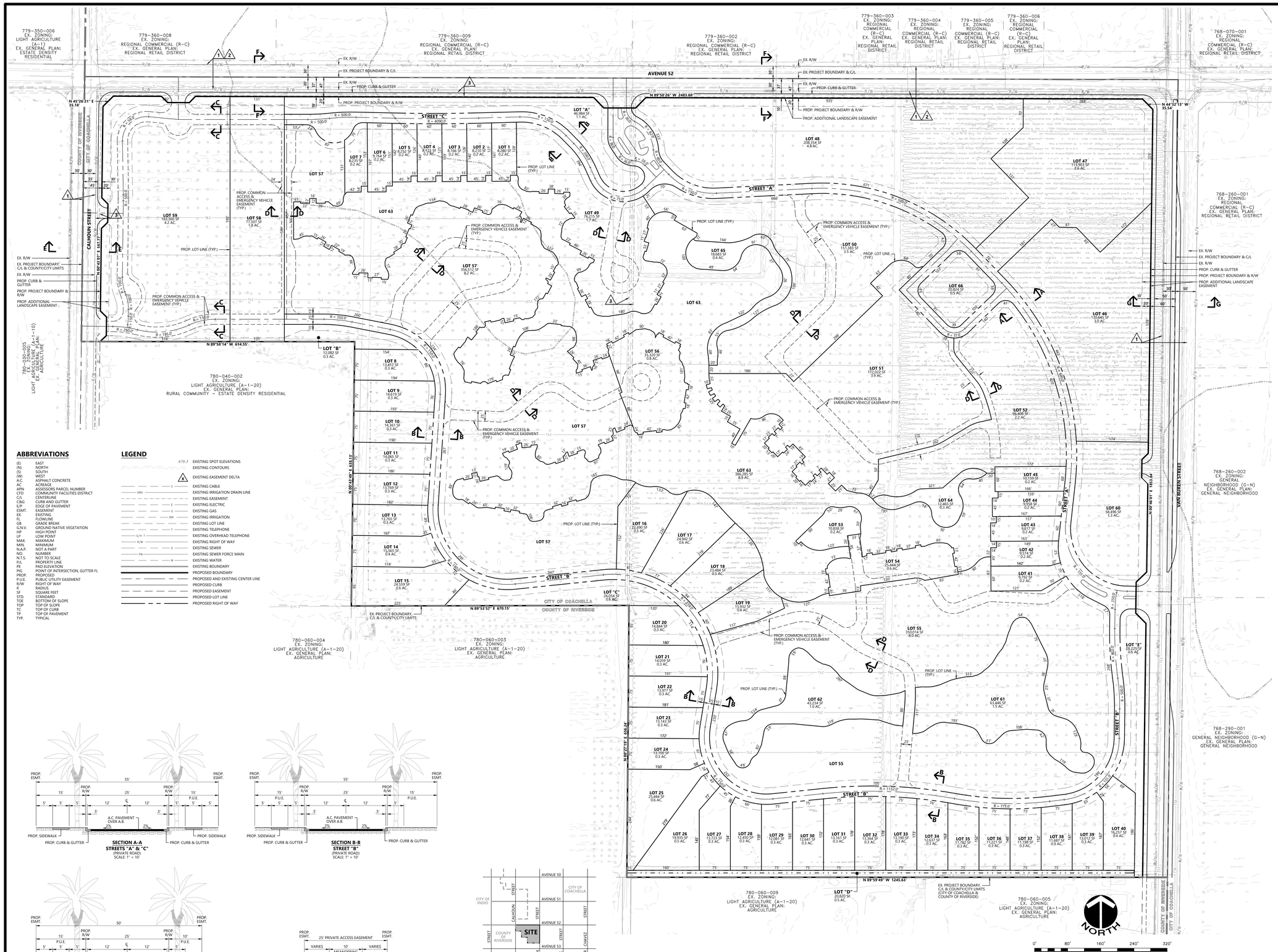
88. Fire Protection Water Supplies/Hydrants - Fire hydrants shall be located no more than 400 feet from all portions of the exterior of all buildings, or 600 feet from all portions of the exterior of the building equipped with an approved fire sprinkler system, along an approved route on a fire apparatus access road/driveway, unless otherwise approved by the Fire Department. The maximum distance to a fire hydrant can be increased utilizing direction from the Riverside County Office of the Fire Marshal Policies and Standards. Reference CFC as amended.

89. Fire Department Access - Fire apparatus access roads/driveways shall be provided within 150 feet of all exterior portions of buildings, unless otherwise approved by the Fire Department. Access shall comply with requirements from the Riverside County Fire Department Policies and Standards. Reference CFC as amended.

90. Fire Department Access Turn Around – On-parcel dead-end fire apparatus access roads exceeding 150 feet in length shall provide a bulb turnaround at the terminus measuring a minimum of 45 feet outside radius and 24 feet inside radius Parallel parking around the perimeter of the bulb is acceptable provided the bulb outside turning radius is increased by 8 feet. In-lieu of a bulb, a hammer-head type turnaround is acceptable where the top of the "T" dimension is 120 feet with the stem in the center. Additional turnaround designs may be acceptable as approved by the Fire Department. Reference CFC as amended and Riverside County Fire Department Policies and Standards.

91. Residential Fire Sprinklers: Residential fire sprinklers are required in all one and two-family dwellings per the California Residential Code (CRC). Plans must be submitted to the Office of the Fire Marshal for review and be approved prior to installation. Ref. CRC.

92. Materials and Construction Methods for Exterior Wildfire Exposure - Projects in the Local Responsibility Area Very High Fire Hazard Severity Zone and State Responsibility Area Very High, High, and Moderate Fire Hazard Severity Zones shall comply with Chapter 3, R337 of the California Residential Code and California Code of Regulations Title 14 Fire Safety Regulations. Reference CFC as amended.



ABBREVIATIONS

(E)	EAST
(N)	NORTH
(S)	SOUTH
(W)	WEST
A.C.	ASPHALT CONCRETE
AC	ACREAGE
APN	ASSESSORS PARCEL NUMBER
CFD	COMMUNITY FACILITIES DISTRICT
C/L	CENTERLINE
C&G	CURB AND GUTTER
E/P	EDGE OF PAVEMENT
ESMT.	EASEMENT
EX.	EXISTING
FL	FLOWLINE
GB	GRADE BREAK
G.N.V.	GROUND NATIVE VEGETATION
HP	HIGH POINT
LP	LOW POINT
MAX.	MAXIMUM
MIN.	MINIMUM
N.A.P.	NOT A PART
NO.	NUMBER
N.T.S.	NOT TO SCALE
P/L	PROPERTY LINE
PE	PAD ELEVATION
PIG	POINT OF INTERSECTION, GUTTER FL
PROP.	PROPOSED
P.U.E.	PUBLIC UTILITY EASEMENT
R/W	RIGHT OF WAY
R	RADIUS
SF	SQUARE FEET
STD.	STANDARD
TOE	BOTTOM OF SLOPE
TOP	TOP OF SLOPE
TC	TOP OF CURB
TP	TOP OF PAVEMENT
TYP.	TYPICAL

LEGEND

679.3 EXISTING SPOT ELEVATIONS
EXISTING CONTOURS
EXISTING EASEMENT DELTA
EXISTING CABLE
EXISTING IRRIGATION DRAIN LINE
EXISTING EASEMENT
EXISTING ELECTRIC
EXISTING GAS
EXISTING IRRIGATION
EXISTING LOT LINE
EXISTING TELEPHONE
EXISTING OVERHEAD TELEPHONE
EXISTING RIGHT OF WAY
EXISTING SEWER
EXISTING SEWER FORCE MAIN
EXISTING WATER
EXISTING R/W/BOUNDARY
PROPOSED BOUNDARY
PROPOSED AND EXISTING CENTER LINE
PROPOSED CURB
PROPOSED EASEMENT
PROPOSED LOT LINE
PROPOSED RIGHT OF WAY

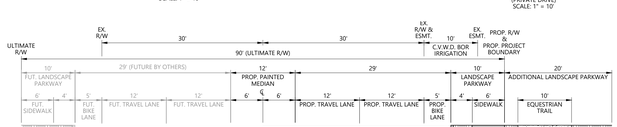
SECTION A-A
STREETS "A" & "C"
(PRIVATE ROAD)
SCALE: 1" = 10'

SECTION B-B
STREET "B"
(PRIVATE ROAD)
SCALE: 1" = 10'

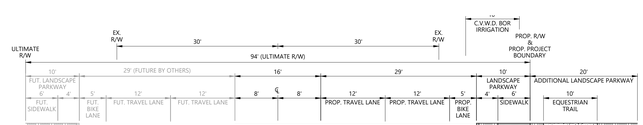
SECTION C-C
BEACH CLUB DRIVE
(PRIVATE ROAD)
SCALE: 1" = 10'

SECTION D-D
TYPICAL COMMON ACCESS & EMERGENCY VEHICLE EASEMENT
(PRIVATE DRIVE)
SCALE: 1" = 10'

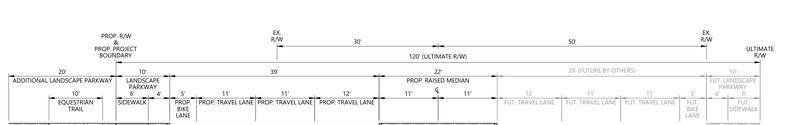
VICINITY MAP
N.T.S.



SECTION E-E
CALHOUN STREET
(COLLECTOR WITH ENHANCED BICYCLE FACILITIES)
(PER CITY OF COACHELLA GENERAL PLAN)
(PUBLIC ROAD)
SCALE: 1" = 10'



SECTION F-F
AVENUE 52
(PRIMARY ARTERIAL WITH ENHANCED BICYCLE FACILITIES)
(PER CITY OF COACHELLA GENERAL PLAN)
(PUBLIC ROAD)
SCALE: 1" = 10'



SECTION G-G
VAN BUREN STREET
(MAJOR ARTERIAL WITH ENHANCED BICYCLE FACILITIES)
(PER CITY OF COACHELLA GENERAL PLAN)
(PUBLIC ROAD)
SCALE: 1" = 10'

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THE CITY OF COACHELLA OF THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

TENTATIVE TRACT MAP NO. 39330

FOR SUBDIVISION AND CONDOMINIUM PURPOSES

EXHIBIT DATE: SEPTEMBER 11, 2026

REVISIONS

NO.	DATE	DESCRIPTION

DATA TABLE

APPLICANT / LAND OWNER	RELEVANT COACHELLA OWNER, LLC		
ADDRESS	6417 SELMA AVENUE HOLLYWOOD, CALIFORNIA 90028		
CONTACT	GRANT KING		
EXHIBIT PREPARER	MSA CONSULTING, INC.		
ADDRESS	34200 BOB HOPE DRIVE RANCHO MIRAGE, CALIFORNIA 92270		
CONTACT	PAUL DEPALATIS, AICP	TELEPHONE	(760) 320-9811
SOURCE OF TOPOGRAPHY	INLAND AERIAL SURVEYS, INC.		
ADDRESS	7117 ARLINGTON AVENUE, SUITE A RIVERSIDE, CALIFORNIA 92503		
DATE OF TOPOGRAPHY	DECEMBER 22, 2021	TELEPHONE	(951) 687-4252
ASSESSOR'S PARCEL NUMBERS	780-040-001, 780-040-003, 780-060-001 & 780-060-002		

LEGAL DESCRIPTION

BEING A PORTION OF NE 1/4 OF SECTION 12, TOWNSHIP 6 SOUTH, RANGE 7 EAST, SAN BERNARDINO MERIDIAN.

LAND USE DESCRIPTION	ACREAGE
EXISTING GROSS AREA	87.2 AC.
PROPOSED PUBLIC RIGHT OF WAY DEDICATION (CALHOUN STREET, AVENUE 52 & VAN BUREN STREET)	6.1 AC.
PROPOSED NET AREA	**81.1 AC.**
PROPOSED SINGLE FAMILY RESIDENTIAL LOTS (LOTS 1 THRU 45)	14.1 AC.
PROPOSED CONDOMINIUM LOTS (LOTS 46, 48, 49, 50, 52 & 54 THRU 58)	34.6 AC.
PROPOSED PUBLIC BEACH CLUB LOT (LOT 59)	4.2 AC.
PROPOSED BACK OF HOUSE LOT (LOT 60)	1.3 AC.
PROPOSED AMENITY LOTS (LOTS 47, 51, 53, 61 THRU 66)	19.3 AC.
PROPOSED OPEN SPACE LOTS (LOTS "A" THRU "E")	3.1 AC.
PROPOSED STREETS (STREETS "A" THRU "C")	4.5 AC.

EXISTING ZONING	REGIONAL COMMERCIAL (R-C)
PROPOSED ZONING	REGIONAL COMMERCIAL (R-C)
EXISTING GENERAL PLAN LAND USE	REGIONAL RETAIL DISTRICT
PROPOSED GENERAL PLAN LAND USE	REGIONAL RETAIL DISTRICT

PUBLIC UTILITY PURVEYORS

ELECTRIC	IMPERIAL IRRIGATION DISTRICT	(760) 335-3640
GAS	SOUTHERN CALIFORNIA GAS COMPANY	(877) 238-0092
TELEPHONE	FRONTIER COMMUNICATIONS	(800) 921-8101
WATER	COACHELLA WATER AUTHORITY	(760) 501-8100
CABLE	SPECTRUM	(877) 719-3278
SEWER	CITY OF COACHELLA	(760) 501-8100
USA	UNDERGROUND SERVICE ALERT	(800) 227-2600

EXISTING EASEMENT NOTES

1. AN EASEMENT IN FAVOR OF THE COUNTY OF RIVERSIDE, FOR PUBLIC HIGHWAYS AND INCIDENTAL PURPOSES, RECORDED APRIL 17, 1959 AS INSTRUMENT NO. 32692 OF OFFICIAL RECORDS. (PLOTTED HEREON)
2. AN EASEMENT IN FAVOR OF COUNTY OF RIVERSIDE, FOR PUBLIC HIGHWAY, UTILITIES AND INCIDENTAL PURPOSES, RECORDED SEPTEMBER 11, 1935 AS BOOK 252, PAGE 97 OF OFFICIAL RECORDS. (PLOTTED HEREON)
3. 10' BOR DISTRIBUTION EASEMENT PARCEL C-6-52 REC. 5/20/1949 (PLOTTED HEREON)
4. RESERVATIONS CONTAINED IN THE PATENT FROM THE UNITED STATES OF AMERICA, RECORDED NOVEMBER 28, 1908 IN BOOK 5, PAGE 67 OF PATENTS, AS FOLLOWS: RECORDED DECEMBER 23, 2009, REC. NO. 2009-0659534 OF OFFICIAL RECORDS. "SUBJECT TO ANY VESTED & ACCRUED WATER RIGHTS FOR MINING, AGRICULTURAL, MANUFACTURING OR OTHER PURPOSES, & RIGHTS TO DITCHES & RESERVOIRS USED IN CONNECTION WITH SUCH WATER RIGHTS AS MAY BE RECOGNIZED & ACKNOWLEDGED BY THE LOCAL CUSTOMS, LAWS & DECISIONS OF COURTS, & A RIGHT OF WAY FOR DITCHES OR CANALS CONSTRUCTED BY AUTHORITY OF THE UNITED STATES." (BLANKET IN NATURE)
5. AN EASEMENT IN FAVOR OF CALIFORNIA ELECTRIC POWER COMPANY, FOR UTILITIES & INCIDENTAL PURPOSES, RECORDED MARCH 27, 1942 AS BOOK 536, PAGE 297 OF OFFICIAL RECORDS. (BLANKET EASEMENT FOR MAINTENANCE, REPAIR & REPLACEMENT OF AS AS CONSTRUCTED UTILITY LINES)

FEMA FLOOD ZONE DESIGNATION

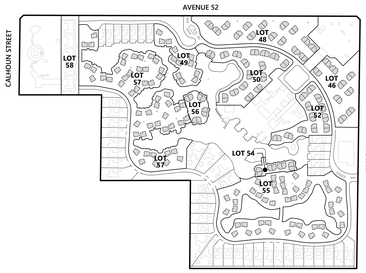
ZONE "X": AREA OF MINIMAL FLOOD HAZARD

AS SHOWN ON RIVERSIDE COUNTY, CALIFORNIA, FLOOD INSURANCE RATE MAPS, COMMUNITY PANEL MAP NUMBER: 06065C2262H EFFECTIVE DATE: MARCH 6, 2018

LIQUEFACTION	HIGH LIQUEFACTION ZONE
SCHOOL DISTRICT	COACHELLA VALLEY UNIFIED

NOTES

1. THIS MAP INCLUDES THE ENTIRE CONTIGUOUS OWNERSHIP OF THE LAND DIVIDER.
2. THERE ARE EXISTING DWELLINGS, BUILDINGS, OR OTHER STRUCTURES KNOWN ON THIS PROPERTY.



CONDOMINIUM LOT DETAIL

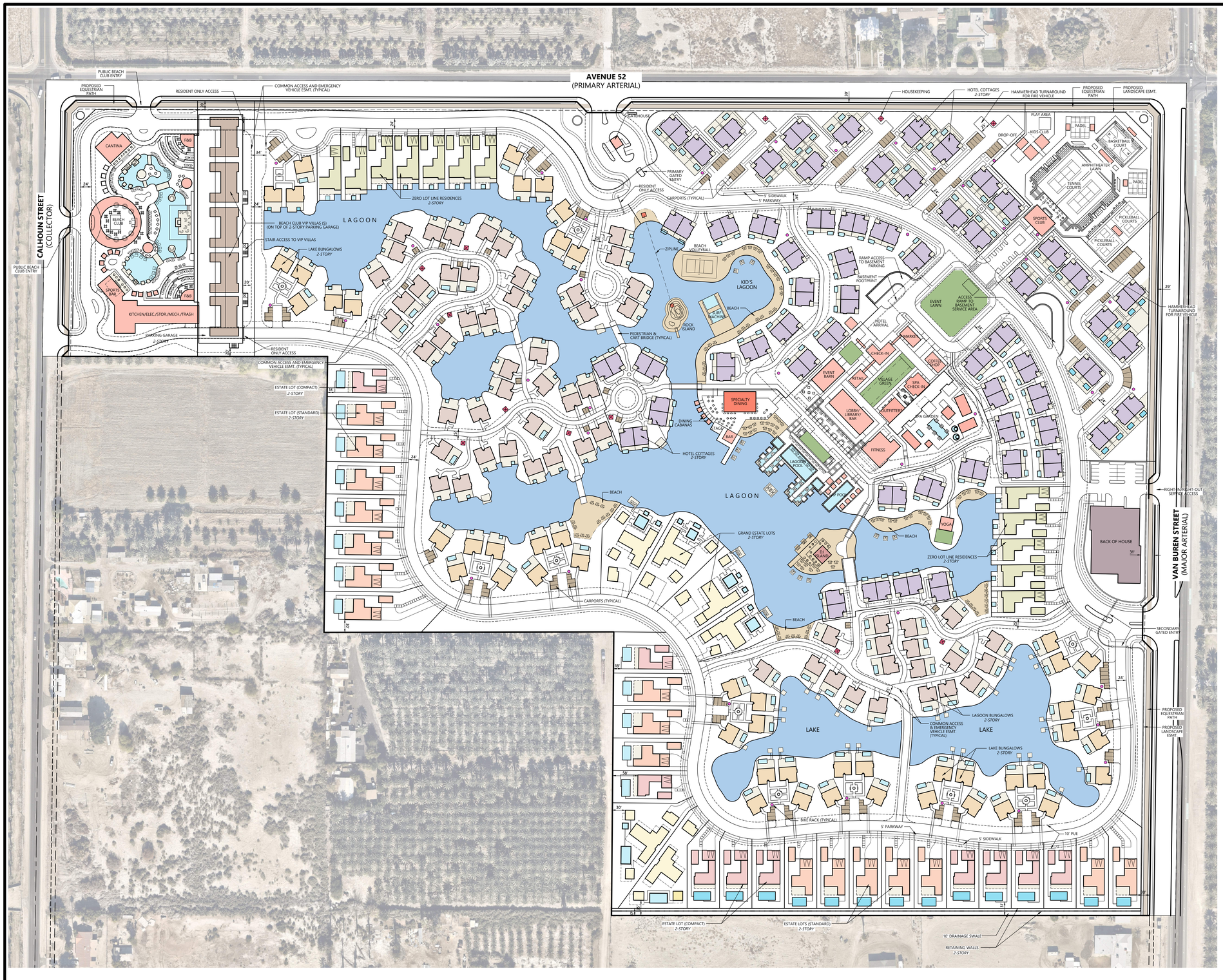
SCALE: 1" = 400'

CONDOMINIUM LOT UNIT COUNT	
LOT	UNIT COUNT
LOT 46	36 UNITS
LOT 48	60 UNITS
LOT 49	12 UNITS
LOT 50	64 UNITS
LOT 52	48 UNITS
LOT 54	16 UNITS
LOT 55	47 UNITS
LOT 56	16 UNITS
LOT 57	53 UNITS
LOT 58	5 UNITS
TOTAL	**357 UNITS**

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SHEET 1 OF 1 SHEETS

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ABBREVIATIONS

(E)	EAST
(N)	NORTH
(S)	SOUTH
(W)	WEST
AC.	ACREAGE
APN	ASSESSORS PARCEL NUMBER
BNDRY	BOUNDARY
C/L	CENTERLINE
C&G	CURB AND GUTTER
E/P	EDGE OF PAVEMENT
ESMT.	EASEMENT
EX.	EXISTING
M.B.	MAP BOOK
NO.	NUMBER
N.T.S.	NOT TO SCALE
O/H	OVERHEAD
PG.	PAGE
P/L	PROPERTY LINE
PROP.	PROPOSED
P.U.E.	PUBLIC UTILITY EASEMENT
R	RADIUS
R/W	RIGHT OF WAY
SF	SQUARE FEET
TYP.	TYPICAL
UG	UNDERGROUND

LEGEND

679.3 EXISTING SPOT ELEVATIONS
EXISTING CONTOURS
EXISTING EASEMENT DELTA
EXISTING CABLE
DRN EXISTING IRRIGATION DRAIN LINE
EXISTING EASEMENT
EXISTING ELECTRIC
G EXISTING GAS
IRR EXISTING IRRIGATION
EXISTING LOT LINE
EXISTING EDGE OF PAVEMENT
T EXISTING TELEPHONE
T/V T EXISTING OVERHEAD TELEPHONE
R/W EXISTING RIGHT OF WAY
S EXISTING SEWER
TW EXISTING SEWER FORCE MAIN
W EXISTING WATER
PROPOSED TENTATIVE TRACT MAP BOUNDARY
PROPOSED AND EXISTING CENTER LINE
PROPOSED CURB
PROPOSED EASEMENT
PROPOSED RIGHT OF WAY
PROPOSED LOT LINE

NORTH
0' 80' 160' 240' 320'
SCALE 1"=80'

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THE CITY OF COACHELLA OF THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

TECHNICAL SITE PLAN

EXHIBIT DATE: SEPTEMBER 16, 2026

REVISIONS

NO.	DATE	DESCRIPTION

DATA TABLE

APPLICANT / LAND OWNER	RELEVANT COACHELLA OWNER, LLC		
ADDRESS	6417 SELMA AVENUE HOLLYWOOD, CALIFORNIA 90028		
CONTACT	GRANT KING		
EXHIBIT PREPARER	MSA CONSULTING, INC.		
ADDRESS	34200 BOB HOPE DRIVE RANCHO MIRAGE, CALIFORNIA 92270		
CONTACT	PAUL DEPALATIS, AICP	**TELEPHONE**	(760) 320-9811
SOURCE OF TOPOGRAPHY	INLAND AERIAL SURVEYS, INC.		
ADDRESS	7117 ARLINGTON AVENUE, SUITE A RIVERSIDE, CALIFORNIA 92503		
DATE OF TOPOGRAPHY	DECEMBER 22, 2021	**TELEPHONE**	(951) 687-4252
ASSESSOR'S PARCEL NUMBERS	780-040-001, 780-040-003, 780-060-001 & 780-060-002		

LEGAL DESCRIPTION

BEING A PORTION OF NE 1/4 OF SECTION 12, TOWNSHIP 6 SOUTH, RANGE 7 EAST, SAN BERNARDINO MERIDIAN.

LAND USE DESCRIPTION	**ACREAGE**
EXISTING GROSS AREA	87.16 AC.
PROPOSED PUBLIC RIGHT OF WAY DEDICATION (CALHOUN STREET, AVENUE 52 & VAN BUREN STREET)	6.02 AC.
PROPOSED NET AREA	**81.14 AC.**

PROJECT STATISTICS

SINGLE-FAMILY RESIDENTIAL	**LOT SIZE**	**# BEDS**	**# STORIES**	**# UNITS**	**FLOOR AREA (SF)**
GRAND ESTATE LOT	100' X 160'	6	2	6	8,665 SF/UNIT [1]
ESTATE LOT (STANDARD)+ADU [4]	75' X 150'	4-5	2	17	4,721 SF/UNIT [1]
ESTATE LOT (COMPACT)	75' X 150'	4-5	2	10	4,403 SF/UNIT [1]
ZERO LOT LINE RESIDENCE	60' X 150'	4-5	2	12	4,585 SF/UNIT [1]
LAGOON BUNGALOW	N/A	3-4	2	61	2,600 SF/UNIT [1]
LAKE BUNGALOW	N/A	3-4	2	51	2,600 SF/UNIT [1]
BEACH CLUB VIP VILLAS	N/A	1	1	5	4,629 SF/UNIT [1] 32,245 SF [2] (TOTAL)
TOTAL				**162**	**646,177 SF [2]**
CONDO HOTEL					
HOTEL COTTAGES (1ST FLR.)	NA	1	1	120	1,248 SF/UNIT
HOTEL COTTAGES (2ND FLR.LOCKOFF)	NA	1	1	120	1,149 SF/UNIT
TOTAL				**240**	**287,640 SF**

MAIN CLUB AMENITIES	256,531 SF [3]
PUBLIC BEACH AREA	16,173 SF [3]
SPORTS CENTER	5,100 SF [3]

PARKING PROVIDED	**CAR SPACES**	**PARKING RATIO**	**CART SPACES**
HOTEL (2-LEVEL BASEMENT PARKING GARAGE)	360	REFER TO PAGE 38[6] FOR PARKING DEMAND ANALYSIS & NARRATIVE	50
HOTEL (SURFACE PARKING AT GROVE)	50		
HOTEL (SURFACE PARKING AT BOH)	18		
TOTAL HOTEL PARKING PROVIDED	**428**		-
BEACH CLUB (2-LEVEL PARKING GARAGE)	**321**	REFER TO PAGE 40[6]	
BUNGALOWS (VEHICULAR ACCESS)	51	1.0 SPACES/UNIT	
BUNGALOWS (CART ACCESS)	61[5]	1.0 SPACES/UNIT	104
ZERO LOT LINE LOTS	24	2.0 SPACES/UNIT	-
ESTATE LOTS	54	2.0 SPACES/UNIT	27
GRAND ESTATE LOTS	12	2.0 SPACES/UNIT	12
TOTAL RESIDENTIAL PARKING PROVIDED	**202**		**193**

NOTES :

1. INTERIOR FLOOR AREA ONLY. DOESN'T INCLUDE EXT. COVERED AREA AND ADU AREA
2. INCLUDES EXT. COVERED AREA AND ADU AREA
3. PLEASE REFER TO LANDSCAPE PACKAGE FOR COMPLETE BLDG. PROGRAMMING
4. ADU FLOOR AREA = 518 SF
5. PROVIDED IN HOTEL PARKING STRUCTURE
6. PLANNING AND LANDSCAPE ARCHITECTURE SUBMITTAL MATERIALS FOR CITY OF COACHELLA VALLEY

BIKE RACK LOCATION

EV PARKING SPACES PROVIDED PER 2025 CAL GREEN CODE

SINGLE-FAMILY RESIDENTIAL : 157 SPACES (1 EV SPACE PER UNIT)

HOTEL : 428 x 65% = 279 EV READY AND EV CAPABLE SPACES

BEACH CLUB : 321 x 40% = 129 EV READY AND EV CAPABLE SPACES

WATER AMENITIES	**AREA**
HOTEL LAGOON	9.0 ACRES
LAKE	2.4 ACRES
BEACH CLUB LAGOON	0.4 ACRES
TOTAL	11.9 ACRES

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SHEET 1 OF 1 SHEETS

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ENTITLEMENT CASE NUMBERS:

TTM NO.	TTM 39330
CUP NO.	CUP 396
EA NO.	EA 25-03 - COVA

COVA

ARCHITECTURAL REVIEW

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760.320.9811 msaconsultinginc.com

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PLANNING | LANDSCAPE ARCHITECTURE | ARCHITECTURE

SO.CAL.WESTCOASTELECTRIC

SUBMITTAL DATE:
JUNE 10, 2026

PROJECT DESCRIPTION

COVA IS AN 87-ACRE MASTER-PLANNED DESTINATION RESORT AND RESIDENTIAL COMMUNITY LOCATED IN THE CITY OF COACHELLA, CALIFORNIA. THE DEVELOPMENT INCLUDES 162 SINGLE-FAMILY HOMES ACROSS VILLA, RANCH, AND ESTATE LOTS, ALONG WITH A 120-UNIT (240-KEY) TOWNHOME STYLE RESORT HOTEL. THE PROJECT IS DESIGNED TO DELIVER A VIBRANT, WATER-CENTRIC HOSPITALITY AND RECREATION EXPERIENCE ANCHORED BY A 10-ACRE RECREATIONAL LAGOON AND A DIVERSE PROGRAM OF RESORT AMENITIES. THE PLAN INCLUDES HOSPITALITY USES, SIGNIFICANT OPEN SPACE, AND PUBLIC-SERVING ELEMENTS THAT CONTRIBUTE TO THE CITY'S BROADER GOALS FOR ECONOMIC DEVELOPMENT, TOURISM, AND HIGH-QUALITY PLACE MAKING.

LEGAL DESCRIPTION

BEING A PORTION OF NORTH EAST 1/4 OF SECTION 12, TOWNSHIP 6 SOUTH, RANGE 7 EAST, SAN BERNARDINO MERIDIAN.

ASSESSOR'S PARCEL NUMBERS

780-040-001, 780-040-003, 780-060-001 & 780-060-002

PROJECT OWNER & CONSULTANTS

PROJECT OWNER
RELEVANT COACHELLA OWNER, LLC
6417 SELMA AVE, 2ND FLOOR
LOS ANGELES, CALIFORNIA 90028
CONTACT: GRANT KING
P: (970) 596-6642

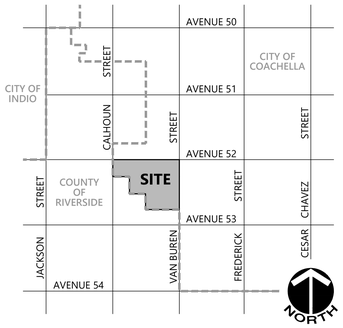
PROJECT ARCHITECT
10 DESIGN
415 JACKSON STREET, SUITE 100
SAN FRANCISCO, CALIFORNIA 94111
CONTACT: MATTHEW PAGE
P: (415) 673-8990

PROJECT CIVIL
MSA CONSULTING, INC.
34200 BOB HOPE DRIVE
RANCHO MIRAGE, CALIFORNIA 92270
CONTACT: PAUL DEPALATIS
P: (760) 320-9811

PROJECT ARCHITECT
O2 ARCHITECTURE
1089 N PALM CANYON DRIVE, SUITE B
PALM SPRINGS, CALIFORNIA 92262
CONTACT: LANCE O'DONNELL
P: (760) 778-8165

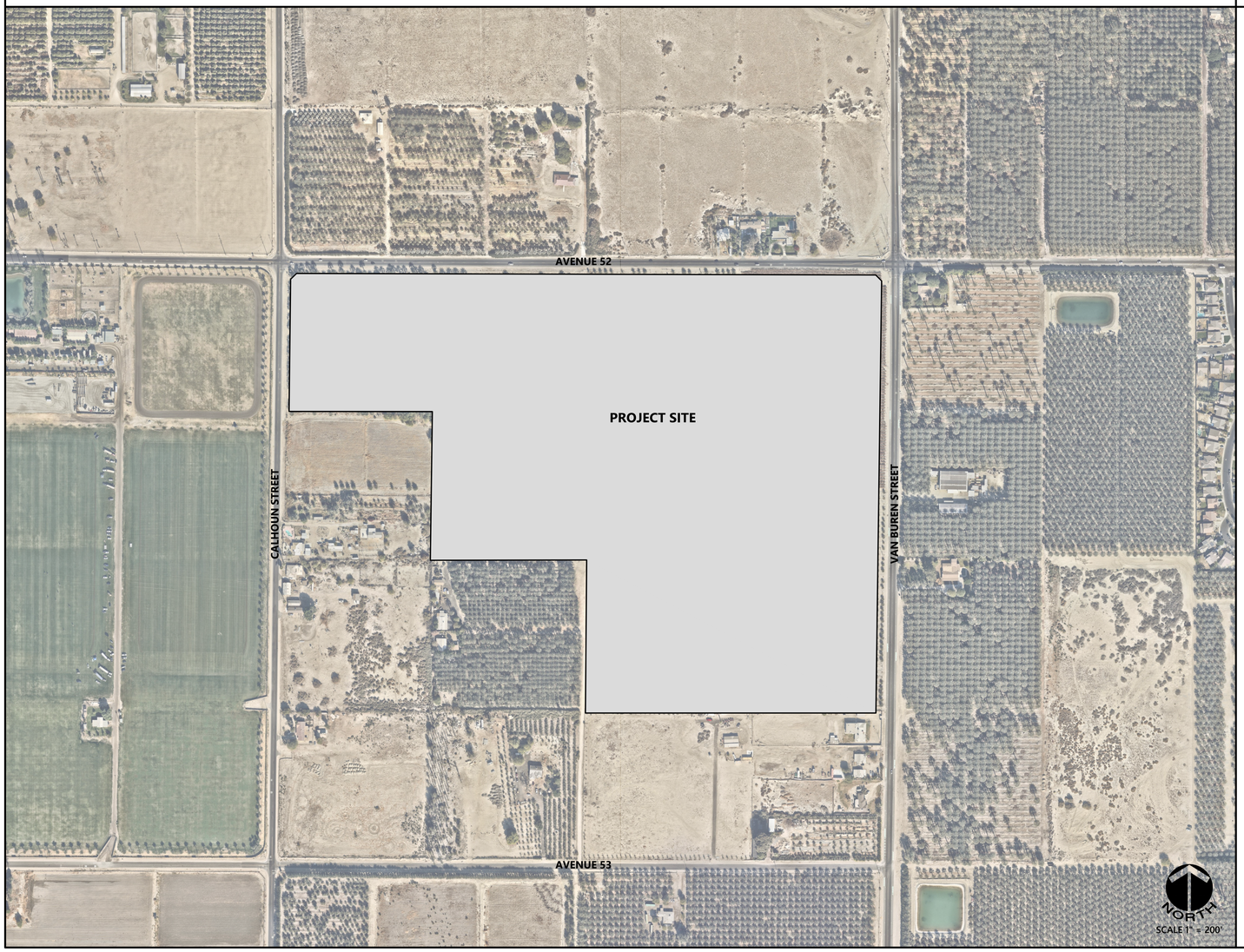
PROJECT SITE DESIGN & LANDSCAPE
VITA
181 THIRD STREET, SUITE 100
SAN RAFAEL, CALIFORNIA 94901
CONTACT: KARL SVEINSSON
P: (415) 259-0190

VICINITY MAP



VICINITY MAP
N.T.S.

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10

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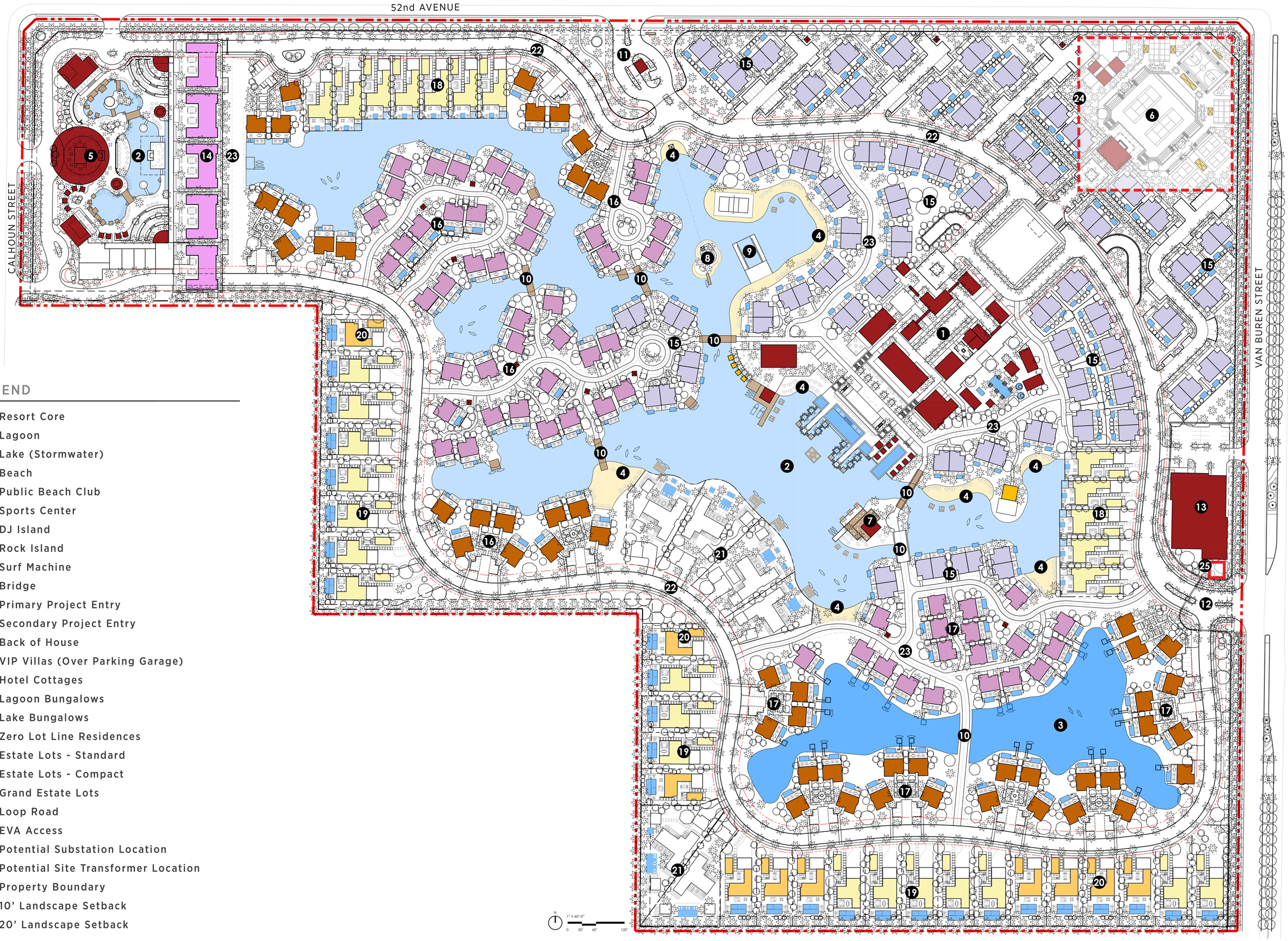
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SUBMITTAL DATE: JUNE 10, 2026
COVA | ARCHITECTURAL REVIEW

SITE DESIGN

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760.320.9811 msaconsultinginc.com

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LEGEND

1. Resort Core
2. Lagoon
3. Lake (Stormwater)
4. Beach
5. Public Beach Club
6. Sports Center
7. DJ Island
8. Rock Island
9. Surf Machine
10. Bridge
11. Primary Project Entry
12. Secondary Project Entry
13. Back of House
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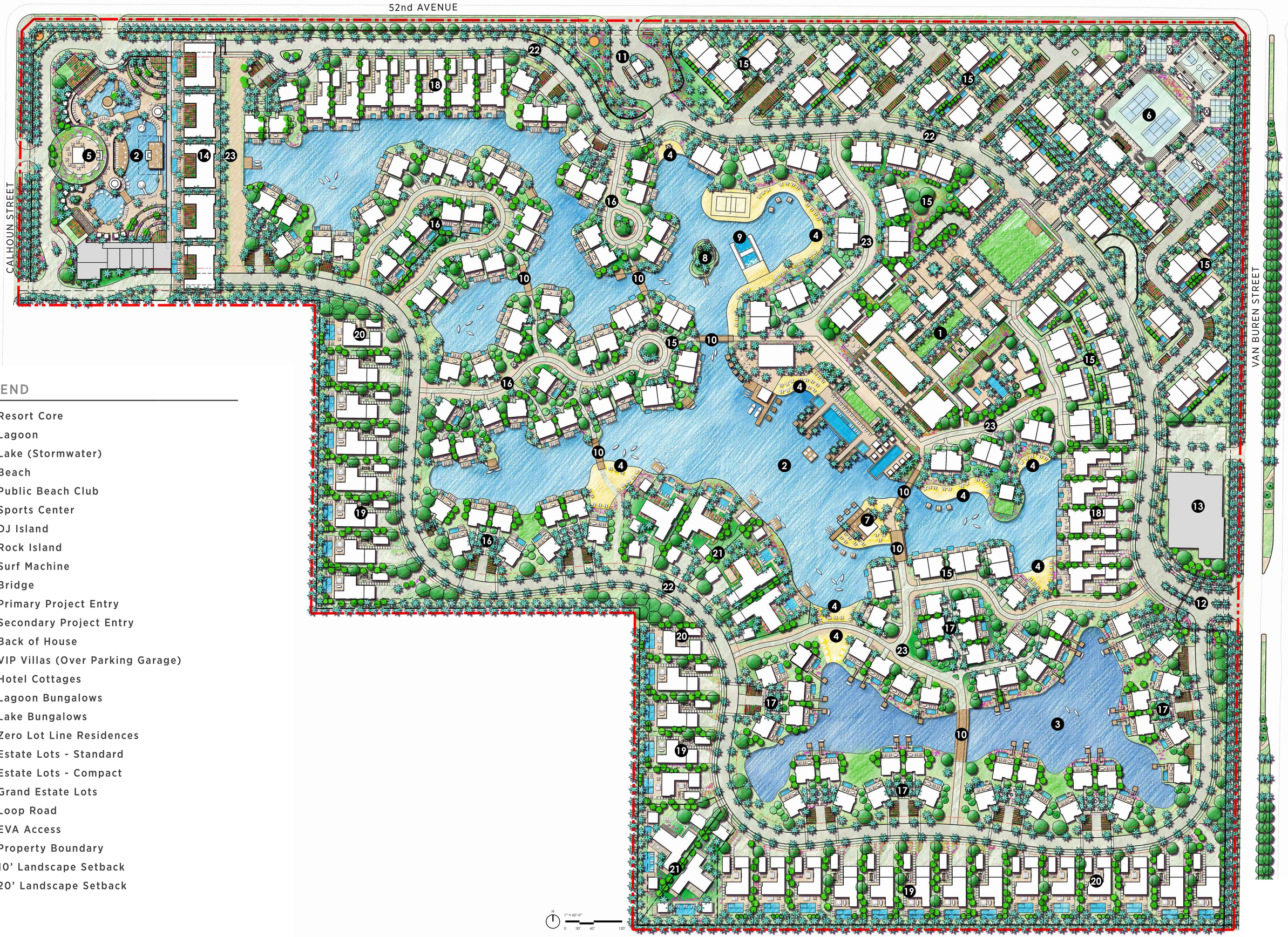
---- 10' Landscape Setback

– – – 20' Landscape Setback

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10



LEGEND

1. Resort Core
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12. Secondary Project Entry
13. Back of House
14. VIP Villas (Over Parking Garage)
15. Hotel Cottages
16. Lagoon Bungalows
17. Lake Bungalows
18. Zero Lot Line Residences
19. Estate Lots - Standard
20. Estate Lots - Compact
21. Grand Estate Lots
22. Loop Road
23. EVA Access

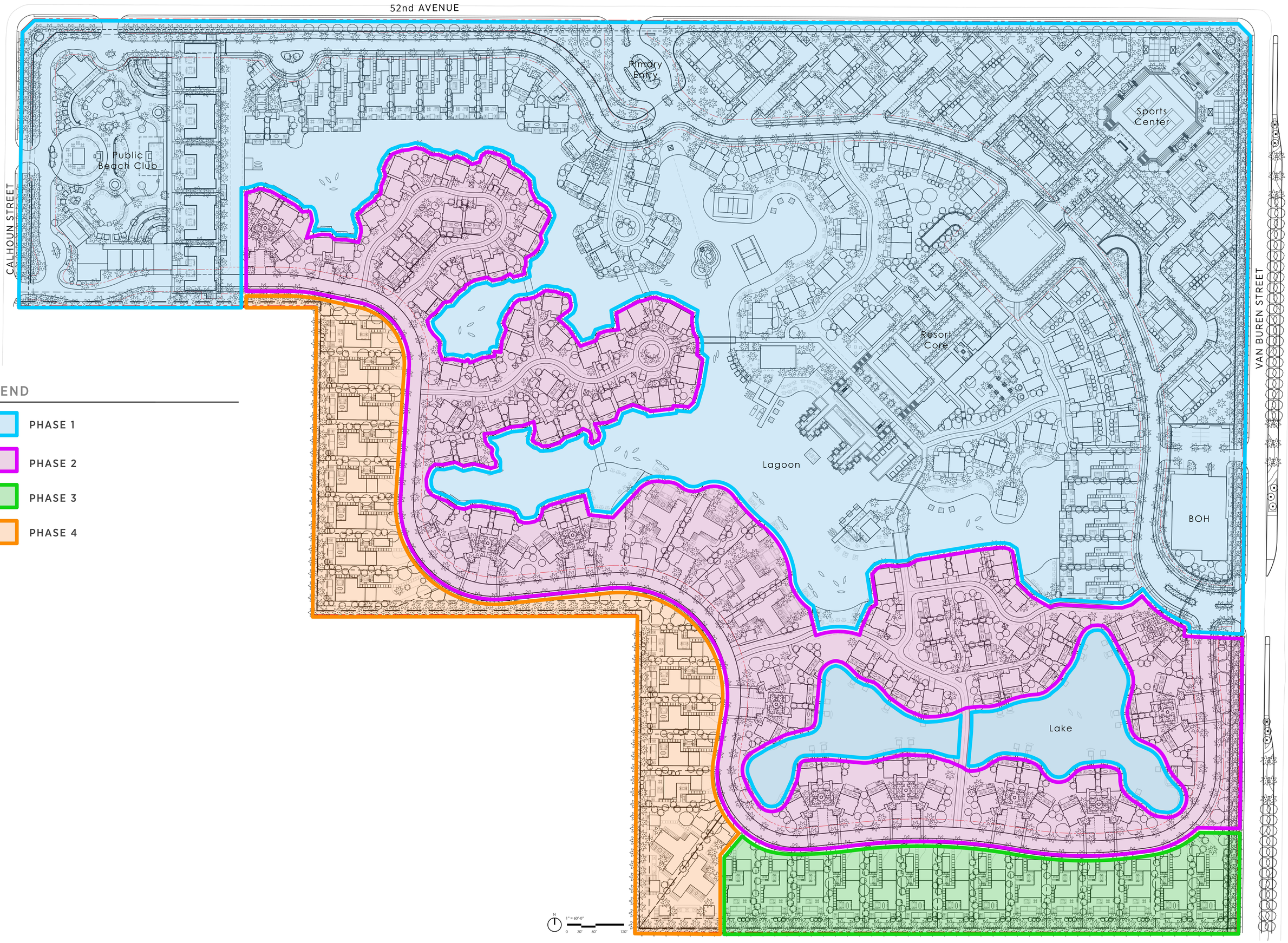
Property Boundary

10' Landscape Setback

20' Landscape Setback

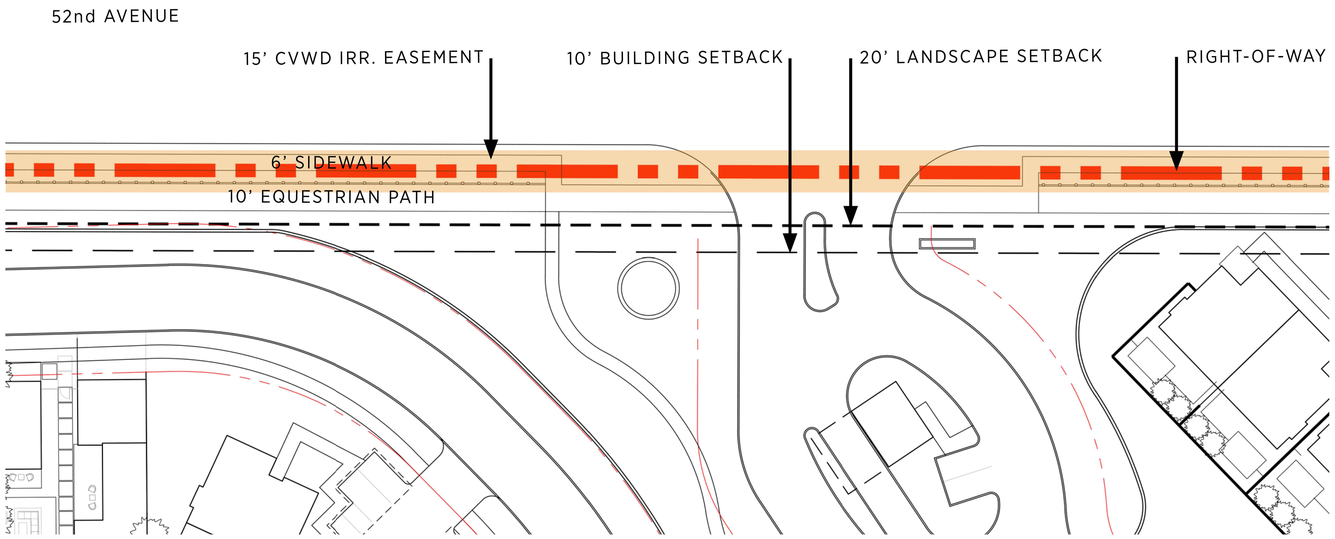
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760.320.9811 msaconsultinginc.com

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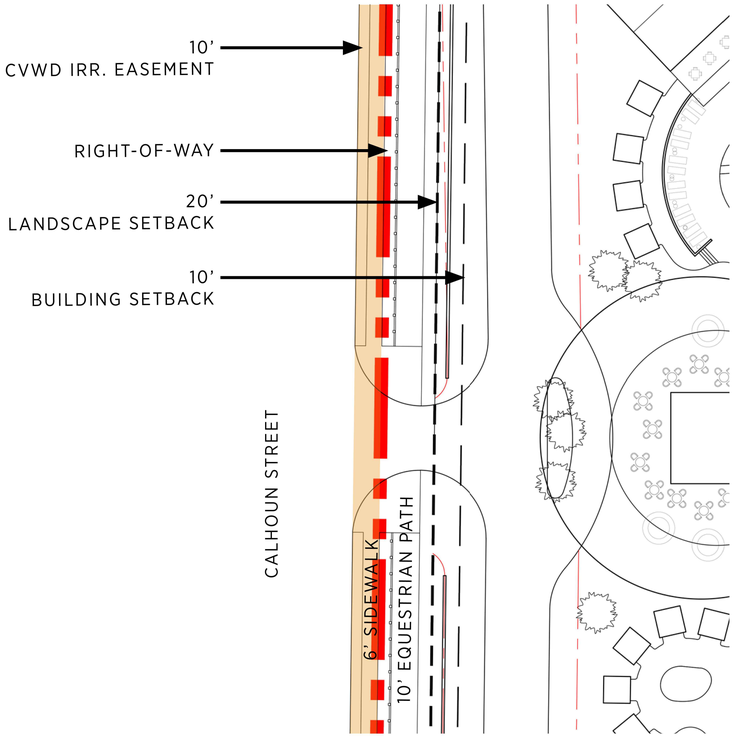


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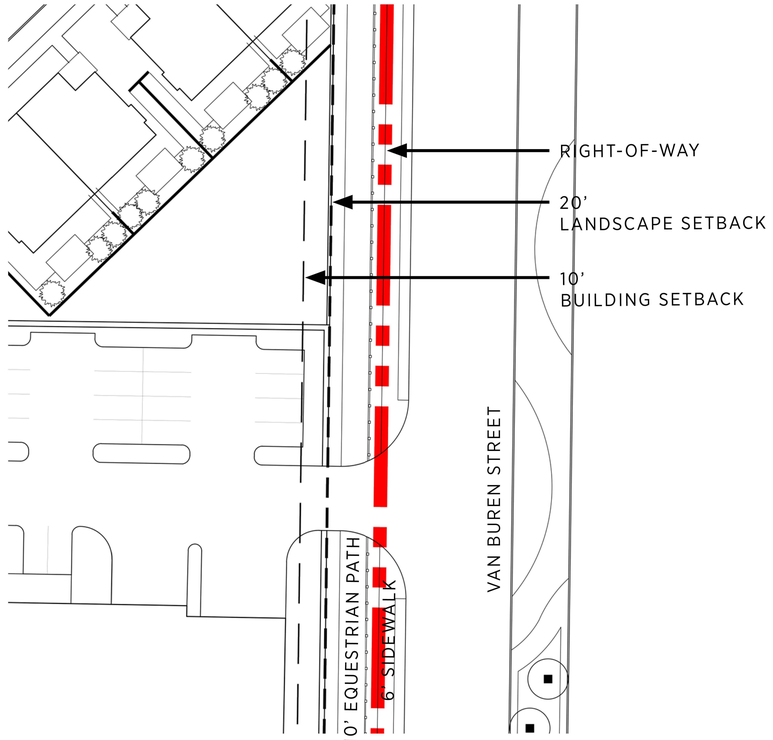
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PLANNING | LANDSCAPE ARCHITECTURE | ARCHITECTURE



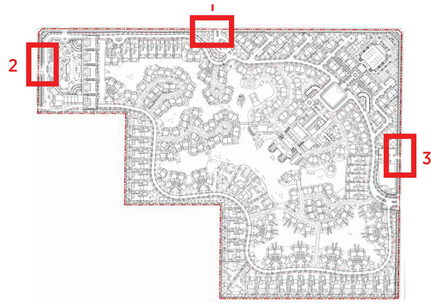
ENLARGEMENT 1 - 52nd AVENUE



ENLARGEMENT 2 - CALHOUN STREET



ENLARGEMENT 3 - VAN BUREN STREET



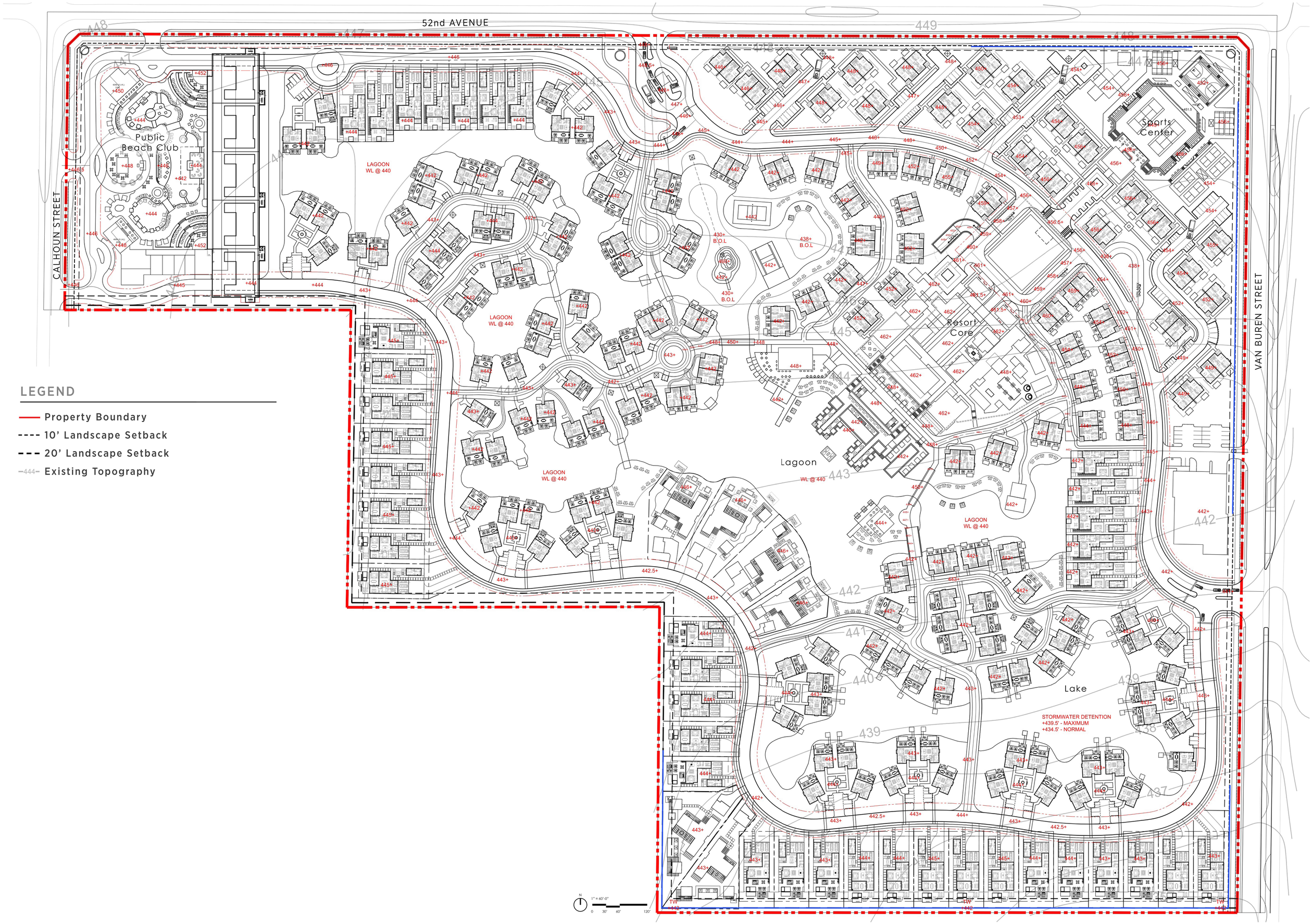
N

1" = 20'-0"
0 10' 20' 40'

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52nd AVENUE

CALHOUN STREET

VAN BUREN STREET

Public Beach Club

Sports Center

Resort Core

Lagoon

BOH

Lake

LEGEND

- MAJOR ARTERIAL (118' ROW)
- PRIMARY ARTERIAL (94' ROW)
- COLLECTOR ROAD (90' ROW)
- PRIMARY CIRCULATION
- SECONDARY CIRCULATION
- SERVICE CIRCULATION
- FIRE LANE
- FLEX STREET CIRCULATION

- FULL MOVEMENT INTERSECTION
- RIGHT-IN/RIGHT-OUT DRIVEWAY
- PRIMARY SITE ENTRY
- SECONDARY SITE ENTRY

N

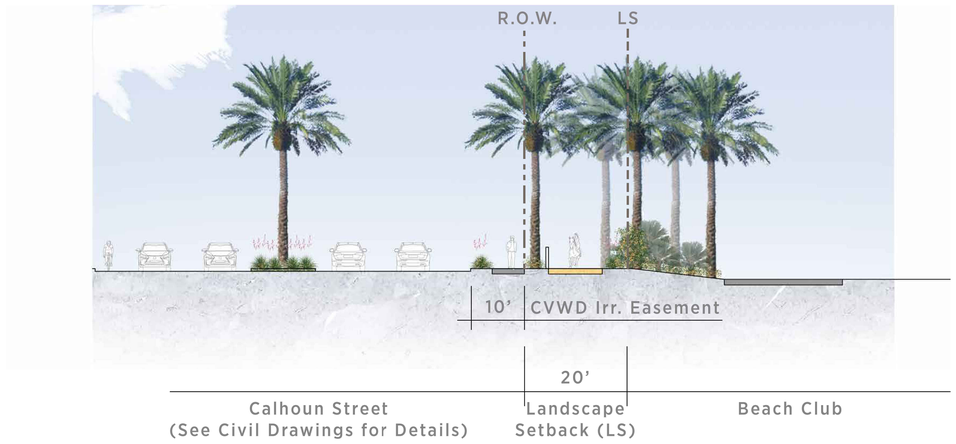
1" = 60'-0"

0 30' 60' 120'

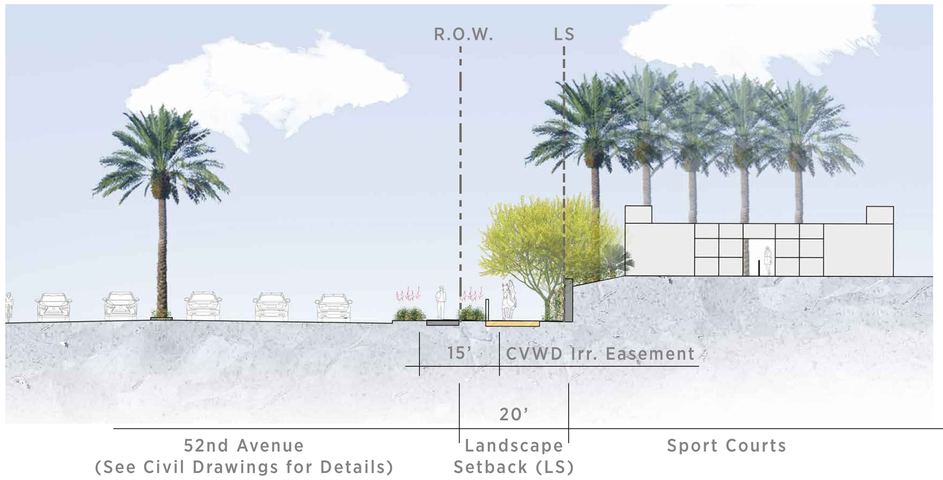
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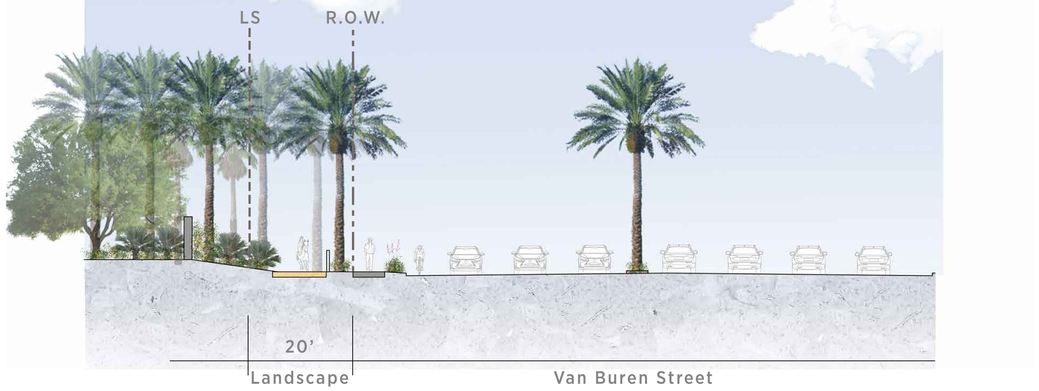
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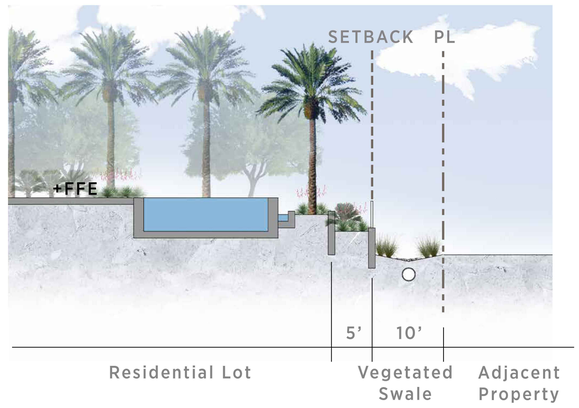
SECTION 1 - CALHOUN STREET AT BEACH CLUB
1/8”=1’-0”



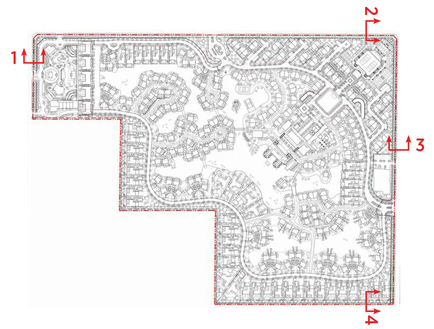
SECTION 2 - 52nd AVENUE AT SPORTS COURTS
1/8”=1’-0”

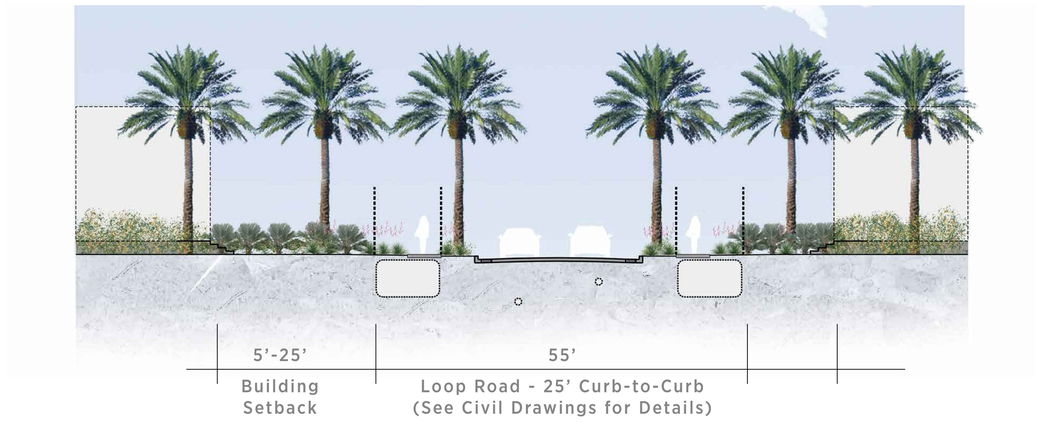


SECTION 3 - VAN BUREN STREET
1/8”=1’-0”

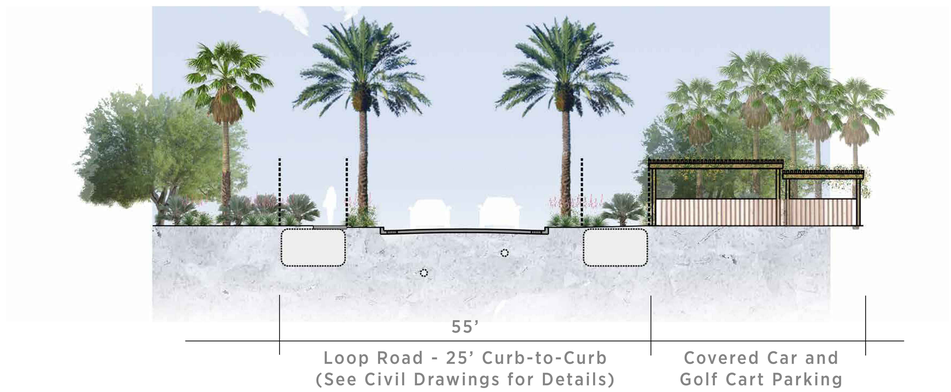


SECTION 4 - SOUTHERN PROPERTY LINE
1/8”=1’-0”

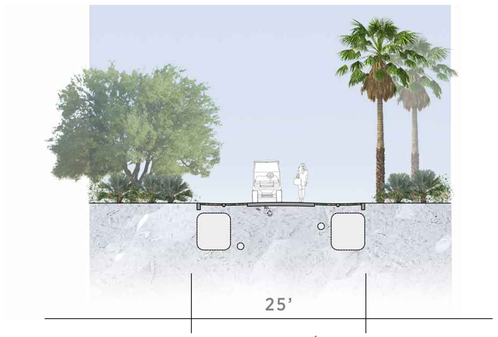




SECTION 1 - LOOP ROAD AT HOTEL COTTAGES
1/8”=1’-0”

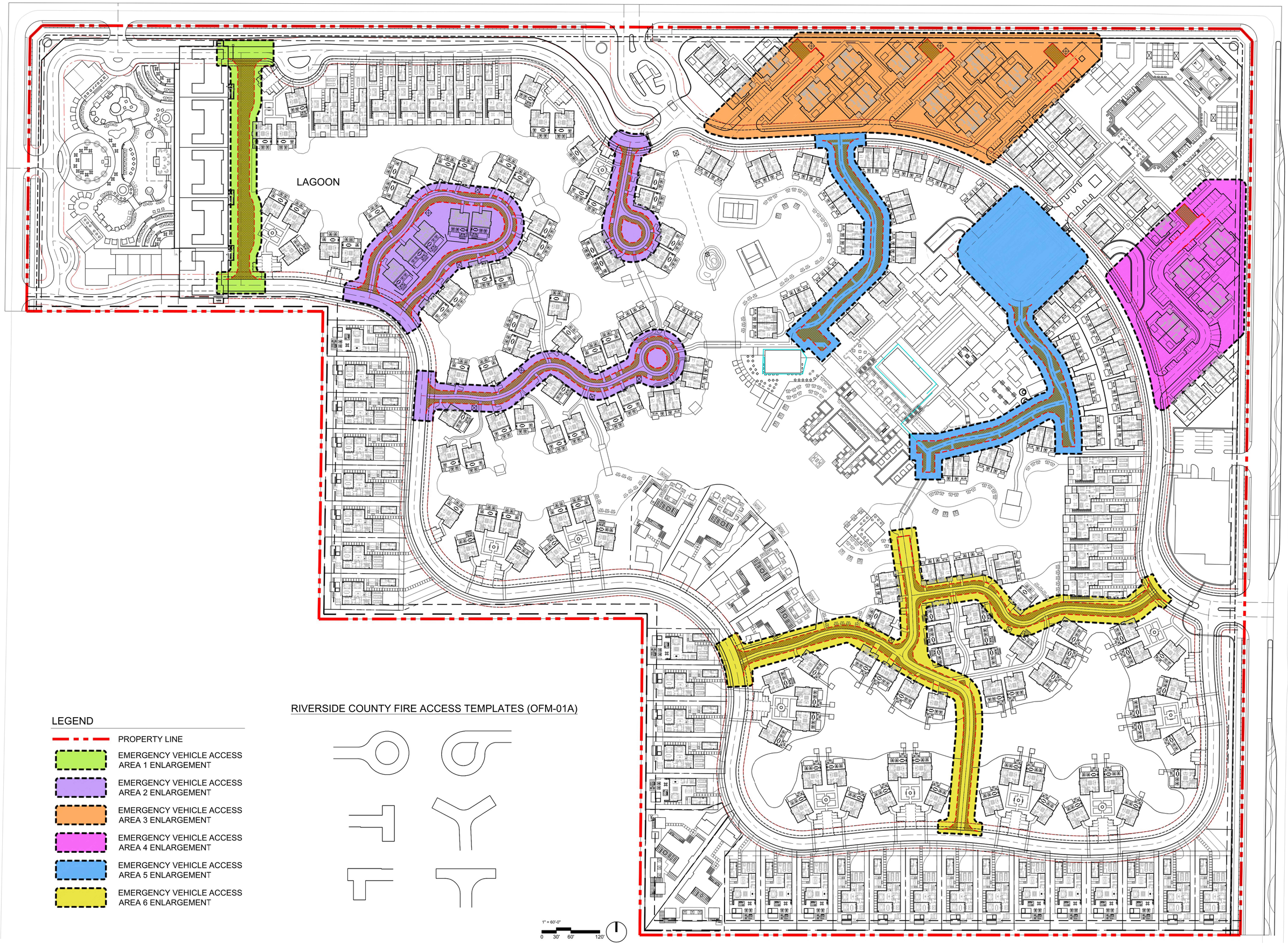


SECTION 2 - LOOP ROAD AT BUNGALOWS
1/8”=1’-0”



SECTION 3 - CART ACCESS W/ EVA
1/8”=1’-0”





LEGEND

- PROPERTY LINE
- EMERGENCY VEHICLE ACCESS AREA 1 ENLARGEMENT
- EMERGENCY VEHICLE ACCESS AREA 2 ENLARGEMENT
- EMERGENCY VEHICLE ACCESS AREA 3 ENLARGEMENT
- EMERGENCY VEHICLE ACCESS AREA 4 ENLARGEMENT
- EMERGENCY VEHICLE ACCESS AREA 5 ENLARGEMENT
- EMERGENCY VEHICLE ACCESS AREA 6 ENLARGEMENT

RIVERSIDE COUNTY FIRE ACCESS TEMPLATES (OFM-01A)

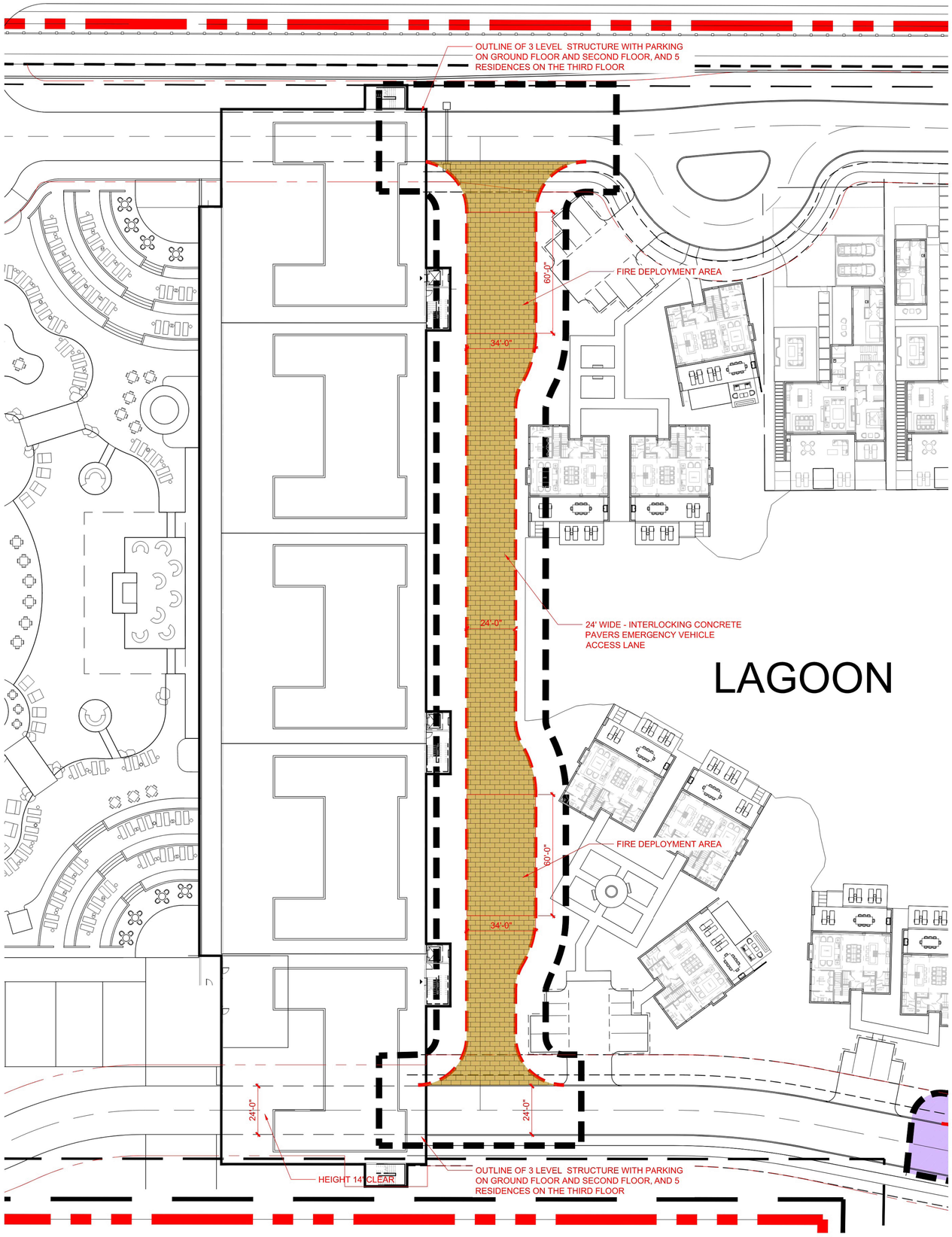
1" = 60'-0"
0 30' 60' 120'

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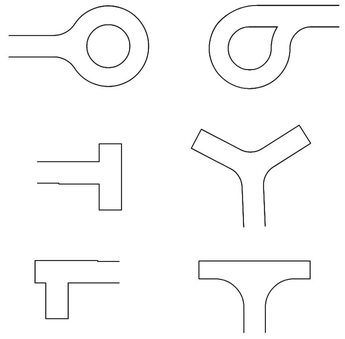
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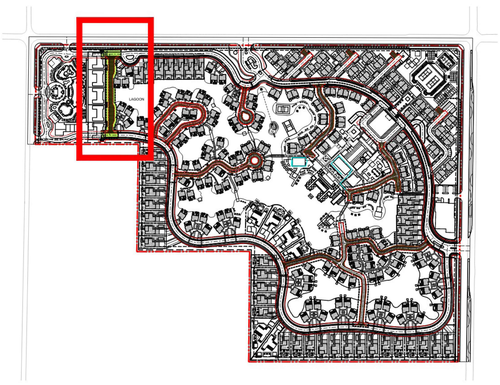
OVERALL FIRE LANE ACCESS KEY MAP
SUBMITTAL DATE: JUNE 10, 2026
COVA | ARCHITECTURAL REVIEW



RIVERSIDE COUNTY FIRE ACCESS TEMPLATES (OFM-01A)



KEY MAP



LEGEND

EDGE OF EMERGENCY VEHICLE ACCESS LANE

EMERGENCY VEHICLE ACCESS INTERLOCKING CONCRETE PAVERS

1" = 20'-0"
0 10' 20' 40'

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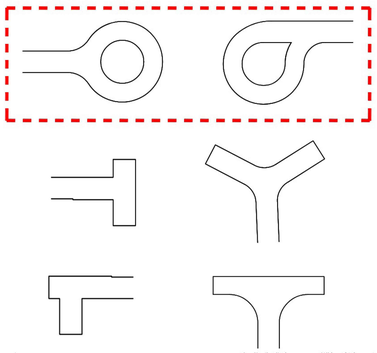
FIRE LANE ACCESS ENLARGEMENT: AREA 1
SUBMITTAL DATE: JUNE 10, 2026
COVA | ARCHITECTURAL REVIEW

LEGEND

EDGE OF EMERGENCY VEHICLE ACCESS LANE

EMERGENCY VEHICLE ACCESS INTERLOCKING CONCRETE PAVERS

RIVERSIDE COUNTY FIRE ACCESS TEMPLATES (OFM-01A



KEY MAP

1" = 20'-0"
0 10' 20' 40'

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FIRE LANE ACCESS ENLARGEMENT: AREA 2
SUBMITTAL DATE: JUNE 10, 2026
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HAMMERHEAD PER RIVERSIDE COUNTY FIRE DEPARTMENT GUIDELINE OFM-01A

INTERLOCKING CONCRETE PAVERS EMERGENCY VEHICLE ACCESS

HAMMERHEAD PER RIVERSIDE COUNTY FIRE DEPARTMENT GUIDELINE OFM-01A

INTERLOCKING CONCRETE PAVERS EMERGENCY VEHICLE ACCESS

INTERLOCKING CONCRETE PAVERS EMERGENCY VEHICLE ACCESS

HAMMERHEAD PER RIVERSIDE COUNTY FIRE DEPARTMENT GUIDELINE OFM-01A

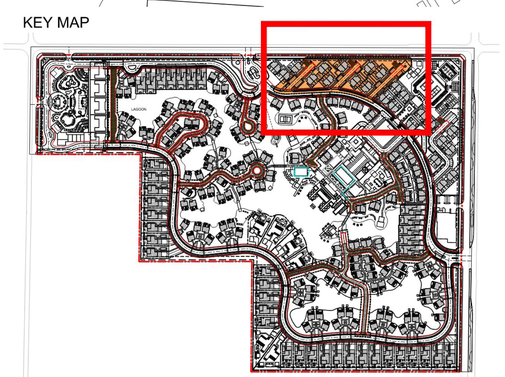
R24'-0"

R48'-0"

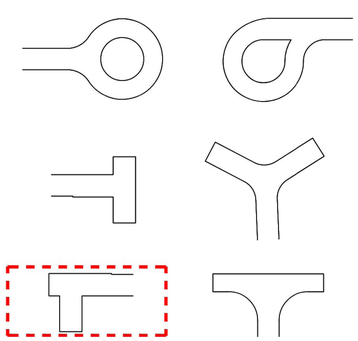
97'-1"

24'-0"

KEY MAP



RIVERSIDE COUNTY FIRE ACCESS TEMPLATES (OFM-01A)



LEGEND

EDGE OF EMERGENCY VEHICLE ACCESS LANE

EMERGENCY VEHICLE ACCESS INTERLOCKING CONCRETE PAVERS

1" = 20'-0"

0 10' 20' 40'

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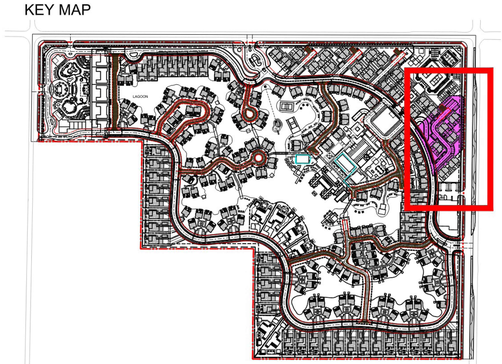
FIRE LANE ACCESS ENLARGEMENT: AREA 3

SUBMITTAL DATE: JUNE 10, 2026

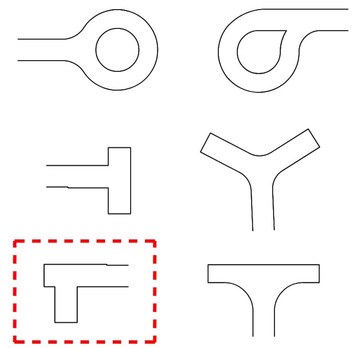
COVA | ARCHITECTURAL REVIEW



KEY MAP



RIVERSIDE COUNTY FIRE ACCESS TEMPLATES (OFM-01A)



LEGEND

EDGE OF EMERGENCY VEHICLE ACCESS LANE

EMERGENCY VEHICLE ACCESS INTERLOCKING CONCRETE PAVERS

1" = 20'-0"

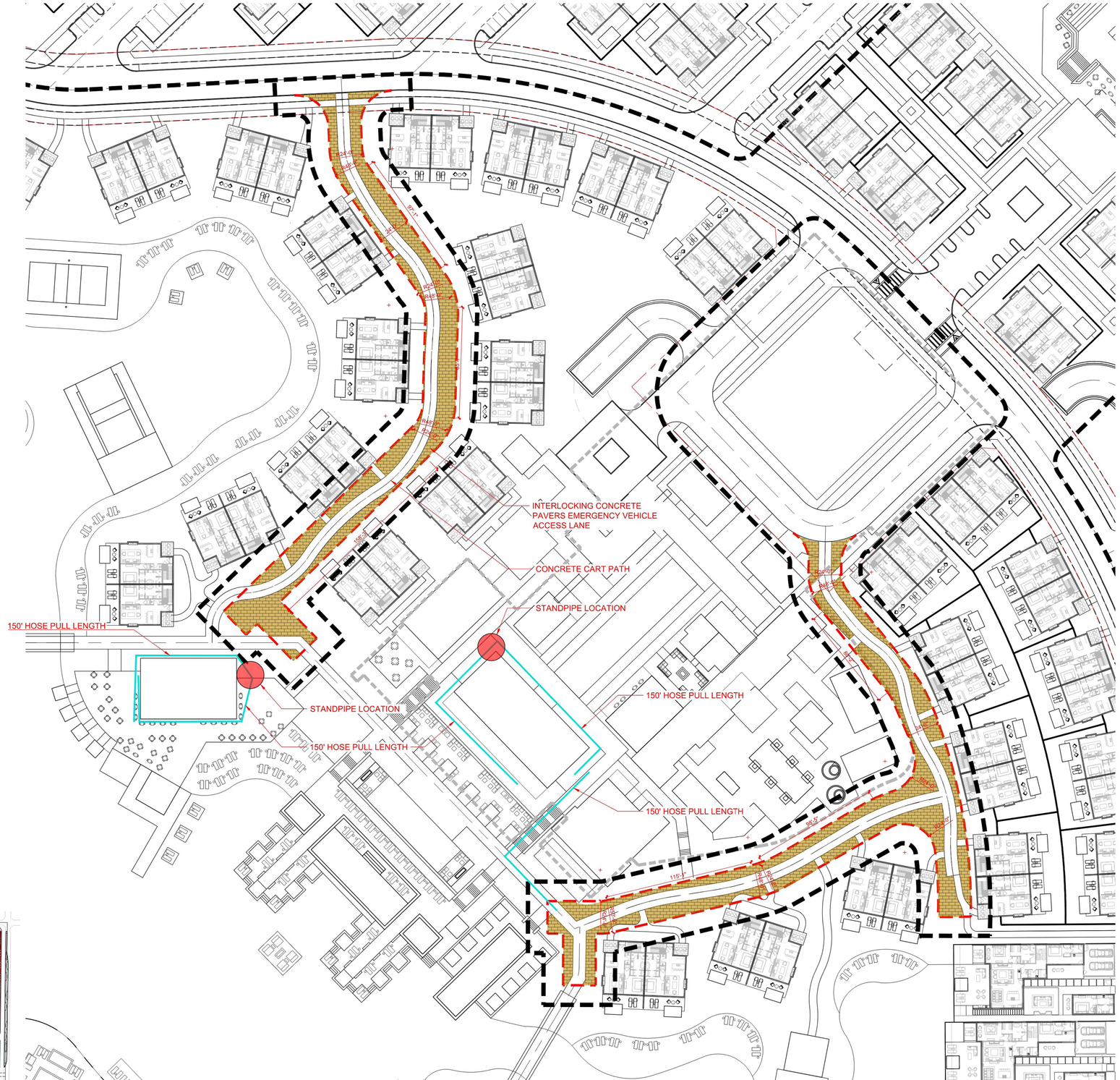
0 10' 20' 40'

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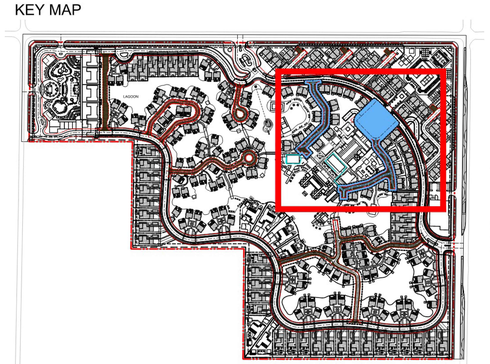
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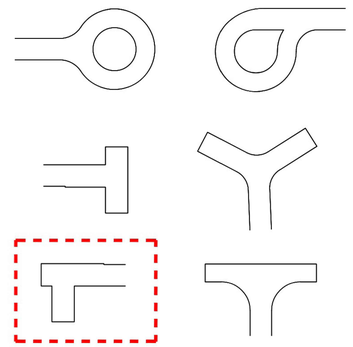
FIRE LANE ACCESS ENLARGEMENT: AREA 4
SUBMITTAL DATE: JUNE 10, 2026
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KEY MAP



RIVERSIDE COUNTY FIRE ACCESS TEMPLATES (OFM-01A)



LEGEND

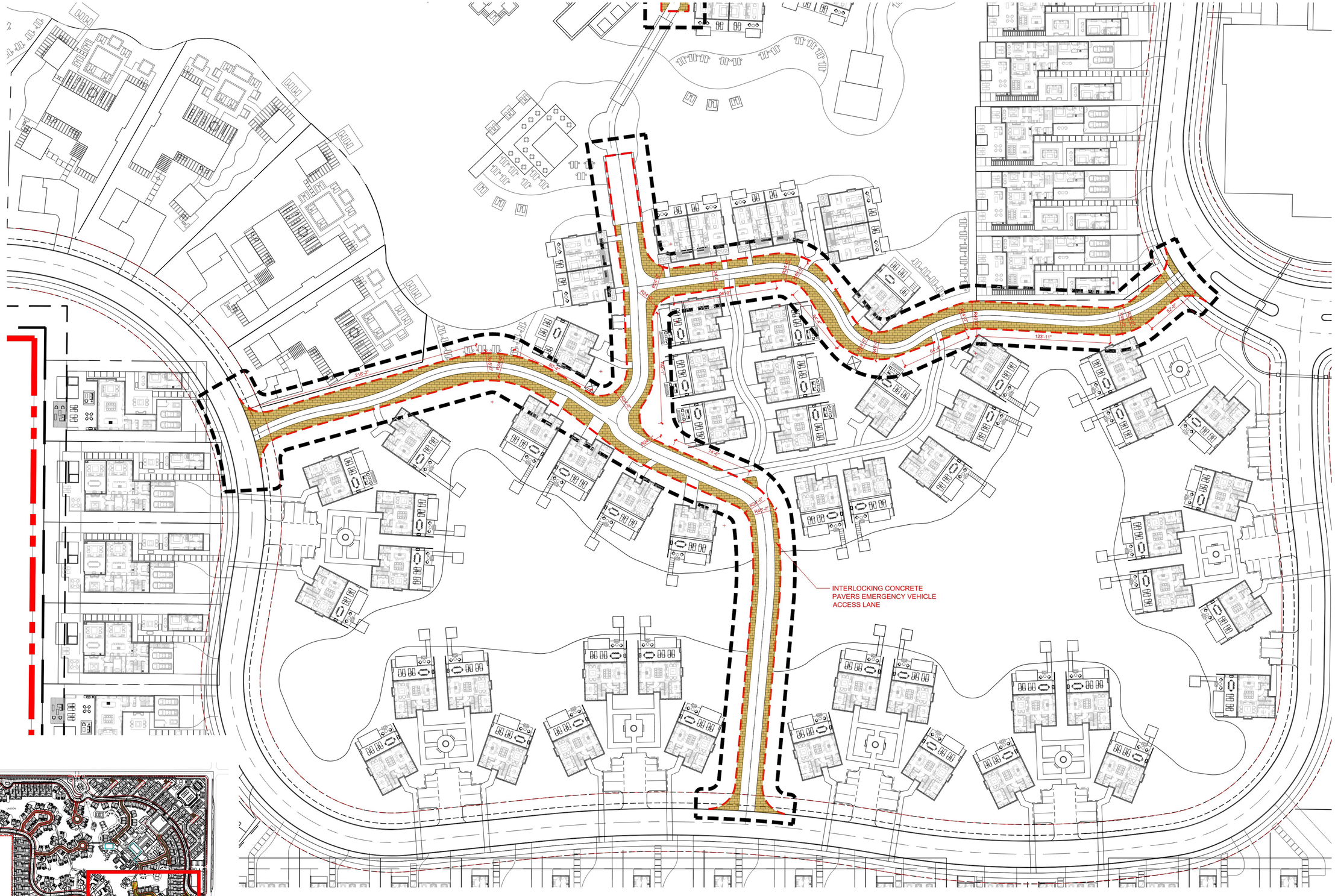
- EDGE OF EMERGENCY VEHICLE ACCESS LANE
- EMERGENCY VEHICLE ACCESS INTERLOCKING CONCRETE PAVERS
- STANDPIPE LOCATION
- 150' HOSE PULL LENGTH

0 10' 20' 40'

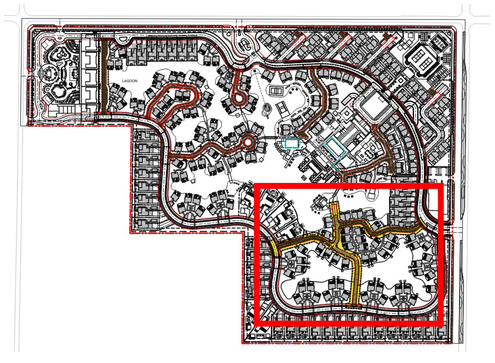
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KEY MAP



LEGEND

EDGE OF EMERGENCY VEHICLE ACCESS LANE

EMERGENCY VEHICLE ACCESS INTERLOCKING CONCRETE PAVERS

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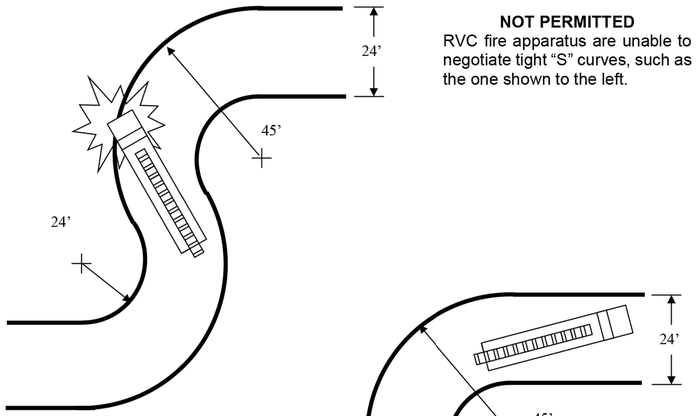
VITA
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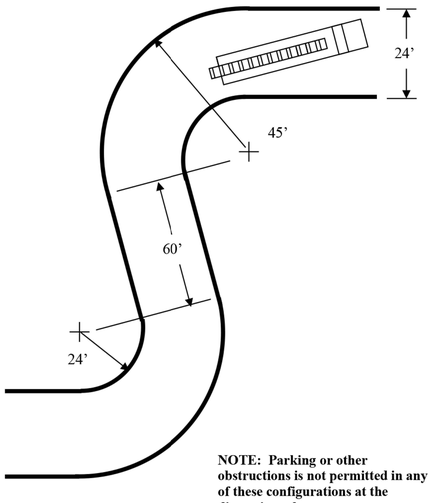
FIRE LANE ACCESS ENLARGEMENT: AREA 6
SUBMITTAL DATE: JUNE 10, 2026
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ATTACHMENT 6

"S" Curves



NOT PERMITTED
RVC fire apparatus are unable to negotiate tight "S" curves, such as the one shown to the left.



PERMITTED
A 60' straight leg is required between the turns in a compound curve to provide sufficient recovery distance for the apparatus. Alternatively, the length of the straight leg may be reduced if the road width and/or turning radii are increased to allow for a wider turn.

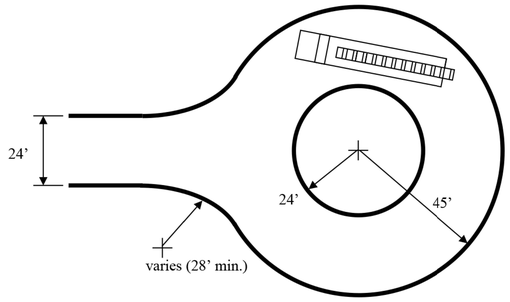
NOTE: Parking or other obstructions is not permitted in any of these configurations at the dimensions shown.

ATTACHMENT 7 (2 Pages)

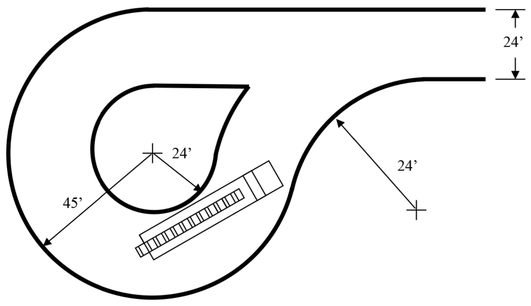
Minimum Turnaround and Hammerhead Dimensions

NOTE: Parking is <u>not</u> permitted in these turnarounds at the dimensions shown.

Standard turnaround

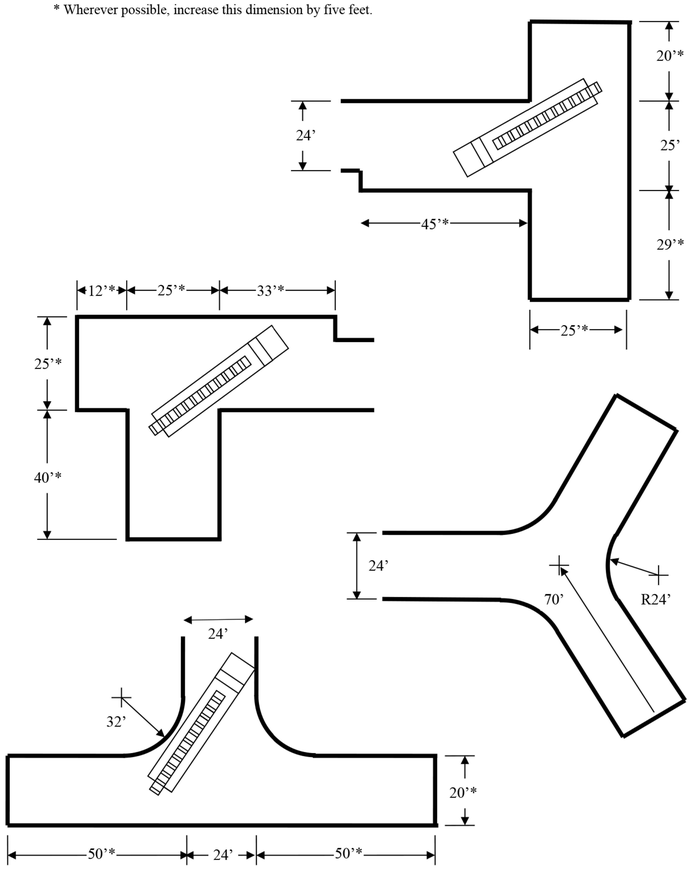


Offset turnaround



NOTE: Parking is not permitted in any of these hammerheads at the dimensions shown.

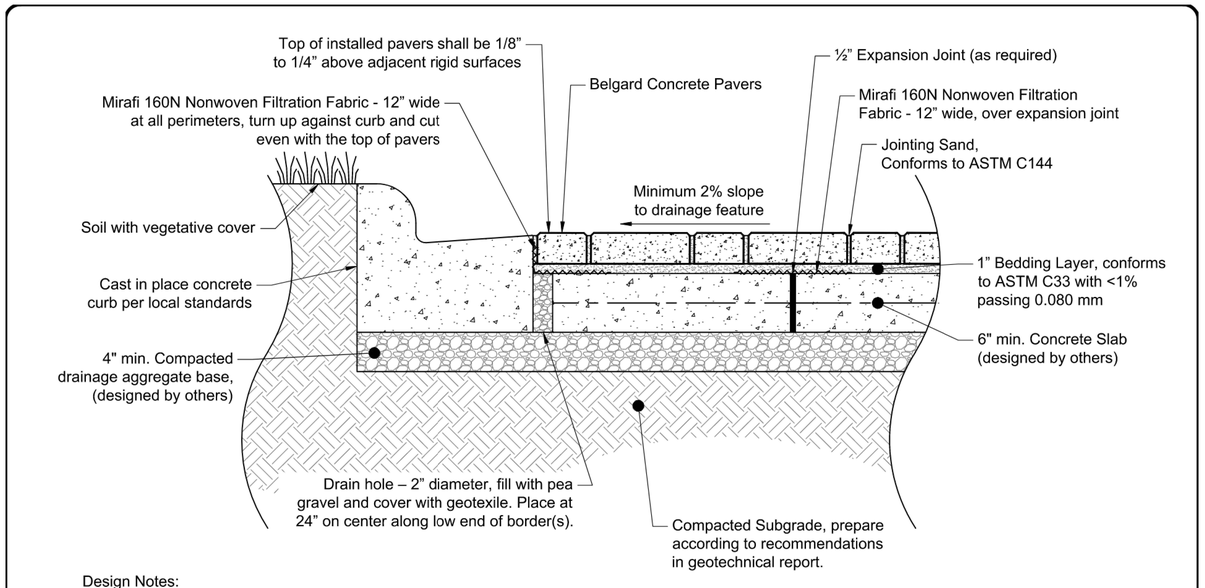
* Wherever possible, increase this dimension by five feet.



CONCRETE PAVER COLOR OPTIONS







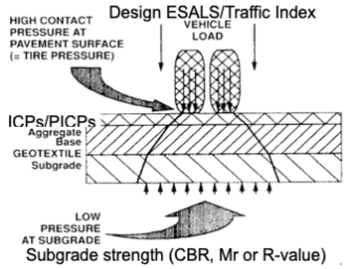
Design Notes:

1. Cross section as shown is suitable for pedestrian and vehicular applications. Paver dimensions subject to aspect and plan ratio requirements. Contact Belgard Commercial for product selection guidance based on the intended traffic loading.
2. Depth of aggregate base subject to site specific conditions (traffic loading, soil conditions, groundwater levels, climatic conditions). Contact Belgard Commercial for design assistance.
3. Additional drain holes may be required depending on the size of the pavement area. The rule of thumb is to have at least one drain hole per 500 square feet of surface area. Storm drains should be used at low spots.
4. Drain pipes may be required within the aggregate base depending on the permeability of the subgrade soils. Verify drainage needs with the geotechnical engineer. Ensure drain pipes are able to daylight via gravity flow to surface, or connect to catch basin.
5. Ensure the geotextile above the drain hole has good drainage characteristics and is not prone to clogging.
6. Techniseal HP Nextgel jointing sand conforming to ASTM C144 may be used in pedestrian and light vehicular applications. Please contact Belgard Commercial for design assistance.

BELGARD belgardcommercial.com 877-235-4273 details@belgard.com	This drawing is for illustrative purposes only and should not be used for construction without the signature of a registered professional engineer.	Belgard Standard Paving Detail Sand Set on Concrete Base	Scale: N.T.S. Date: 02/11/2019	Drawn by: MAH Drawing number: ICP_1

BELGARD COMMERCIAL

TRAFFIC LOADING CALCULATION EXAMPLE



Structural Pavement Section function of Subgrade Strength, Traffic Loadings and Strength of Pavement Section Components

The following calculations demonstrate that Belgard permeable and interlocking concrete pavement systems satisfy the requirements of meeting or exceeding a 75,000 lb theoretical design load as compared to the required compressive strength of pavers per the requirements in *ASTM C936 Standard Specification for Solid Concrete Interlocking Paving Units (average compressive strength of 8,000 psi).*

Step #1) Determine the maximum wheel load:

GVWR = 76,800 lbs

GAWR (front axle) = 22,800 lbs

GAWR (rear axle) = 54,000 lbs

Front Axle Wheel Loads

W_L = 22,800 lb/ 2 tires per axle = 11,400 lbs per tire

Rear Axle Wheel Loads

W_L = 54,000 lb/ 2 axles/4 tires per axle = 6,750 lbs per tire

Step #2) Increase the load by 30% to account for dynamic forces associated with moving vehicles:

Front Axle: $W_{L\text{-dynamic}}$ = 11,400 lbs x 1.30 = 14,820 lbs per tire

Rear Axle: $W_{L\text{-dynamic}}$ = 6,750 lbs x 1.30 = 8,775 lbs per tire

Step #3) Determine the tire contact area:

The Contact Area was measured for a Pierce Fire Truck (GVWR = 76,800 lbs) and was determined to be 104 in2 per front tire, and 90 in2 per rear tire. (See measurements in the attached document)

Step #4) Determine the stress exerted per tire in the dynamic load:

$$\sigma_{tire} = \frac{W_{L\text{-dynamic}}}{A_{contact}} = \frac{14{,}820\ lbs}{104\ in^2} = 142.5\ \frac{lbs}{in^2}$$

Step # 5) Compare Belgard PICP to GVWR = 76,800 lbs:

Belgard permeable and interlocking concrete pavers are manufactured to ASTM C936 standards requiring an average compressive strength of 8,000 psi. As illustrated above, the maximum theoretical tire pressure exerted on the pavement surface is 142.50 psi so stresses are effectively transferred to the base and subgrade using Belgard permeable pavers. This significant factor of safety makes Belgard permeable pavers viable solution for a flexible pavement system subjected to Fire Truck Loading.

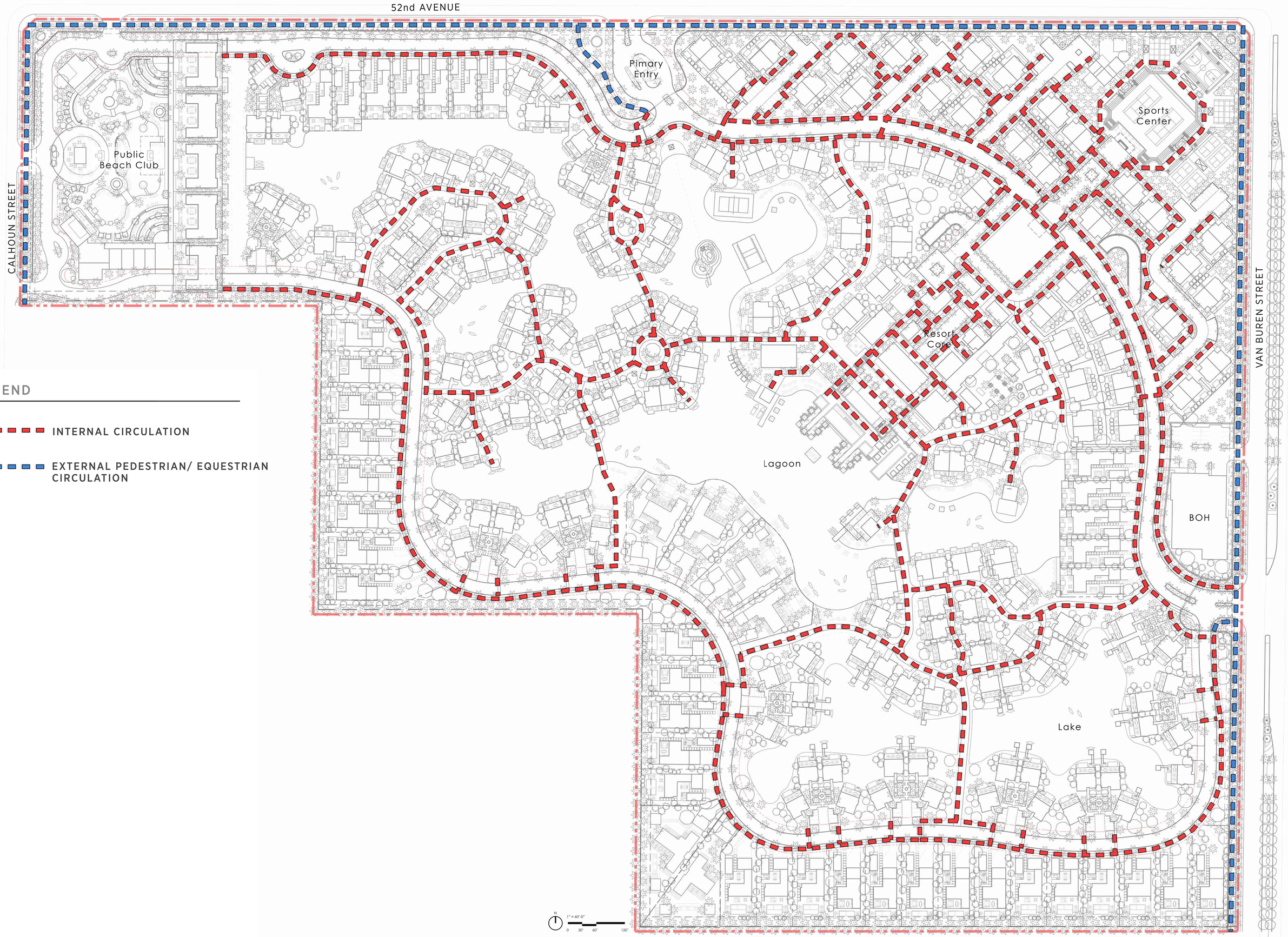
REFERENCES

1. *AASHTO 1993. Guide for Design of Pavement Structures, American Association of State Highway and Transportation Officials, Washington, DC.*
2. *ASCE 2016. Structural Design of Interlocking Concrete Pavement for Municipal Streets and Roadways, ASCE/T&DI/ICPI Standard 58-16, American Society of Civil Engineers, Reston, VA.*
3. *ASCE 2018. Permeable Interlocking Concrete Pavement, ASCE/T&DI/ICPI Standard 68-18, American Society of Civil Engineers, Reston, VA.*
4. *Caltrans 2016. Pervious Pavement Design Guidance, California Department of Transportation, Division of Design, Office of Storm Water Management, Sacramento, CA.*
5. *UC Davis 2010. Research Report – Laboratory Testing and Modeling for Structural Performance of Fully Permeable Pavements Under Heavy Traffic: Final Report, U.C. Davis, Department of Civil and Environmental Engineering (CTSW-RT-10-249.04), Davis, CA.*

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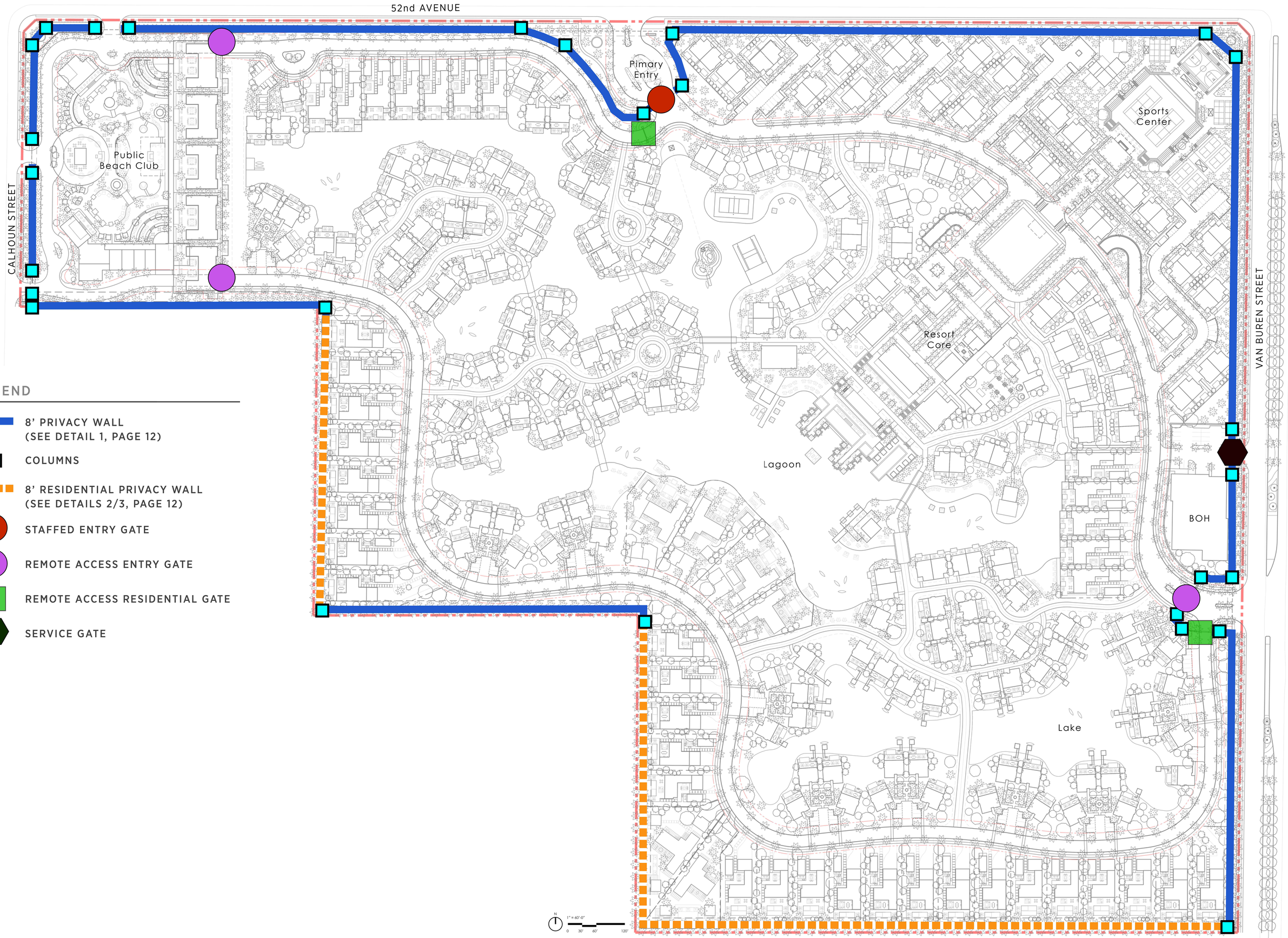
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52nd AVENUE
CALHOUN STREET
VAN BUREN STREET
Public Beach Club
Pimary Entry
Sports Center
Resort Core
Lagoon
BOH
Lake
P
P
P
LEGEND
ON-STREET CIRCULATION
NEIGHBORHOOD PATHWAY CIRCULATION
GUEST PICKUP TO ROOM
N
1" = 60'-0"
0
30'
60'
120'



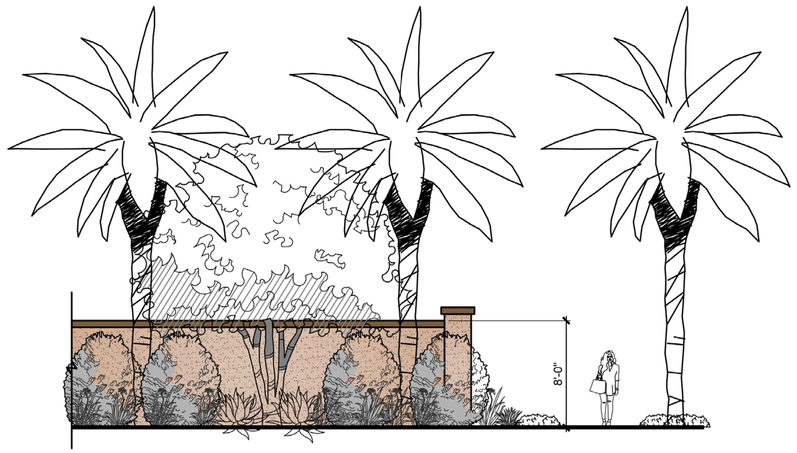
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LEGEND

- 8' PRIVACY WALL (SEE DETAIL 1, PAGE 12)
- COLUMNS
- 8' RESIDENTIAL PRIVACY WALL (SEE DETAILS 2/3, PAGE 12)
- STAFFED ENTRY GATE
- REMOTE ACCESS ENTRY GATE
- REMOTE ACCESS RESIDENTIAL GATE
- SERVICE GATE



1 TYPICAL PERIMETER WALL ELEVATION
SCALE 1" = 5'-0"

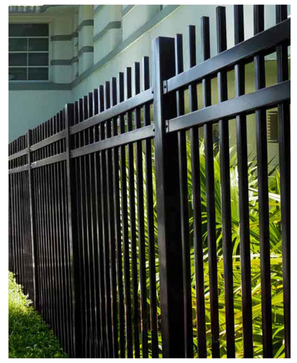
LEGEND

- CMU WALL - STUCCO
- DECORATIVE CAP
- POOL WALLS/FOUNDATION
- POOL

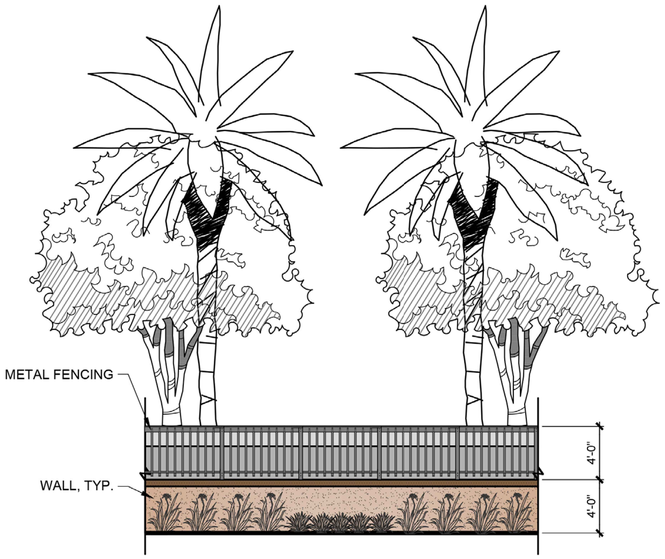
MATERIALS



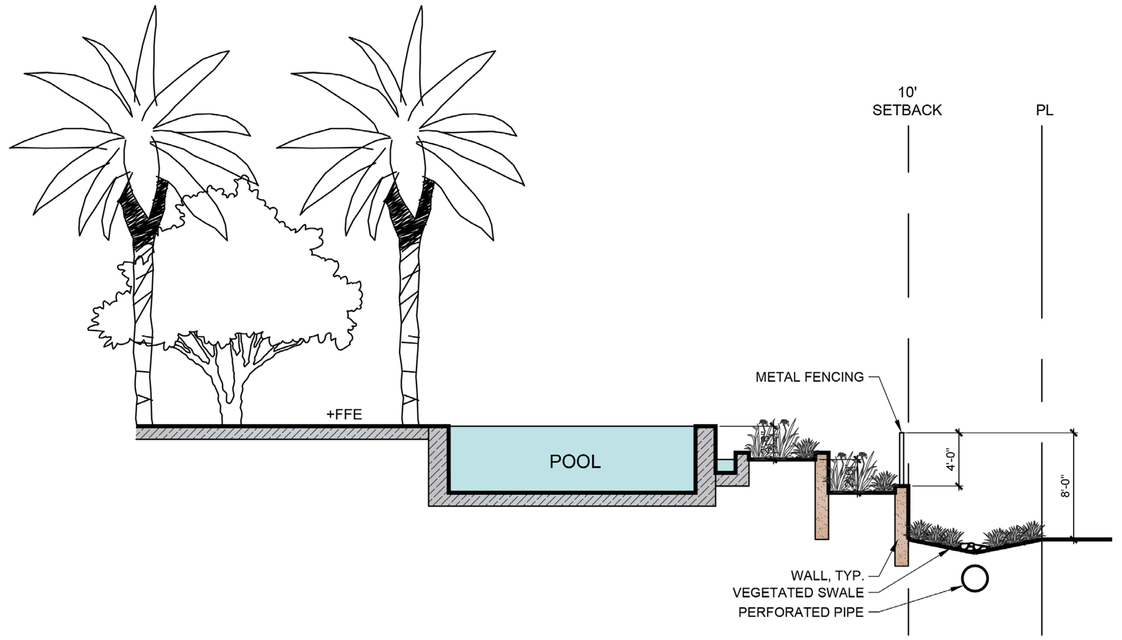
STUCCO FINISH OPTIONS



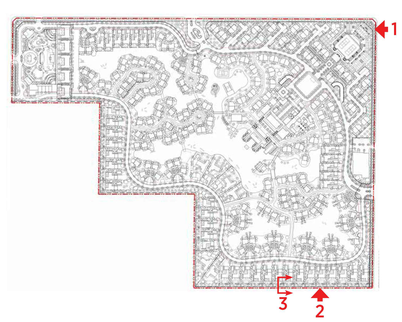
METAL FENCE

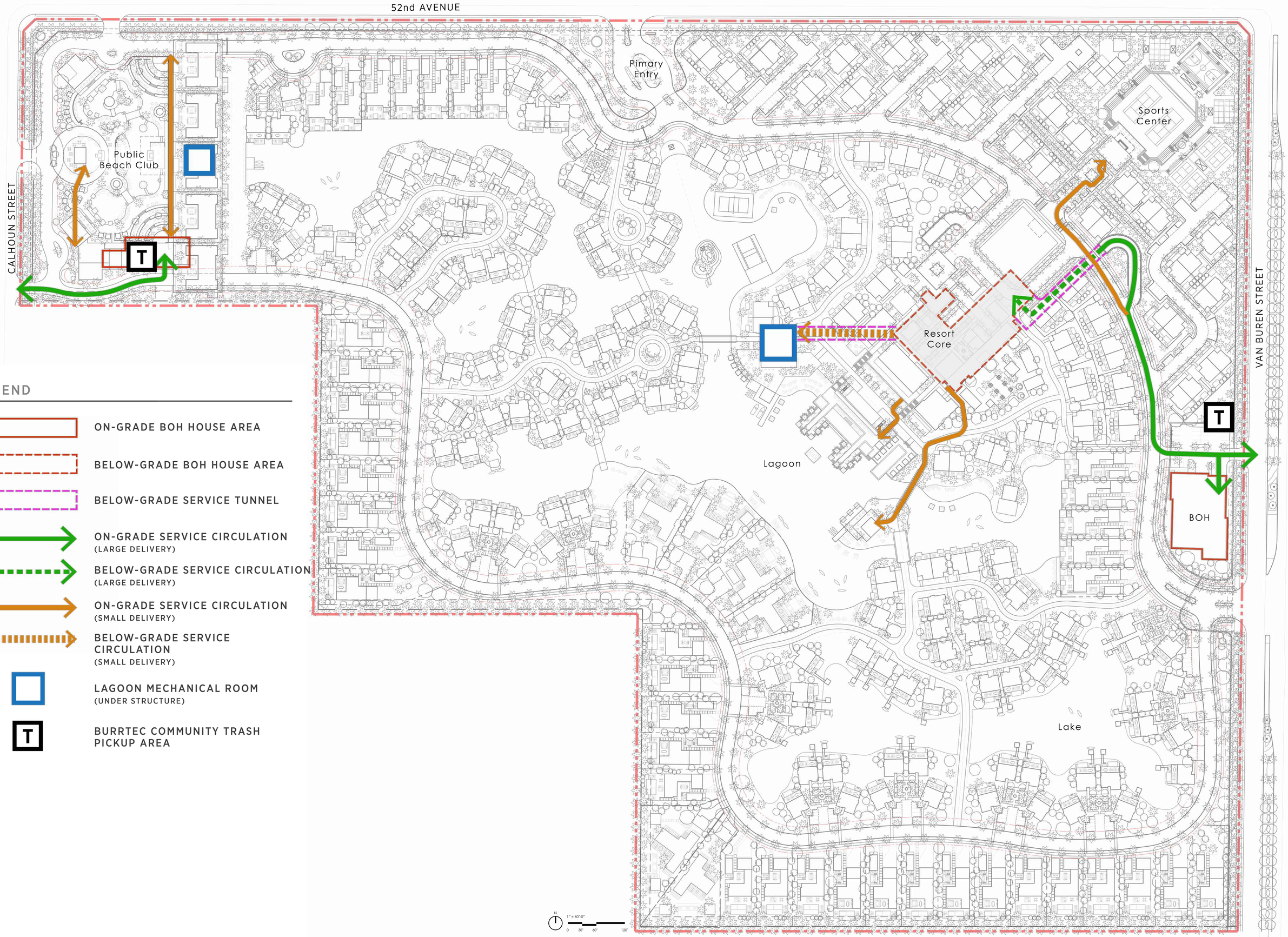


2 TYPICAL RESIDENTIAL PERIMETER WALL ELEVATION
SCALE 1" = 5'-0"



3 TYPICAL RESIDENTIAL PERIMETER WALL SECTION
SCALE 1" = 5'-0"



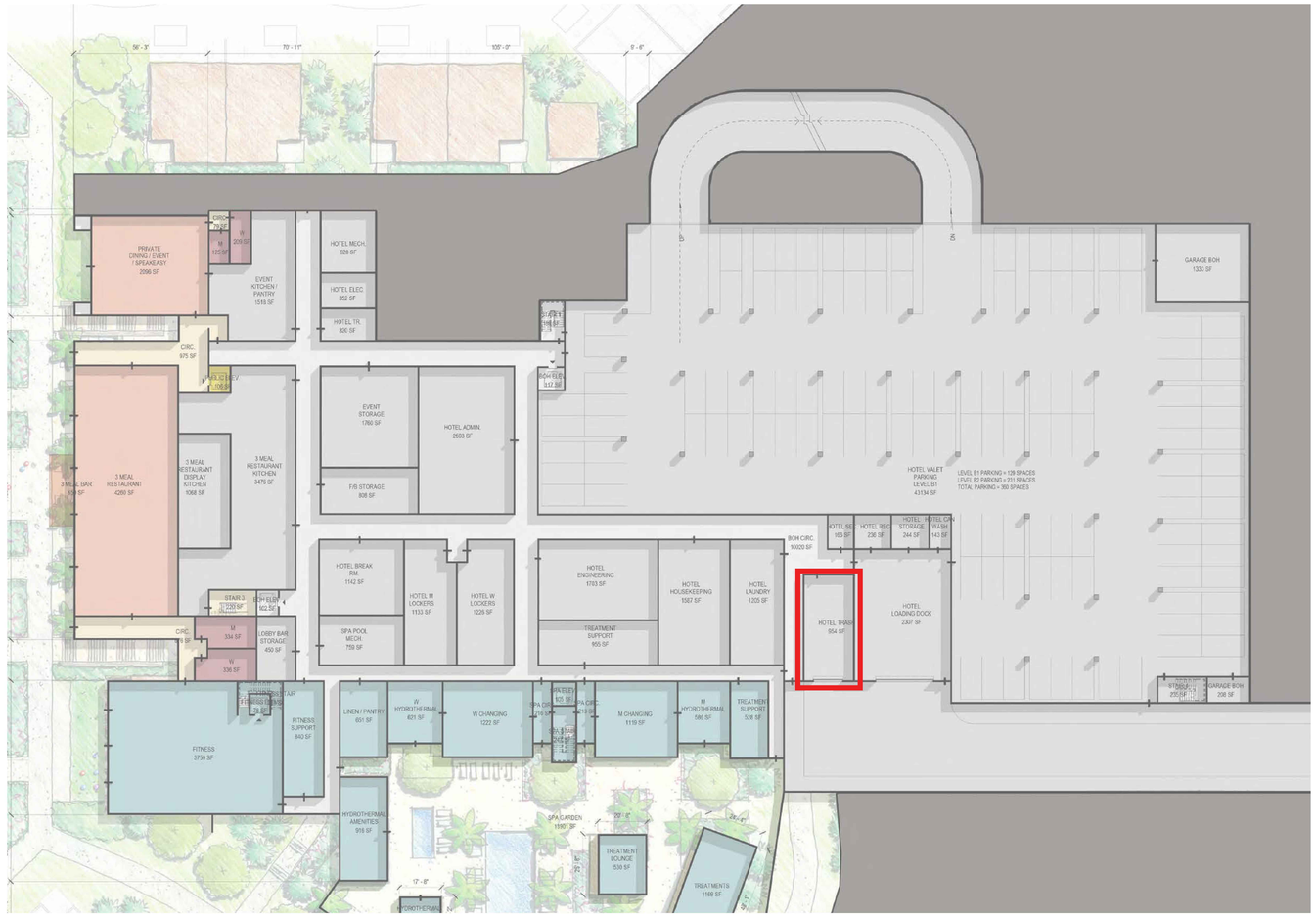


LEGEND

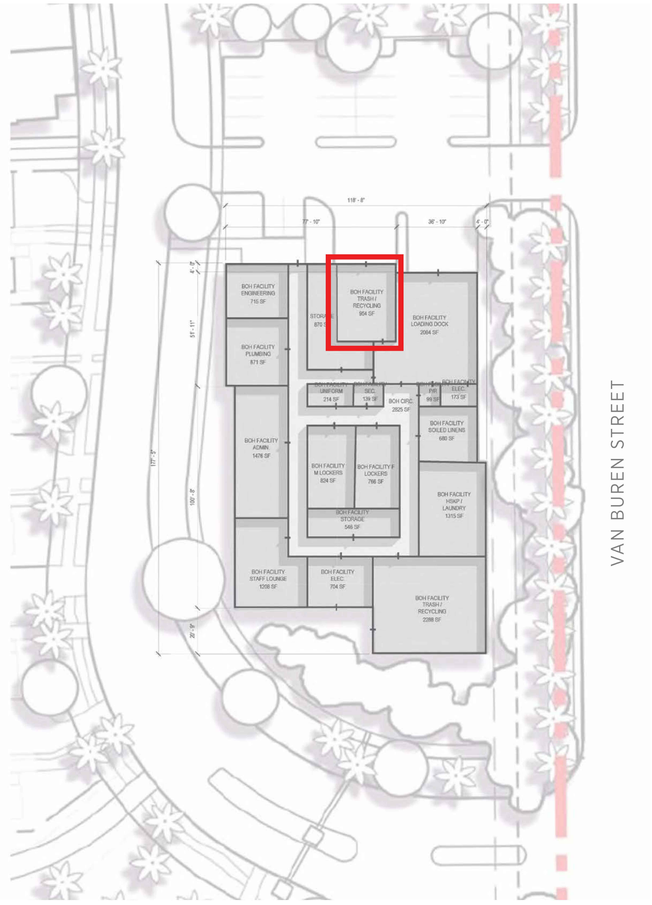
- ON-GRADE BOH HOUSE AREA
- BELOW-GRADE BOH HOUSE AREA
- BELOW-GRADE SERVICE TUNNEL
- ON-GRADE SERVICE CIRCULATION (LARGE DELIVERY)
- BELOW-GRADE SERVICE CIRCULATION (LARGE DELIVERY)
- ON-GRADE SERVICE CIRCULATION (SMALL DELIVERY)
- BELOW-GRADE SERVICE CIRCULATION (SMALL DELIVERY)
- LAGOON MECHANICAL ROOM (UNDER STRUCTURE)
- T — BURRTEC COMMUNITY TRASH PICKUP AREA

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LEVEL B1 - HOSPITALITY TRASH REFUSE AREA



LEVEL L1 - BOH MAIN TRASH ENCLOSURE



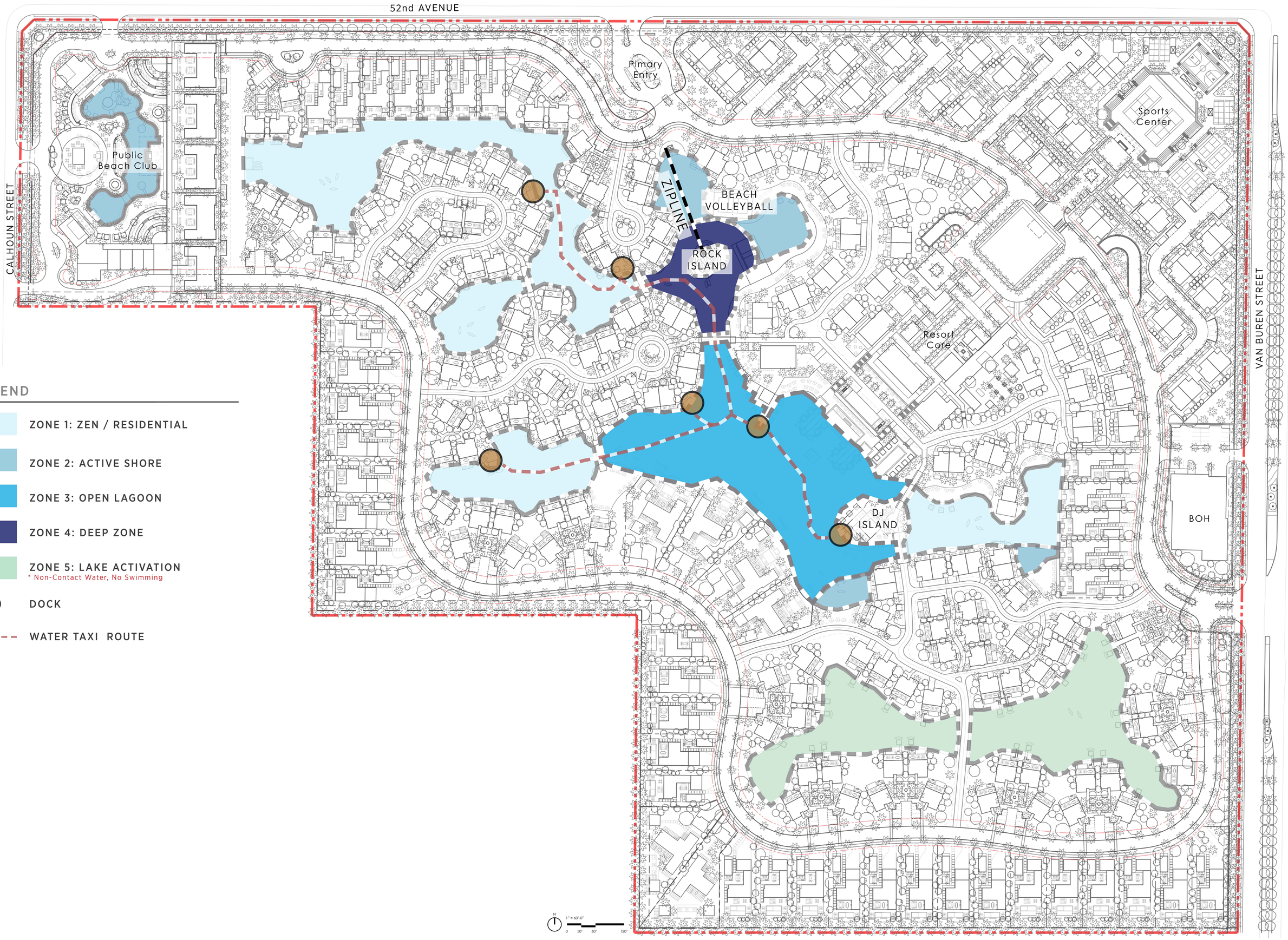
LEVEL L1 - BEACH CLUB MAIN TRASH ENCLOSURE

TRASH COLLECTION INTENTION NARRATIVE

All Hospitality units and Bungalow units will be serviced by the hotel's centralized trash-operations team. Refuse generated in these areas will first be routed to the designated hospitality huts, after which it will be transported to the Hospitality Refuse Area located on Level B1 of the main hotel. From the B1 refuse area, all waste will be consolidated in the BOH Main Trash Enclosure, where Burrtec will conduct final collection.

The Beach Club maintains an independent trash enclosure within its own BOH area, allowing its waste stream to operate separately from the hotel infrastructure.

Residential units will utilize individual Burrtec bins, with collection occurring directly at the street per standard municipal procedures.

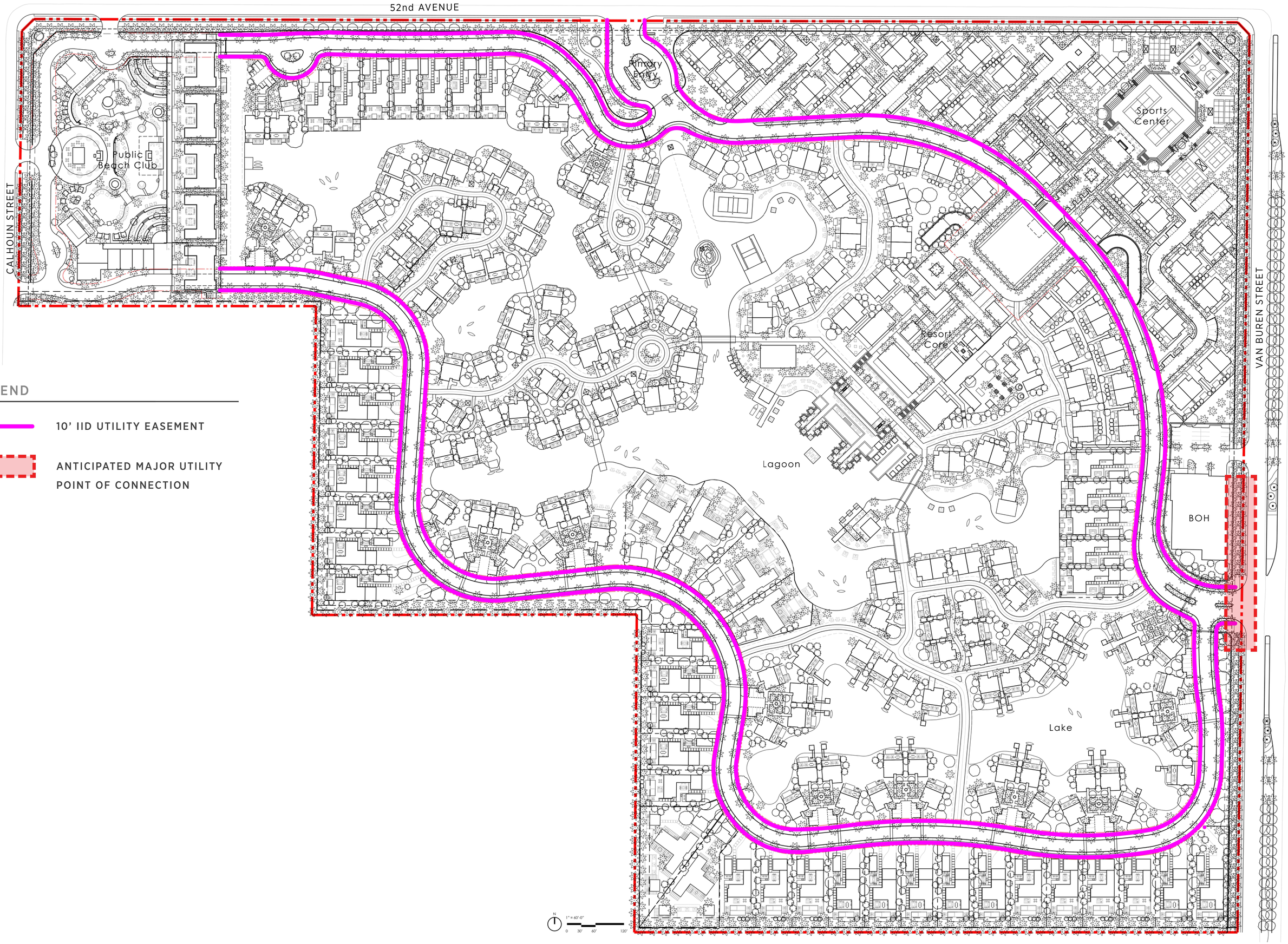


LEGEND

- ZONE 1: ZEN / RESIDENTIAL
- ZONE 2: ACTIVE SHORE
- ZONE 3: OPEN LAGOON
- ZONE 4: DEEP ZONE
- ZONE 5: LAKE ACTIVATION
  * Non-Contact Water, No Swimming
- DOCK
- WATER TAXI ROUTE

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LEGEND

- 10' IID UTILITY EASEMENT
- ANTICIPATED MAJOR UTILITY POINT OF CONNECTION

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LEGEND

WHARF HYDRANT LOCATION

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POTENTIAL WHARF HYDRANT LOCATIONS
SUBMITTAL DATE: JUNE 10, 2026
COVA | ARCHITECTURAL REVIEW

LANDSCAPE STRUCTURE & THEMEING

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LEGEND

- THEME 1 - DESERT OASIS
- THEME 2 - DESERT LUSH
- THEME 3 - THE GROVE
- THEME 4 - AGRARIAN HERITAGE
- THEME 5 - BEACH
- THEME 6 - DESERT NATIVE
- THEME 7 - SPA WATER GARDEN

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THEME 1 - DESERT OASIS LANDSCAPE

Lush Refuge | Vertical Drama | Shade + Cooling

SCIENTIFIC NAME	COMMON NAME
PALMS	
Cycas revoluta	*Sago Palm*
Chamaerops humilis	*Mediterranean Fan Palm*
Phoenix dactylifera	*Date Palm*
Phoenix canariensis	*Canary Island Palm*
Washingtonia filifera	*California Fan Palm*
TREES	
Acacia smallii	*Desert Sweet Acacia*
Chilopsis linearis	*Desert Willow*
Chitalpa x	*Tashkentensis*
Cordia boissieri	*Mexican Olive*
Citrus Species	*Citrus*
Olea europa	*Olive*
Olneya tesota	*Ironwood*
Parkinsonia × 'Desert Museum'	*Desert Museum Palo Verde*
Prosopis glandulosa	*Honey Mesquite*
Prosopis velutina	*Velvet Mesquite*
Pistacia lentiscus	*Mastic Tree*
Sophora secundiflora	*Silver Sierra*
CACTI / ACCENTS	
Agave weberi	*Weber's Agave*
Agave 'Blue Flame'	*Blue Flame Agave*
Aloe barbadensis	*Aloe Vera*
Aloe ferox	*Cape Aloe*
Aloe x 'Blue Elf"	*Blue ELF Aloe*
Euphorbia rigida	*Gopher Plant*
Yucca pallida	*Pale Yucca*
SHRUBS/GRASSES	
Bougainvillea 'Monka'	*Oo-La-La® Bougainvillea*
Bougainvillea	*Torch Glow*
Bougainvillea	*Rosenka*
Bougainvillea	*Barbara Karst*
Caesalpinia pulherrima	*Mexican Bird of Paradise*
Campsis radicans	*Trumpet Vine*
Dianella revoluta	*Little Rev™ Flax Lily*
Eremophila hygrophana	*Blue Bells*
Eremophila maculata Valenitine	*Valentine Bush*
Lavendula angustifolia	*Lavender*
Leucophyllum frutexcens	*Texas Ranger*
Ilex vomitoria Nana	*Dwarf Youpon Holly*
Jasminum sambac	*Arabian Jasmine*
Myrtus communis boetica	*Twisted Myrtle*
Ruellia brittoniana	*Mexican Petunia*
Russelia equisetiformis	*Firecracker Plant*
Olea europaea 'Montra'	*Dwarf Olive*
Stipa tenuissima	*Mexican Feather Grass*
Salvia leucantha	*Mexican Bush Sage*
Tradescantia pallida	*Purple heart*
Trachelospermum jasminoides	*Star Jasmin*
Tecoma stans	*Yellow Bells Bush*
Perovskia atriplicifolia	*Russian Sage*



THEME 2 - DESERT LUSH LANDSCAPE

Residential Comfort | Seasonal Color | Layered Texture

SCIENTIFIC NAME	COMMON NAME
PALMS	
Phoenix dactylifera	*Date Palm*
Chamaerops humilis	*Mediterranean Fan Palm*
Washingtonia filifera	*California Fan Palm*
TREES	
Acacia smallii	*Desert Sweet Acacia*
Chilopsis linearis	*Desert Willow*
Chitalpa x	*Tashkentensis*
Olea europa	*Olive*
Olneya tesota	*Ironwood*
Parkinsonia praecox	*Palo Brea*
Parkinsonia × 'Desert Museum'	*Desert Museum Palo Verde*
Prosopis glandulosa	*Honey Mesquite*
Prosopis velutina	*Velvet Mesquite*
CACTI / ACCENTS	
Aloe barbadensis	*Medicinal Aloe*
Agave weberi	*Weber's Agave*
Agave vilmoriniana	*Octopus Agave*
Dasylirion texanum	*Green Desert Spoon*
Dasylirion wheeleri	*Desert Spoon*
Euphorbia rigida	*Gopher Plant*
Hesperaloe funifera	*Giant Hesperaloe*
Hesperaloe parvifolia 'Perpa'	*Brakelights Yucca*
Mediopicta Aurea	*Agave Americana*
SHRUBS / GRASSES	
Acacia redolens	*Prostrate Acacia*
Bougainvillea 'Monka'	*Oo-La-La® Bougainvillea*
Campsis radicans	*Trumpet Vine*
Caesalpinia pulherrima	*Mexican Bird of Paradise*
Calliandra californica	*Baja Fairy Duster*
Chrisactinia mexicana	*Damianita*
Dianella revoluta	*Little Rev™ Flax Lily*
Eremophila glabra 'Mingenew	*Gold Outback Sunrise Emu*
Ericameria laricifolia	*Turpentine Bush*
Leucophyllum frutexcens	*Texas Ranger*
Muhlenbergia capillaris	*Pink Muhly Grass*
Olea europaea 'Montra'	*Dwarf Olive*
Penstemon baccharifolius	*Diablo Rock Penstemon*
Ruellia peninsularis	*Desert Ruellia*
Salvia leucantha	*Mexican Bush Sage*
Senna artemisioides	*Feathery Cassia*
Tecoma stans	*Yellow Bells Bush*



THEME 3 - THE GROVE LANDSCAPE

Structured | Historical Echo | Productive Beauty

SCIENTIFIC NAME	COMMON NAME
PALMS	
Phoenix dactylifera	*Date Palm*
TREES	
Acacia smallii	*Desert Sweet Acacia*
Chilopsis linearis	*Desert Willow*
Chitalpa x	*Tashkentensis*
Olea europa	*Olive*
Olneya tesota	*Ironwood*
Parkinsonia praecox	*Palo Brea*
Parkinsonia × 'Desert Museum'	*Desert Museum Palo Verde*
Prosopis glandulosa	*Honey Mesquite*
Prosopis velutina	*Velvet Mesquite*
CACTI / ACCENTS	
Aloe barbadensis	*Medicinal Aloe*
Agave weberi	*Weber's Agave*
Agave vilmoriniana	*Octopus Agave*
Carnegiea gigantea	*Saguaro*
Dasylirion texanum	*Green Desert Spoon*
Dasylirion wheeleri	*Desert Spoon*
Euphorbia rigida	*Gopher Plant*
Euphorbia tirucalli	*Firesticks / Pencil Cactus*
Hesperaloe funifera	*Giant Hesperaloe*
Hesperaloe parvifolia 'Perpa'	*Brakelights Yucca*
Mediopicta Aurea	*Agave Americana*
SHRUBS / GRASSES	
Acacia redolens	*Prostrate Acacia*
Bougainvillea 'Monka'	*Oo-La-La® Bougainvillea*
Campsis radicans	*Trumpet Vine*
Caesalpinia pulherrima	*Mexican Bird of Paradise*
Calliandra californica	*Baja Fairy Duster*
Chrisactinia mexicana	*Damianita*
Dianella revoluta	*Little Rev™ Flax Lily*
Eremophila glabra 'Mingenew	*Gold Outback Sunrise Emu*
Ericameria laricifolia	*Turpentine Bush*
Leucophyllum frutexcens	*Texas Ranger*
Olea europaea 'Montra'	*Dwarf Olive*
Penstemon baccharifolius	*Diablo Rock Penstemon*
Salvia leucantha	*Mexican Bush Sage*
Tecoma stans	*Yellow Bells Bush*

THEME 4 - AGRARIAN HERITAGE



SCIENTIFIC NAME	COMMON NAME
PALMS	
Phoenix dactylifera	*Date Palm*
TREES	
Acacia smallii	*Desert Sweet Acacia*
Chilopsis linearis	*Desert Willow*
Olea europa	*Olive*
Parkinsonia praecox	*Palo Brea*
Parkinsonia × 'Desert Museum'	*Desert Museum Palo Verde*
Prosopis velutina	*Velvet Mesquite*
CACTI / ACCENTS	
Aloe barbadensis	*Medicinal Aloe*
Agave weberi	*Weber's Agave*
Agave vilmoriniana	*Octopus Agave*
Dasylirion texanum	*Green Desert Spoon*
Dasylirion wheeleri	*Desert Spoon*
Euphorbia rigida	*Gopher Plant*
Euphorbia tirucalli	*Firesticks / Pencil Cactus*
Hesperaloe funifera	*Giant Hesperaloe*
Hesperaloe parvifolia 'Perpa'	*Brakelights Yucca*
SHRUBS / GRASSES	
Acacia redolens	*Prostrate Acacia*
Bougainvillea 'Monka'	*Oo-La-La® Bougainvillea*
Campsis radicans	*Trumpet Vine*
Caesalpinia pulherrima	*Mexican Bird of Paradise*
Calliandra californica	*Baja Fairy Duster*
Chrisactinia mexicana	*Damianita*
Dianella revoluta	*Little Rev™ Flax Lily*
Eremophila glabra 'Mingenew	*Gold Outback Sunrise Emu*
Ericameria laricifolia	*Turpentine Bush*
Leucophyllum frutexcens	*Texas Ranger*
Olea europaea 'Montra'	*Dwarf Olive*
Penstemon baccharifolius	*Diablo Rock Penstemon*
Salvia leucantha	*Mexican Bush Sage*
Tecoma stans	*Yellow Bells Bush*

THEME 5 - BEACH LANDSCAPE

Casual | Flowing Forms | Coastal Vibes



SCIENTIFIC NAME	COMMON NAME
PALMS	
Phoenix dactylifera	*Date Palm*
Chamaerops humilis	*Mediterranean Fan Palm*
Washingtonia robusta	*Mexican Fan Palm*
TREES	
Acacia smallii	*Desert Sweet Acacia*
Chilopsis linearis	*Desert Willow*
Chitalpa x	*Tashkentensis*
Olea europa	*Olive*
Olneya tesota	*Ironwood*
Prosopis glandulosa	*Honey Mesquite*
Prosopis velutina	*Velvet Mesquite*
CACTI / ACCENTS	
Agave desmettiana	*Smooth Agave Century Plant*
Aloe striata	*Coral Aloe*
Aloe maculata	*Soap Aloe*
Yucca pallida	*Pale Yucca*
SHRUBS / GRASSES	
Aristida purpurea	*Purple Three-Awn Grass*
Bouteloua gracilis	*Blond Ambition Grass*
Calliandra californica	*Baja Fairy Duster*
Carex pansa	*California meadow sedge*
Dalea greggii	*Trailing Indigo Bush*
Eriogonum fasciculatum	*California Buckwheat*
Fallugia paradoxa	*Apache Plume*
Gaura lindheimeri	*Whirling Butterflies*
Hymenoxys acaulis	*Angelita Daisy*
Isomeris arborea	*Bladderpod*
Juncus patens	*California Gray Rush*
Justicia californica	*Chuparosa*
Lavandula multifida	*Fernleaf Lavender*
Muhlenbergia capillaris	*Pink Muhly Grass*
Muhlenbergia rigens	*Deer Grass*
Penstemon pseudospectabilis	*Desert Penstemon*
Ruellia peninsularis	*Desert Ruellia*
Salvia greggii	*Autumn Sage*
Sphaeralcea ambigua	*Globe Mallow*
Stipa tenuissima	*Mexican Feather Grass*
Tecoma stans	*Yellow Bells*
Verbena lilacina	*Cedros Island Verbena*

THEME 6 - DESERT NATIVE



SCIENTIFIC NAME	COMMON NAME
PALMS	
Phoenix dactylifera	*Date Palm*
TREES	
Acacia smallii	*Desert Sweet Acacia*
Chilopsis linearis	*Desert Willow*
Olneya tesota	*Ironwood*
Parkinsonia × 'Desert Museum'	*Desert Museum Palo Verde*
Prosopis glandulosa	*Honey Mesquite*
Prosopis velutina	*Velvet Mesquite*
CACTI / ACCENTS	
Aloe barbadensis	*Medicinal Aloe*
Carnegiea gigantea	*Saguaro*
Dasylirion texanum	*Green Desert Spoon*
Dasylirion wheeleri	*Desert Spoon*
Euphorbia rigida	*Gopher Plant*
Fouquieria splendens	*Ocotillo*
Hesperaloe funifera	*Giant Hesperaloe*
Stenocereus thurberi	*Organ pipe cactus*
Yucca rostrata	*Beaked Yucca*
Yucca faxoniana	*Spanish Dagger*
SHRUBS / GRASSES	
Acacia redolens	*Prostrate Acacia*
Bouteloua gracilis	*Blond Ambition Grass*
Caesalpinia pulherrima	*Mexican Bird of Paradise*
Calliandra californica	*Baja Fairy Duster*
Chrisactinia mexicana	*Damianita*
Cordia parvifolia	*Little Leaf Cordia*
Dalea greggii	*Trailing Indigo Bush*
Eremophila maculata	*Emu Bush*
Ericameria laricifolia	*Turpentine Bush*
Fallugia paradoxa	*Apache Plume*
Glandularia pulchella	*Rock verbena*
Larrea tridentata	*Creosote Bush*
Muhlenbergia rigens	*Deer Grass*
Penstemon baccharifolius	*Diablo Rock Penstemon*
Ruellia peninsularis	*Desert Ruellia*
Simmondsia chinensis	*Jojoba*
Sphaeralcea ambigua	*Globe Mallow*
Tecoma stans	*Yellow Bells Bush*

THEME 7 - SPA WATER GARDEN LANDSCAPE

Naturalistic | Low Maintenance | Habitat-Friendly



SCIENTIFIC NAME	COMMON NAME
PALMS	
Chamaerops humilis	*Mediterranean Fan Palm*
Phoenix dactylifera	*Date Palm*
TREES	
Acacia smallii	*Desert Sweet Acacia*
Chilopsis linearis	*Desert Willow*
Jacaranda mimosifolia	*Jacaranda*
Olneya tesota	*Ironwood*
Lagerstroemia indica	*Crape Myrtle*
SHRUBS / GRASSES	
Aloysia gratissima	*Whitebrush*
Bacopa monnieri	*Water Hyssop*
Caesalpinia pulherrima	*Mexican Bird of Paradise*
Calliandra californica	*Baja Fairy Duster*
Carex divulsa	*Berkeley Sedge*
Chondropetalum tectorum	*Cape Rush*
Dodonaea viscosa 'Purpurea'	*Purple Hopseed Bush*
Dymondia margaretae	*Dymondia*
Hibiscus rosa-sinensis	*Tropical Hibiscus*
Juncus patens	*California Grey Rush*
Justicia californica	*Chuparosa*
Leucophyllum frutescens	*Texas Ranger*
Lippia nodiflora	*Frogfruit*
Lomandra longifolia 'Breeze'	*Lomandra*
Miscanthus sinensis 'Adagio'	*Adagio Maiden Grass*
Muhlenbergia capillaris	*Pink Muhly Grass*
Muhlenbergia rigens	*Deer Grass*
Nerium oleander 'Petite Pink'	*Dwarf Oleander*
Pennisetum orientale	*Oriental Fountain Grass*
Plumbago auriculata	*Plumbago*
Russelia equisetiformis	*Firecracker Plant*
Salvia greggii	*Autumn Sage*
Tecoma stans	*Yellow Bells B ush*
Vitex agnus-castus	*Chaste Tree, shrub form*



LEGEND

- Date Palm Grove
  *Palm Canopies to Exceed 14' High
- Canopy Tree - Large
- Canopy Tree - Medium
- Palm - Small
- Fire Lane

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PALM TREES



Bismarckia nobilis | Bismark Palm



Brahea armata | Mexican Blue Palm



Cycas revoluta | Sago Palm



Chamaerops humilis | Mediterranean Fan Palm



Phoenix dactylifera | Date Palm



Phoenix canariensis | Canary Island Palm



Washingtonia × filibusta | Hybrid Fan Palm



Washingtonia filifera | California Fan Palm

TREES



Acacia smallii | Desert Sweet Acacia



Caesalpinia cacalaco | Cascalote



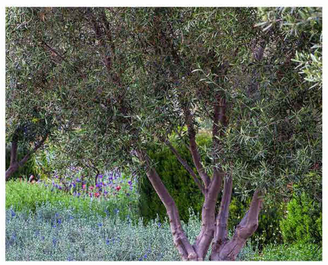
Chilopsis linearis | Desert Willow



Chitalpa x | Tashkentensis



Citrus Species | Citrus



Olea europa | Seedless Olive



Parkinsonia praecox | Palo Brea



Parkinsonia × 'Desert Museum' | Desert Museum Palo Verde



Prosopis glandulosa | Honey Mesquite



Prosopis velutina | Velvet Mesquite



Pistacia lentiscus | Mastic Tree



Sophora secundiflora | Silver Sierra

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SHRUBS



Asparagus densiflorus 'Myers' | Foxtail Fern



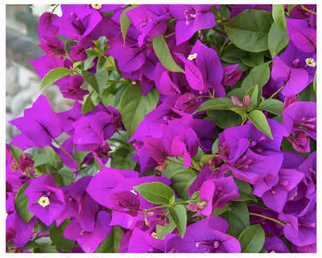
Anigozanthos | Kangaroo Paw



Berlandiera lyrata | *Chocolate Flower*



Bougainvillea | *Barbara Karst*



Bougainvillea 'Moneth' | *Purple Queen® Bougainvillea*



Campsis radicans | Trumpet Vine



Caesalpinia pulcherrima | *Mexican Bird of Paradise*



Calliandra californica | Baja Fairy Duster



Chrysactinia mexicana | Damianita



Dianella revoluta | Little Rev™ Flax Lily



Dodonaea viscosa | Hop Bush



Eremophila maculata | Emu Bush



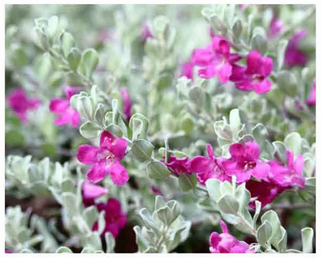
Eremophila glabra *'Mingenew'* | Gold Outback Sunrise Emu



Eremophila hygrophana | Blue Bells



Lavendula angustifolia | *English* Lavender



Leucophyllum frutescens | Texas Ranger



Olea europaea 'Montra' | Dwarf Olive



Myrtus communis boetica | *Twisted Myrtle*



Penstemon baccharifolius | Diablo Rock Penstemon



Ruellia brittoniana | *Mexican Petunia*



Rosmarinus officinalis 'Arp' | *Rosemary*



Salvia leucantha | Mexican Bush Sage



Trachelospermum jasminoides | Star Jasmin



Tecoma stans | Yellow Bells Bush

GRASSES



Aristida purpurea | Purple Threeawn



Muhlenbergia capillaris | Pink Muhly Grass



Muhlenbergia rigens | Deer Grass



Nassella tenuissima | Mexican Feather Grass

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AGAVE / SPECIMEN



Agave weberi | Weber's Agave



Agave 'Blue Flame' | Blue Flame Agave



Agave attenuata | Ghost Agave/Fox Tail Agave



Agave desmettiana | Smooth Agave



Agave vilmoriniana | Octopus Agave



Aloe Striata | Coral Aloe



Dasylirion texanum | Green Desert Spoon



Euphorbia rigida | *Gopher Plant*



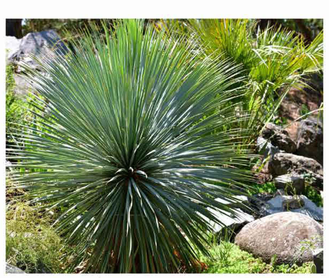
Fouquieria splendens | Ocotillo



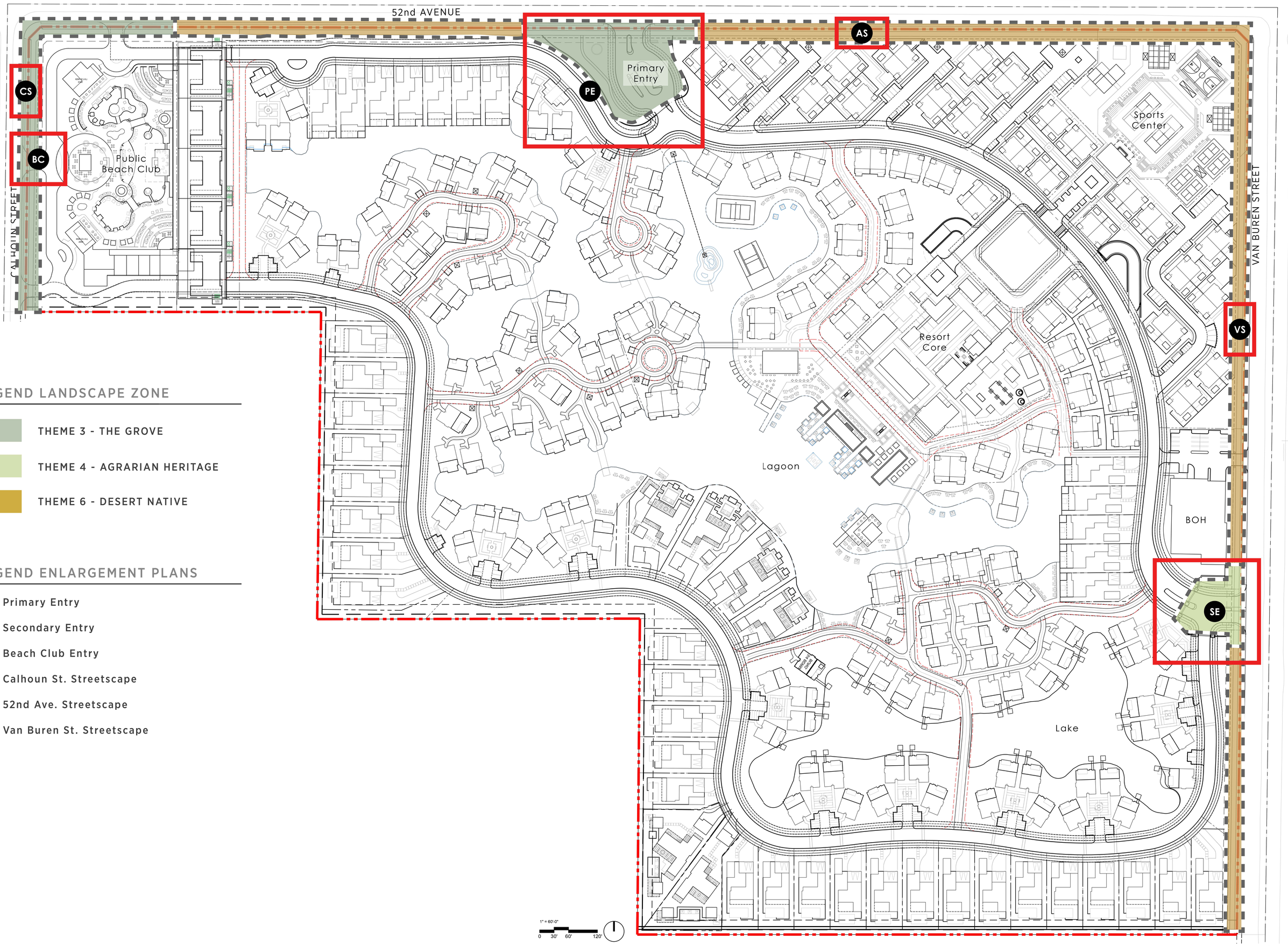
Hesperaloe funifera | Giant Hesperaloe



Pachycereus marginatus | Mexican Fence Post



Yucca rostrata | Beaked Yucca



LEGEND LANDSCAPE ZONE

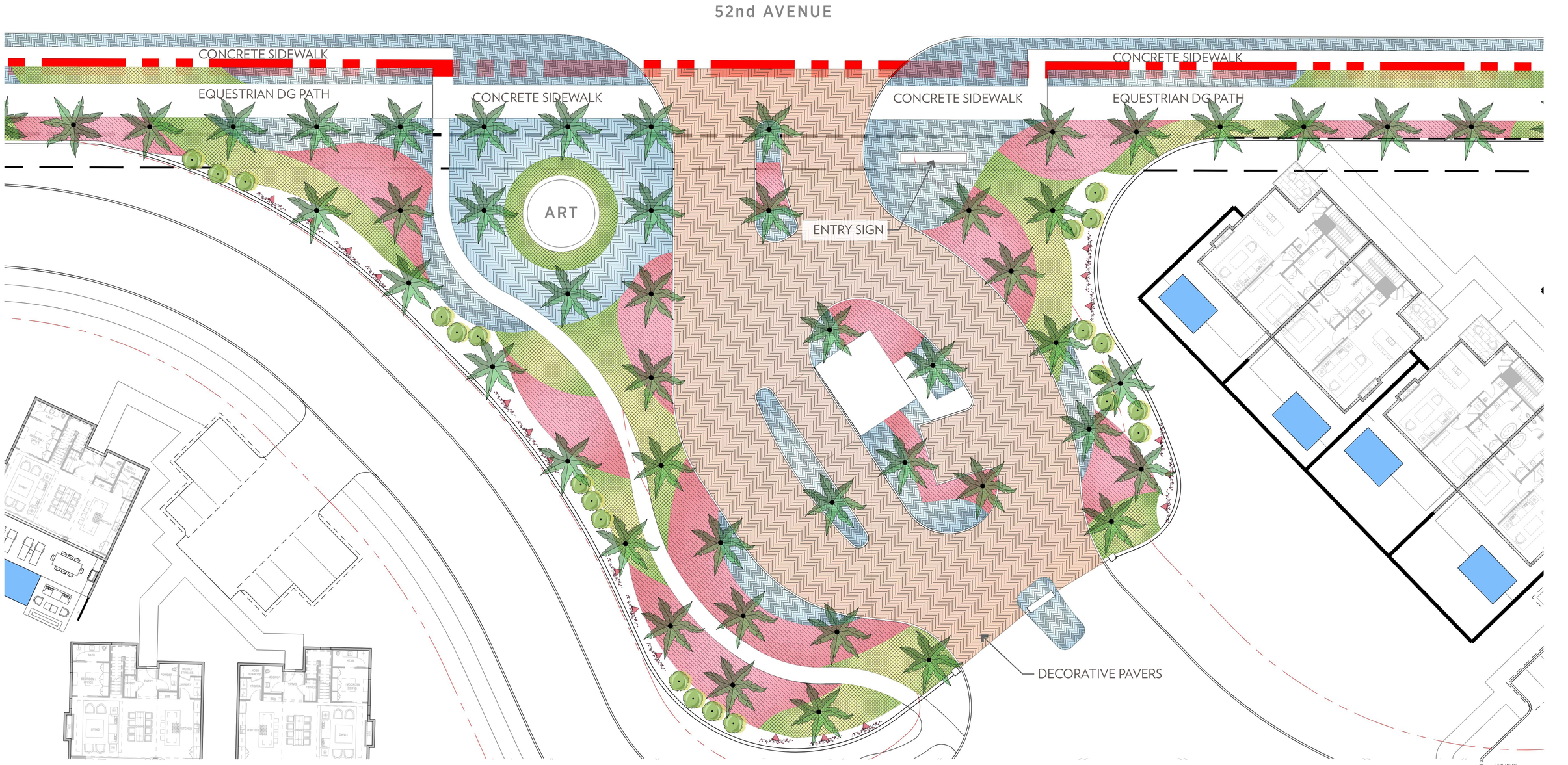
- THEME 3 - THE GROVE
- THEME 4 - AGRARIAN HERITAGE
- THEME 6 - DESERT NATIVE

LEGEND ENLARGEMENT PLANS

- PE Primary Entry
- SE Secondary Entry
- BC Beach Club Entry
- CS Calhoun St. Streetscape
- AS 52nd Ave. Streetscape
- VS Van Buren St. Streetscape

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LANDSCAPE LEGEND

PALM TREES
(VERTICAL ACCENTS | 10'–60'+ TALL | ICONIC + SCULPTURAL FORM)

DESCRIPTION:
PALMS FUNCTION AS ARCHITECTURAL VERTICAL ELEMENTS. THEY PROVIDE RHYTHM, SKYLINE IDENTITY, AND RESORT CHARACTER.

CHAMAEROPS HUMILIS / MEDITERRANEAN FAN PALM
PHOENIX DACTYLIFERA / DATE PALM
WASHINGTONIA FILIFERA / CALIFORNIA FAN PALM

LARGE SHADE TREES
(APPROX. 25'–40'+ TALL | BROAD CANOPY + PRIMARY SHADE STRUCTURE)

DESCRIPTION:
DOMINANT CANOPY TREES, USED FOR SHADE PRODUCTION, SPATIAL DEFINITION, AND MICROCLIMATE COOLING. TYPICALLY WIDE-SPREADING WITH STRONG BRANCHING STRUCTURE, THEY ANCHOR MAJOR SPACES LIKE STREETS, PASEOS, AND OPEN AREAS.

CERCIDIUM PRAECOX / SONORAN PALO VERDE
CHORISIA SPECIOSA / SILK FLOSS TREE
FICUS MICROCARPA / INDIAN LAUREL FIG
PARKINSONIA X 'DESERT MUSEUM' / DESERT MUSEUM PALO VERDE
PROSOPIS GLANDULOSA / HONEY MESQUITE
PROSOPIS VELUTINA / VELVET MESQUITE
TIPUANA TIPU / TIPU TREE

LARGE SHRUBS
(APPROX. 6'–15'+ TALL | STRUCTURAL + SCREENING LAYER)

DESCRIPTION:
THESE ARE YOUR PRIMARY MASSING PLANTS—USED FOR PRIVACY, ENCLOSURE, AND BACKDROP STRUCTURE. THEY ARE UPRIGHT OR SPREADING FORMS, MODERATE DENSITY, AND STRONG SEASONAL PRESENCE (FLOWERS OR FOLIAGE).

AGAVE AMERICANA 'SUPER BLUE' / SUPER BLUE CENTURY PLANT
CAESALPINIA PULCHERRIMA / RED BIRD OF PARADISE
CORDIA PARVIFOLIA / SMALL-LEAF GEIGERTREE
DASYLIRION WHEELERI / GREY DESERT SPOON
DODONAEA VISCOSA / HOPSEED BUSH
EREMOPHILA MACULATA / SPOTTED EMU BUSH
LARREA TRIDENTATA / CREOSOTE BUSH
LEUCOPHYLLUM CANDIDUM / TEXAS SAGE
MYRTUS COMMUNIS / COMMON MYRTLE
SIMMONDSIA CHINENSIS / JOJOBA
TECOMA STANS / YELLOW BELLS
YUCCA FAXONIANA / SPANISH DAGGER
YUCCA ROSTRATA / BEAKED YUCCA

VINES
(VARIABLE HEIGHT | VERTICAL ELEMENTS + SOFTENING STRUCTURES)

DESCRIPTION:
VINES PROVIDE VERTICAL LAYERING AND ARCHITECTURAL SOFTENING. USED ON WALLS, TRELLISES, AND FENCES TO INTRODUCE COLOR, MOVEMENT, AND SEASONAL INTEREST WITHOUT INCREASING FOOTPRINT. THEY ACT AS FOCAL ELEMENTS OR CONNECTORS BETWEEN BUILT AND PLANTED ENVIRONMENTS.

ANTIGONON LEPTOPUS / CORAL VINE
BOUGAINVILLEA X 'BARBARA KARST' / BARBARA KARST BOUGAINVILLEA
CAMPSIS RADICANS / TRUMPET CREEPER
GELSEMIUM SEMPERVIRENS / CAROLINA JESSAMINE
JASMINUM SAMBAC / ARABIAN JASMINE
TRACHELOSPERMUM JASMINOIDES / CHINESE STAR JASMINE

MEDIUM SHRUBS
(APPROX. 3'–6' TALL | MID-LAYER + COLOR + TRANSITION PLANTING)

DESCRIPTION:
USED TO TRANSITION BETWEEN LARGE SHRUBS AND LOW PLANTINGS. TYPICALLY MOUNDING OR LOOSELY UPRIGHT, THESE PLANTS PROVIDE SEASONAL COLOR, TEXTURE VARIATION, AND HABITAT VALUE.

AGAVE WEBERI / WEBER AGAVE
CALLIANDRA CALIFORNICA / RED BAJA FAIRY DUSTER
EREMOPHILA HYGROPHANA / EMU BUSH
HESPERALOE FUNIFERA / GIANT HESPERALOE
HESPERALOE PARVIFLORA 'RUBY RED' / RUBY RED YUCCA
ILEX VOMITORIA / YAUPON HOLLY
LAVANDULA ANGUSTIFOLIA / ENGLISH LAVENDER
OLEA EUROPAEA 'MONTRA' / LITTLE OLLIE® OLIVE
PEROVSKIA ATRIPLICIFOLIA / RUSSIAN SAGE
RUELLIA BRITTONIANA / MEXICAN PETUNIA
SALVIA LEUCANTHA / MEXICAN BUSH SAGE

LOW SHRUBS
(APPROX. 0.5'–3' TALL | FOREGROUND + GROUND PLANE + EROSION CONTROL)

DESCRIPTION:
THIS LAYER DEFINES THE GROUND PLANE AND FINE TEXTURE. INCLUDES BOTH COMPACT SHRUBS AND SPREADING GROUNDCOVERS. THESE PLANTS ARE LOW, MOUNDING, OR TRAILING, AND ARE CRITICAL FOR WEED SUPPRESSION, SOIL STABILIZATION, AND VISUAL COHESION. USED IN MASSES OR TIGHT SPACING.

ACACIA REDOLENS 'DESERT CARPET' / DESERT CARPET BANK CATCLAW
AGAVE X 'BLUE FLAME' / BLUE FLAME AGAVE
ALOE STRIATA / CORAL ALOE
BERLANDIERA LYRATA / CHOCOLATE DAISY
BOUGAINVILLEA X 'HELEN JOHNSON' / HELEN JOHNSON COMPACT BOUGAINVILLEA
CHRYSACTINIA MEXICANA / DAMIANITA
DALEA GREGGII / TRAILING INDIGO BUSH
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ECHINOCACTUS GRUSONII / GOLDEN BARREL CACTUS
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RUELLIA PENINSULARIS / DESERT RUELLIA
SPHAERALCEA AMBIGUA / DESERT GLOBEMALLOW
TRADESCANTIA PALLIDA / PURPLE SPIDERWORT

GRASSES
(APPROX. 1'–4' TALL | MOVEMENT + TEXTURE + SOFTENING LAYER)

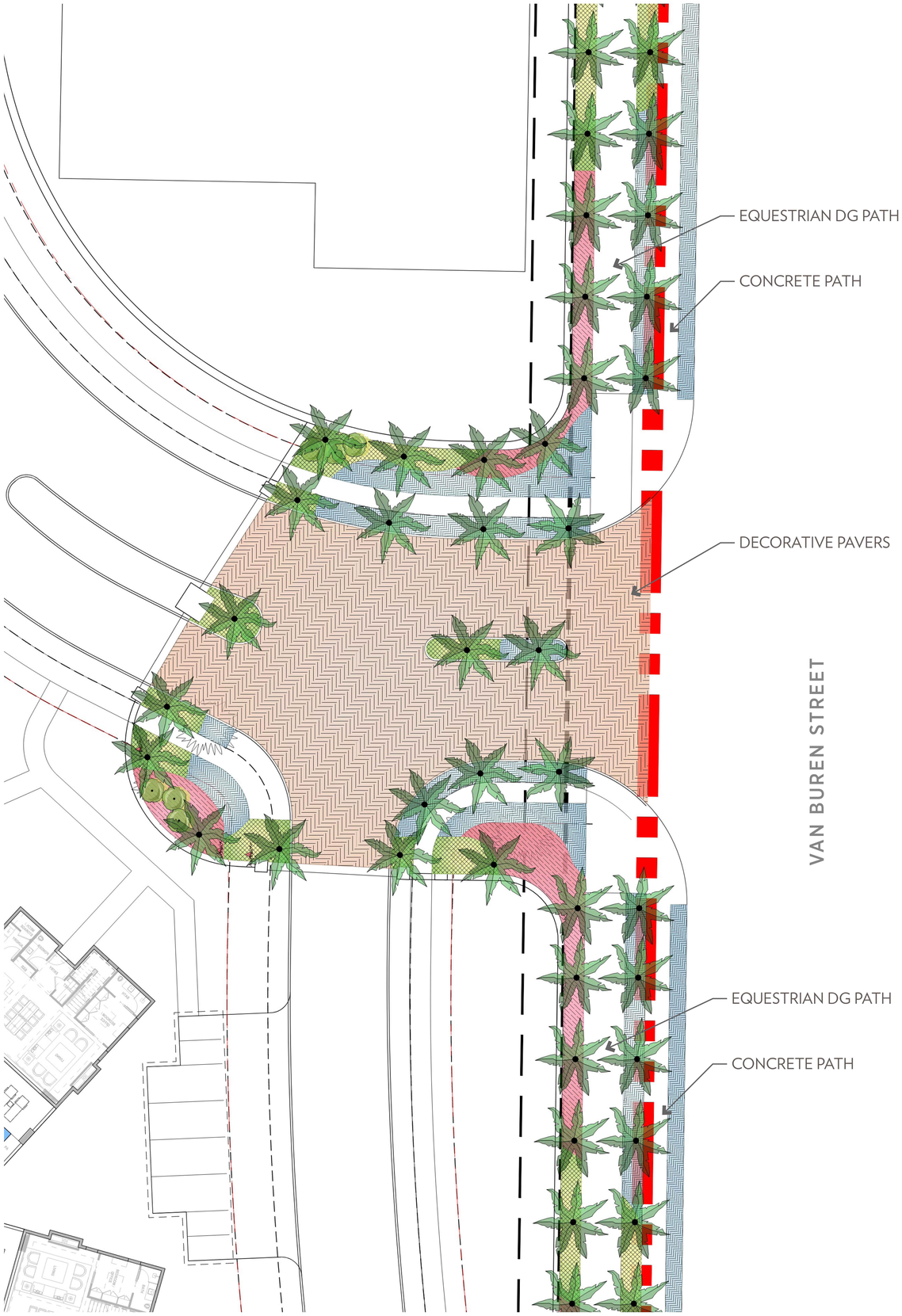
DESCRIPTION:

GRASSES PROVIDE MOVEMENT, FINE TEXTURE, AND VISUAL SOFTNESS IN THE LANDSCAPE. USED TO TRANSITION BETWEEN SHRUBS AND GROUND PLANE PLANTING, WHILE CONTRASTING NICELY WITH BOLD DESERT FORMS LIKE AGAVES AND CACTI. USED TO CREATE FLOW, RHYTHM, AND COHESION ACROSS PLANTING AREAS.

BOUTELOUA GRACILIS 'BLONDE AMBITION' / BLONDE AMBITION BLUE GRAMA
FESTUCA GLAUCA / BLUE FESCUE
MUHLENBERGIA CAPILLARIS / PINK MUHLY GRASS
MUHLENBERGIA RIGENS / DEER GRASS
STIPA TENUISSIMA / MEXICAN FEATHER GRASS

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LANDSCAPE LEGEND

PALM TREES
(VERTICAL ACCENTS | 10'–60'+ TALL | ICONIC + SCULPTURAL FORM)

DESCRIPTION:
PALMS FUNCTION AS ARCHITECTURAL VERTICAL ELEMENTS. THEY PROVIDE RHYTHM, SKYLINE IDENTITY, AND RESORT CHARACTER.

CHAMAEROPS HUMILIS / MEDITERRANEAN FAN PALM
PHOENIX DACTYLIFERA / DATE PALM
WASHINGTONIA FILIFERA / CALIFORNIA FAN PALM

LARGE SHADE TREES
(APPROX. 25'–40'+ TALL | BROAD CANOPY + PRIMARY SHADE STRUCTURE)

DESCRIPTION:
DOMINANT CANOPY TREES, USED FOR SHADE PRODUCTION, SPATIAL DEFINITION, AND MICROCLIMATE COOLING. TYPICALLY WIDE-SPREADING WITH STRONG BRANCHING STRUCTURE, THEY ANCHOR MAJOR SPACES LIKE STREETS, PASEOS, AND OPEN AREAS.

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PARKINSONIA X 'DESERT MUSEUM' / DESERT MUSEUM PALO VERDE
PROSOPIS GLANDULOSA / HONEY MESQUITE
PROSOPIS VELUTINA / VELVET MESQUITE
TIPUANA TIPU / TIPU TREE

LARGE SHRUBS
(APPROX. 6'–15'+ TALL | STRUCTURAL + SCREENING LAYER)

DESCRIPTION:
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TECOMA STANS / YELLOW BELLS
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YUCCA ROSTRATA / BEAKED YUCCA

VINES
(VARIABLE HEIGHT | VERTICAL ELEMENTS + SOFTENING STRUCTURES)

DESCRIPTION:
VINES PROVIDE VERTICAL LAYERING AND ARCHITECTURAL SOFTENING. USED ON WALLS, TRELLISES, AND FENCES TO INTRODUCE COLOR, MOVEMENT, AND SEASONAL INTEREST WITHOUT INCREASING FOOTPRINT. THEY ACT AS FOCAL ELEMENTS OR CONNECTORS BETWEEN BUILT AND PLANTED ENVIRONMENTS.

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TRACHELOSPERMUM JASMINOIDES / CHINESE STAR JASMINE

MEDIUM SHRUBS
(APPROX. 3'–6' TALL | MID-LAYER + COLOR + TRANSITION PLANTING)

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SPHAERALCEA AMBIGUA / DESERT GLOBEMALLOW
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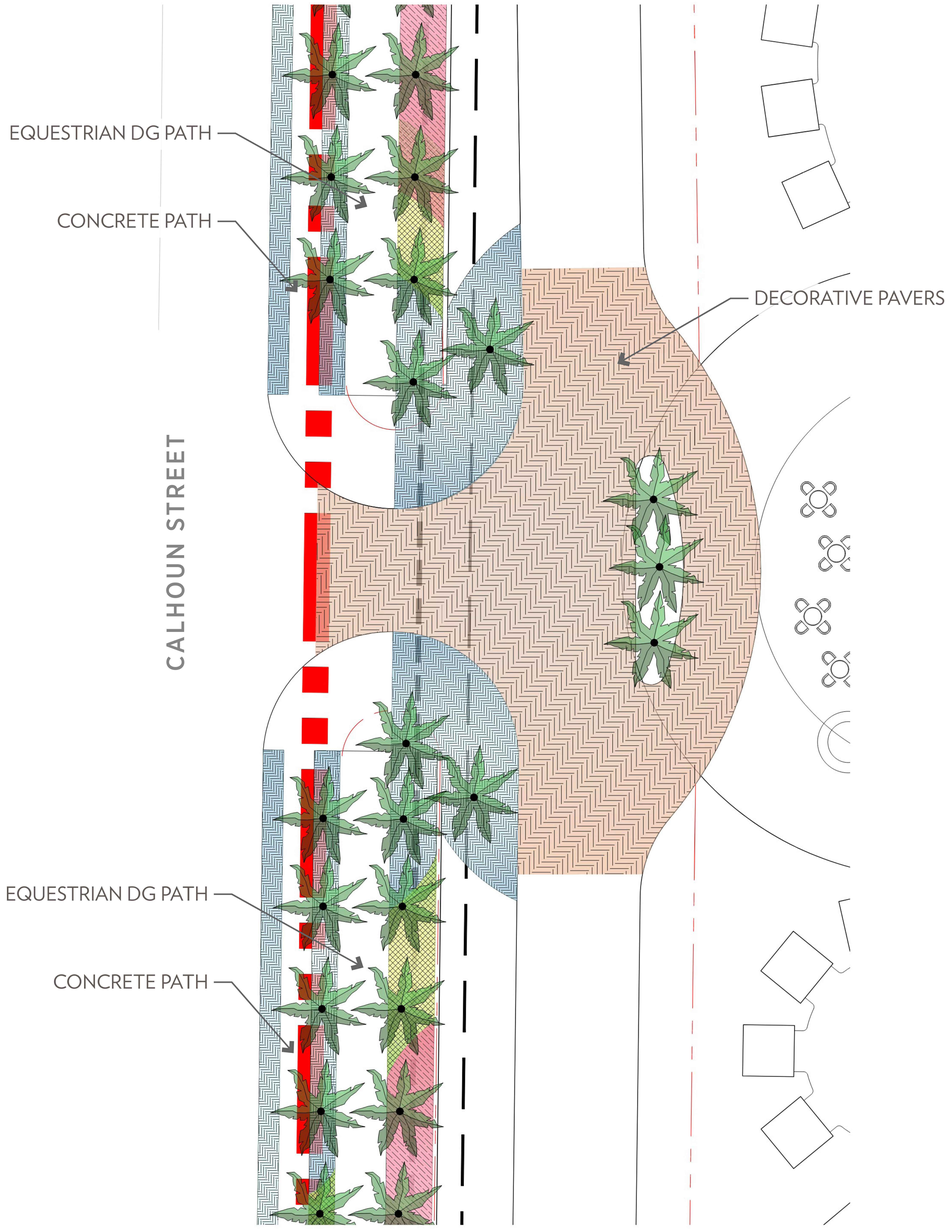
BOUTELOUA GRACILIS 'BLONDE AMBITION' / BLONDE AMBITION BLUE GRAMA
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N
1" = 10'-0"
0 5' 10' 20'

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SECONDARY ENTRY LANDSCAPE PLAN
SUBMITTAL DATE: JUNE 10, 2026
COVA | ARCHITECTURAL REVIEW



LANDSCAPE LEGEND

PALM TREES
(VERTICAL ACCENTS | 10'–60'+ TALL | ICONIC + SCULPTURAL FORM)

DESCRIPTION:
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(APPROX. 6'–15'+ TALL | STRUCTURAL + SCREENING LAYER)

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TECOMA STANS / YELLOW BELLS
YUCCA FAXONIANA / SPANISH DAGGER
YUCCA ROSTRATA / BEAKED YUCCA

VINES
(VARIABLE HEIGHT | VERTICAL ELEMENTS + SOFTENING STRUCTURES)

DESCRIPTION:
VINES PROVIDE VERTICAL LAYERING AND ARCHITECTURAL SOFTENING. USED ON WALLS, TRELLISES, AND FENCES TO INTRODUCE COLOR, MOVEMENT, AND SEASONAL INTEREST WITHOUT INCREASING FOOTPRINT. THEY ACT AS FOCAL ELEMENTS OR CONNECTORS BETWEEN BUILT AND PLANTED ENVIRONMENTS.

ANTIGONON LEPTOPUS / CORAL VINE
BOUGAINVILLEA X 'BARBARA KARST' / BARBARA KARST BOUGAINVILLEA
CAMPSIS RADICANS / TRUMPET CREEPER
GELSEMIUM SEMPERVIRENS / CAROLINA JESSAMINE
JASMINUM SAMBAC / ARABIAN JASMINE
TRACHELOSPERMUM JASMINOIDES / CHINESE STAR JASMINE

MEDIUM SHRUBS
(APPROX. 3'–6' TALL | MID-LAYER + COLOR + TRANSITION PLANTING)

DESCRIPTION:
USED TO TRANSITION BETWEEN LARGE SHRUBS AND LOW PLANTINGS. TYPICALLY MOUNDING OR LOOSELY UPRIGHT, THESE PLANTS PROVIDE SEASONAL COLOR, TEXTURE VARIATION, AND HABITAT VALUE.

AGAVE WEBERI / WEBER AGAVE
CALLIANDRA CALIFORNICA / RED BAJA FAIRY DUSTER
EREMOPHILA HYGROPHANA / EMU BUSH
HESPERALOE FUNIFERA / GIANT HESPERALOE
HESPERALOE PARVIFLORA 'RUBY RED' / RUBY RED YUCCA
ILEX VOMITORIA / YAUPON HOLLY
LAVANDULA ANGUSTIFOLIA / ENGLISH LAVENDER
OLEA EUROPAEA 'MONTRA' / LITTLE OLLIE® OLIVE
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RUELLIA BRITTONIANA / MEXICAN PETUNIA
SALVIA LEUCANTHA / MEXICAN BUSH SAGE

LOW SHRUBS
(APPROX. 0.5'–3' TALL | FOREGROUND + GROUND PLANE + EROSION CONTROL)

DESCRIPTION:
THIS LAYER DEFINES THE GROUND PLANE AND FINE TEXTURE. INCLUDES BOTH COMPACT SHRUBS AND SPREADING GROUNDCOVERS. THESE PLANTS ARE LOW, MOUNDING, OR TRAILING, AND ARE CRITICAL FOR WEED SUPPRESSION, SOIL STABILIZATION, AND VISUAL COHESION. USED IN MASSES OR TIGHT SPACING.

ACACIA REDOLENS 'DESERT CARPET' / DESERT CARPET BANK CATCLAW
AGAVE X 'BLUE FLAME' / BLUE FLAME AGAVE
ALOE STRIATA / CORAL ALOE
BERLANDIERA LYRATA / CHOCOLATE DAISY
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DALEA GREGGII / TRAILING INDIGO BUSH
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RUELLIA PENINSULARIS / DESERT RUELLIA
SPHAERALCEA AMBIGUA / DESERT GLOBEMALLOW
TRADESCANTIA PALLIDA / PURPLE SPIDERWORT

GRASSES
(APPROX. 1'–4' TALL | MOVEMENT + TEXTURE + SOFTENING LAYER)

DESCRIPTION:

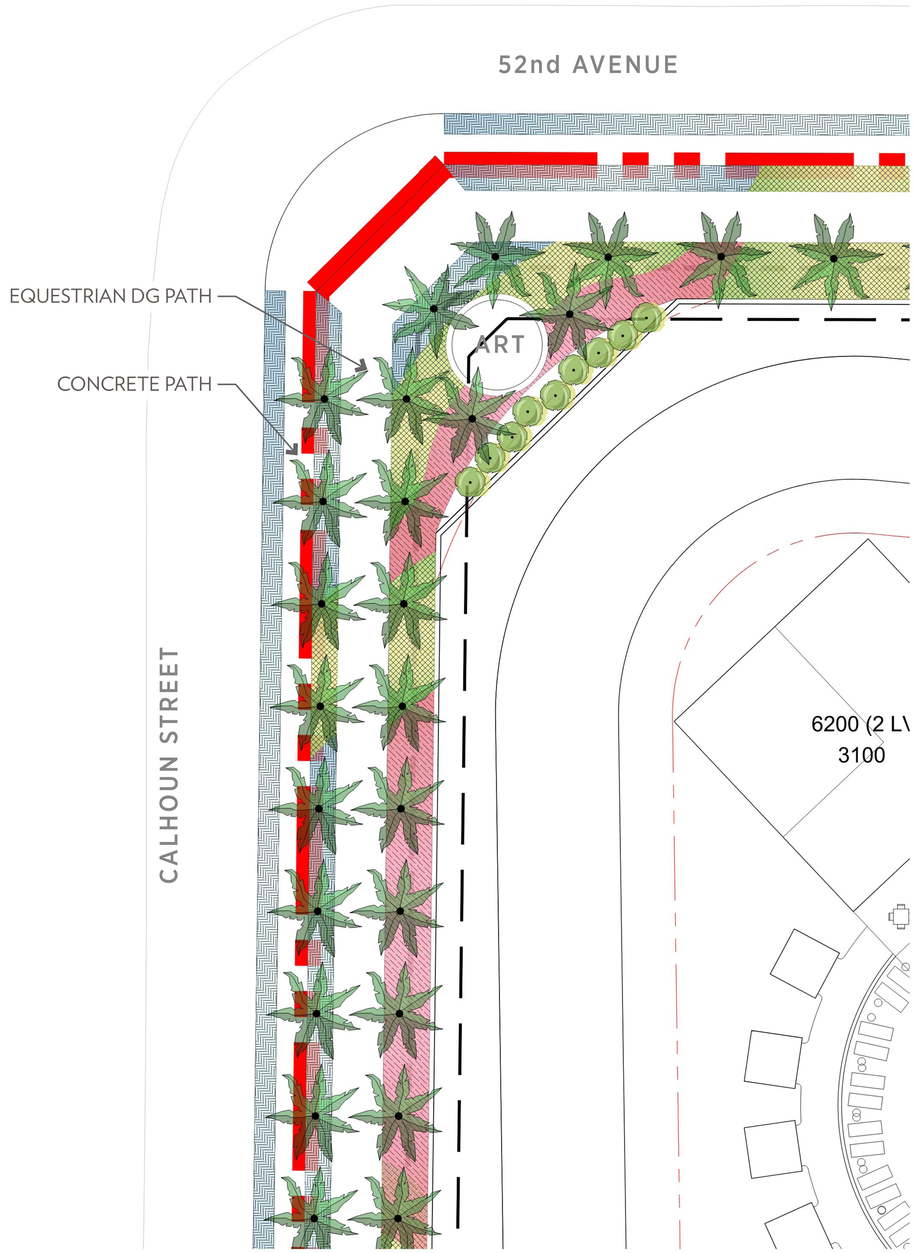
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BOUTELOUA GRACILIS 'BLONDE AMBITION' / BLONDE AMBITION BLUE GRAMA
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PLANNING | LANDSCAPE ARCHITECTURE | ARCHITECTURE

N
1" = 10'-0"
0 5' 10' 20'



LANDSCAPE LEGEND

PALM TREES
(VERTICAL ACCENTS | 10'–60'+ TALL | ICONIC + SCULPTURAL FORM)

DESCRIPTION:
PALMS FUNCTION AS ARCHITECTURAL VERTICAL ELEMENTS. THEY PROVIDE RHYTHM, SKYLINE IDENTITY, AND RESORT CHARACTER.

CHAMAEROPS HUMILIS / MEDITERRANEAN FAN PALM
PHOENIX DACTYLIFERA / DATE PALM
WASHINGTONIA FILIFERA / CALIFORNIA FAN PALM

LARGE SHADE TREES
(APPROX. 25'–40'+ TALL | BROAD CANOPY + PRIMARY SHADE STRUCTURE)

DESCRIPTION:
DOMINANT CANOPY TREES, USED FOR SHADE PRODUCTION, SPATIAL DEFINITION, AND MICROCLIMATE COOLING. TYPICALLY WIDE-SPREADING WITH STRONG BRANCHING STRUCTURE, THEY ANCHOR MAJOR SPACES LIKE STREETS, PASEOS, AND OPEN AREAS.

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PROSOPIS GLANDULOSA / HONEY MESQUITE
PROSOPIS VELUTINA / VELVET MESQUITE
TIPUANA TIPU / TIPU TREE

LARGE SHRUBS
(APPROX. 6'–15'+ TALL | STRUCTURAL + SCREENING LAYER)

DESCRIPTION:
THESE ARE YOUR PRIMARY MASSING PLANTS—USED FOR PRIVACY, ENCLOSURE, AND BACKDROP STRUCTURE. THEY ARE UPRIGHT OR SPREADING FORMS, MODERATE DENSITY, AND STRONG SEASONAL PRESENCE (FLOWERS OR FOLIAGE).

AGAVE AMERICANA 'SUPER BLUE' / SUPER BLUE CENTURY PLANT
CAESALPINIA PULCHERRIMA / RED BIRD OF PARADISE
CORDIA PARVIFOLIA / SMALL-LEAF GEIGERTREE
DASYLIRION WHEELERI / GREY DESERT SPOON
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VINES
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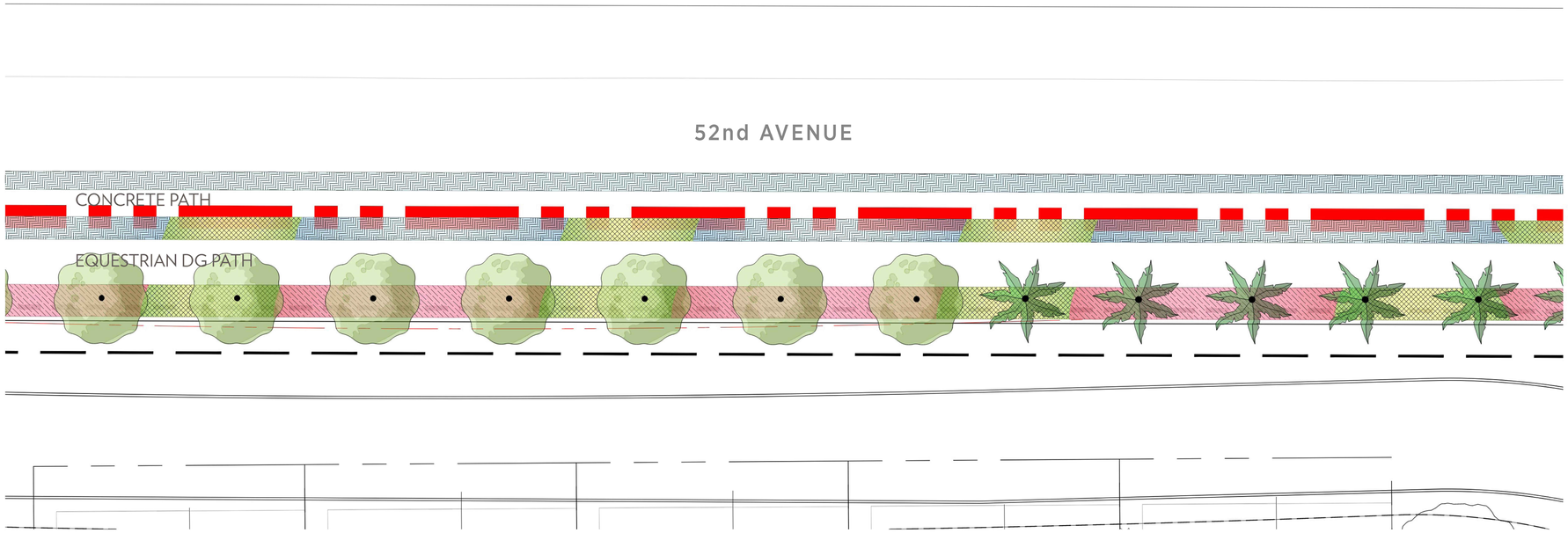
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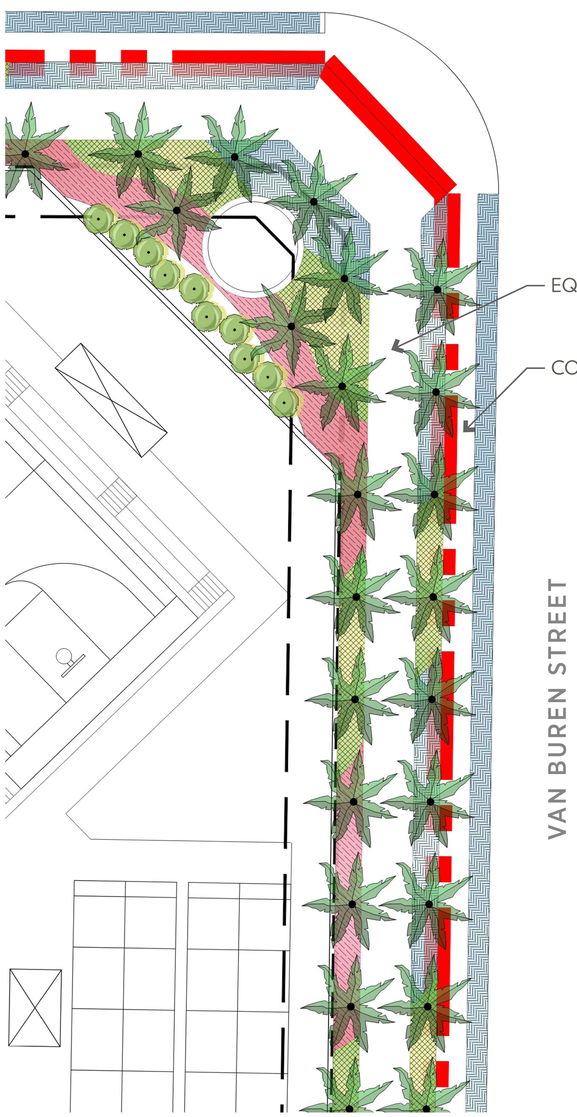
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(APPROX. 1'–4' TALL | MOVEMENT + TEXTURE + SOFTENING LAYER)

DESCRIPTION:

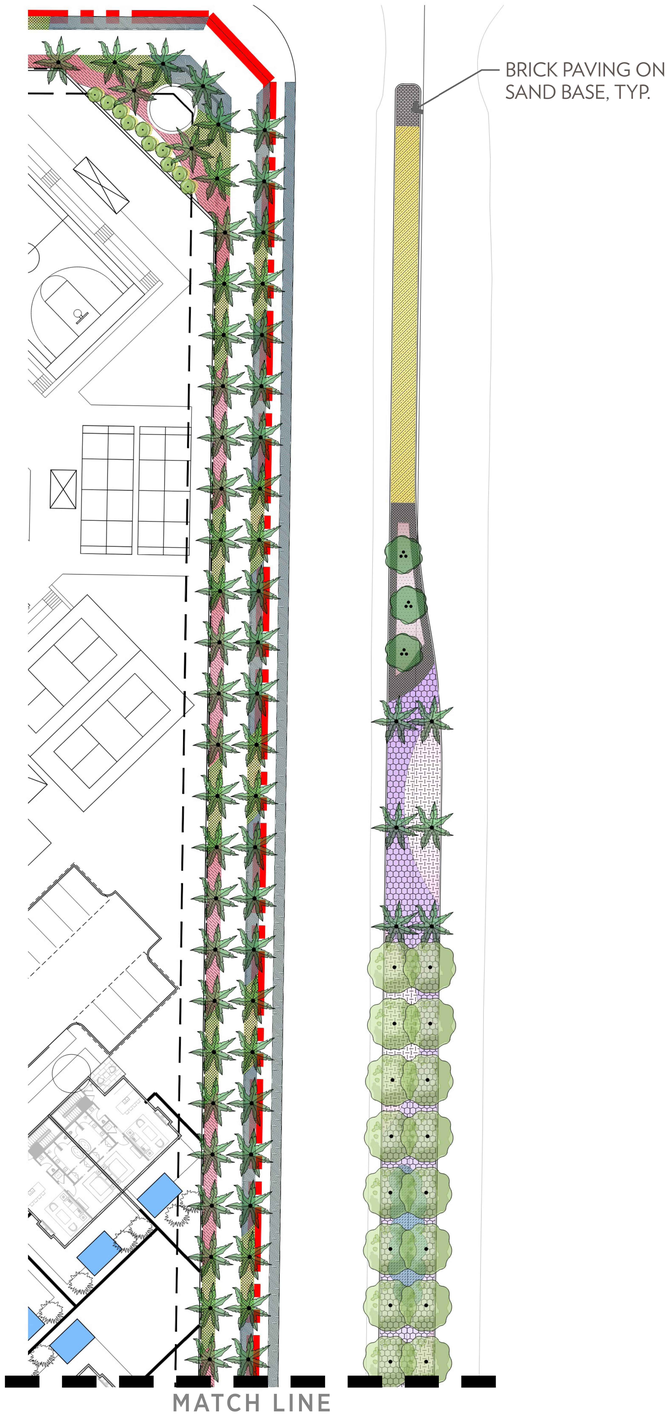
GRASSES PROVIDE MOVEMENT, FINE TEXTURE, AND VISUAL SOFTNESS IN THE LANDSCAPE. USED TO TRANSITION BETWEEN SHRUBS AND GROUND PLANE PLANTING, WHILE CONTRASTING NICELY WITH BOLD DESERT FORMS LIKE AGAVES AND CACTI. USED TO CREATE FLOW, RHYTHM, AND COHESION ACROSS PLANTING AREAS.

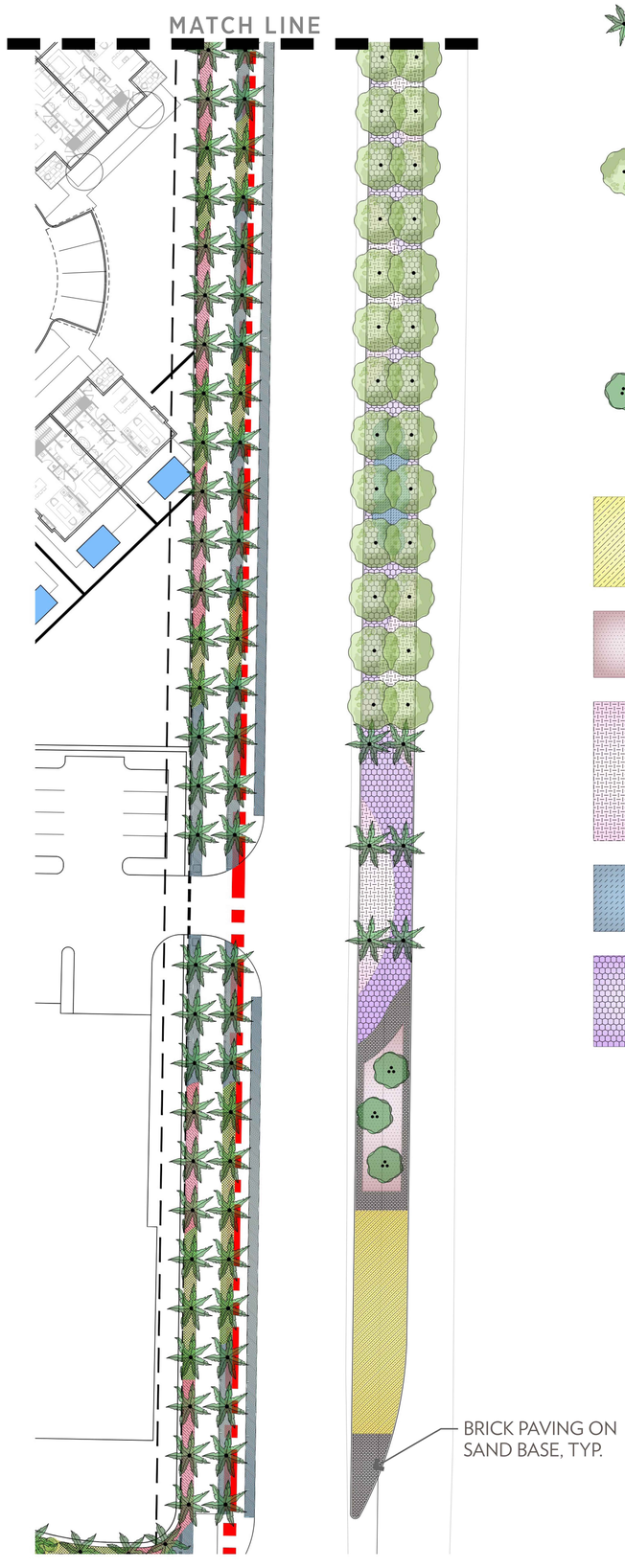
BOUTELOUA GRACILIS 'BLONDE AMBITION' / BLONDE AMBITION BLUE GRAMA
FESTUCA GLAUCA / BLUE FESCUE
MUHLENBERGIA CAPILLARIS / PINK MUHLY GRASS
MUHLENBERGIA RIGENS / DEER GRASS
STIPA TENUISSIMA / MEXICAN FEATHER GRASS

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PLANNING | LANDSCAPE ARCHITECTURE | ARCHITECTURE

N
1" = 10'-0"
0 5' 10' 20'





TYPICAL MEDIAN LANDSCAPE LEGEND

PALM TREES
(VERTICAL ACCENTS | 10'–60'+ TALL | ICONIC + SCULPTURAL FORM)

DESCRIPTION:
PALMS FUNCTION AS ARCHITECTURAL VERTICAL ELEMENTS. THEY PROVIDE RHYTHM, SKYLINE IDENTITY, AND RESORT CHARACTER.

CHAMAEROPS HUMILIS / MEDITERRANEAN FAN PALM
PHOENIX DACTYLIFERA / DATE PALM
WASHINGTONIA FILIFERA / CALIFORNIA FAN PALM

LARGE SHADE TREES
(APPROX. 25'–40'+ TALL | BROAD CANOPY + PRIMARY SHADE STRUCTURE)

DESCRIPTION:
DOMINANT CANOPY TREES, USED FOR SHADE PRODUCTION, SPATIAL DEFINITION, AND MICROCLIMATE COOLING. TYPICALLY WIDE-SPREADING WITH STRONG BRANCHING STRUCTURE, THEY ANCHOR MAJOR SPACES LIKE STREETS, PASEOS, AND OPEN AREAS.

CERCIDIUM PRAECOX / SONORAN PALO VERDE
CHORISIA SPECIOSA / SILK FLOSS TREE
FICUS MICROCARPA / INDIAN LAUREL FIG
PARKINSONIA X 'DESERT MUSEUM' / DESERT MUSEUM PALO VERDE
PROSOPIS GLANDULOSA / HONEY MESQUITE
PROSOPIS VELUTINA / VELVET MESQUITE
TIPUANA TIPU / TIPU TREE

ACCENT TREE
ACCENT TREE FOR CITY MEDIAN

CASSIA FISTULA / GOLDEN SHOWER TREE
CERCIDIUM X 'DESERT MUSEUM' / DESERT MUSEUM PALO VERDE
LAGERSTROEMIA INDICA / CRAPE MYRTLE
X CHITALPA TASHKENTENSIS 'PINK DAWN' / PINK DAWN CHITALPA

GROUP A
GROUNDCOVER AND LOW ACCENT SHRUBS WITH D.G., PEA GRAVEL, COBBLES, AND BOULDERS

AGAVE PARRYI / PARRY'S AGAVE
ECHINOCACTUS GRUSONII / GOLDEN BARREL CACTUS
OENOTHERA SPECIOSA / MEXICAN EVENING PRIMROSE

GROUP B
GROUNDCOVER AND MIXED ACCENT SHRUBS.

CALLISTEMON VIMINALIS 'LITTLE JOHN' / LITTLE JOHN WEEPING BOTTLEBRUSH
LANTANA CAMARA 'DWARF PINK' / DWARF PINK LANTANA

GROUP C
ACCENT SHRUBS SPARSELY PLANTED OVER D.G., PEA GRAVEL, COBBLES, AND BOULDERS. MOUND 18" TYP.

ARTEMISIA CALIFORNICA / CALIFORNIA SAGEBRUSH
BACCHARIS PILULARIS 'PIGEON POINT' / PIGEON POINT COYOTE BRUSH
BOUGAINVILLEA X 'PINK PEARL' / PINK PEARL BOUGAINVILLEA
CALLIANDRA CALIFORNICA / RED BAJA FAIRY DUSTER
CARISSA MACROCARPA / NATAL PLUM
CASSIA COVESII / DESERT SENNA
MUHLENBERGIA CAPILLARIS / PINK MUHLY GRASS

GROUP D
ACCENT PLANTING.

CAESALPINEA PULCHERRIMA / DWARF POINCIANA
LEUCOPHYLLUM CANDIDUM 'THUNDER CLOUD' / THUNDER CLOUD TEXAS SAGE

GROUP E
REGIMENTED AGRARIAN THEMED PLANTINGS.

ACACIA REDOLENS 'DESERT CARPET' / DESERT CARPET BANK CATCLAW
CAREX TUMULICOLA / FOOTHILL SEDGE
DALEA PULCHRA / SANTA CATALINA PRAIRIE CLOVER
LANTANA CAMARA 'DWARF PINK' / DWARF PINK LANTANA

N
1" = 20'-0"
0 10' 20' 40'

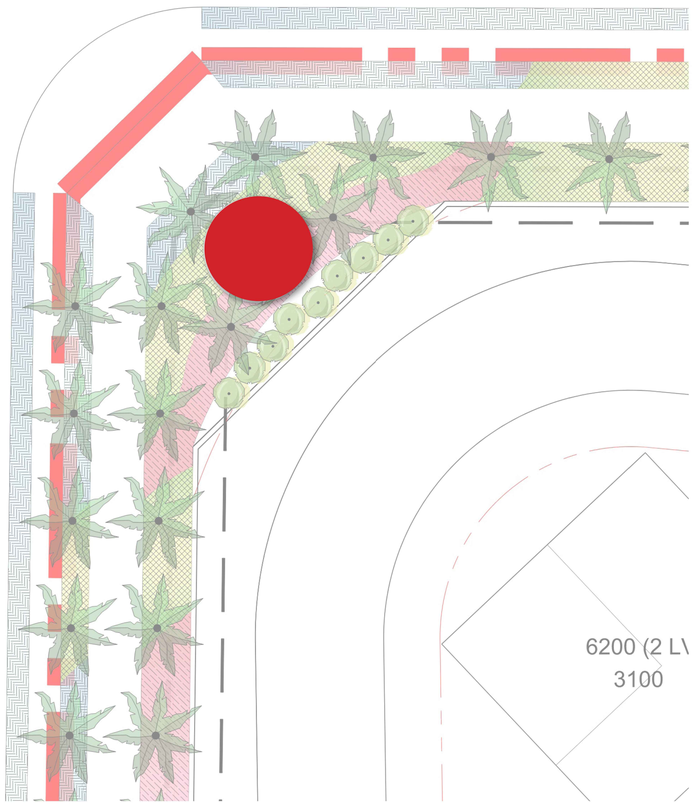
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MAJOR ARTERIAL TYPICAL MEDIAN: VAN BUREN STREET

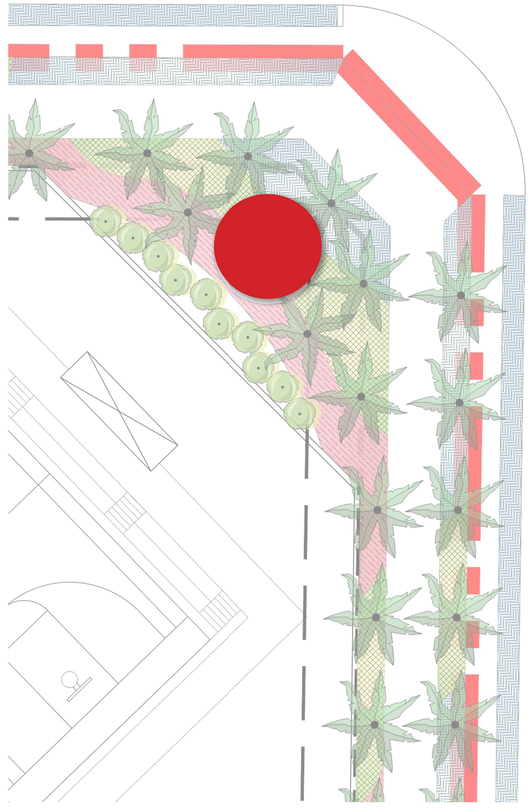
SUBMITTAL DATE: JUNE 10, 2026

COVA | ARCHITECTURAL REVIEW



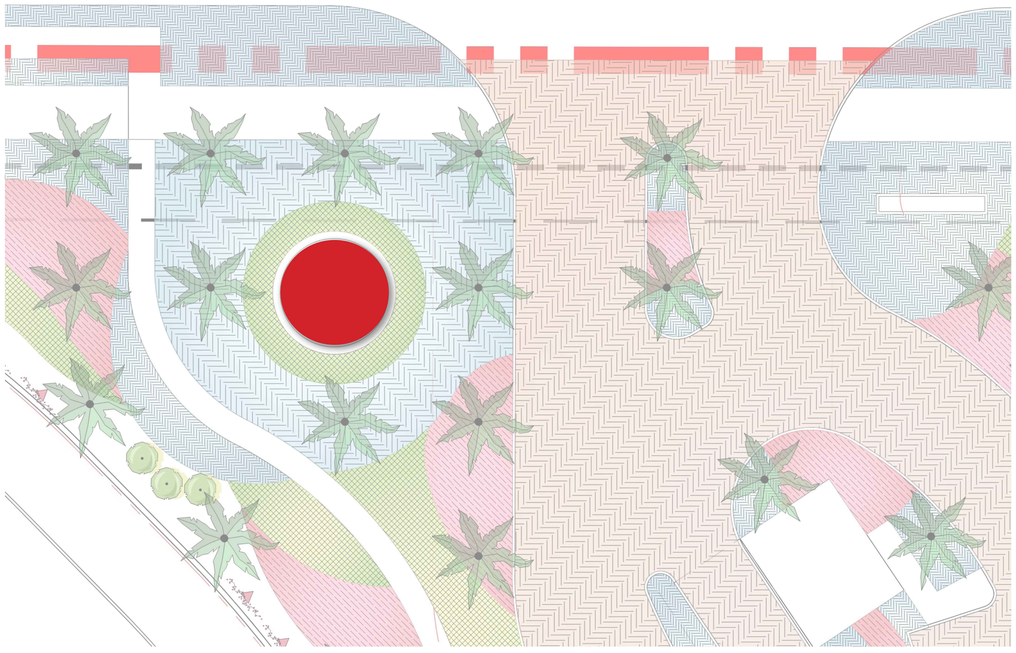
CALHOUN STREET

1”=20’



VAN BUREN STREET

1”=20’



PRIMARY ENTRY

1”=20’





CHARACTER IMAGERY

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LEGEND ENLARGEMENT PLANS

- RC1 Resort Core Village
- RC2 Sports Center
- RC3 Hotel Cottages
- RC4 Primary Project Entry
- RC5 Secondary Project Entry
- BC1 Public Beach Club
- R1 Bungalows - Lagoon
- R2 Bungalow Court - Lakeside
- R3 Zero Lot Line Estate
- R4 Estate Lots (Standard and Compact)
- R5 Grand Estate Lot

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LANDSCAPE LIGHTING

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SO.CAL.WESTCOASTELECTRIC



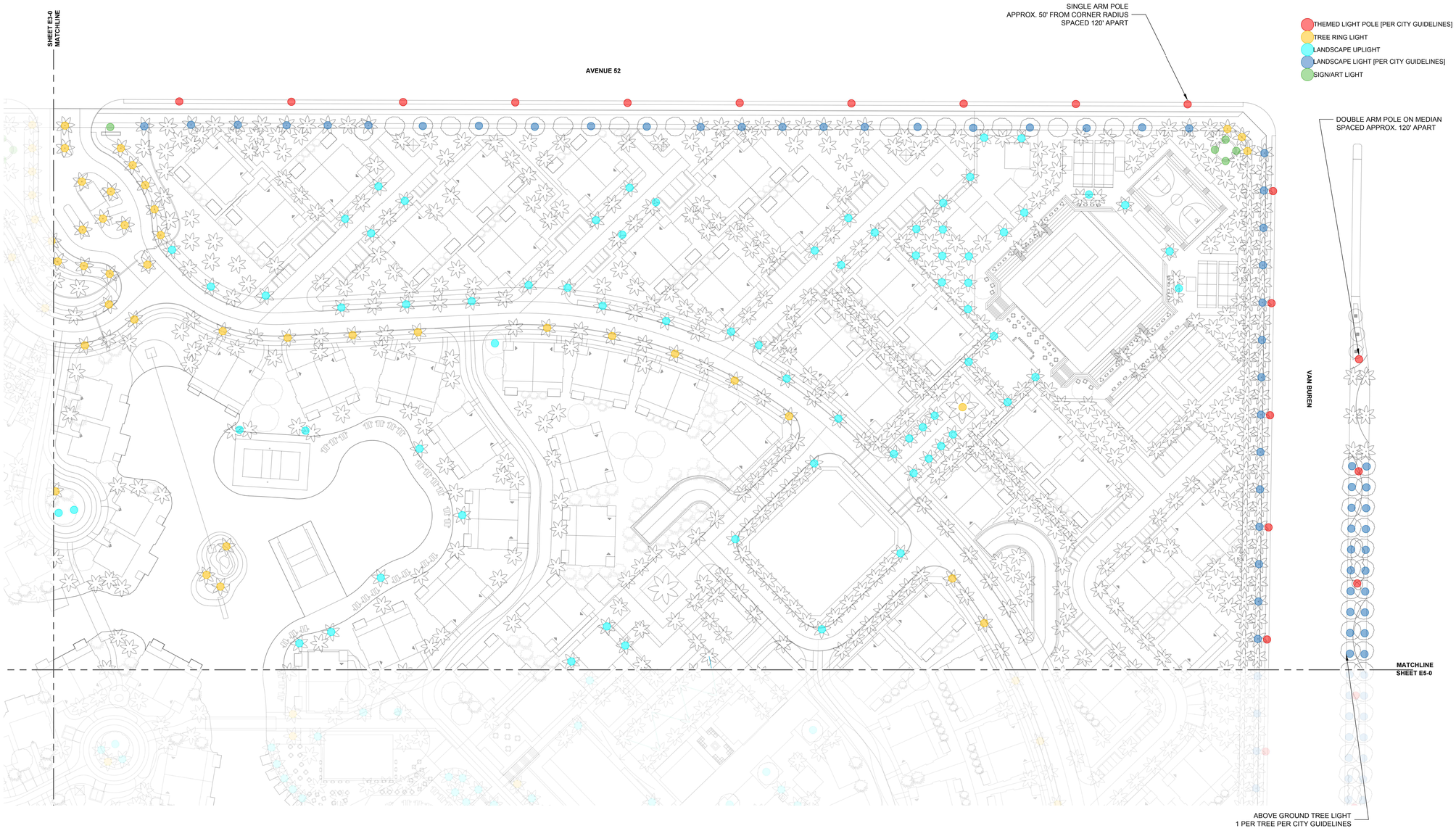
LANDSCAPE LIGHTING PLAN
SCALE: 1" = 80'

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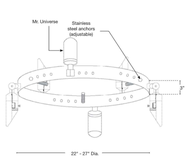
SO.CAL.WESTCOASTELECTRIC

OVERALL LANDSCAPE LIGHTING PLAN KEY MAP
SUBMITTAL DATE: JUNE 10, 2026
COVA | ARCHITECTURAL REVIEW



TREE RING LIGHT

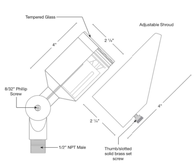




MODEL:	**SPJ-RGD-MR.UNIVERSE**
MATERIAL:	**Solid Brass**
FINISH SHOWN:	**Matte Bronze**
ELECTRICAL:	**8-15v**
WATTAGE:	**2W**
ENGINE:	**FB-2W-CYL-TA16**
LUMENS:	**150**

LANDSCAPE UPLIGHT





MODEL:	**VersaLux-WD**
MATERIAL:	**Solid Brass**
FINISH SHOWN:	**Black**
ELECTRICAL:	**12-15V / 120V**
WATTAGE:	**15W**
ENGINE:	**Versa-Lux Engine**
LUMENS:	**1000**
MOUNTING:	**1/2" NPT. Dual Fin Spike Included**

SECONDARY IMAGE CORRIDOR

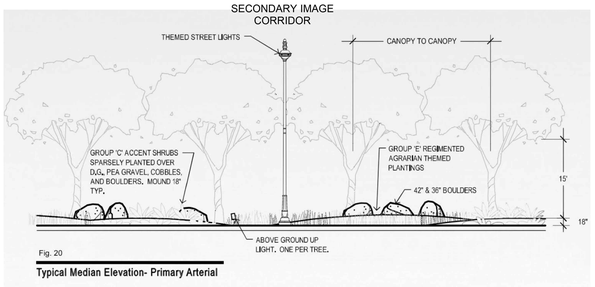


Fig. 20
Typical Median Elevation- Primary Arterial

PROJECT TO FOLLOW STREET MEDIAN DEVELOPMENT GUIDELINES FOR CITY OF COACHELLA

NOTE: SEE SHEET E7-0 FOR CITY GUIDELINE FIXTURE SPECS.

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VITA
PLANNING | LANDSCAPE ARCHITECTURE | ARCHITECTURE

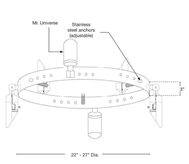
SO.CAL.WESTCOASTELECTRIC

THEMED LIGHT POLE [PER CITY GUIDELINES]
TREE RING LIGHT
LANDSCAPE UPLIGHT
LANDSCAPE LIGHT [PER CITY GUIDELINES]
SIGN/ART LIGHT



TREE RING LIGHT

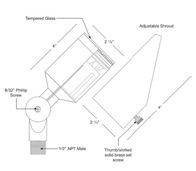




MODEL:	**SPJ-RGD-MR.UNIVERSE**
MATERIAL:	**Solid Brass**
FINISH SHOWN:	**Matte Bronze**
ELECTRICAL:	**8-15v**
WATTAGE:	**2W**
ENGINE:	**FB-2W-CYL-TA16**
LUMENS:	**150**

LANDSCAPE UPLIGHT





MODEL:	**VersaLux-WD**
MATERIAL:	**Solid Brass**
FINISH SHOWN:	**Black**
ELECTRICAL:	**12-15V / 120V**
WATTAGE:	**15W**
ENGINE:	**Versa-Lux Engine**
LUMENS:	**1000**
MOUNTING:	**1/2" NPT. Dual Fin Spike Included**

SECONDARY IMAGE CORRIDOR

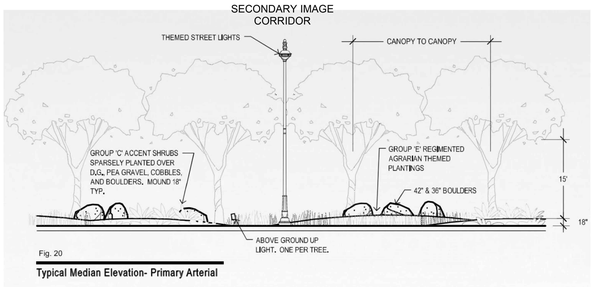


Fig. 20
Typical Median Elevation- Primary Arterial

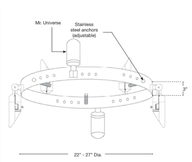
PROJECT TO FOLLOW STREET MEDIAN DEVELOPMENT GUIDELINES FOR CITY OF COACHELLA

- THEMED LIGHT POLE [PER CITY GUIDELINES]
- TREE RING LIGHT
- LANDSCAPE UPLIGHT
- LANDSCAPE LIGHT [PER CITY GUIDELINES]
- SIGN/ART LIGHT



TREE RING LIGHT

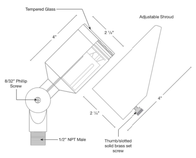




MODEL:	**SPJ-RGD-MR.UNIVERSE**
MATERIAL:	**Solid Brass**
FINISH SHOWN:	**Matte Bronze**
ELECTRICAL:	**8-15v**
WATTAGE:	**2W**
ENGINE:	**FB-2W-CYL-TA16**
LUMENS:	**150**

LANDSCAPE UPLIGHT





MODEL:	**VersaLux-WD**
MATERIAL:	**Solid Brass**
FINISH SHOWN:	**Black**
ELECTRICAL:	**12-15V / 120V**
WATTAGE:	**15W**
ENGINE:	**Versa-Lux Engine**
LUMENS:	**1000**
MOUNTING:	**1/2" NPT. Dual Fin Spike Included**

SECONDARY IMAGE CORRIDOR

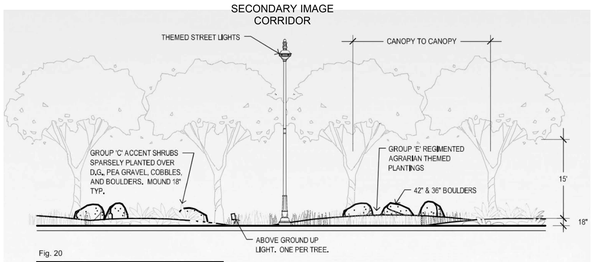
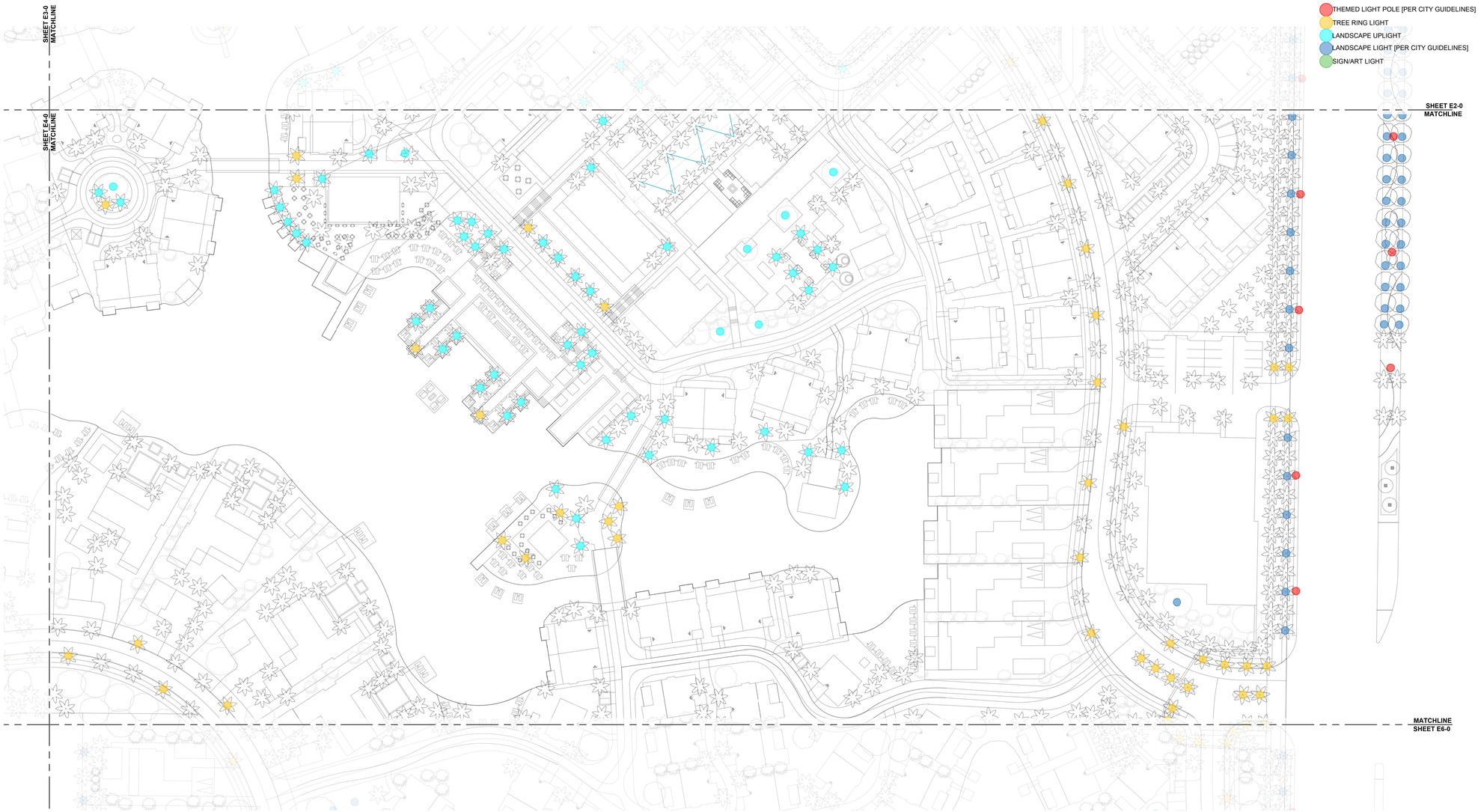


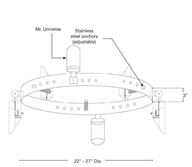
Fig. 20
Typical Median Elevation- Primary Arterial

PROJECT TO FOLLOW STREET MEDIAN DEVELOPMENT GUIDELINES FOR CITY OF COACHELLA



TREE RING LIGHT

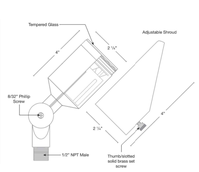




MODEL:	**SPJ-RGD-MR.UNIVERSE**
MATERIAL:	**Solid Brass**
FINISH SHOWN:	**Matte Bronze**
ELECTRICAL:	**8-15v**
WATTAGE:	**2W**
ENGINE:	**FB-2W-CYL-TA16**
LUMENS:	**150**

LANDSCAPE UPLIGHT





MODEL:	**VersaLux-WD**
MATERIAL:	**Solid Brass**
FINISH SHOWN:	**Black**
ELECTRICAL:	**12-15V / 120V**
WATTAGE:	**15W**
ENGINE:	**Versa-Lux Engine**
LUMENS:	**1000**
MOUNTING:	**1/2" NPT. Dual Fin Spike Included**

SECONDARY IMAGE CORRIDOR

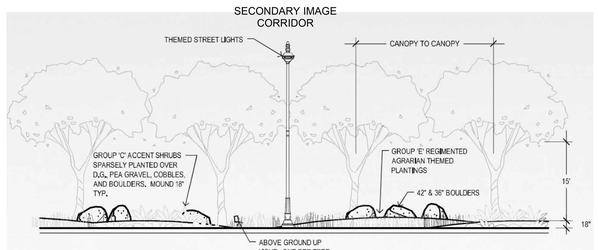
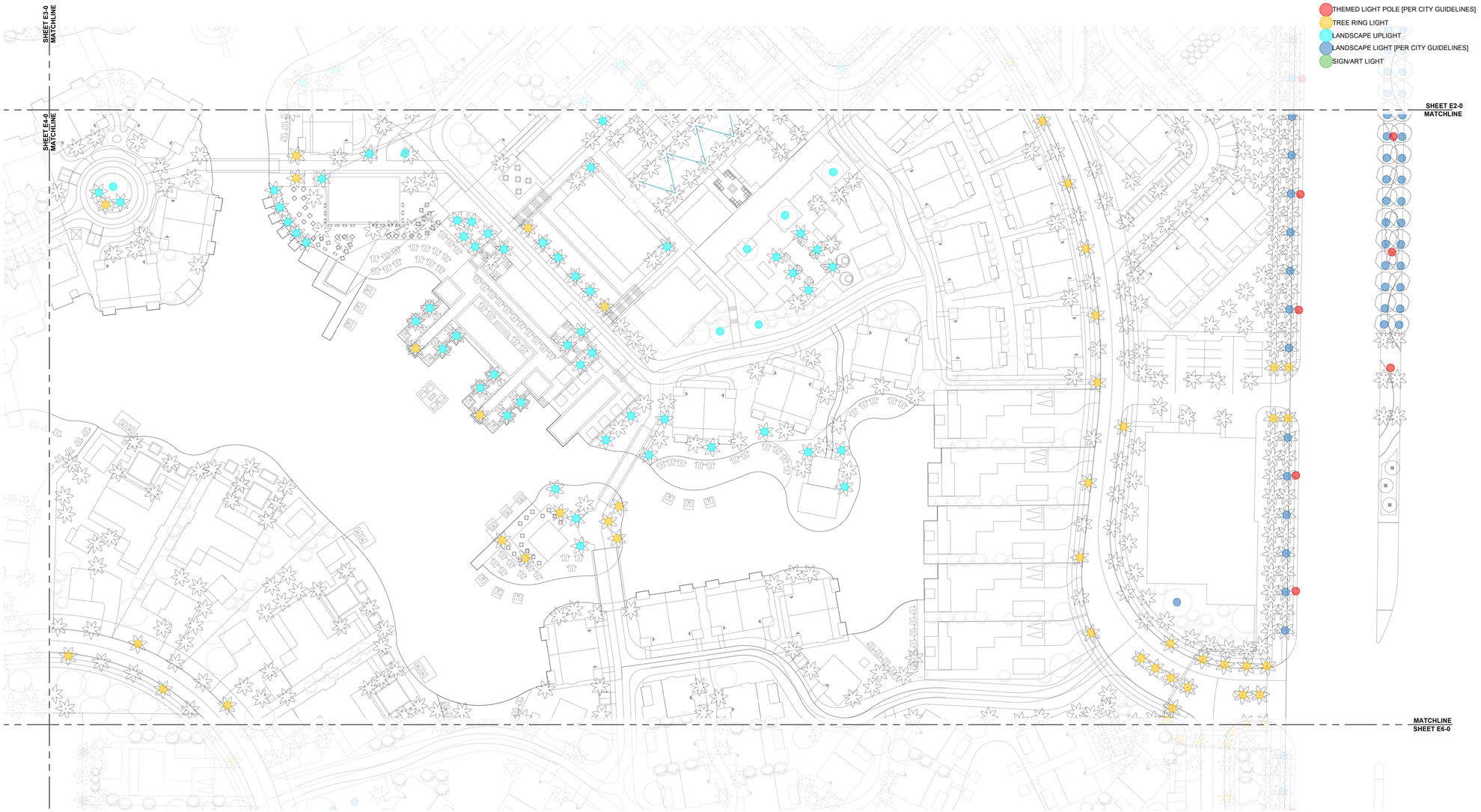


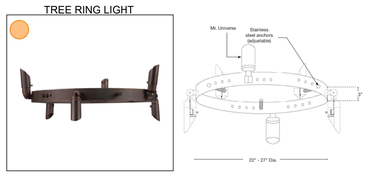
Fig. 20

Typical Median Elevation- Primary Arterial

PROJECT TO FOLLOW STREET MEDIAN DEVELOPMENT GUIDELINES FOR CITY OF COACHELLA



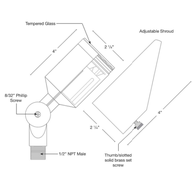
TREE RING LIGHT



MODEL:	**SPJ-RGD-MR.UNIVERSE**
MATERIAL:	**Solid Brass**
FINISH SHOWN:	**Matte Bronze**
ELECTRICAL:	**8-15v**
WATTAGE:	**2W**
ENGINE:	**FB-2W-CYL-TA16**
LUMENS:	**150**

LANDSCAPE UPLIGHT





MODEL:	**VersaLux-WD**
MATERIAL:	**Solid Brass**
FINISH SHOWN:	**Black**
ELECTRICAL:	**12-15V / 120V**
WATTAGE:	**15W**
ENGINE:	**Versa-Lux Engine**
LUMENS:	**1000**
MOUNTING:	**1/2" NPT. Dual Fin Spike Included**

SECONDARY IMAGE CORRIDOR

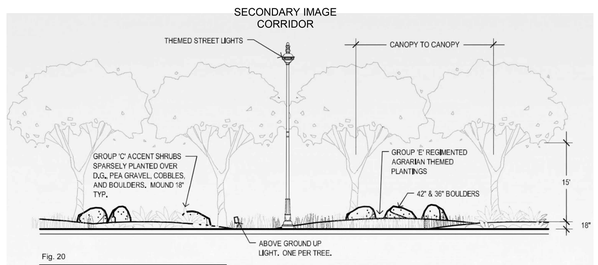


Fig. 20
Typical Median Elevation- Primary Arterial

PROJECT TO FOLLOW STREET MEDIAN DEVELOPMENT GUIDELINES FOR CITY OF COACHELLA

Lighting
Pedestrian Scale

KIM LIGHTING

Era
Hertiage Style Luminaire
70-400 Watt

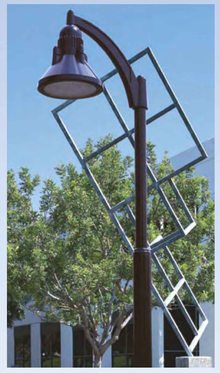


Fig. 42
Pedestrian Scale Light Pole

Hertiage Style Cutoff Luminaires

Color: to be bronze

BUSINESS ADDRESS:
16555 East Gale Avenue
City of Industry, CA 91745
U.S.A.
PHONE: (626) 968 - 5666
FAX: (626) 369 - 2695

www.kimlighting.com

Lighting
Pedestrian Scale

KIM LIGHTING

Era
Hertiage Style Luminaire
70-400 Watt

Luminaire Specifications

RA17

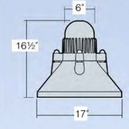


Fig. 43
Pedestrian Scale Light Fixture

Housing: The Ballast Housing is a one piece die-cast, low copper (<0.6% Cu) aluminum1 component with integral cooling fins. The Reflector Housing is one piece die-cast, low copper (<0.6% Cu) aluminum1. The Ballast Housing attaches to the Reflector Housing with stainless steel fasteners and is sealed with a silicone gasket.

Lens Frame: One piece die-cast, low copper (<0.6% Cu) aluminum1. Stainless steel hinges provided for attachment to the Reflector Housing. Stainless steel threaded fasteners provide easy access, concealed from normal view. The 3/16" thick clear flat or convex tempered glass lens seals against the reflector flange by a one piece extruded silicone gasket with fused seam, to produce a fully sealed optical chamber. The aluminum material used in the die-castings is a customized 360 aluminum alloy. Additional silicone is added to the composition to allow improved molten flow characteristics that provide greater detailing and shaping.

Mounting: Stainless steel bolts are provided to attach the luminaire to the crook arm or swept arm mounting.

Reflector Module: Specular Alzak® optical segments are rigidly mounted within a die-cast, low copper (<0.6% Cu) aluminum enclosure (spun for 17° vertical reflector) which attaches to the Reflector Housing as a one piece module. Reflectors are field rotatable in 90° increments. All sockets are factory prewired with a quick-disconnect plug for the ballast module, with wires passing through a silicone gasket to maintain sealed optical chamber integrity. The optical segments are positioned so that reflected light does not pass through the lamp arc tube. For the RA17, the reflector modules are equipped with medium base sockets rated 4KV. For the RA25, the horizontal metal halide lamp reflectors are
equipped with a pin-oriented mogul base socket with a molded silicone lamp stabilizer. All vertical reflectors, HPS horizontal reflectors, and Pulse Start reflectors are equipped with a mogul base socket rated 4KV. All optical systems are interchangeable within the housing.

Electrical Module: All electrical components are UL and CSA recognized, mounted on a single plate and factory prewired with quick-disconnect plugs for attachment to the incoming wires and the socket wires. The module attaches inside the housing using keyhole slots. All ballasts are high power factor with starting temperatures of -40°F for HPS and -20°F for MH lamp modes. See lamp and electrical data on pages 28 - 29 for ballast types and characteristics.

Finish: Super TGIC thermoset polyester powder coat paint, 2.5 mil nominal thickness, applied over a Titanated Zirconium conversion coating; A.S.T.M. 2500 hour salt spray test endurance rating. Standard colors are Black, Dark Bronze, Light Gray, Platinum Silver, or White. Custom colors are available and subject to additional charges, minimum quantities and longer lead times. Consult representative.

Certification: UL Listed to U.S. and Canadian safety standards for
wet locations. Fixture manufacturer shall employ a quality program
that is certified to meet the ISO 9001:2000 standard.

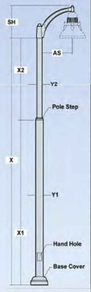
Lighting
Pedestrian Scale

KIM LIGHTING

Era
Hertiage Style Luminaire
70-400 Watt

Pole Ordering Information and Specifications
SAS / SAL Stepped Aluminum Pole and Swept Arm(s)

1 Pole Catalog Numbers:



For RA17 Luminaires only

Pole Catalog Number	X	X1	X2	Y1	Y2	Wall Thickness	Bolt Circle Dia.	Base Cover Dia.	SH Overall Height	AS Arm Spacing	Anchor Bolt Projection	Anchor Bolts	Base Cover Dia.	Overall Pole Dia.	ALLOWABLE POLE EPA* 90	105	115	125	130	140	150
SA510-S4188	10	6.5	3.5	5'	3.4	188"	8½"	22"	23½"	3.2"		¾x16"x3"	12"	3"	25.7	25.5	19.1	15.8	13.2	11.2	9.5
SA512-S4188	12	8	4	5'	3.4	188"	8½"	22"	23½"	3.2"		¾x16"x3"	12"	3"	30.6	30.5	19.2	15.5	13.3	8.7	7.3
SA514-S4188	14	8.2	4.7	5'	3.4	188"	8½"	22"	23½"	3.2"		¾x16"x3"	12"	3"	16.8	15.3	12.3	10.0	8.2	6.8	5.7
SA516-S4188	16	10.5	5.5	5'	3.4	188"	8½"	22"	23½"	3.2"		¾x16"x4"	12"	3"	14.1	12.7	10.5	9.1	8.0	5.3	4.4
SA32C-S4188	18/0	13	8.4	5'	3.4	188"	8½"	22"	23½"	3.2"		¾x24"x4"	12"	3"	9.6	8.6	6.8	5.1	4.0	3.1	2.4

For RA25 Luminaires only

Pole Catalog Number	X	X1	X2	Y1	Y2	Wall Thickness	Bolt Circle Dia.	Base Cover Dia.	SH Overall Height	AS Arm Spacing	Anchor Bolt Projection	Anchor Bolts	Base Cover Dia.	Overall Pole Dia.	ALLOWABLE POLE EPA* 90	105	115	125	130	140	150
SAL25-S4188	16/5	13	8.4	6'	4'	188"	10½"	28"	30"	3.2"		¾x30"x4"	14'	5'	15.2	13.9	11.0	8.7	7.1	5.8	4.9
SAL25-S4188	25	16.7	8.3	6'	4'	188"	10½"	28"	30"	3.2"		¾x30"x4"	14'	5'	9.5	8.6	6.5	4.9	3.7	2.9	2.3
SAL254-S4250	25	16.7	8.3	6'	4'	250	10½"	28"	30"	3.2"		¾x30"x4"	14'	5'	10.9	10.7	8.9	7.6	6.1	5.0	4.1
SAL304-S4250	30	20	10	6'	4'	250	10½"	28"	30"	3.2"		¾x30"x4"	14'	5'	8.3	8.1	6.2	4.5	3.4	2.6	2.0
SAL304-S4400	30	20	10	6'	4'	400	10½"	28"	30"	3.2"		¾x30"x4"	14'	6'	14.7	13.3	10.1	7.9	6.2	5.0	4.1

NOTE: All allowable pole and fixture EPAs (Effective Projected Area, which is Fixture Area x Drag Factor) are derived from the AASHTO standard (American Association of State Highway and Transportation Officials). Responsibility lies with the specifier for correct pole selection based on local codes and standards for the job location (See page **26**).

* Thickness at **Y1** section, **Y2** section is .188".

Pole reinforced, to 40' above base, to 400', remaining **Y1 section is .250", **Y2** section is .188".

Arm assemblies are included.

2 Mounting Arrangements:



NOTE: ALLOWABLE POLE EPA for jobsite wind conditions must be equal to or greater than fixture mount EPA.

Fig. 44
Pedestrian Scale Light Pole and Swept Arm

Lighting
In-ground

All median islands shall be lit with light standards as shown on the layout plans. Specification_____.

KIM LIGHTING

LTV20 Series Wall Wash
Lightvault

Specifications

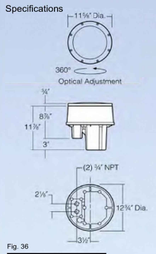


Fig. 36
In-ground Light Fixture

Lens Ring: One piece cast bronze, natural finish. Eight captive 5/8" blackened stainless steel hex-socket cap screws.
Lens: Clear tempered borosilicate glass, M° thick, flush with lens ring, slightly crowned.
Lens Gasket: One piece molded silicone, U-channel wraps completely around lens flange.
Housing: High temperature, compression molded, fiberglass impregnated, F° min. wall composite. Charcoal gray. No top lip to trap dirt and moisture. Solid brass knurled inserts molded-in to receive lens ring screws. Separate splice and ballast compartments, individual cast aluminum internal covers, with one piece molded silicone gaskets. Two L" NPT in bottom, 33 cu in.
splice area. Modular reverse draft design (top dia. smaller than bottom), body and ballast modules epoxy bonded.
Optical System: WW - one piece hydroformed reflector, specular Alzak®, black lower shield towards viewers, 360° rotation and screw locks, Wall Wash distribution. Medium base 4KV socket for H.I.D. lamps, mini-can socket for halogen lamps.
Electrical Module: High power factor ballast, -20°F starting, factory mounted and prewired to gasketed compartment cover, LTV22 only.
Fixtures must be grounded in accordance with local codes or the National Electrical Code. Failure to do so may result in serious personal injury.
Wiring: Anti-siphon barriers on all wiring to and from ballast compartment. All components wire linked for ground, quickdisconnect for removal of optical system.
Drive-over Durability: When installed in concrete (see page 4), fixture will withstand drive-over by vehicles weighing up to 5,500 lb.
Certification: UL Listed to U.S. and Canadian safety standards for wet locations. Fixture manufacturer shall employ a quality program that is audited to ISO9001 standards.

Fig. 37
In-ground Light Fixture Rock Guard

Rock Guard lens ring for lens protection in vandal prone areas. One piece cast bronze, replaces standard lens ring. Includes glass lens gasket and mounting screws.
CAUTION: On LTV22, Rock Guard will cast severe shadows on the lighted surface with clear lamps. If Rock Guard is required, use coated lamps and estimate a 50% reduction in longitudinal light throw and intensity. Rock Guard not recommended for LTV23 halogen wall wash fixtures.

Lighting
Vehicular Scale

KIM LIGHTING

Era
Hertiage Style Luminaire
70-400



Fig. 39
Vehicular Scale Light Pole

Hertiage Style Cutoff Luminaires

Color: to be bronze

BUSINESS ADDRESS:
16555 East Gale Avenue
City of Industry, CA 91745
U.S.A.
PHONE: (626) 968 - 5666
FAX: (626) 369 - 2695

www.kimlighting.com

Lighting
Vehicular Scale

KIM LIGHTING

Era
Hertiage Style Luminaire
70-400 Watt

Luminaire Specifications

RA25

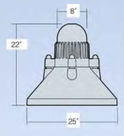


Fig. 40
Vehicular Scale Light Fixture

Housing: The Ballast Housing is a one piece die-cast, low copper (<0.6% Cu) aluminum1 component with integral cooling fins. The Reflector Housing is one piece die-cast, low copper (<0.6% Cu) aluminum1. The Ballast Housing attaches to the Reflector Housing with stainless steel fasteners and is sealed with a silicone gasket.

Lens Frame: One piece die-cast, low copper (<0.6% Cu) aluminum1. Stainless steel hinges provided for attachment to the Reflector Housing. Stainless steel threaded fasteners provide easy access, concealed from normal view. The 3/16" thick clear flat or convex tempered glass lens seals against the reflector flange by a one piece extruded silicone gasket with fused seam, to produce a fully sealed optical chamber. The aluminum material used in the die-castings is a customized 360 aluminum alloy. Additional silicone is added to the composition to allow improved molten flow characteristics that provide greater detailing and shaping.

Mounting: Stainless steel bolts are provided to attach the luminaire to the crook arm or swept arm mounting.

Reflector Module: Specular Alzak® optical segments are rigidly mounted within a die-cast, low copper (<0.6% Cu) aluminum enclosure (spun for 17° vertical reflector) which attaches to the Reflector Housing as a one piece module. Reflectors are field rotatable in 90° increments. All sockets are factory prewired with a quick-disconnect plug for the ballast module, with wires passing through a silicone gasket to maintain sealed optical chamber integrity. The optical segments are positioned so that reflected light does not pass through the lamp arc tube. For the RA17, the reflector modules are equipped with medium base sockets rated 4KV. For the RA25, the horizontal metal halide lamp reflectors are
equipped with a pin-oriented mogul base socket with a molded silicone lamp stabilizer. All vertical reflectors, HPS horizontal reflectors, and Pulse Start reflectors are equipped with a mogul base socket rated 4KV. All optical systems are interchangeable within the housing.

Electrical Module: All electrical components are UL and CSA recognized, mounted on a single plate and factory prewired with quick-disconnect plugs for attachment to the incoming wires and the socket wires. The module attaches inside the housing using keyhole slots. All ballasts are high power factor with starting temperatures of -40°F for HPS and -20°F for MH lamp modes. See lamp and electrical data on pages 28 - 29 for ballast types and characteristics.

Finish: Super TGIC thermoset polyester powder coat paint, 2.5 mil nominal thickness, applied over a Titanated Zirconium conversion coating; A.S.T.M. 2500 hour salt spray test endurance rating. Standard colors are Black, Dark Bronze, Light Gray, Platinum Silver, or White. Custom colors are available and subject to additional charges, minimum quantities and longer lead times. Consult representative.

Certification: UL Listed to U.S. and Canadian safety standards for
wet locations. Fixture manufacturer shall employ a quality program
that is certified to meet the ISO 9001:2000 standard.

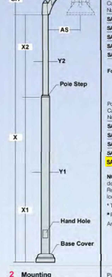
Lighting
Vehicular Scale

KIM LIGHTING

Era
Hertiage Style Luminaire
70-400 Watt

Pole Ordering Information and Specifications
SAS / SAL Stepped Aluminum Pole and Swept Arm(s)

1 Pole Catalog Numbers:



For RA17 Luminaires only

Pole Catalog Number	X	X1	X2	Y1	Y2	Wall Thickness	Bolt Circle Dia.	Base Cover Dia.	SH Overall Height	AS Arm Spacing	Anchor Bolt Projection	Anchor Bolts	Base Cover Dia.	Overall Pole Dia.	ALLOWABLE POLE EPA* 90	105	115	125	130	140	150
SA510-S4188	10	6.5	3.5	5'	3.4	188"	8½"	22"	23½"	3.2"		¾x16"x3"	12"	3"	25.7	25.5	19.1	15.8	13.2	11.2	9.5
SA512-S4188	12	8	4	5'	3.4	188"	8½"	22"	23½"	3.2"		¾x16"x3"	12"	3"	30.6	30.5	19.2	15.5	13.3	8.7	7.3
SA514-S4188	14	8.2	4.7	5'	3.4	188"	8½"	22"	23½"	3.2"		¾x16"x3"	12"	3"	16.8	15.3	12.3	10.0	8.2	6.8	5.7
SA516-S4188	16	10.5	5.5	5'	3.4	188"	8½"	22"	23½"	3.2"		¾x16"x4"	12"	3"	14.1	12.7	10.5	9.1	8.0	5.3	4.4
SA32C-S4188	18/0	13	8.4	5'	3.4	188"	8½"	22"	23½"	3.2"		¾x24"x4"	12"	3"	9.6	8.6	6.8	5.1	4.0	3.1	2.4

For RA25 Luminaires only

Pole Catalog Number	X	X1	X2	Y1	Y2	Wall Thickness	Bolt Circle Dia.	Base Cover Dia.	SH Overall Height	AS Arm Spacing	Anchor Bolt Projection	Anchor Bolts	Base Cover Dia.	Overall Pole Dia.	ALLOWABLE POLE EPA* 90	105	115	125	130	140	150
SAL25-S4188	16/5	13	8.4	6'	4'	188"	10½"	28"	30"	3.2"		¾x30"x4"	14'	5'	15.2	13.9	11.0	8.7	7.1	5.8	4.9
SAL25-S4188	25	16.7	8.3	6'	4'	188"	10½"	28"	30"	3.2"		¾x30"x4"	14'	5'	9.5	8.6	6.5	4.9	3.7	2.9	2.3
SAL254-S4250	25	16.7	8.3	6'	4'	250	10½"	28"	30"	3.2"		¾x30"x4"	14'	5'	10.9	10.7	8.9	7.6	6.1	5.0	4.1
SAL304-S4250	30	20	10	6'	4'	250	10½"	28"	30"	3.2"		¾x30"x4"	14'	5'	8.3	8.1	6.2	4.5	3.4	2.6	2.0
SAL304-S4400	30	20	10	6'	4'	400	10½"	28"	30"	3.2"		¾x30"x4"	14'	6'	14.7	13.3	10.1	7.9	6.2	5.0	4.1

NOTE: All allowable pole and fixture EPAs (Effective Projected Area, which is Fixture Area x Drag Factor) are derived from the AASHTO standard (American Association of State Highway and Transportation Officials). Responsibility lies with the specifier for correct pole selection based on local codes and standards for the job location (See page **26**).

* Thickness at **Y1** section, **Y2** section is .188".

Pole reinforced, to 40' above base, to 400', remaining **Y1 section is .250", **Y2** section is .188".

Arm assemblies are included.

2 Mounting Arrangements:

NOTE: ALLOWABLE POLE EPA for jobsite wind conditions must be equal to or greater than fixture mount EPA.

Fig. 41
Vehicular Scale Light Pole and Swept Arms

Lighting
In-ground

KIM LIGHTING

LTV20 Series Wall Wash
Lightvault

Install in Concrete

For installations in ground cover, shrubbery or lawn areas, encase the fixture in concrete. This creates a buffer zone with the additional advantage of greater fixture stability. Elevate the fixture 2" to 4" above grade, and slope the concrete away from the lens ring for drainage.

Advantages

- Cleaner, more stable installation, less susceptible to traffic and maintenance activity.
- Prevents lens overgrowth.
- Provides a defined edge for trimming.
- Provides drainage away from the lens to maintain light culput.
- Visually looks like a flush installation.

Concrete must have reinforcing rocs to prevent cracking from fixture heat expansion.

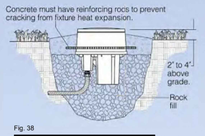
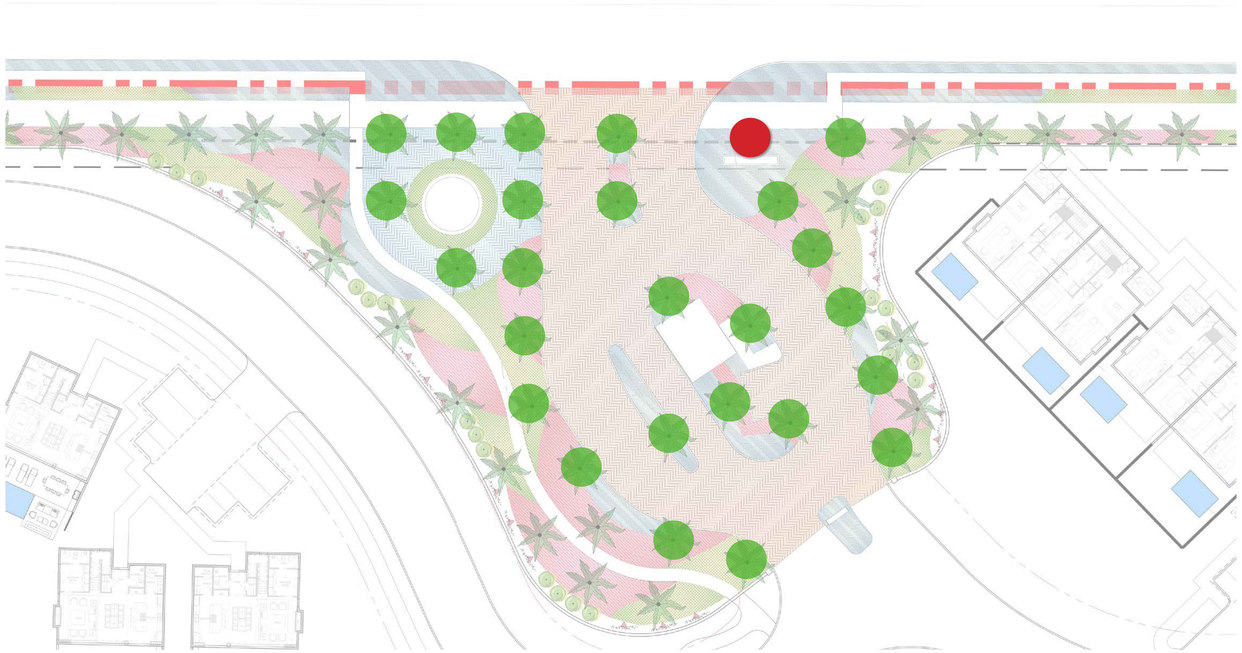
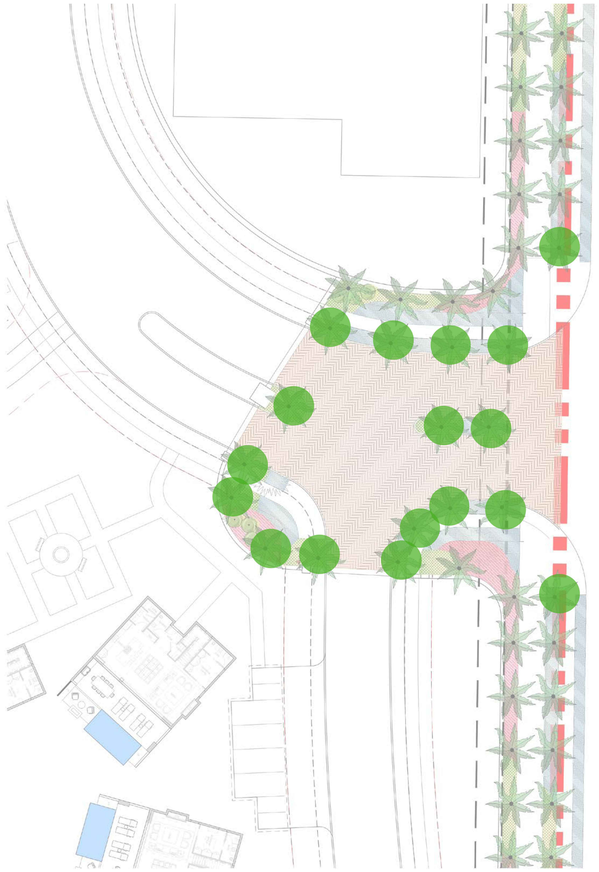


Fig. 38
In-ground Light Fixture Installation

NOTE: Always use adequate rebar surrounding the fixture to prevent cracking of the concrete due to heat expansion.



PRIMARY ENTRY



SECONDARY ENTRY

LIGHTING LEGEND

ENTRY SIGN LIGHTING

MODEL **1045** | Specification Sheet
Commercial Series • Floodlight • LED

TYPE: MODEL:
PROJECT:

PRODUCT FEATURES

Wattage	14 – 26 W
Voltage	120 – 277 VAC
Lumens	1100 – 2400 Delivered Lumens
Distribution	17° (VNS), 18° (NS), 30° (MF), 50° (WF)
CCT	2700K, 3000K, 3500K, 4000K, 5000K
CRI	80 CRI min.
Dimming	0-10V or Phase Cut (TRIAC/ELV-120VAC only) available
Driver	Multi-Volt 120-277VAC with tri-modal dimming capabilities
Dimensions	4½" DIA x 10½" D

IP66 BAA BABA



Click on image for alternate shields
(within Adobe Acrobat or Acrobat Reader)

TREE UPLIGHTING

MODEL **1185TG** | Specification Sheet
Commercial Series • In-Grade • LED

TYPE: MODEL:
PROJECT:

PRODUCT FEATURES

Wattage	15 – 26 W
Voltage	120 – 277 VAC
Lumens	917 – 1766 Delivered Lumens
Distribution	NEMA type [*H* x *V*]: 2x2 (VNS), 2x2 (NS), 3x3 (MF), 4x4 (WF), 5x5 (WW)
CCT	2700K, 3000K, 3500K, 4000K, 5000K
CRI	80 CRI min.
Dimming	0-10V or Phase Cut (TRIAC/ELV-120VAC only) available
Driver	Multi-Volt 120-277VAC with tri-modal dimming capabilities
Dimensions	8 19/32" DIA x 8" D

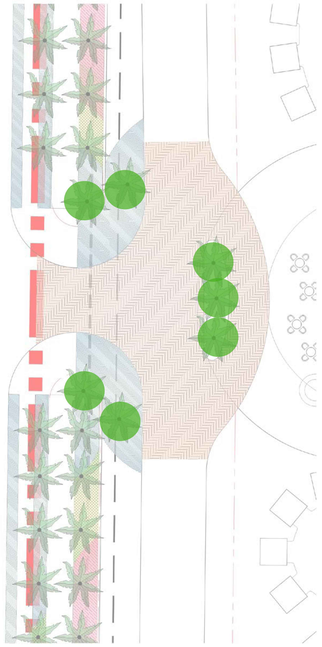
IP68 BAA BABA



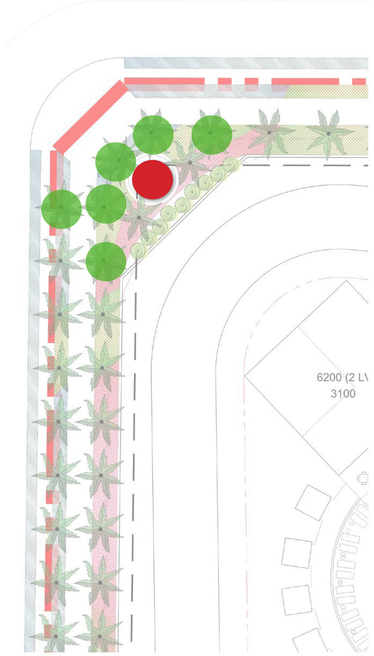
PALM LIGHTING RINGS



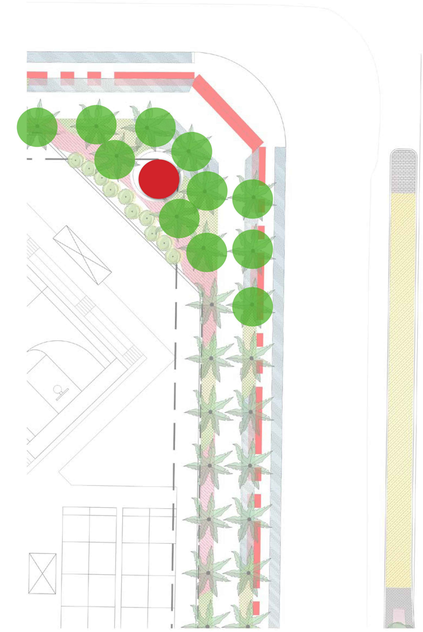




BEACH CLUB ENTRY



CALHOUN STREET



VAN BUREN STREET

52nd AVENUE

LIGHTING LEGEND

ENTRY SIGN LIGHTING

MODEL **1045** | Specification Sheet
Commercial Series • Floodlight • LED

TYPE: MODEL:
PROJECT:

PRODUCT FEATURES

Wattage	14 – 26 W
Voltage	120 – 277 VAC
Lumens	1100 – 2400 Delivered Lumens
Distribution	17° (VNS), 18° (NS), 30° (MF), 50° (WF)
CCT	2700K, 3000K, 3500K, 4000K, 5000K
CRI	80 CRI min.
Dimming	0-10V or Phase Cut (TRIAC/ELV-120VAC only) available
Driver	Multi-Volt 120-277VAC with tri-modal dimming capabilities
Dimensions	4½" DIA x 10½" D



Click on image for alternate shields
(within Adobe Acrobat or Acrobat Reader)

TREE UPLIGHTING

MODEL **1185TG** | Specification Sheet
Commercial Series • In-Grade • LED

TYPE: MODEL:
PROJECT:

PRODUCT FEATURES

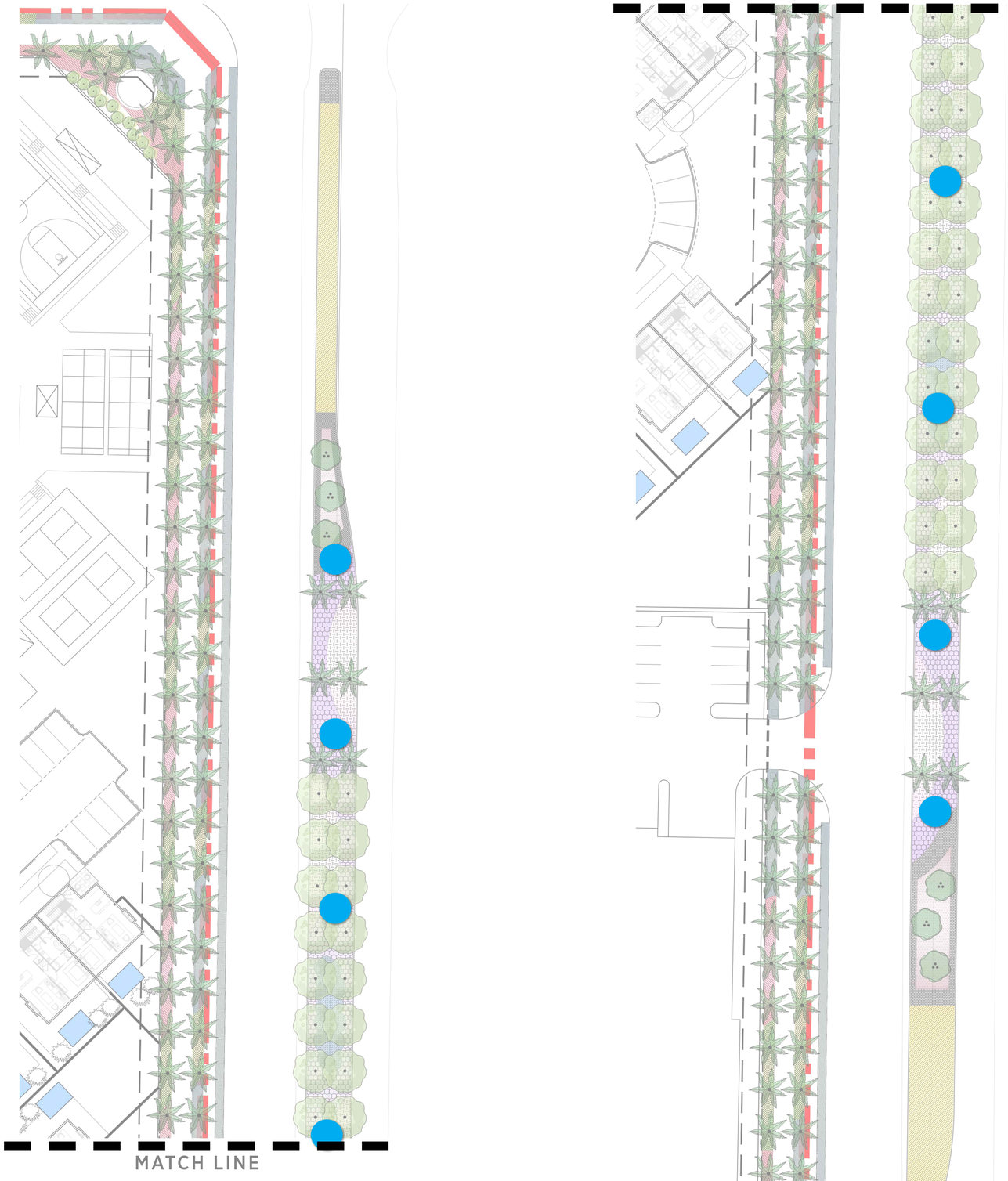
Wattage	15 – 26 W
Voltage	120 – 277 VAC
Lumens	917 – 1766 Delivered Lumens
Distribution	NEMA type [**H x V**]: 2x2 (VNS), 2x2 (NS), 3x3 (MF), 4x4 (WF), 5x5 (WM)
CCT	2700K, 3000K, 3500K, 4000K, 5000K
CRI	80 CRI min.
Dimming	0-10V or Phase Cut (TRIAC/ELV-120VAC only) available
Driver	Multi-Volt 120-277VAC with tri-modal dimming capabilities
Dimensions	8 19/32" DIA x 8" D



PALM LIGHTING RINGS







MEDIAN LIGHTING LEGEND

LIGHT POLE,
PER CITY ENGINEER, TYP

VAN BUREN ST. TYPICAL MEDIAN

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34200 Bob Hope Drive, Rancho Mirage, CA 92270
760.320.9811 msaconsultinginc.com

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PLANNING | LANDSCAPE ARCHITECTURE | ARCHITECTURE

HOTEL

ARCHITECTURE & LANDSCAPE

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10

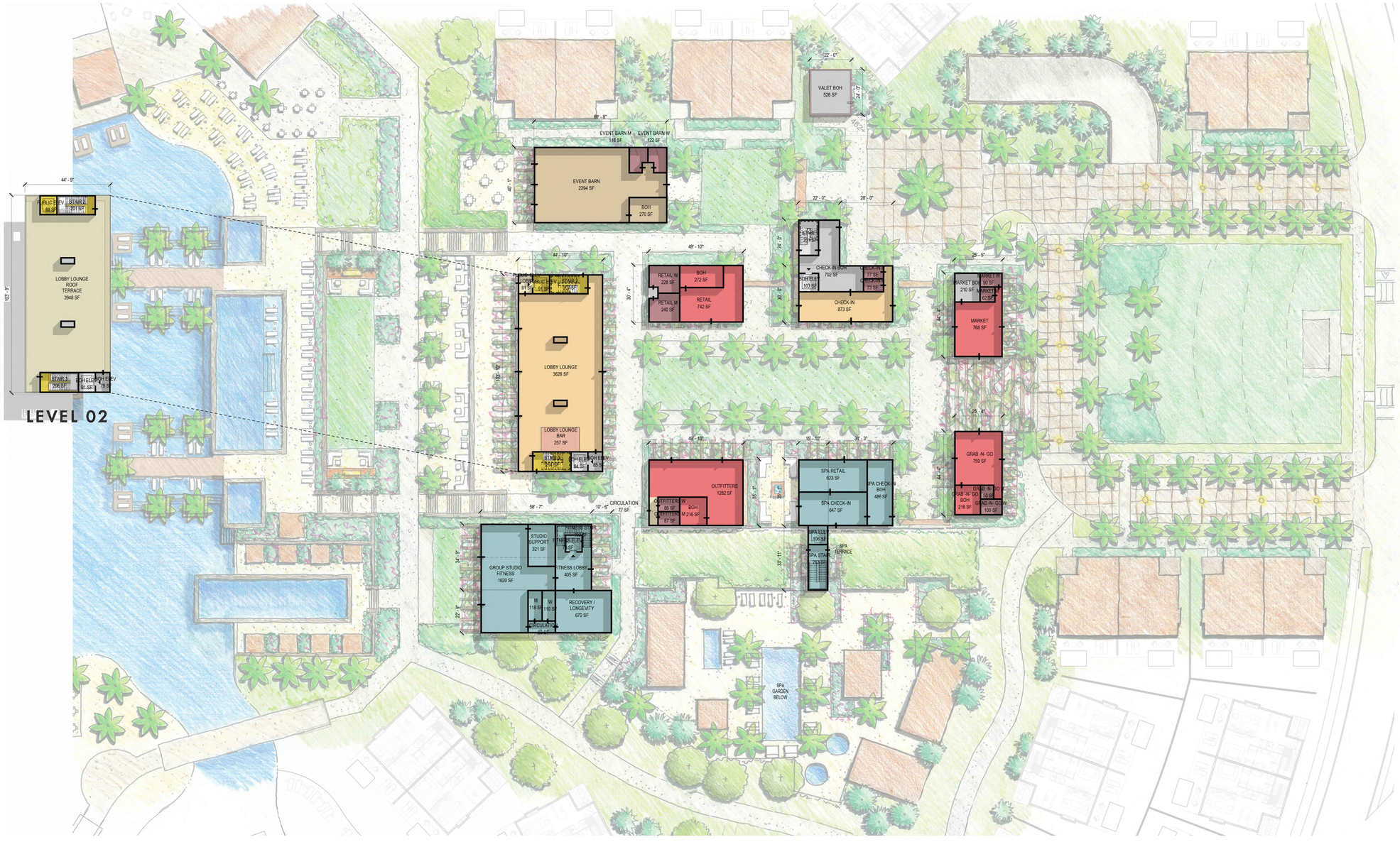


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760.320.9811 msaconsultinginc.com

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PLANNING | LANDSCAPE ARCHITECTURE | ARCHITECTURE

10

HOTEL OVERALL SITE PLAN
SUBMITTAL DATE: JUNE 10, 2026
COVA | ARCHITECTURAL REVIEW



LEVEL 01 - HOTEL CORE VILLAGE



LEGEND

- RETAIL / FOOD & BEVERAGE
- LOBBY LOUNGE / LIBRARY
- LOBBY LOUNGE BAR
- SPA & FITNESS
- RESTROOM
- CHECK-IN / CONCIERGE
- EVENT BARN
- ROOF TERRACE BAR
- 3 MEAL RESTAURANT / SPEAK-EASY
- BOH

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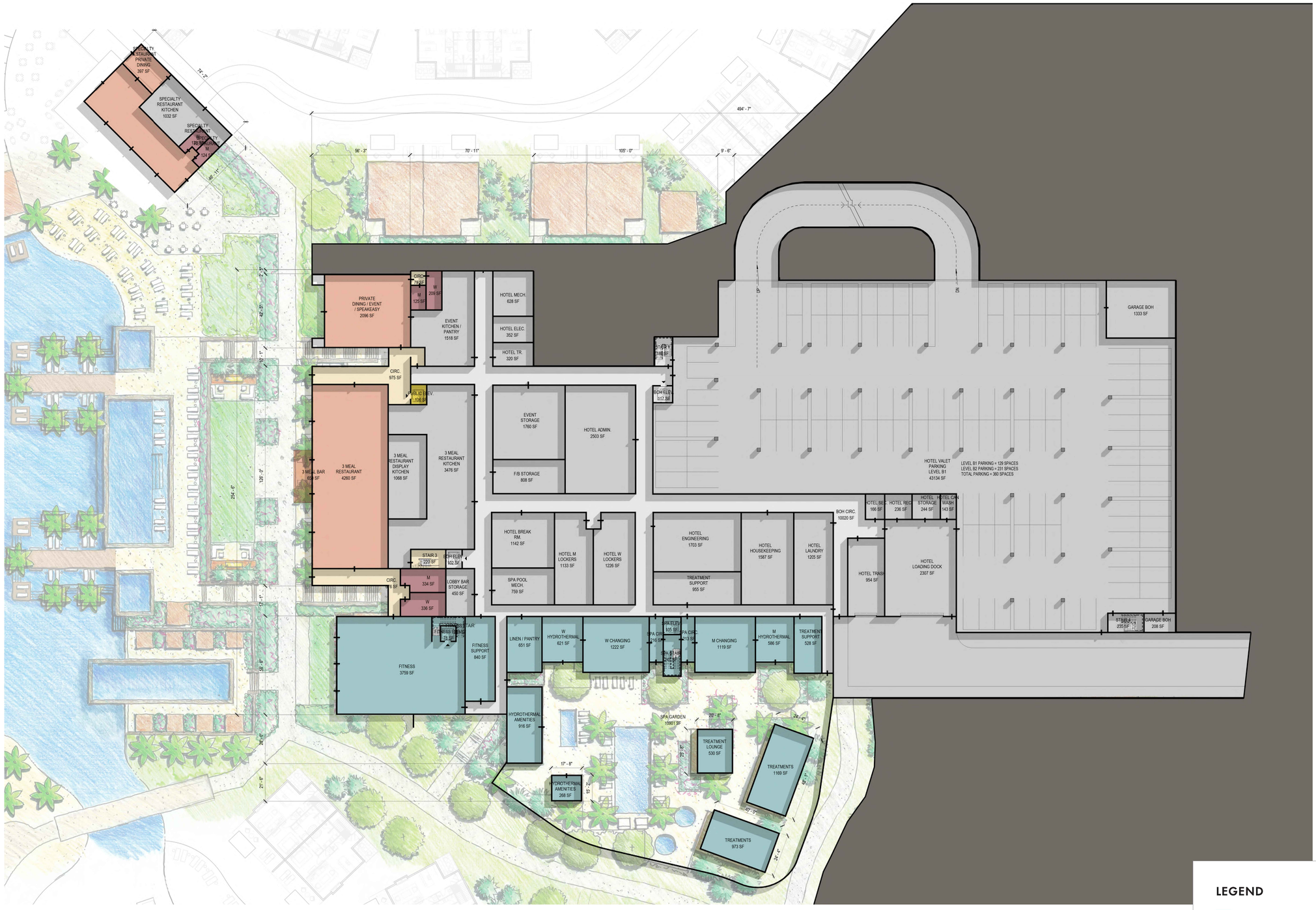
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34200 Bob Hope Drive, Rancho Mirage, CA 92270
760.320.9811 msaconsultinginc.com

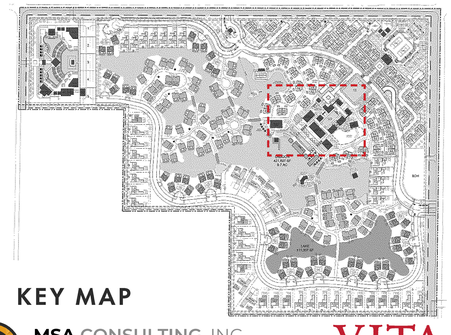
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10

HOTEL ARRIVAL PLAN: LEVEL 1
SUBMITTAL DATE: JUNE 10, 2026
COVA | ARCHITECTURAL REVIEW



LEVEL B1 - 3 MEAL RESTAURANT, SPA AND WELLNESS, BOH & PARKING AREAS



KEY MAP

LEGEND

- RETAIL / FOOD & BEVERAGE
- LOBBY LOUNGE / LIBRARY
- LOBBY LOUNGE BAR
- SPA & FITNESS
- RESTROOM
- CHECK-IN / CONCIERGE
- EVENT BARN
- ROOF TERRACE BAR
- 3 MEAL RESTAURANT / SPEAK-EASY
- BOH

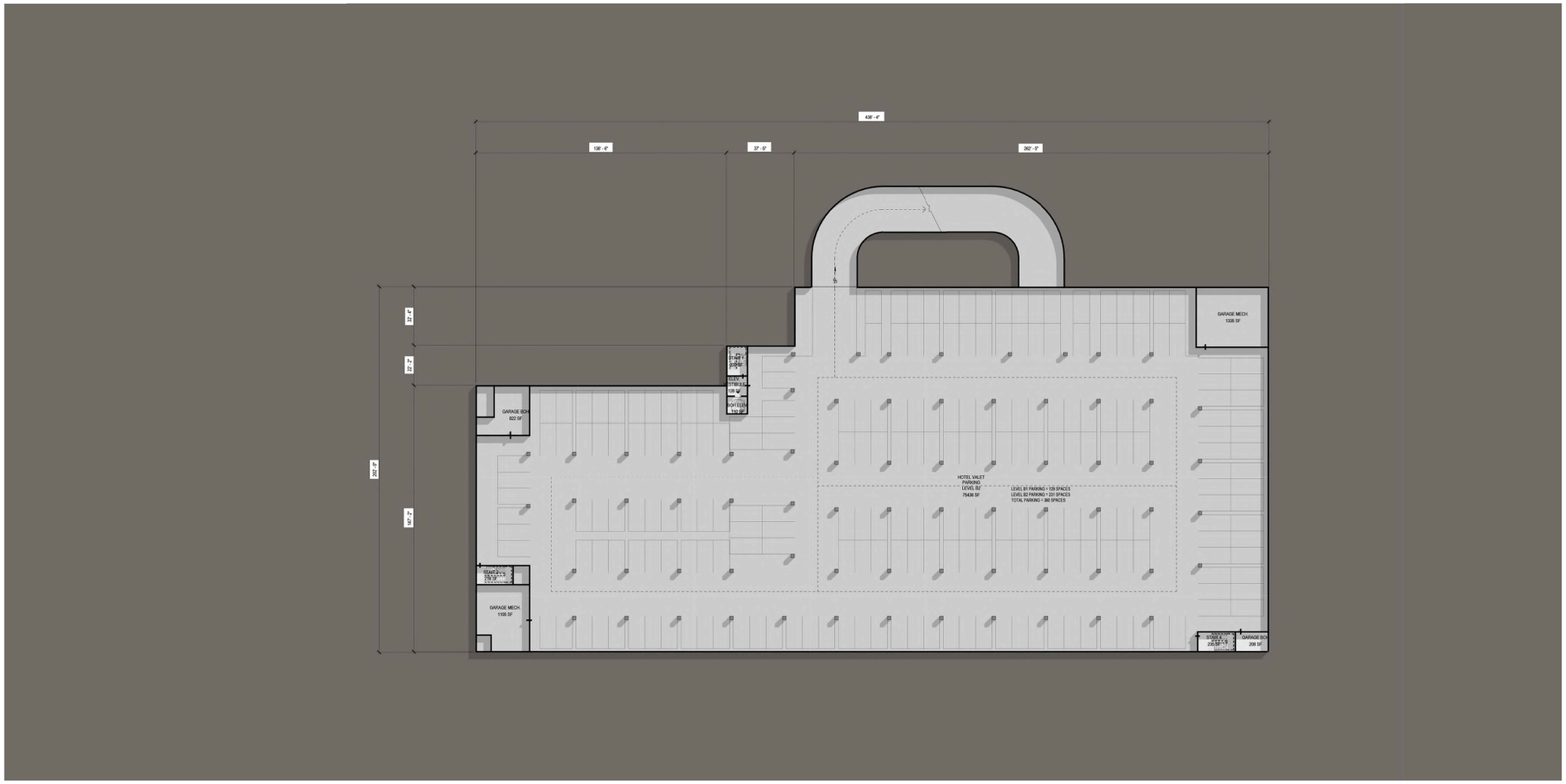
N

1" = 20' 0 10 20 40'

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HOTEL FLOOR PLAN: LEVEL B1
SUBMITTAL DATE: JUNE 10, 2026
COVA | ARCHITECTURAL REVIEW



LEVEL B2 - PARKING



KEY MAP

LEGEND

- RETAIL / FOOD & BEVERAGE
- LOBBY LOUNGE / LIBRARY
- LOBBY LOUNGE BAR
- SPA & FITNESS
- RESTROOM
- CHECK-IN / CONCIERGE
- EVENT BARN
- ROOF TERRACE BAR
- 3 MEAL RESTAURANT / SPEAK-EASY
- BOH

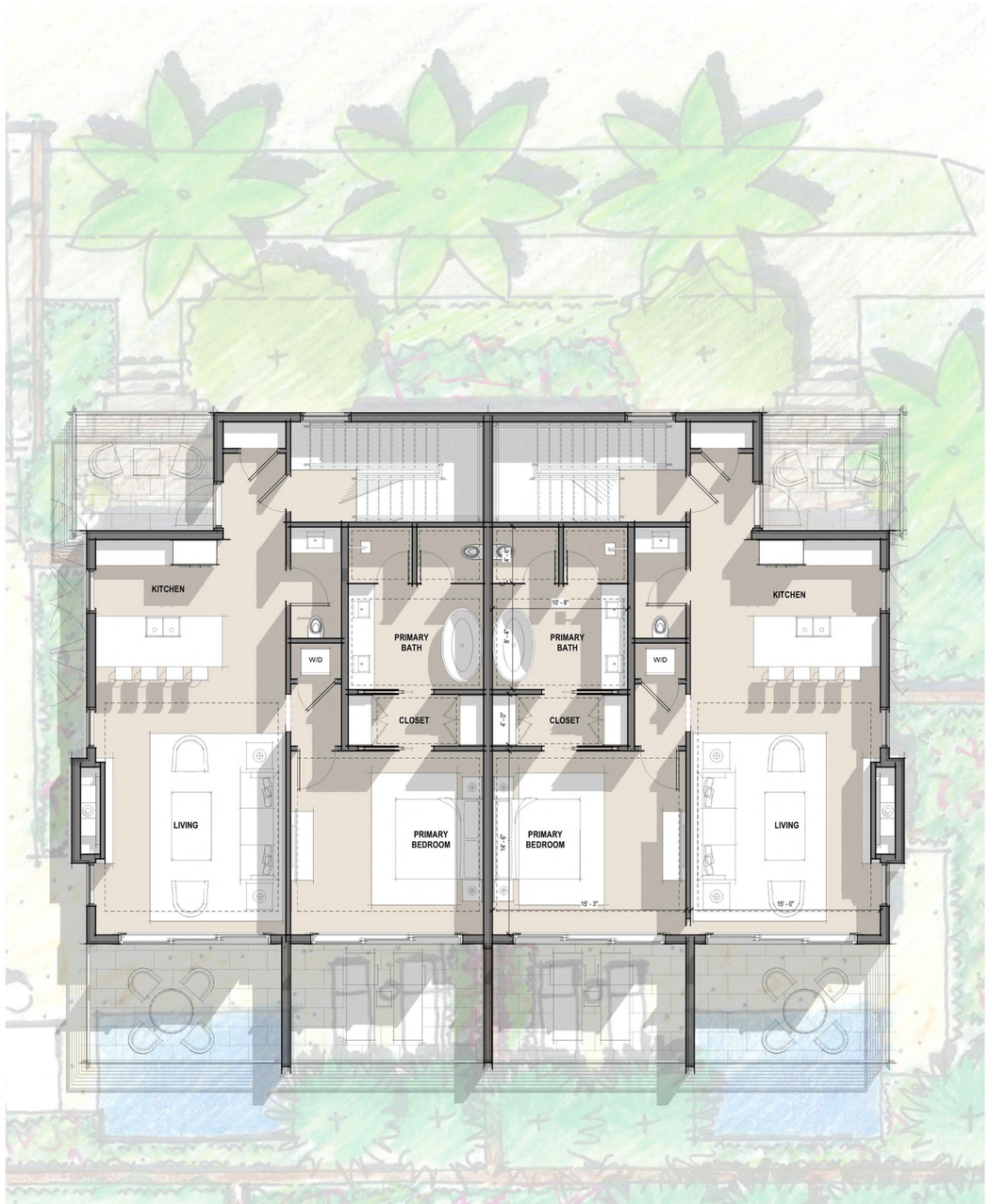
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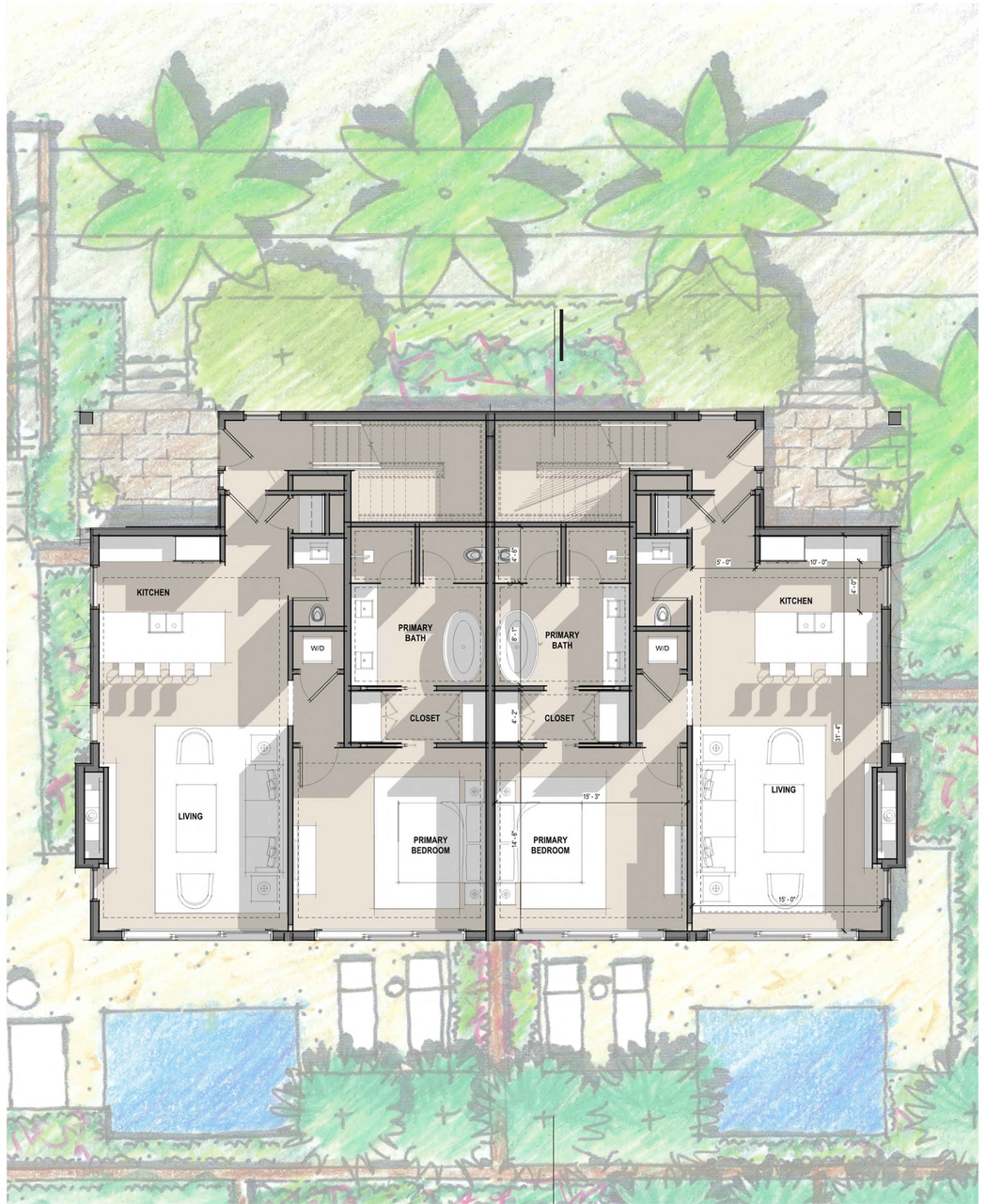
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4 UNIT 2 STORY 1 BR SUITE - LEVEL 02



4 UNIT 2 STORY 1 BR SUITE - LEVEL 01

1/4"= 1' 0 2 4 8'

2 STORY (1 BR SUITES) HOTEL COTTAGE - 4 UNITS

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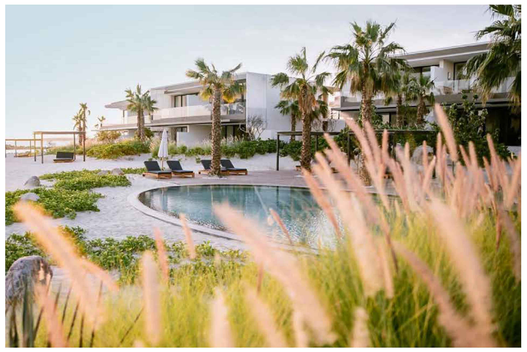
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PLANNING | LANDSCAPE ARCHITECTURE | ARCHITECTURE

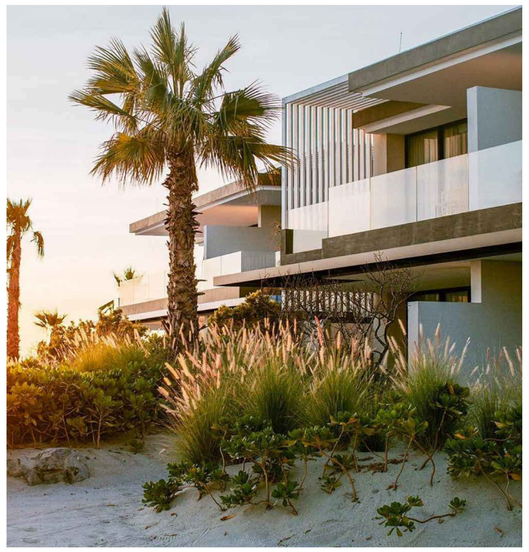


LEGEND

1. Hotel Cottage Unit
2. Entry Porch
3. Private Garden
4. Plunge Pool
5. Privacy Wall
6. Project Loop Road
7. Sidewalk
8. Covered Car Parking
9. Covered Cart Parking
10. EVA Turnaround
11. Property Boundary
12. 10’ Landscape Setback









NOTE: ENLARGEMENT SHOWN FOR ILLUSTRATION PURPOSES ONLY.

N

1" = 10'-0"

0 5' 10' 20'

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HOTEL COTTAGE ENLARGEMENT PLAN (RC3)
SUBMITTAL DATE: JUNE 10, 2026
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FRONT ELEVATION



REAR ELEVATION

1/4"= 1' 0 2 4 8'

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SECTION A - COTTAGE

1/4" = 1' 0 2 4 8'

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REAR ELEVATION



FRONT ELEVATION

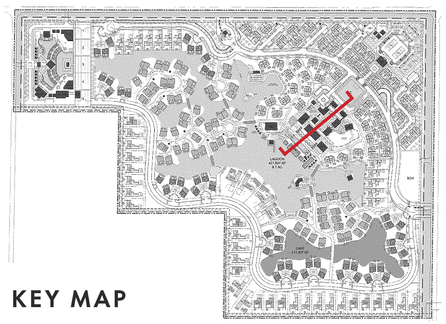
1/8"= 1' 0 4 8 16'

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1/8 "= 1' 0 8 16 32'



KEY MAP

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HOTEL VILLAGE BUILDING SECTION
SUBMITTAL DATE: JUNE 10, 2026
COVA | ARCHITECTURAL REVIEW

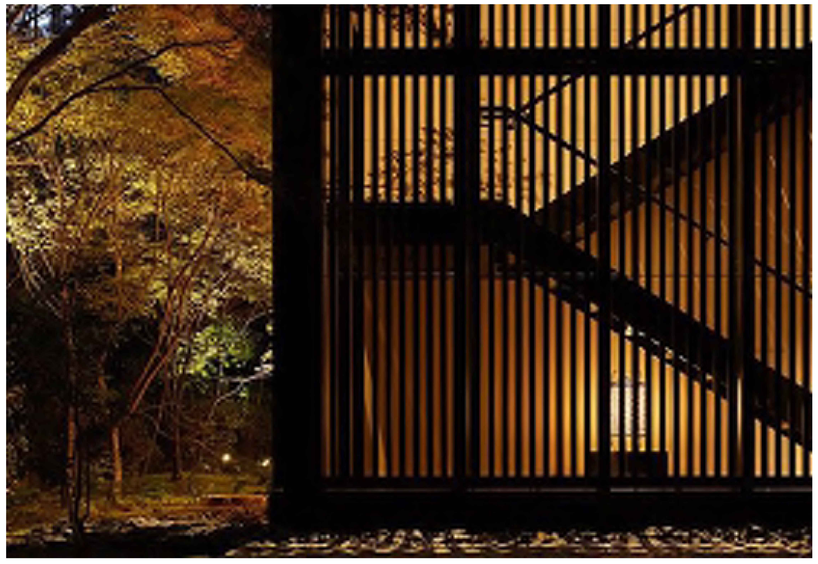














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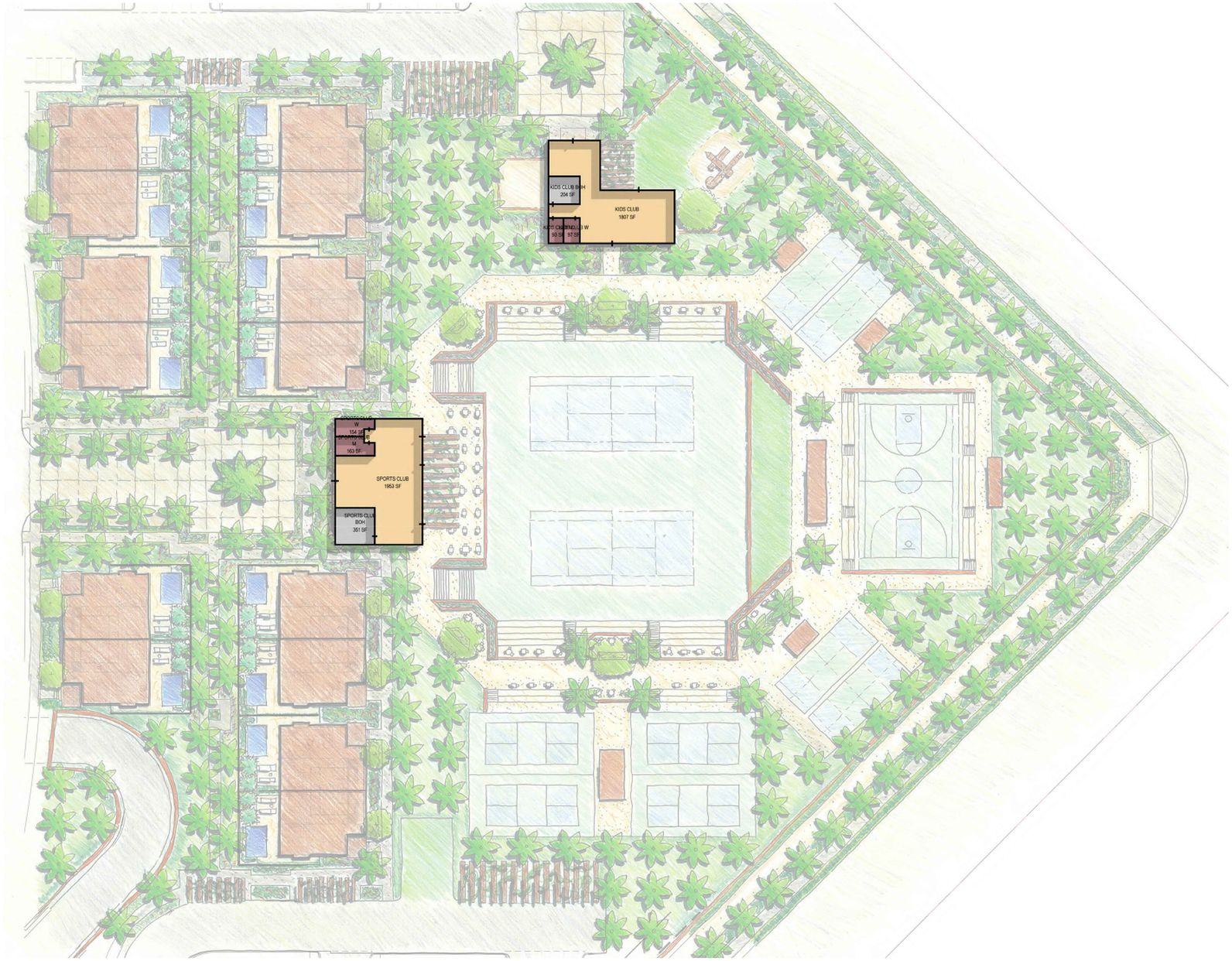


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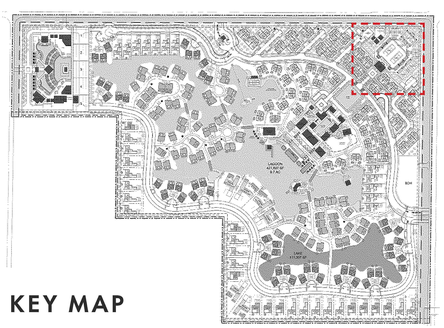




LEVEL 01 - SPORTS AND KIDS CLUB AREA



LEVEL 01 - MAIN BOH FACILITY



KEY MAP

LEGEND

- RETAIL / FOOD & BEVERAGE
- LOBBY LOUNGE / LIBRARY
- LOBBY LOUNGE BAR
- SPA & FITNESS
- RESTROOM
- CHECK-IN / CONCIERGE
- EVENT BARN
- ROOF TERRACE BAR
- 3 MEAL RESTAURANT / SPEAK-EASY
- BOH

N

1' = 20' 0 10 20 40'

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NOTE: ENLARGEMENT SHOWN FOR ILLUSTRATION PURPOSES ONLY.

LEGEND

1. Drop-Off
2. Event Barn
3. Bar Terrace Seating
4. Tennis Courts/ Events
5. Shade Structure
6. Pickleball Courts
7. Basketball Court
8. Padel Courts
9. Kid's Club
10. Playground
11. Hotel Cottage
12. Date Palm Grove
13. Covered Car Parking
14. Cart Parking
15. Project Loop Road
16. EVA Turnaround
17. BOH Service Ramp
18. Public Equestrian Path
19. Public Sidewalk

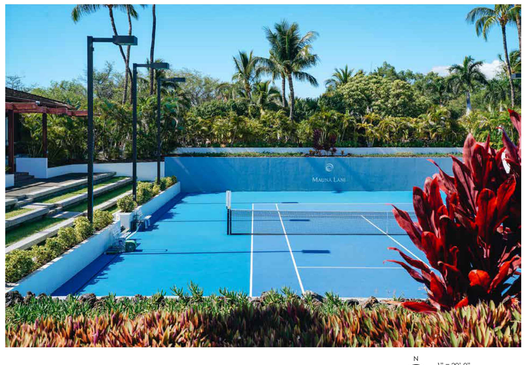












N

1" = 20'-0"
0 10' 20' 40'

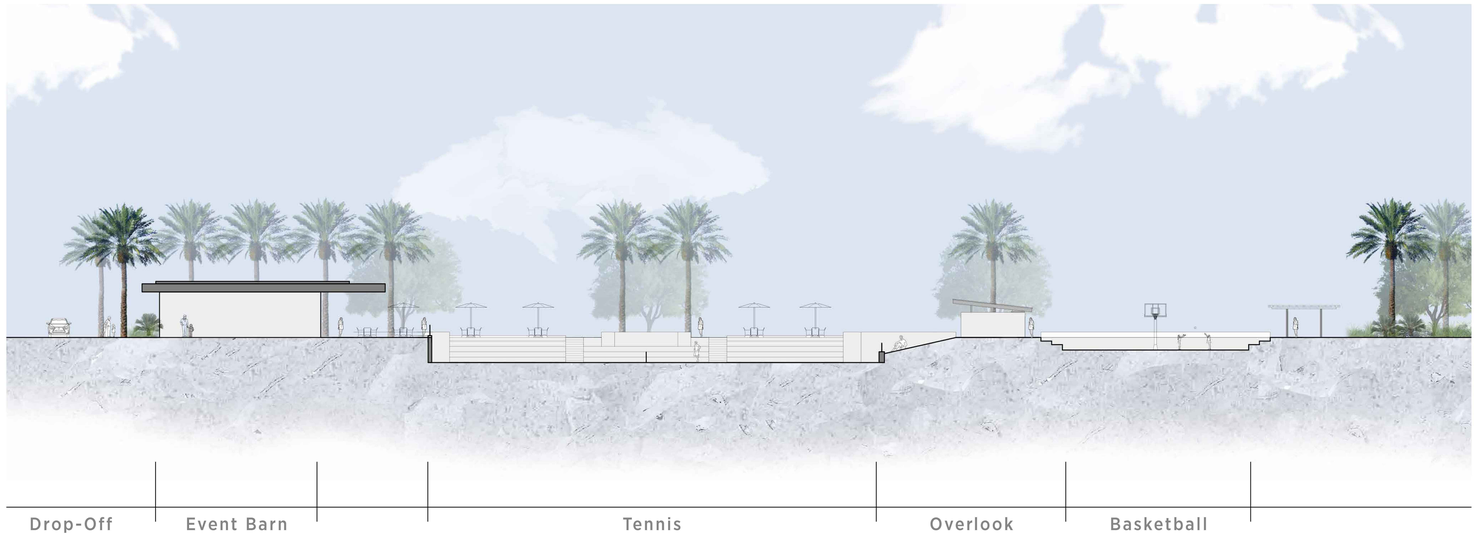
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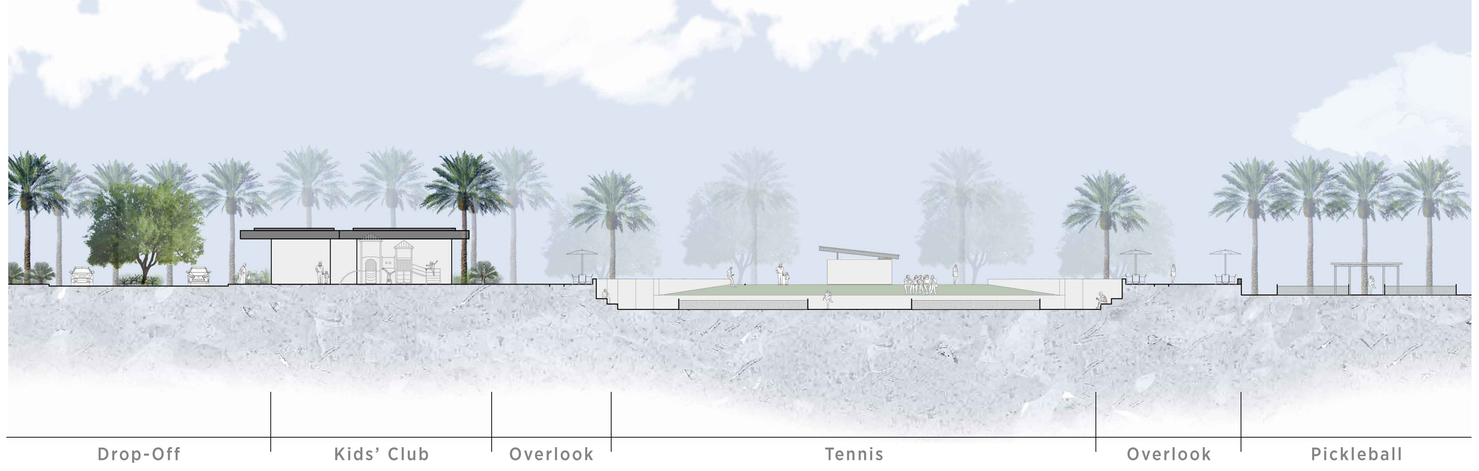
SPORTS COURTS ENLARGEMENT PLAN (RC2)

SUBMITTAL DATE: JUNE 10, 2026

COVA | ARCHITECTURAL REVIEW



SECTION 1 - SPORTS COURTS
1”=15’



SECTION 2 - SPORTS COURTS
1”=15’





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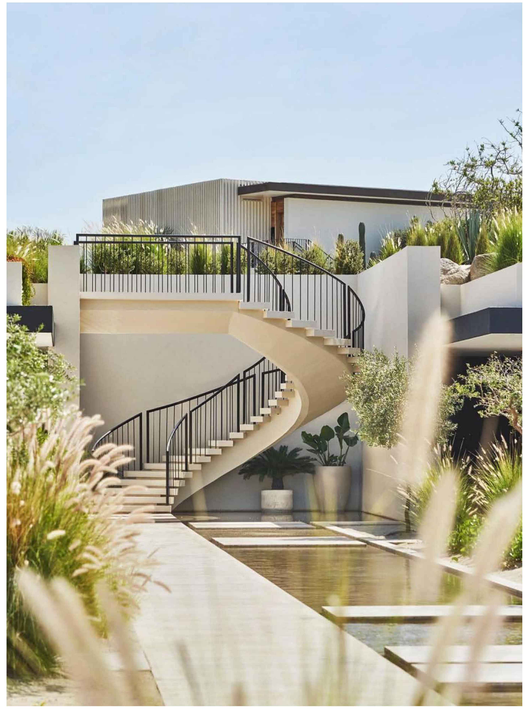
NOTE: ENLARGEMENT SHOWN FOR ILLUSTRATION PURPOSES ONLY.

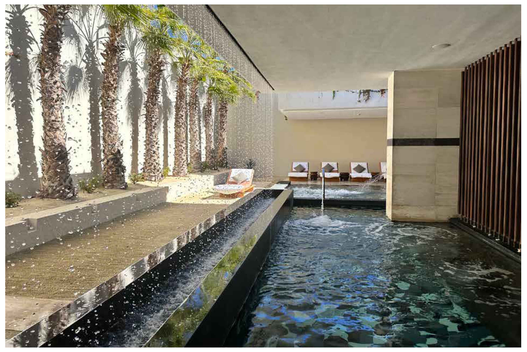
LEGEND

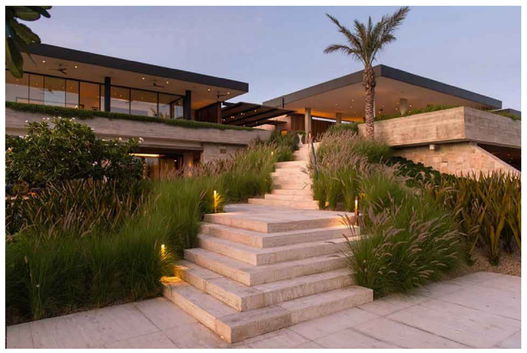
1. Arrival Drive
2. Guest Arrival Court
3. Market
4. Check-In
5. Retail
6. Event Barn Garden
7. Event Barn
8. Event Barn Terrace
9. Lobby, Lounge & Bar
10. Lounge Terrace
11. Fitness
12. Fitness Lawn
13. Outfitters
14. Spa Check-In
15. Spa Treatment
16. Spa Garden
17. Coffee Shop / Cafe
18. Event Lawn
19. Village Green
20. Dining Terrace
21. Specialty Restaurant
22. Beach
23. Lagoon Pool
24. Lagoon Plunge
25. Beach Bar
26. 25m Lap Pool
27. Lagoon
28. Emergency Vehicle Access
29. Ramp to Basement Parking
30. Hotel Cottage
31. Lounging Dock











N

1" = 20'-0"

0 10' 20' 40'



SECTION 1 - RESORT CORE
1”=15’



SECTION 2 - RESORT CORE
1”=15’



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NOTE: ENLARGEMENT SHOWN FOR ILLUSTRATION PURPOSES ONLY.

LEGEND

1. Gate House
2. Sculpture
3. Project Monument
4. Specialty Paving
5. Palm Grove
6. Privacy Wall
7. Vehicle Gate
8. Pedestrian Gate
9. Neighborhood Gate
10. Zipline
11. Lagoon
12. Beach
13. Sidewalk
14. Equestrian Path













N

1" = 20'-0"
0 10' 20' 40'

MAIN ENTRY ENLARGEMENT PLAN (RC4)
SUBMITTAL DATE: JUNE 10, 2026
COVA | ARCHITECTURAL REVIEW

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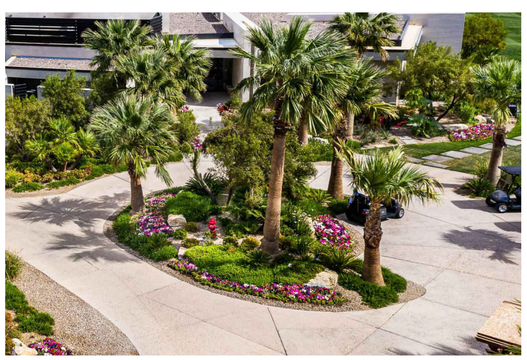
LEGEND

1. Resort Vehicle Gate
2. Pedestrian Gate
3. Residential Neighborhood Gate
4. Privacy Wall
5. Specialty Paving
6. BOH Facility
7. Sidewalk
8. Equestrian Path
9. Project Loop Road









NOTE: ENLARGEMENT SHOWN FOR ILLUSTRATION PURPOSES ONLY.

N

1" = 20'-0"

0 10' 20' 40'

SECONDARY ENTRY ENLARGEMENT PLAN (RC5)

SUBMITTAL DATE: JUNE 10, 2026

COVA | ARCHITECTURAL REVIEW

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REFERENCE IMAGERY



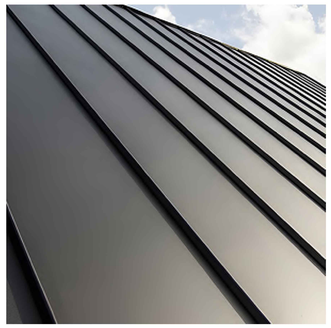
MATERIAL LEGEND



GL-01: GLAZING-INSULATED LOW-E



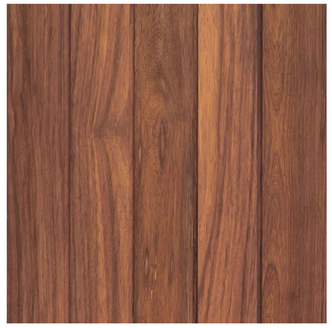
WD-01: THERMALLY TREATED SLAT WOOD



MT-01: METAL SEAM ROOF



CO-01: BOARD FORMED CONCRETE



WD-02: THERMALLY TREATED WOOD



MT-02: ANODIZED ALUMINUM

HOTEL PARKING DEMAND

SEE ARCHITECTURAL PLANS FOR BUILDING SQUARE FOOTAGE REFERENCE

Employee Parking (Estimate Based On Traffic Study)						P=LS/3
EMPLOYEE TYPE	**NUMBER OF EMPLOYEES**	**QUANTITY OF LONGEST SHIFTS (LS)**				**PARKING REQUIRED**
HOTEL OPERATIONS	125	65				22
RETAIL	15	8				3
MANAGEMENT/ADMIN	6	5				2
TOTAL						**26**

MEETING/BANQUET PARKING						P=MC/3
LEVEL	**SPACE**	**CUSTOMER AREA SQ. FT.**	**ROOM CLASSIFCATION ****	**Load Factor (sf/person)**	**MAXIMUM CAPACITY (MC)**	**PARKING REQUIRED**
L1	EVENT BARN	2294	Assembly- tables & chairs	15	153	51
B1	EVENT/SPEAKEASY/PRIVATE DINING	2096	Assembly- tables & chairs	15	140	47
TOTAL		**4390**			**293**	**98**

HOTEL PARKING		P=1 space per unit
ROOM	**QUANTITY**	**PARKING REQUIRED**
HOTEL COTTAGES (1ST FLR.)	120	120
HOTEL COTTAGES (2ND FLR. LOCKOFF)	120	120
TOTAL	**240**	**240**

TOTAL PARKING REQUIRED	**364**

PARKING SUPPLY	**TOTAL**
SURFACE PARKING @ GROVE	50
B1	129
B2	231
EMPLOYEE @ BOH	18
TOTAL SUPPLIED	**428**
REQUIRED PARKING FOR HOTEL	**364**
DELTA	**64**

PARKING DEMAND NARRATIVE

This hotel functions as an exclusive, guest- and member-only resort. All dining, bar, and amenity areas are internal facilities serving the same population already accounted for in the lodging parking demand. Because no public access is allowed, these spaces do not generate separate parking needs, and including them would double-count the same users.

Parking demand for the project should therefore be based on:

Hotel rooms, using a 1 spaces per room, consistent with City Code; and
Assembly/event areas per City code, which remain the only true independent trip generators.

This approach more accurately reflects actual operations and avoids overstating demand for a closed, exclusive resort environment.

**** California Building Code Load Classifications**

Space Type	CBC / Typical Use Classification	Load Factor
Meeting/Banquet Facilities	Assembly – Tables & Chairs (social/gathering)	15 sf/person

Area Schedule (Gross Building)			
CustomScheduleParam	Name	Area	Level
BOH FACILITY			
BOH FACILITY	STORAGE	870 SF	LEVEL 01
BOH FACILITY	BOH FACILITY LOADING DOCK	2084 SF	LEVEL 01
BOH FACILITY	BOH FACILITY TRASH / RECYCLING	954 SF	LEVEL 01
BOH FACILITY	BOH FACILITY ENGINEERING	715 SF	LEVEL 01
BOH FACILITY	BOH FACILITY PLUMBING	871 SF	LEVEL 01
BOH FACILITY	BOH FACILITY ADMIN.	1476 SF	LEVEL 01
BOH FACILITY	BOH FACILITY STAFF LOUNGE	1208 SF	LEVEL 01
BOH FACILITY	BOH FACILITY ELEC.	704 SF	LEVEL 01
BOH FACILITY	BOH FACILITY TRASH / RECYCLING	2288 SF	LEVEL 01
BOH FACILITY	BOH FACILITY HSKP / LAUNDRY	1315 SF	LEVEL 01
BOH FACILITY	BOH FACILITY SOILED LINENS	680 SF	LEVEL 01
BOH FACILITY	BOH FACILITY ELEC.	173 SF	LEVEL 01
BOH FACILITY	BOH FACILITY P/R	99 SF	LEVEL 01
BOH FACILITY	BOH FACILITY SEC.	139 SF	LEVEL 01
BOH FACILITY	BOH FACILITY UNIFORM	214 SF	LEVEL 01
BOH FACILITY	BOH FACILITY M LOCKERS	824 SF	LEVEL 01
BOH FACILITY	BOH FACILITY F LOCKERS	766 SF	LEVEL 01
BOH FACILITY	BOH FACILITY STORAGE	546 SF	LEVEL 01
BOH FACILITY	BOH CIRC.	2825 SF	LEVEL 01
BOH FACILITY		18751 SF	
FOOD / BEVERAGE			
FOOD / BEVERAGE	BEACH BAR	693 SF	LEVEL B1
FOOD / BEVERAGE	DJ ISLAND	932 SF	LEVEL B1
FOOD / BEVERAGE	SPECIALTY RESTAURANT KITCHEN	1032 SF	LEVEL B1
FOOD / BEVERAGE	W	209 SF	LEVEL B1
FOOD / BEVERAGE	M	125 SF	LEVEL B1
FOOD / BEVERAGE	PRIVATE DINING / EVENT / SPEAKEASY	2096 SF	LEVEL B1
FOOD / BEVERAGE	CIRC.	79 SF	LEVEL B1
FOOD / BEVERAGE	3 MEAL RESTAURANT	4260 SF	LEVEL B1
FOOD / BEVERAGE	3 MEAL BAR	650 SF	LEVEL B1
FOOD / BEVERAGE	SPECIALTY RESTAURANT PRIVATE DINING	397 SF	LEVEL B1
FOOD / BEVERAGE	SPECIALTY RESTAURANT	1803 SF	LEVEL B1
FOOD / BEVERAGE	SPECIALTY RESTAURANT W	123 SF	LEVEL B1
FOOD / BEVERAGE	SPECIALTY RESTAURANT M	124 SF	LEVEL B1
FOOD / BEVERAGE	DJ ISLAND M	149 SF	LEVEL B1
FOOD / BEVERAGE	DJ ISLAND W	159 SF	LEVEL B1
FOOD / BEVERAGE	DJ ISLAND BOH	129 SF	LEVEL B1
FOOD / BEVERAGE		12960 SF	
HOTEL BOH			
HOTEL BOH	HOTEL VALET PARKING LEVEL B2	75436 SF	LEVEL B2
HOTEL BOH	TREATMENT SUPPORT	955 SF	LEVEL B1

Area Schedule (Gross Building)			
CustomScheduleParam	Name	Area	Level
HOTEL BOH	HOTEL LOADING DOCK	2307 SF	LEVEL B1
HOTEL BOH	HOTEL TRASH	954 SF	LEVEL B1
HOTEL BOH	HOTEL STORAGE	244 SF	LEVEL B1
HOTEL BOH	HOTEL REC.	236 SF	LEVEL B1
HOTEL BOH	HOTEL SEC.	166 SF	LEVEL B1
HOTEL BOH	HOTEL CAN WASH	143 SF	LEVEL B1
HOTEL BOH	HOTEL LAUNDRY	1205 SF	LEVEL B1
HOTEL BOH	BOH CIRC.	10020 SF	LEVEL B1
HOTEL BOH	HOTEL HOUSEKEEPING	1587 SF	LEVEL B1
HOTEL BOH	HOTEL ENGINEERING	1703 SF	LEVEL B1
HOTEL BOH	HOTEL W LOCKERS	1226 SF	LEVEL B1
HOTEL BOH	HOTEL M LOCKERS	1133 SF	LEVEL B1
HOTEL BOH	HOTEL ADMIN.	2503 SF	LEVEL B1
HOTEL BOH	EVENT STORAGE	1760 SF	LEVEL B1
HOTEL BOH	F/B STORAGE	808 SF	LEVEL B1
HOTEL BOH	HOTEL BREAK RM.	1142 SF	LEVEL B1
HOTEL BOH	SPA POOL MECH.	759 SF	LEVEL B1
HOTEL BOH	HOTEL TR.	320 SF	LEVEL B1
HOTEL BOH	HOTEL ELEC.	352 SF	LEVEL B1
HOTEL BOH	HOTEL MECH.	628 SF	LEVEL B1
HOTEL BOH	EVENT KITCHEN / PANTRY	1518 SF	LEVEL B1
HOTEL BOH	3 MEAL RESTAURANT KITCHEN	3476 SF	LEVEL B1
HOTEL BOH	3 MEAL RESTAURANT DISPLAY KITCHEN	1068 SF	LEVEL B1
HOTEL BOH	LOBBY BAR STORAGE	450 SF	LEVEL B1
HOTEL BOH	BOH ELEV.	117 SF	LEVEL B1
HOTEL BOH	STAIR 1	189 SF	LEVEL B1
HOTEL BOH	HOTEL VALET PARKING LEVEL B1	43134 SF	LEVEL B1
HOTEL BOH	GARAGE BOH	1333 SF	LEVEL B1
HOTEL BOH	GARAGE BOH	208 SF	LEVEL B1
HOTEL BOH	BOH ELEV.	110 SF	LEVEL B2
HOTEL BOH	GARAGE MECH.	1335 SF	LEVEL B2
HOTEL BOH	GARAGE BOH	208 SF	LEVEL B2
HOTEL BOH	STAIR 4	235 SF	LEVEL B2
HOTEL BOH	GARAGE MECH.	1105 SF	LEVEL B2
HOTEL BOH	GARAGE BOH	822 SF	LEVEL B2
HOTEL BOH	BOH ELEV.	103 SF	LEVEL 01
HOTEL BOH	STAIR 4	235 SF	LEVEL B1
HOTEL BOH	BOH ELEV.	102 SF	LEVEL B1
HOTEL BOH	BOH ELEV.	79 SF	LEVEL 02
HOTEL BOH	BOH ELEV.	91 SF	LEVEL 02
HOTEL BOH		161504 SF	
HOTEL PUBLIC			
HOTEL PUBLIC	LOBBY LOUNGE BAR	257 SF	LEVEL 01
HOTEL PUBLIC	LOBBY LOUNGE	3628 SF	LEVEL 01
HOTEL PUBLIC	CHECK-IN BOH	702 SF	LEVEL 01
HOTEL PUBLIC	CHECK-IN	873 SF	LEVEL 01
HOTEL PUBLIC	CHECK-IN W	77 SF	LEVEL 01
HOTEL PUBLIC	CHECK-IN M	73 SF	LEVEL 01
HOTEL PUBLIC	BOH ELEV.	85 SF	LEVEL 01
HOTEL PUBLIC	PUBLIC ELEV. LOBBY	81 SF	LEVEL 01
HOTEL PUBLIC	M	334 SF	LEVEL B1
HOTEL PUBLIC	W	336 SF	LEVEL B1
HOTEL PUBLIC	STAIR 3	220 SF	LEVEL B1
HOTEL PUBLIC	STAIR 1	200 SF	LEVEL B2
HOTEL PUBLIC	ELEV. VESTIBULE	128 SF	LEVEL B2
HOTEL PUBLIC	STAIR 1	201 SF	LEVEL 01
HOTEL PUBLIC	BOH ELEV.	94 SF	LEVEL 01

Area Schedule (Gross Building)			
CustomScheduleParam	Name	Area	Level
HOTEL PUBLIC	PUBLIC ELEV.	91 SF	LEVEL 01
HOTEL PUBLIC	STAIR 2	207 SF	LEVEL 01
HOTEL PUBLIC	STAIR 3	214 SF	LEVEL 01
HOTEL PUBLIC	CIRC.	975 SF	LEVEL B1
HOTEL PUBLIC	CIRC.	676 SF	LEVEL B1
HOTEL PUBLIC	PUBLIC ELEV.	106 SF	LEVEL B1
HOTEL PUBLIC	STAIR 3	219 SF	LEVEL B2
HOTEL PUBLIC	LOBBY LOUNGE ROOF TERRACE	3948 SF	LEVEL 02
HOTEL PUBLIC	PUBLIC ELEV.	88 SF	LEVEL 02
HOTEL PUBLIC	STAIR 2	201 SF	LEVEL 02
HOTEL PUBLIC	STAIR 3	208 SF	LEVEL 02
HOTEL PUBLIC		14221 SF	
KIDS CLUB			
KIDS CLUB	KIDS CLUB	1807 SF	LEVEL 01
KIDS CLUB	KIDS CLUB BOH	204 SF	LEVEL 01
KIDS CLUB	KIDS CLUB M	93 SF	LEVEL 01
KIDS CLUB	KIDS CLUB W	97 SF	LEVEL 01
KIDS CLUB		2202 SF	
MEETING / FUNCTION			
MEETING / FUNCTION	VALET BOH	528 SF	LEVEL 01
MEETING / FUNCTION	BOH	270 SF	LEVEL 01
MEETING / FUNCTION	EVENT BARN W	122 SF	LEVEL 01
MEETING / FUNCTION	EVENT BARN M	118 SF	LEVEL 01
MEETING / FUNCTION	EVENT BARN	2294 SF	LEVEL 01
MEETING / FUNCTION		3332 SF	
RETAIL			
RETAIL	OUTFITTERS	1282 SF	LEVEL 01
RETAIL	BOH	216 SF	LEVEL 01
RETAIL	OUTFITTERS W	86 SF	LEVEL 01
RETAIL	OUTFITTERS M	87 SF	LEVEL 01
RETAIL	CIRCULATION	77 SF	LEVEL 01
RETAIL	RETAIL	742 SF	LEVEL 01
RETAIL	RETAIL W	228 SF	LEVEL 01
RETAIL	RETAIL M	240 SF	LEVEL 01
RETAIL	BOH	272 SF	LEVEL 01
RETAIL	MARKET BOH	210 SF	LEVEL 01
RETAIL	GRAB -N- GO BOH	216 SF	LEVEL 01
RETAIL	MARKET W	90 SF	LEVEL 01
RETAIL	MARKET M	62 SF	LEVEL 01
RETAIL	GRAB -N- GO M	50 SF	LEVEL 01
RETAIL	GRAB -N- GO W	100 SF	LEVEL 01
RETAIL	GRAB -N- GO	759 SF	LEVEL 01
RETAIL	MARKET	768 SF	LEVEL 01
RETAIL		5484 SF	
SPA / FITNESS			
SPA / FITNESS	SPA CHECK-IN BOH	486 SF	LEVEL 01
SPA / FITNESS	SPA RETAIL	623 SF	LEVEL 01
SPA / FITNESS	SPA CHECK-IN	647 SF	LEVEL 01
SPA / FITNESS	GROUP STUDIO FITNESS	1620 SF	LEVEL 01
SPA / FITNESS	RECOVERY / LONGEVITY	670 SF	LEVEL 01
SPA / FITNESS	FITNESS LOBBY	405 SF	LEVEL 01

Area Schedule (Gross Building)			
CustomScheduleParam	Name	Area	Level
SPA / FITNESS	STUDIO SUPPORT	321 SF	LEVEL 01
SPA / FITNESS	W	110 SF	LEVEL 01
SPA / FITNESS	M	118 SF	LEVEL 01
SPA / FITNESS	CIRCULATION	93 SF	LEVEL 01
SPA / FITNESS	FITNESS	3759 SF	LEVEL B1
SPA / FITNESS	FITNESS SUPPORT	840 SF	LEVEL B1
SPA / FITNESS	FITNESS STAIR	311 SF	LEVEL B1
SPA / FITNESS	FITNESS ELEV.	78 SF	LEVEL B1
SPA / FITNESS	HYDROTHERMAL AMENITIES	916 SF	LEVEL B1
SPA / FITNESS	HYDROTHERMAL AMENITIES	268 SF	LEVEL B1
SPA / FITNESS	LINEN / PANTRY	651 SF	LEVEL B1
SPA / FITNESS	W HYDROTHERMAL	621 SF	LEVEL B1
SPA / FITNESS	W CHANGING	1222 SF	LEVEL B1
SPA / FITNESS	M CHANGING	1119 SF	LEVEL B1
SPA / FITNESS	M HYDROTHERMAL	586 SF	LEVEL B1
SPA / FITNESS	TREATMENT SUPPORT	528 SF	LEVEL B1
SPA / FITNESS	SPA STAIR	247 SF	LEVEL B1
SPA / FITNESS	SPA ELEV.	105 SF	LEVEL B1
SPA / FITNESS	TREATMENT LOUNGE	530 SF	LEVEL B1
SPA / FITNESS	TREATMENTS	1169 SF	LEVEL B1
SPA / FITNESS	TREATMENTS	973 SF	LEVEL B1
SPA / FITNESS	SPA GARDEN	13901 SF	LEVEL B1
SPA / FITNESS	SPA POOL	154 SF	LEVEL B1
SPA / FITNESS	SPA POOL	154 SF	LEVEL B1
SPA / FITNESS	COLD PLUNGE	187 SF	LEVEL B1
SPA / FITNESS	FITNESS ELEV.	78 SF	LEVEL 01
SPA / FITNESS	FITNESS STAIR	192 SF	LEVEL 01
SPA / FITNESS	SPA STAIR	263 SF	LEVEL 01
SPA / FITNESS	SPA ELEV.	106 SF	LEVEL 01
SPA / FITNESS	SPA CIRC.	213 SF	LEVEL B1
SPA / FITNESS	SPA CIRC.	216 SF	LEVEL B1
SPA / FITNESS	SPA POOL	977 SF	LEVEL B1
SPA / FITNESS		35456 SF	
SPORTS CLUB			
SPORTS CLUB	SPORTS CLUB BOH	351 SF	LEVEL 01
SPORTS CLUB	SPORTS CLUB W	154 SF	LEVEL 01
SPORTS CLUB	SPORTS CLUB M	163 SF	LEVEL 01
SPORTS CLUB	SPORTS CLUB	1953 SF	LEVEL 01
SPORTS CLUB		2621 SF	
Grand total		256531 SF	

RESIDENTIAL

ARCHITECTURE & LANDSCAPE

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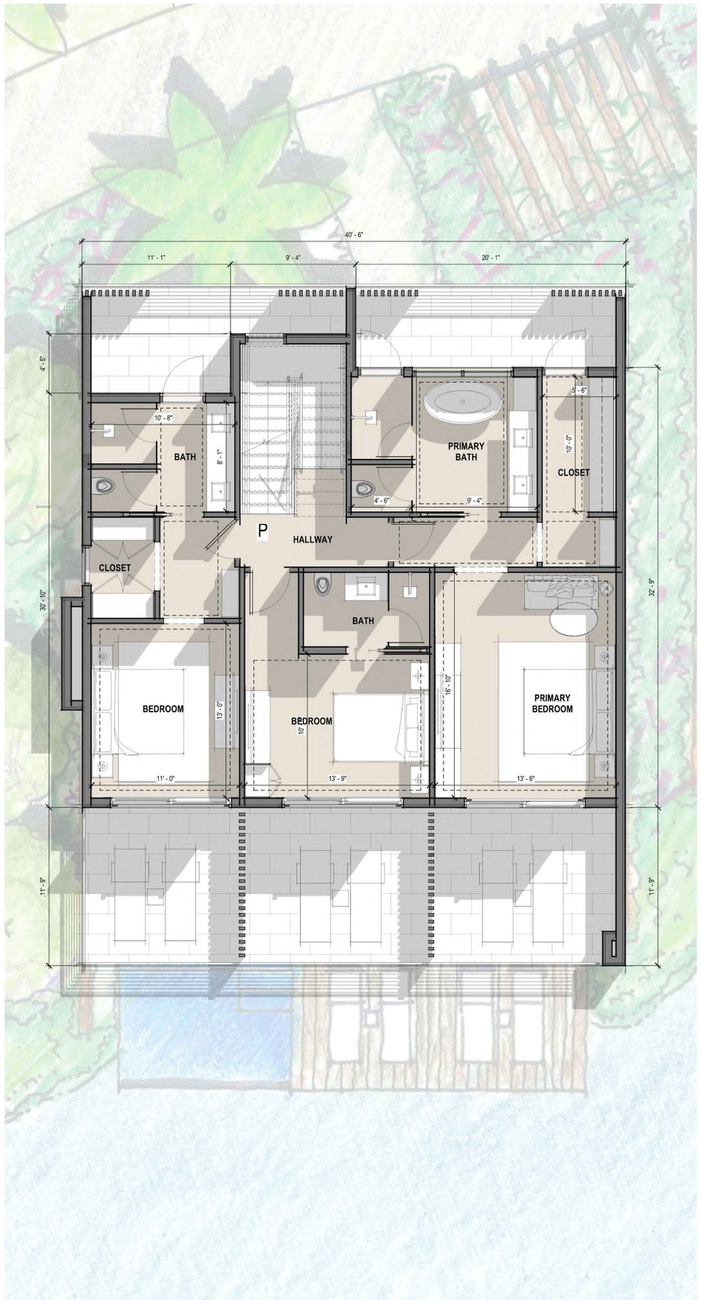


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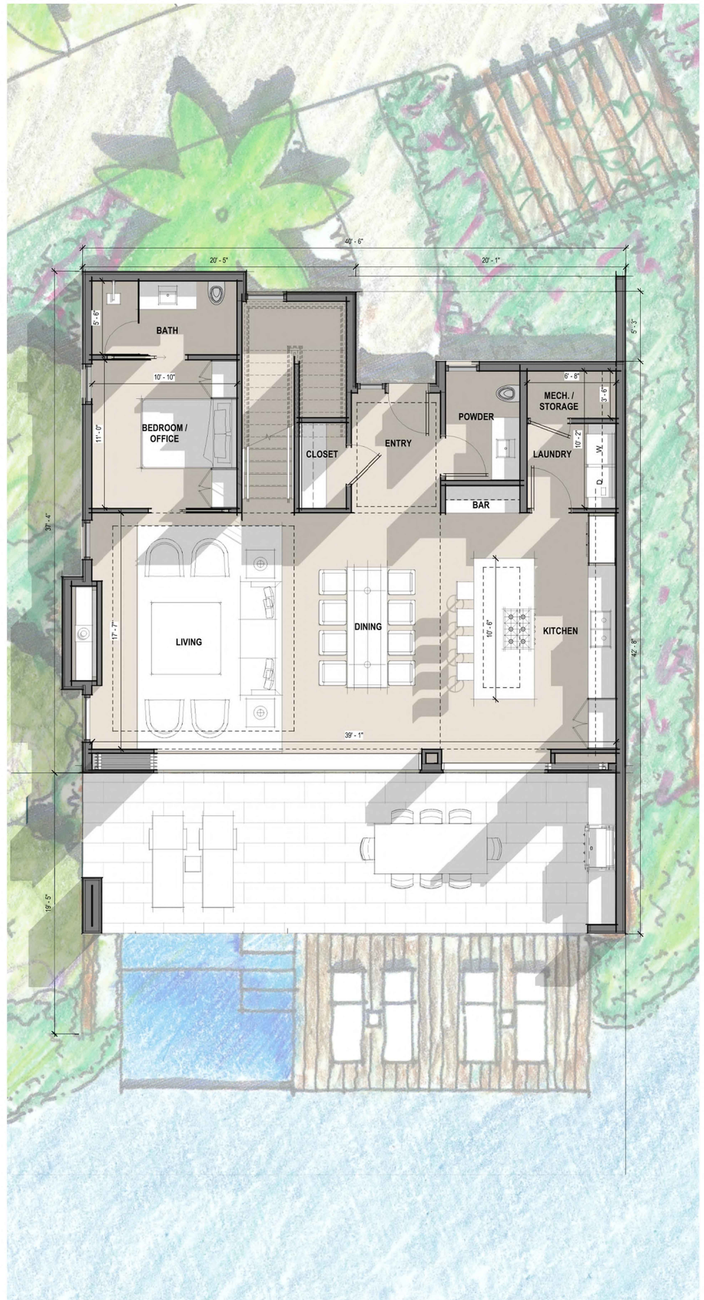
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RESIDENTIAL OVERALL SITE PLAN
SUBMITTAL DATE: JUNE 10, 2026
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LEVEL 02



LEVEL 01

1/4"= 1' 0 2 4 8'

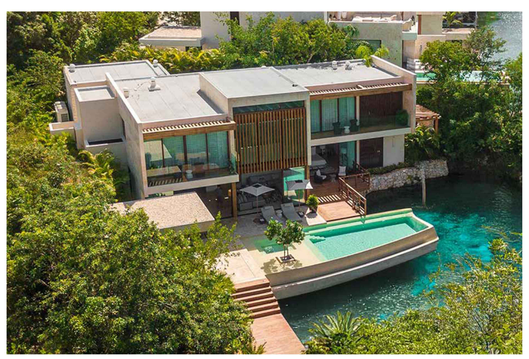


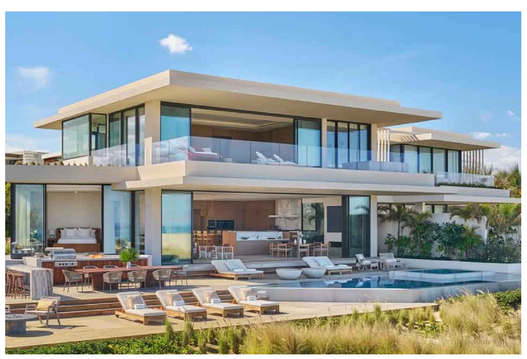
LEGEND

1. Primary Residence
2. Covered Cart Parking
3. Covered Outdoor Seating
4. Lagoon
5. Kayak Dock
6. Steps into Lagoon
7. Hot Tub
8. Bridge
9. Cart/ Pedestrian Path
10. Cart Parking
11. Housekeeping Hut
12. Cart Path & 25’ EVA Route









NOTE: ENLARGEMENT SHOWN FOR ILLUSTRATION PURPOSES ONLY.

N

1" = 10'-0"

0 5' 10' 20'

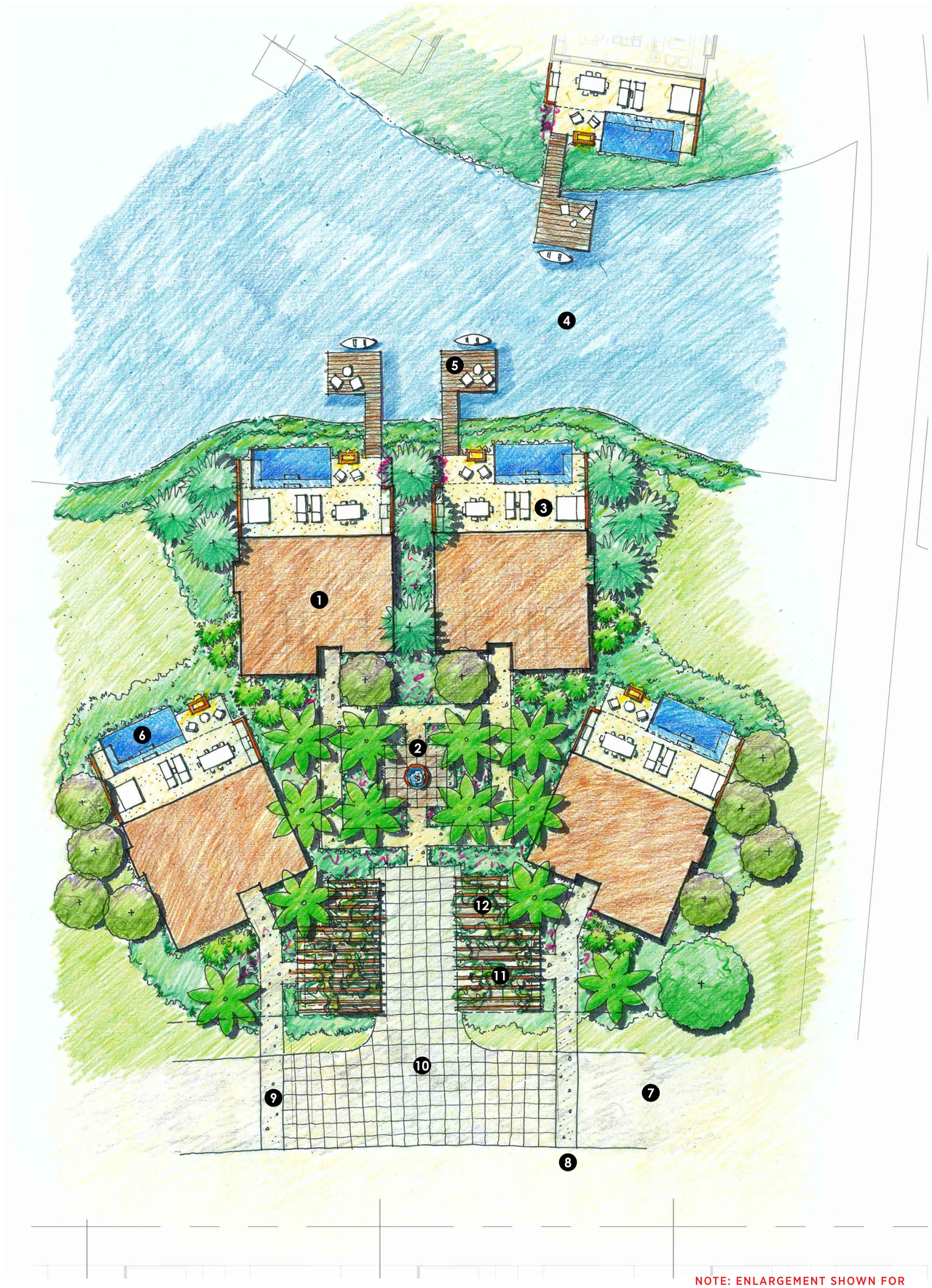
BUNGALOW AT LAGOON ENLARGEMENT PLAN (R1)

SUBMITTAL DATE: JUNE 10, 2026

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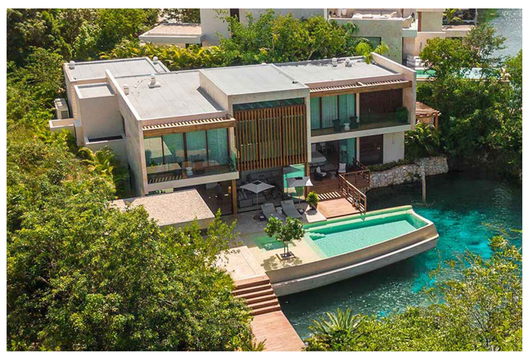


LEGEND

1. Primary Residence
2. Shared Entry Garden
3. Covered Outdoor Seating
4. Lake (Stormwater Mgmt.)
5. Floating Kayak Dock
6. Swimming Pool
7. Project Loop Road
8. Sidewalk
9. Speed Table Crossing
10. Specialty Paving
11. Covered Car Parking
12. Covered Cart Parking









NOTE: ENLARGEMENT SHOWN FOR ILLUSTRATION PURPOSES ONLY.

N

1" = 10'-0"

0 5' 10' 20'

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BUNGALOW AT LAKE ENLARGEMENT PLAN (R1)
SUBMITTAL DATE: JUNE 10, 2026
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FRONT ELEVATION



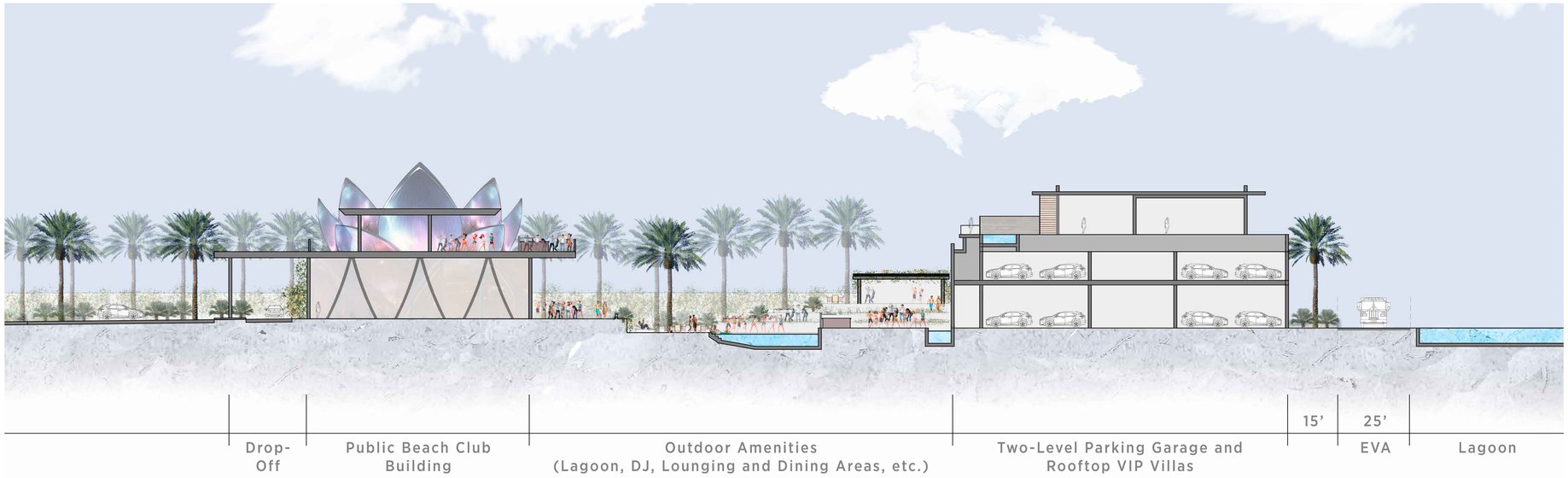
REAR ELEVATION

1/4"= 1' 0 2 4 8'

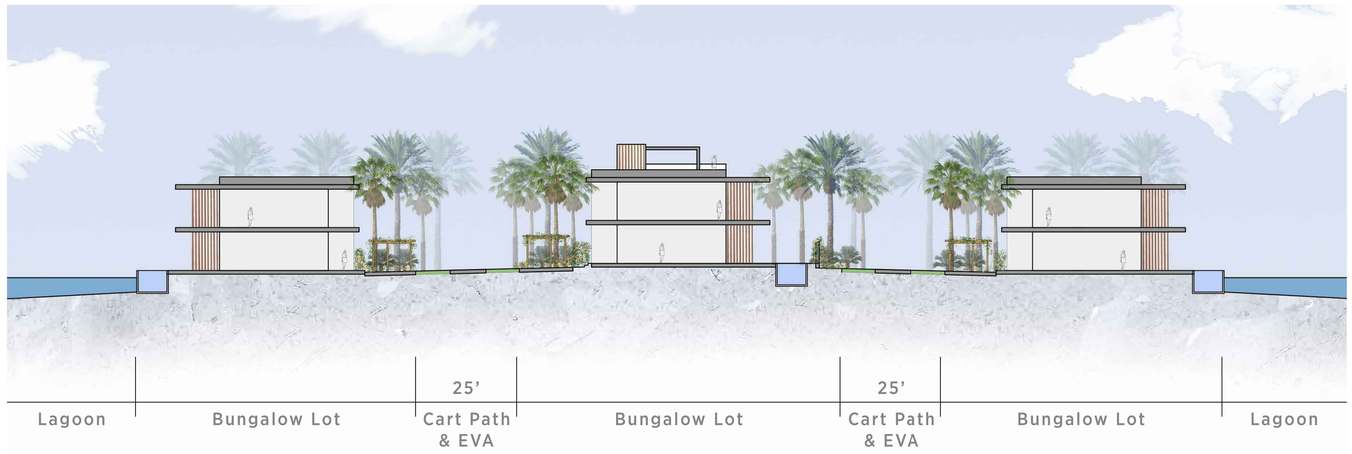
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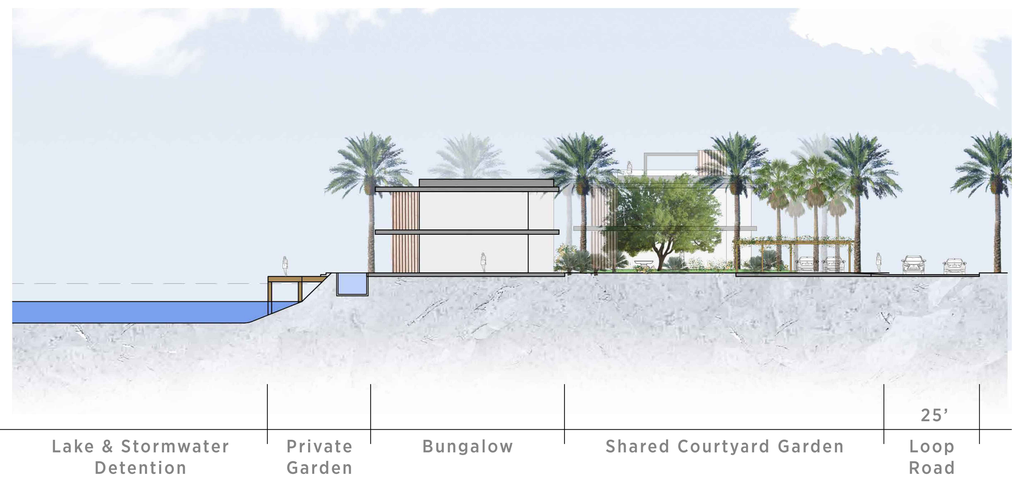
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SECTION 1 - PUBLIC BEACH CLUB
1”=15’



SECTION 2 - BUNGALOWS AT LAGOON
1”=15’

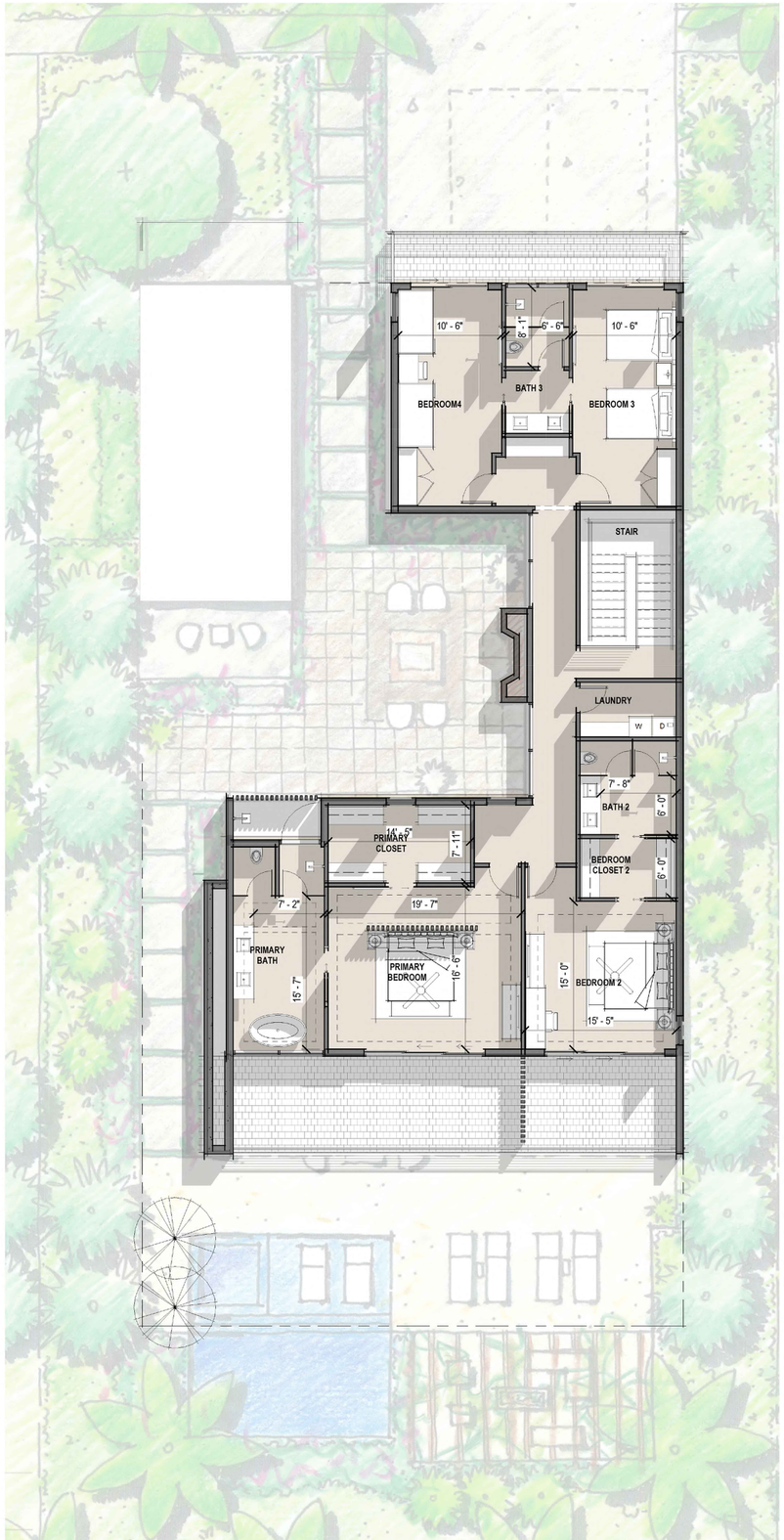


SECTION 3 - BUNGALOWS AT LAKE
1”=15’

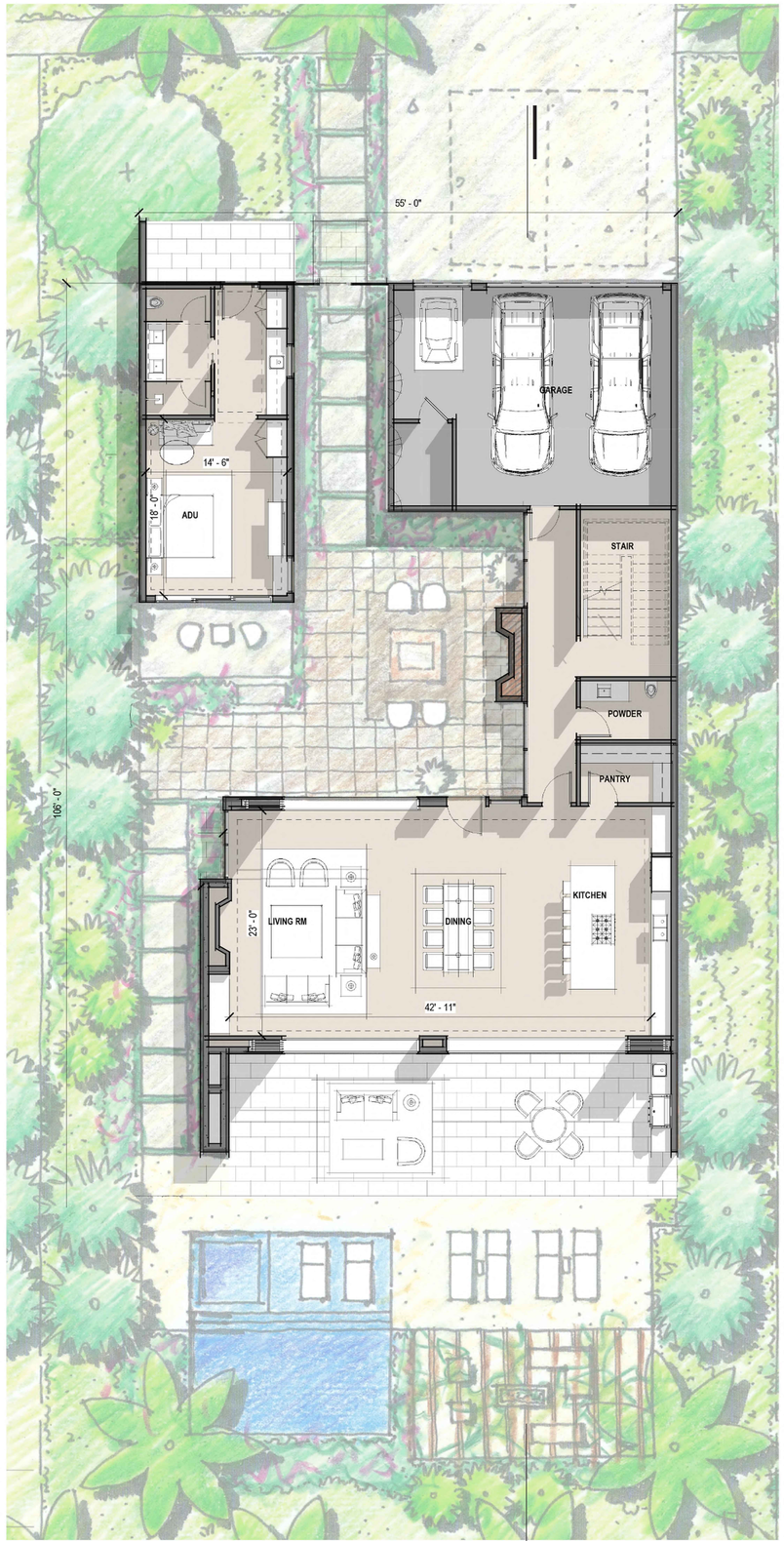








LEVEL 02



LEVEL 01

SECTION A

3/16"= 1' 0 4 8 16'

ALTERNATIVE 1



FRONT ELEVATION



REAR ELEVATION

ALTERNATIVE 2



FRONT ELEVATION



REAR ELEVATION

3/16"= 1' 0 4 8 16'

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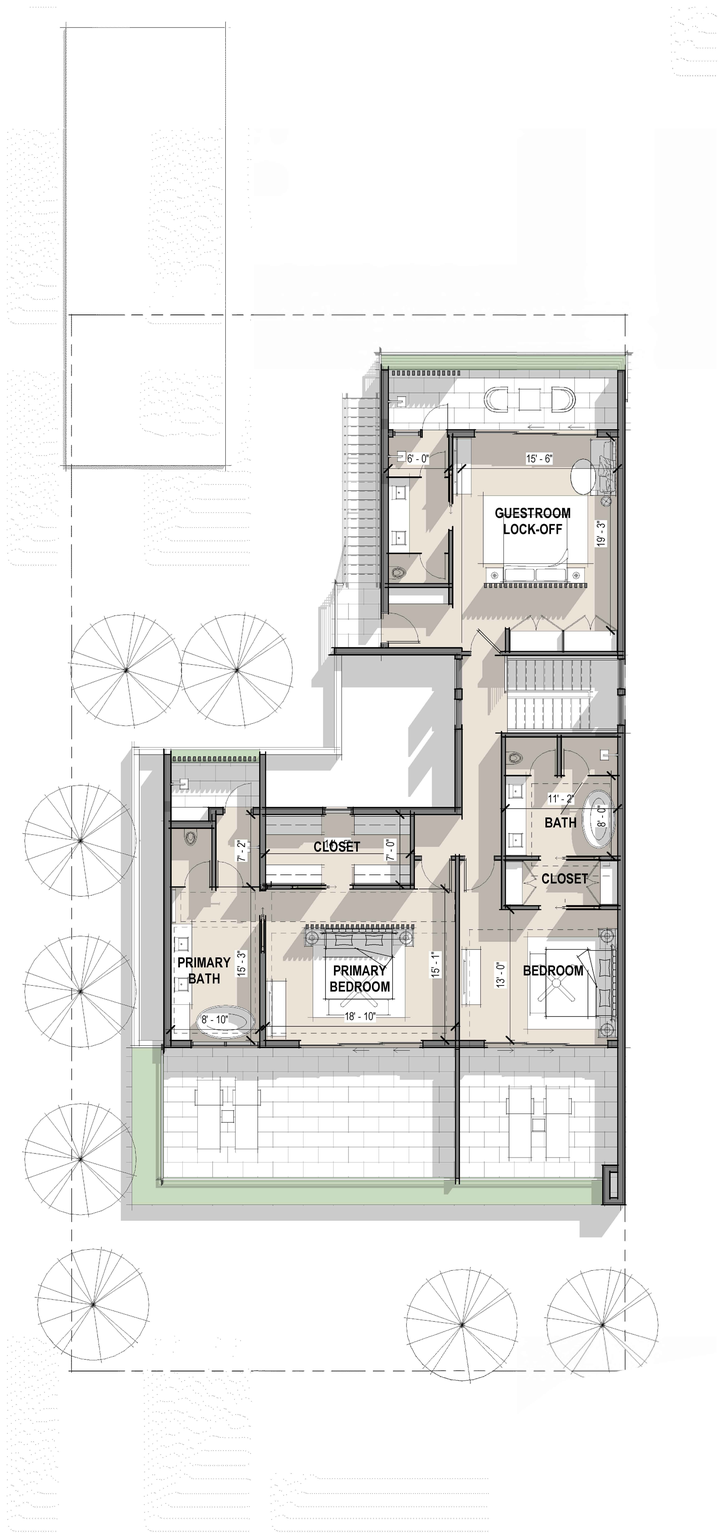
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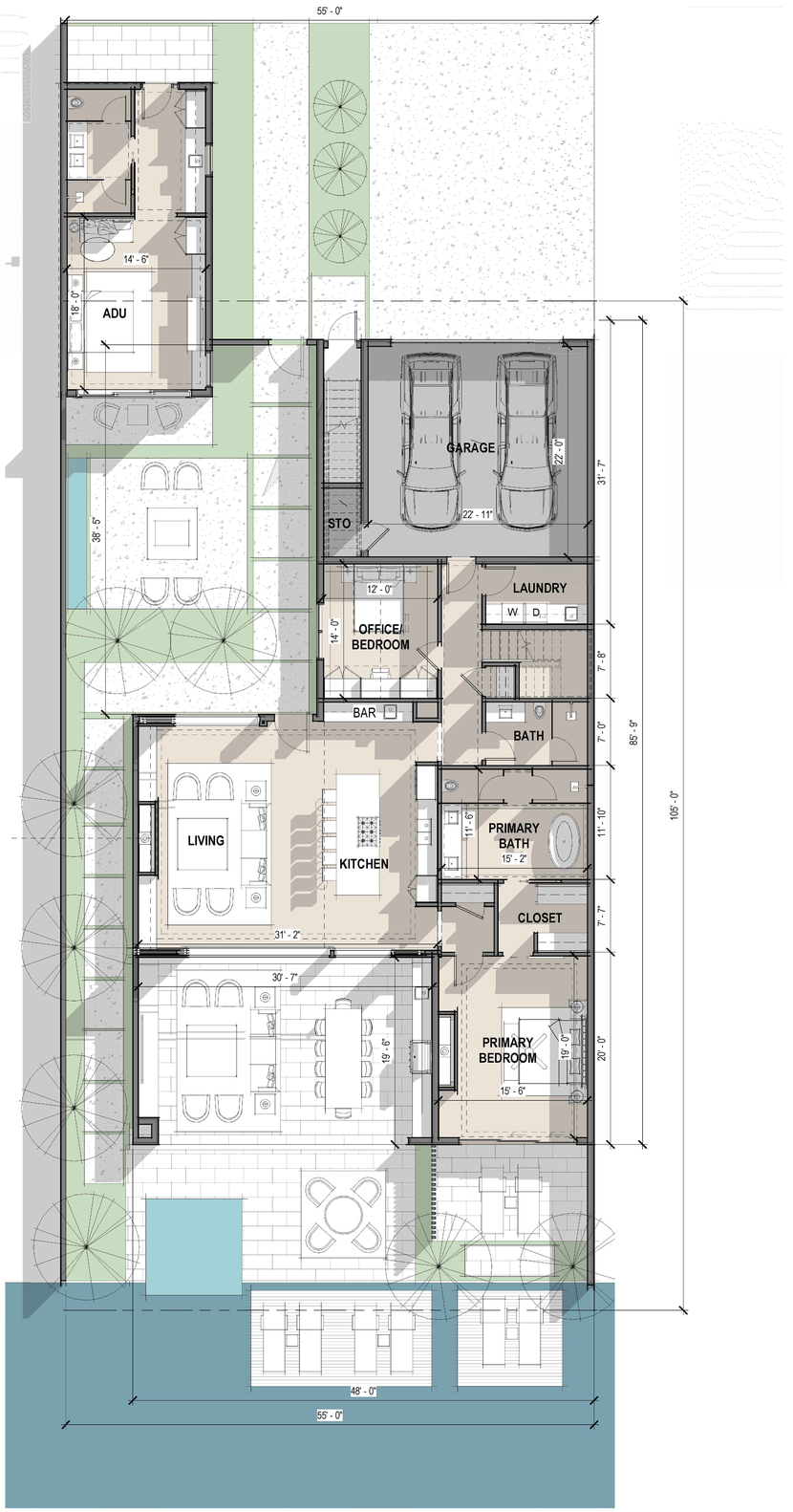


SECTION A - 4 BEDROOM COMPACT LOT

3/16"= 1' 0 4 8 16'



LEVEL 02



LEVEL 01

3/16"= 1' 0 4 8 16'

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ALTERNATIVE 1



FRONT ELEVATION



REAR ELEVATION

ALTERNATIVE 2

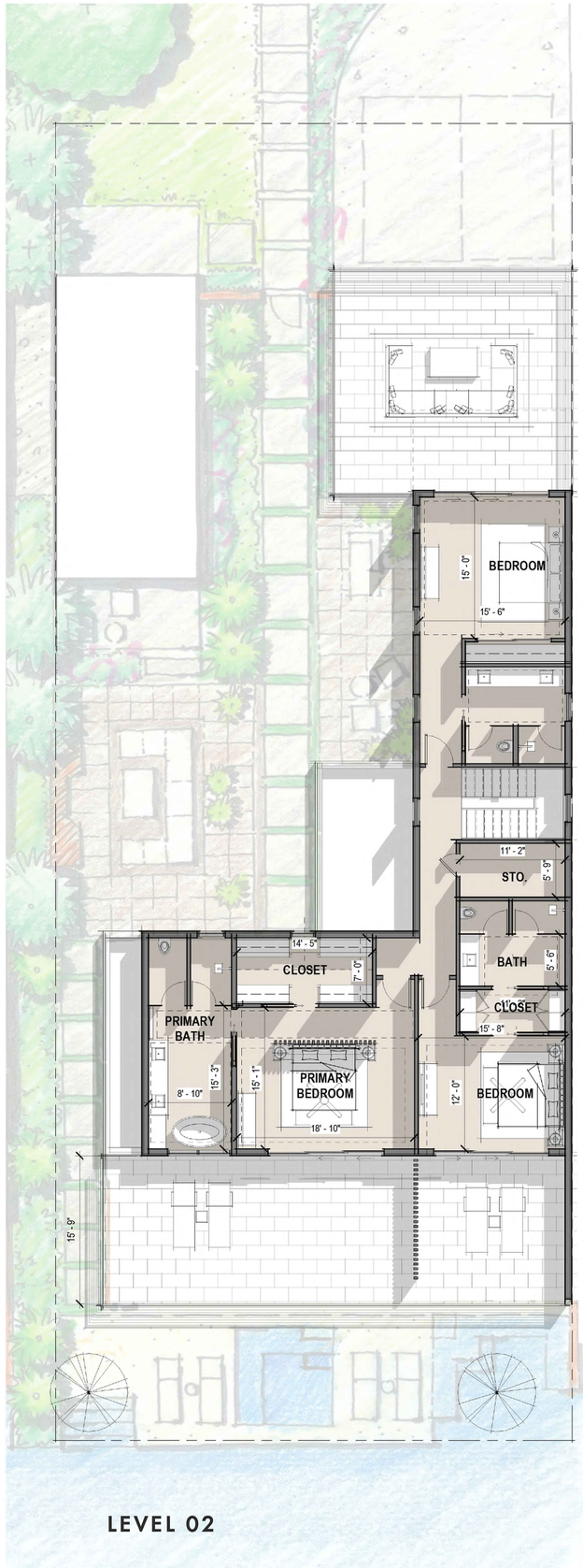


FRONT ELEVATION

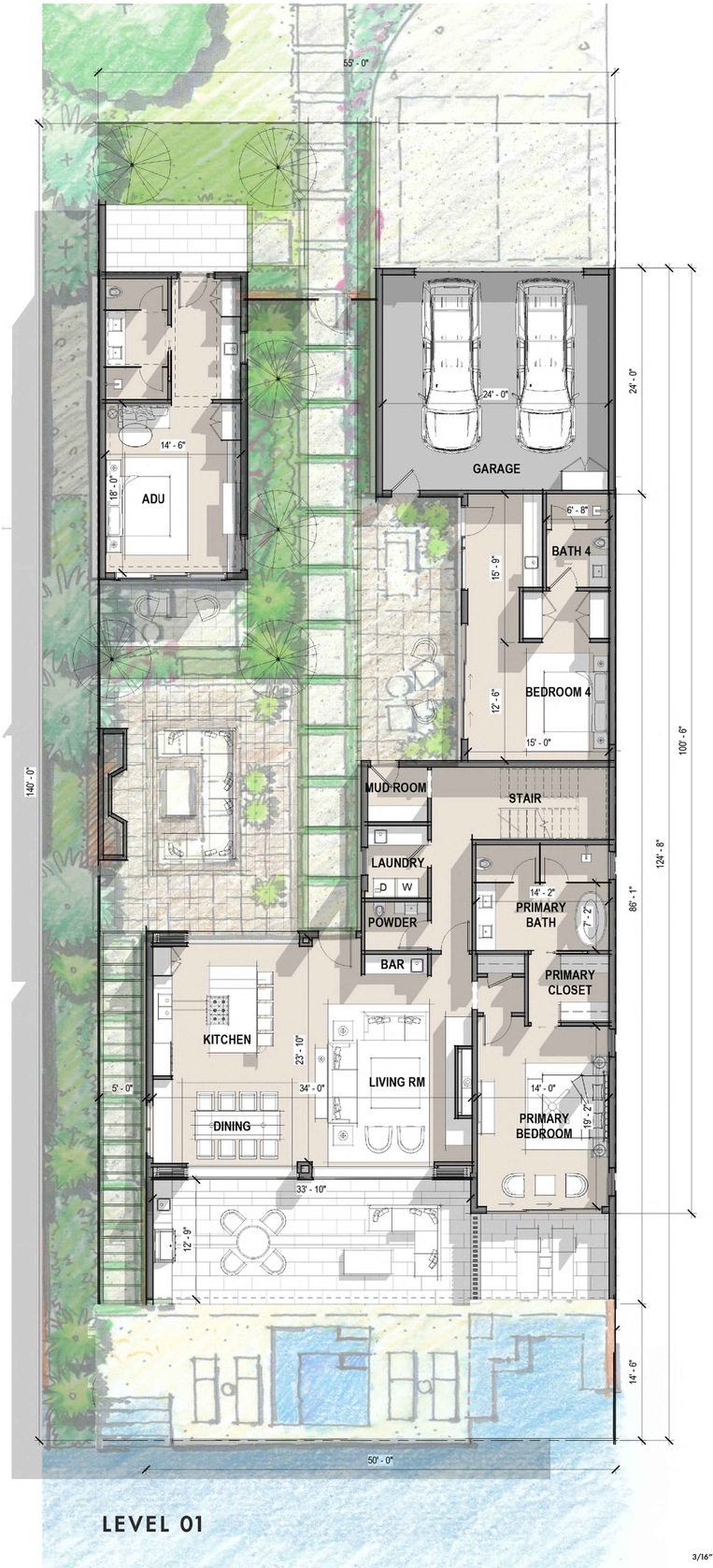


REAR ELEVATION

3/16"= 1' 0 4 8 16'



LEVEL 02



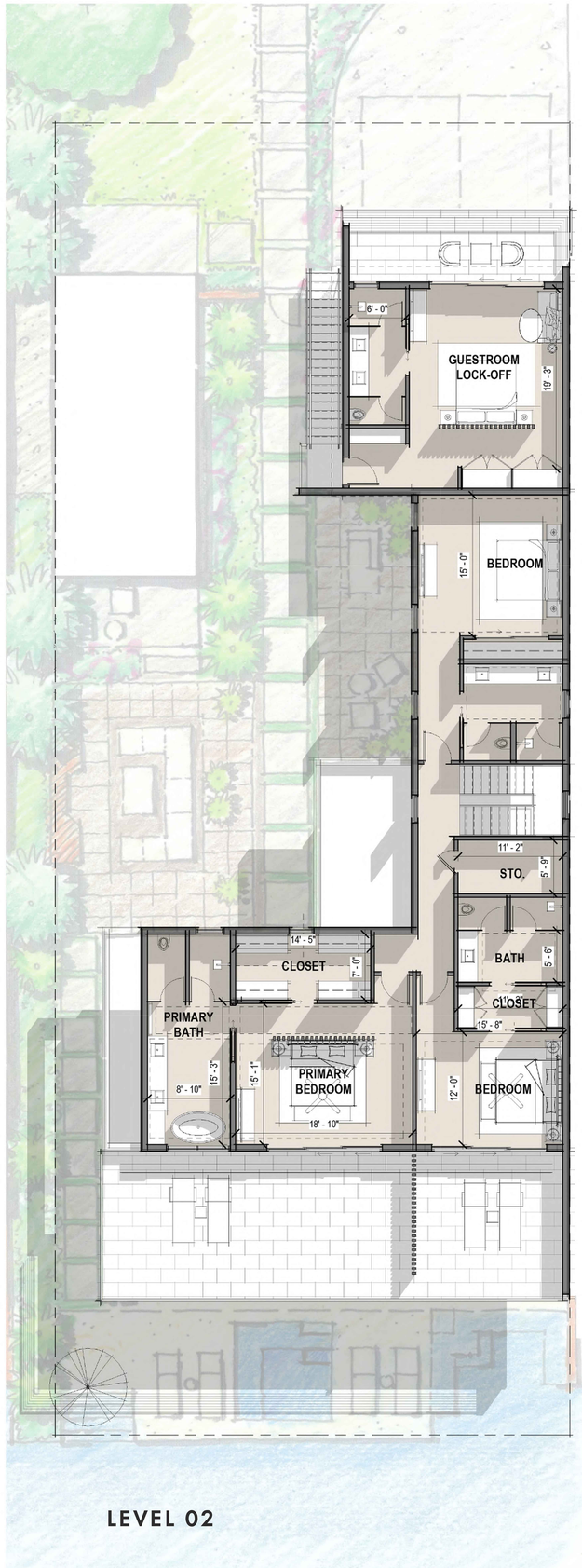
LEVEL 01

3/16"= 1' 0 4 8 16'

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LEVEL 02



LEVEL 01

3/16"= 1' 0 4 8 16'

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ALTERNATIVE 1



FRONT ELEVATION



REAR ELEVATION

ALTERNATIVE 2



FRONT ELEVATION



REAR ELEVATION

3/16"= 1' 0 4 8 16'

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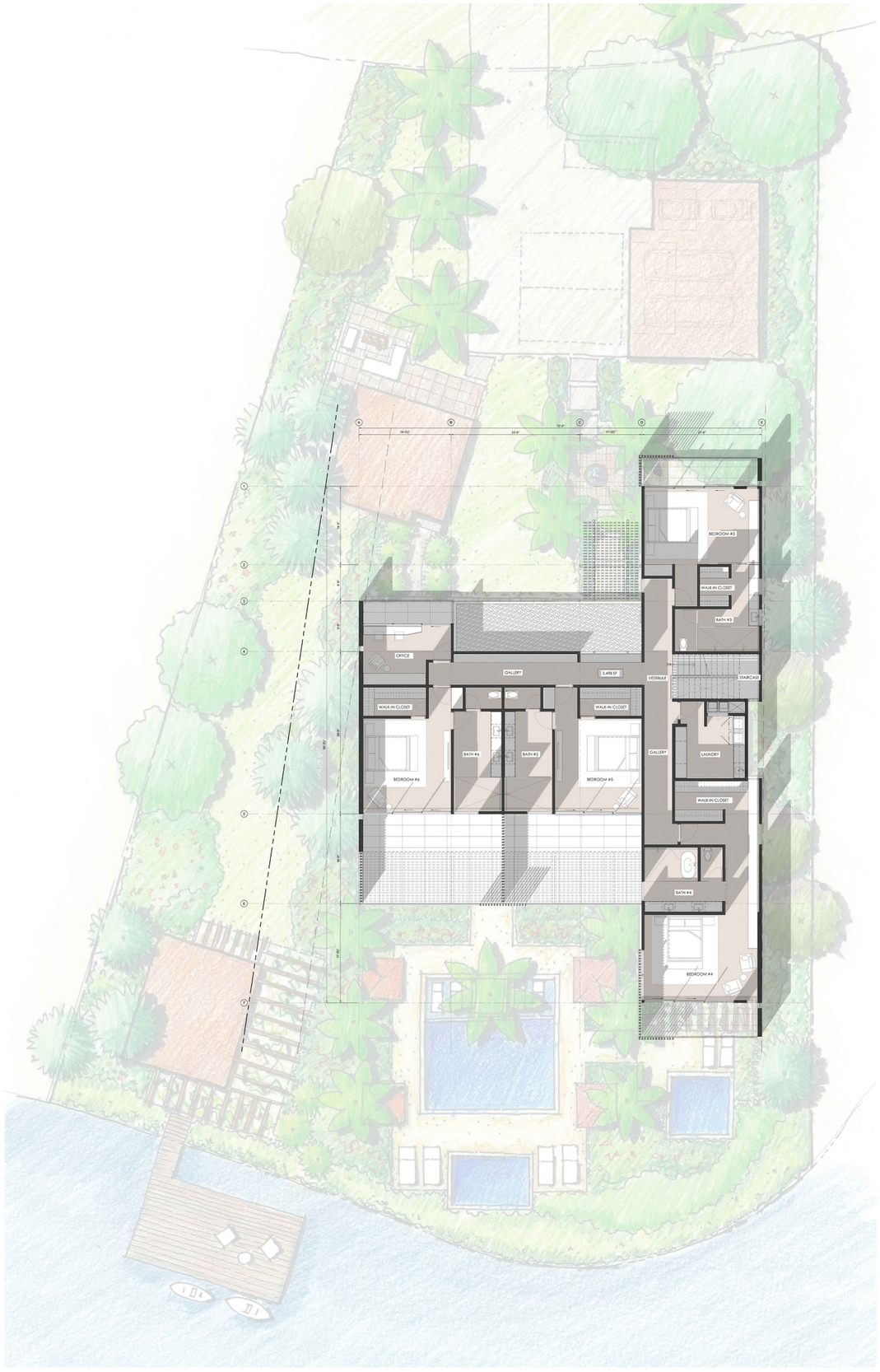


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LEVEL 02



LEVEL 01

1/8"= 1' 0 4 8 16'

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10 02

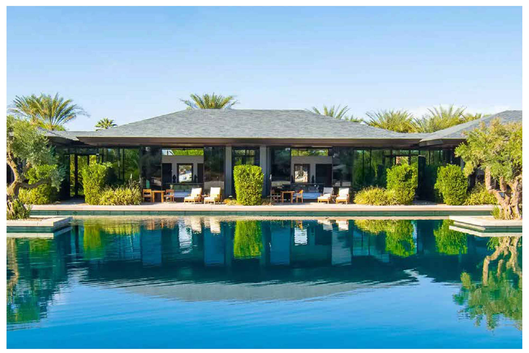
GRAND ESTATE VILLA FLOOR PLAN
SUBMITTAL DATE: JUNE 10, 2026
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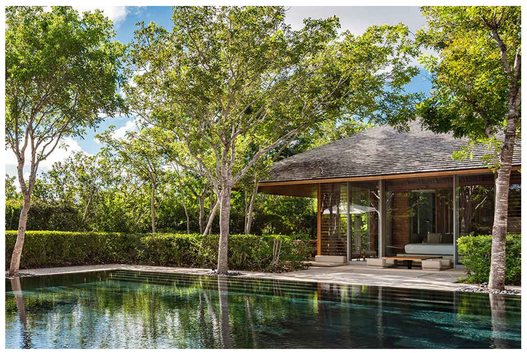


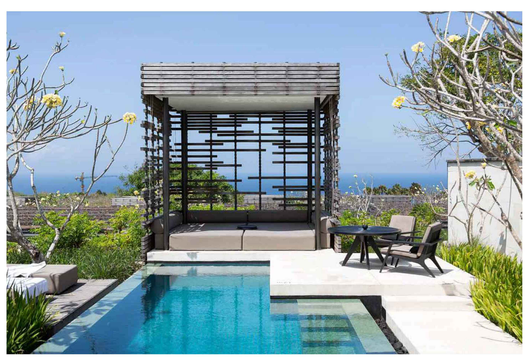
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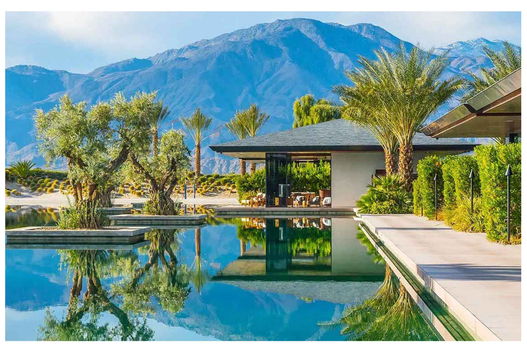
LEGEND

1. Primary Residence
2. ADU
3. Pool House
4. Garage (2 car & 2 cart)
5. Auto Court
6. Covered Outdoor Seating
7. Swimming Pool
8. Hot Tub
9. Deck
10. Lagoon
11. Landscape Screening
12. Project Loop Road









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1" = 20'-0"
0 10' 20' 40'

GRAND ESTATE LOT ENLARGEMENT PLAN (R4)
SUBMITTAL DATE: JUNE 10, 2026
COVA | ARCHITECTURAL REVIEW

ALTERNATIVE 1



FRONT ELEVATION



REAR ELEVATION

ALTERNATIVE 2



FRONT ELEVATION



REAR ELEVATION

3/16"= 1' 0 4 8 16'

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SECTION A-A - GRAND ESTATE VILLA

3/16"= 1' 0 4 8 16'

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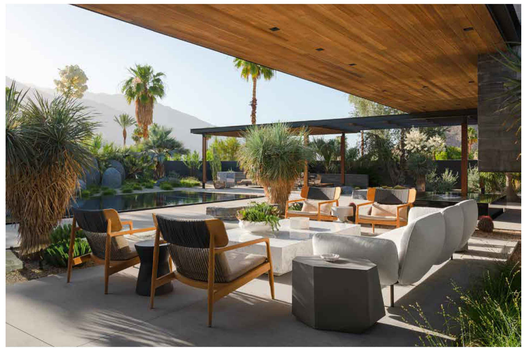




NOTE: ENLARGEMENT SHOWN FOR ILLUSTRATION PURPOSES ONLY.

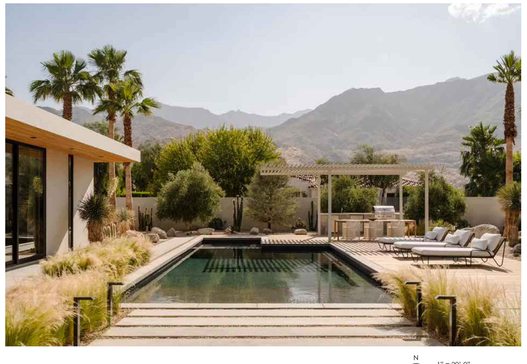
LEGEND

1. Primary Residence - Compact
2. Primary Residence - Standard
3. ADU
4. Garage (2 car & 2 cart)
5. Courtyard Garden
6. Covered Outdoor Seating
7. Swimming Pool
8. Hot Tub
9. Landscape Screening
10. 10’ Rear Yard Setback
11. Privacy Wall
12. Property Boundary
13. Project Loop Road
14. Sidewalk









N

1" = 20'-0"

0 10' 20' 40'

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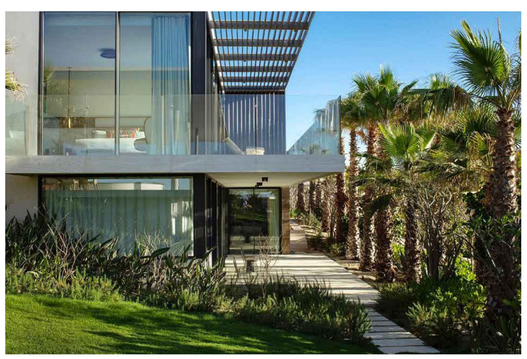
LEGEND

1. Primary Residence
2. ADU
3. Garage (2 car & 2 cart)
4. Courtyard Garden
5. Covered Outdoor Seating
6. Lagoon
7. Lagoon Seating
8. Steps into Lagoon
9. Hot Tub
10. Project Loop Road
11. Sidewalk









NOTE: ENLARGEMENT SHOWN FOR ILLUSTRATION PURPOSES ONLY.

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N
1" = 10'-0"
0 5' 10' 20'

ZERO LOT LINE ENLARGEMENT PLAN (R2)
SUBMITTAL DATE: JUNE 10, 2026
COVA | ARCHITECTURAL REVIEW

























RESIDENTIAL PARKING DEMAND

RESIDENTIAL PARKING

LOT TYPE	# of Units	REQUIRED PER UNIT	PARKING REQUIRED
6 Bedroom - Grand Estate Lot 01	6	2	12
5 Bedroom - Estate Lot (Long)	17	2	34
5 Bedroom - Estate Lot (Compact)	10	2	20
4 Bedroom - Zero Lot Line	12	2	24
3-4 Bedroom - Bungalow (Vehicular Access)	51	1	51
3-4 Bedroom - Bungalow (Cart Access)	61	1	61
TOTAL REQUIRED			**202**

PARKING SUPPLIED

LOT TYPE	# of Units	PARKING SUPPLIED PER UNIT	Parking Type	TOTAL
6 Bedroom - Grand Estate Lot 01	6	2	Surface	12
5 Bedroom - Estate Lot (Long)	17	2	Surface	34
5 Bedroom - Estate Lot (Compact)	10	2	Surface	20
4 Bedroom - Zero Lot Line	12	2	Surface	24
3-4 Bedroom - Bungalow (Vehicular Access)	51	1	Surface	51
3-4 Bedroom - Bungalow (Cart Access)	61	1	Parking Structure	61
TOTAL SUPPLIED				**202**

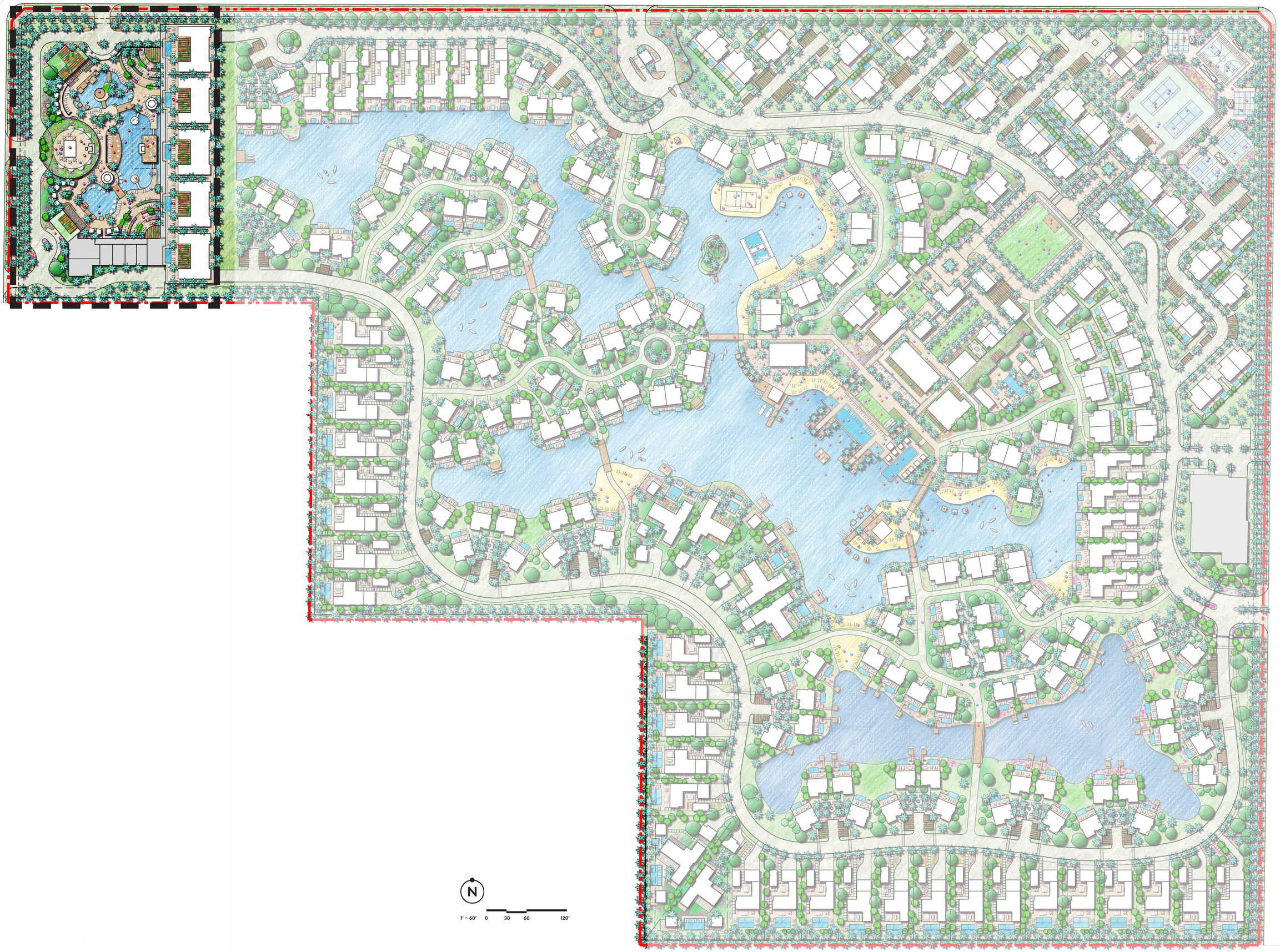
TOTAL REQUIRED	**202**
DELTA	**0**

PUBLIC BEACH CLUB

ARCHITECTURE & LANDSCAPE

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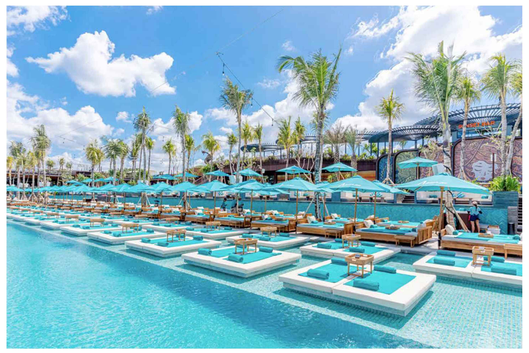
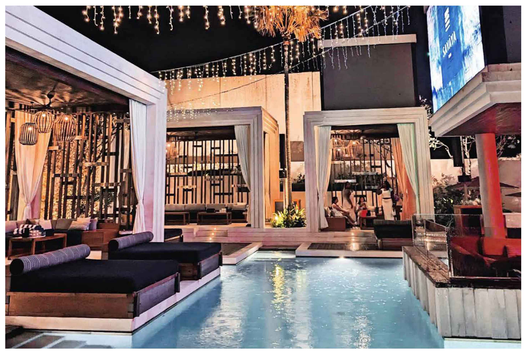
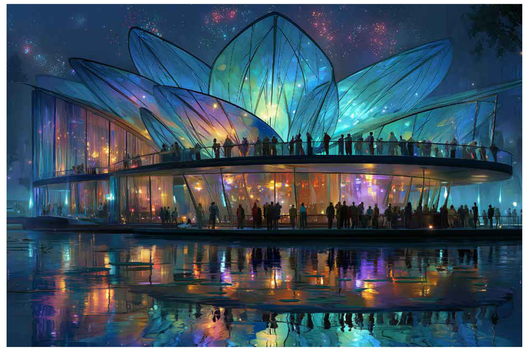
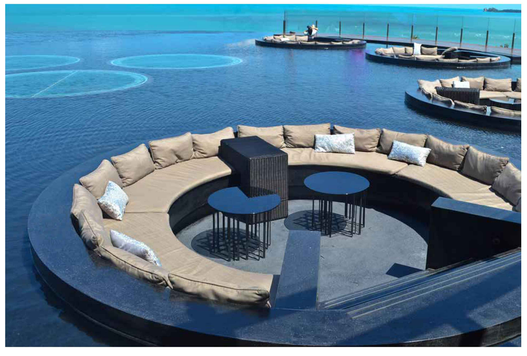
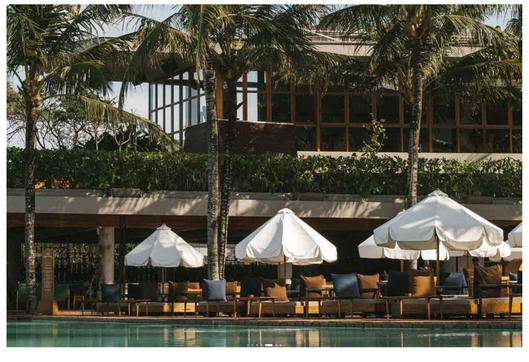
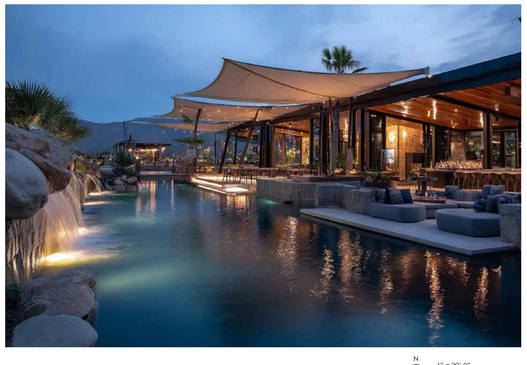
10

PUBLIC BEACH CLUB OVERALL SITE PLAN
SUBMITTAL DATE: JUNE 10, 2026
COVA | ARCHITECTURAL REVIEW



LEGEND

1. Public Beach Club
2. DJ Stage
3. Restaurant 1
4. Restaurant 2
5. Roof Gardens
6. VIP Villas
7. Parking Garage
8. Lagoon
9. Stage
10. Beach
11. Waterfall Projection Wall
12. Bar
13. Bridge
14. Terraced Seating
15. VIP Lounge 'Island'
16. Primary/ Signalized Entry
17. Right-In/ Out Entry
18. Drop-Off
19. BOH
20. BOH Deliveries
21. Entry from Parking Garage
22. Date Palm Grove

NOTE: ENLARGEMENT SHOWN FOR ILLUSTRATION PURPOSES ONLY. REFER TO TECHNICAL DRAWINGS.

N

1" = 20'-0"
0 10' 20' 40'

PUBLIC BEACH CLUB ENLARGEMENT PLAN (BC1)
SUBMITTAL DATE: JUNE 10, 2026
COVA | ARCHITECTURAL REVIEW

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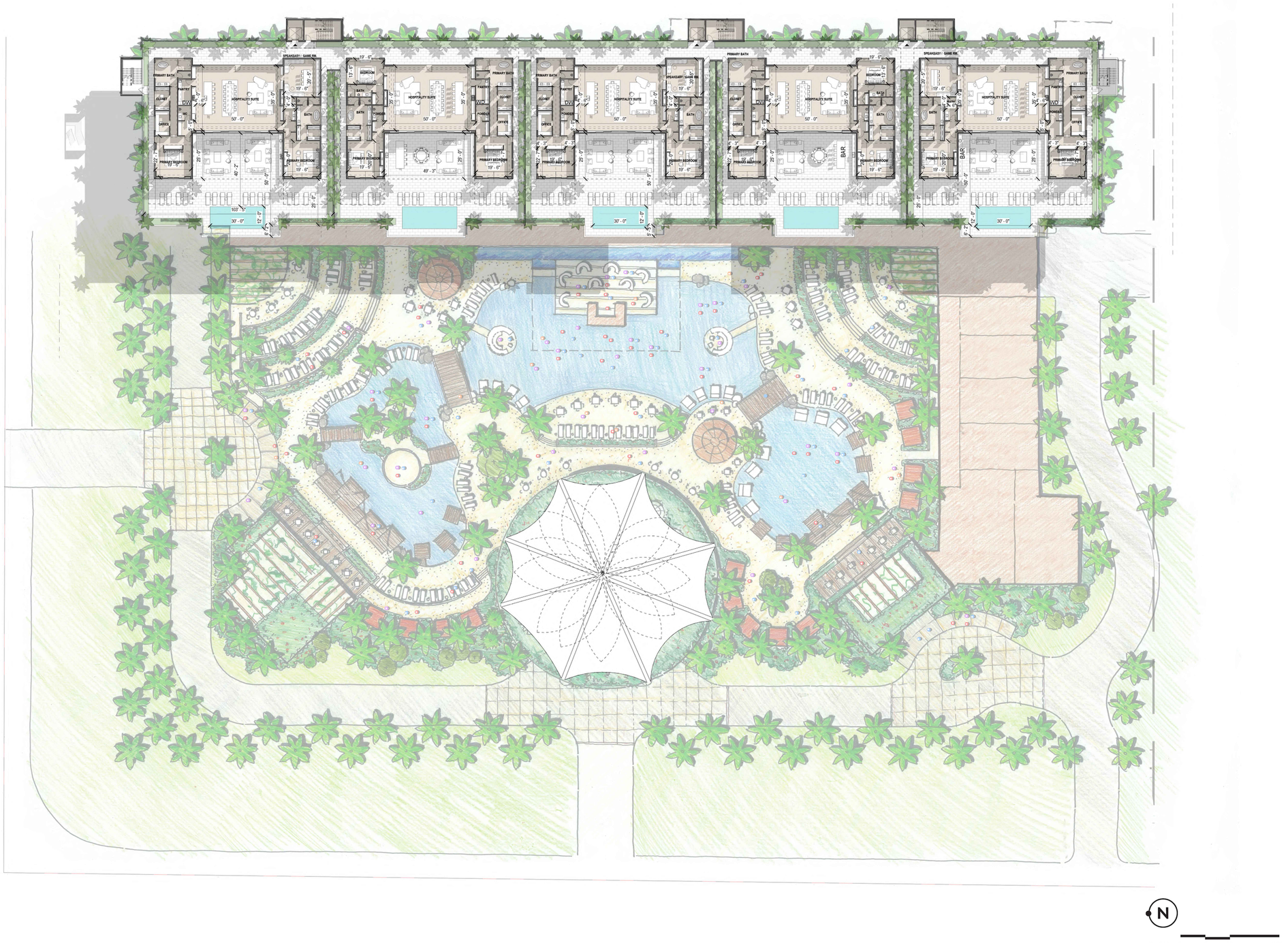


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10


178 PARKING SPACES
WATER FEATURE 454 SF
BOH 3271 SF
ROOF CLUB TERRACE 7614 SF
ROOF CLUB 3025 SF
F 92 SF
M 91 SF
BOH 273 SF
ROOF CLUB 3268 SF
BOH 498 SF
F 177 SF
M 177 SF
SPORTS BAR ROOF TERRACE 2657 SF
BOH 81 SF
LOBBY 211 SF
F 147 SF
M 146 SF
N
1" = 20'
0
5
10
20'

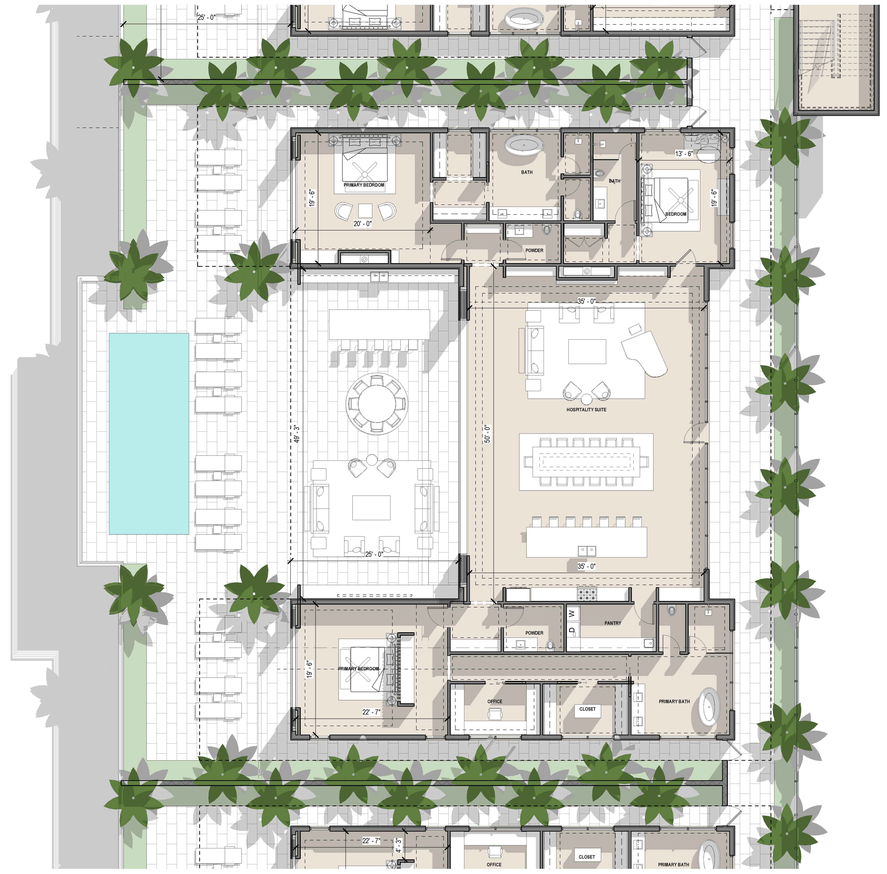

SPEAKEASY / GAME RM.
PRIMARY BATH
CLOSET
PANTRY
W/D
OFFICE
HOSPITALITY SUITE
PRIMARY BEDROOM
BEDROOM
BATH
POWDER
BAR
30' - 0"
N
1" = 20'
0
5
10
20'

ALTERNATIVE 1



SPEAKEASY / GAME ROOM

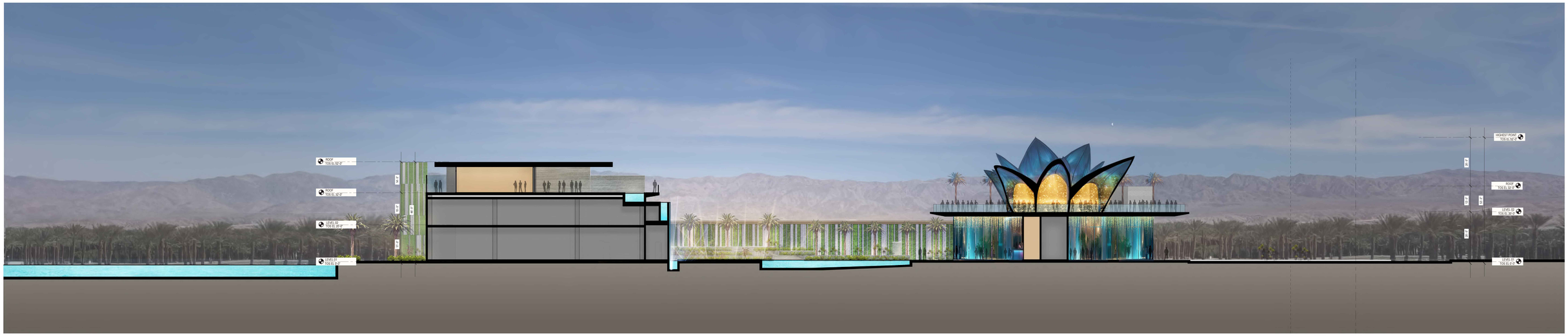
ALTERNATIVE 2



3 BEDROOM UNIT

N

1/4"= 1' 0 2 4 8'



SECTION - E/W



WEST ELEVATION



NORTH ELEVATION

1/16 "= 1' 0 8 16 32'


COVA


COVA



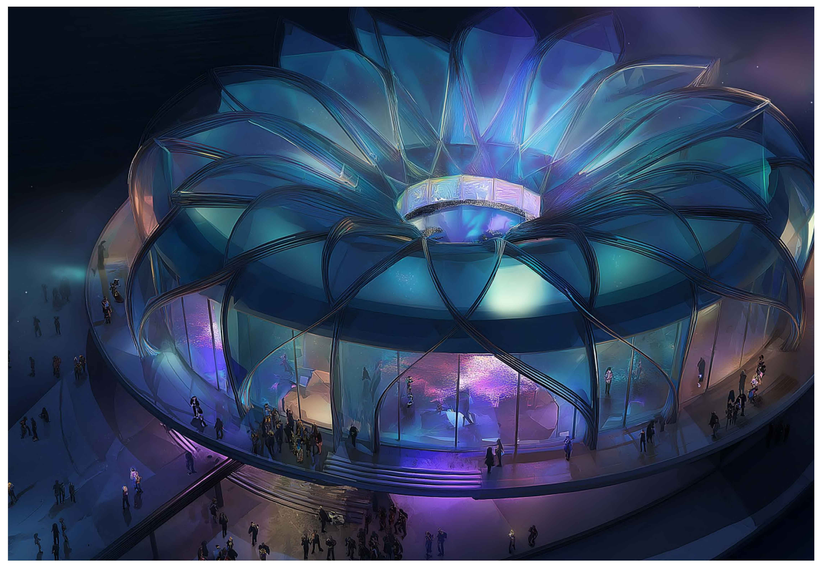
























BASELINE BEACH CLUB PARKING DEMAND

SEE ARCHITECTURAL PLANS FOR BUILDING SQUARE FOOTAGE REFERENCE

CLUB				CA=CA conditioned + CA outside		CP=Total Customer Area/45 sq.ft.	NCP=Non-Customer Area/200 sq.ft.	P=CP+NCP
LEVEL	**SPACE**	**CUSTOMER AREA SQ. FT. CONDITIONED**	**CUSTOMER AREA SQ. FT. OUTSIDE**	**TOTAL CUSTOMER AREA**	**NON-CUSTOMER AREA**	**CUSTOMER AREA PARKING**	**NON-CUSTOMER AREA PARKING**	**PARKING REQUIRED**
L1	CLUB	3100		3100	282	68.9	1.4	70
L2	ROOF CLUB		3025	3025	273	67.2	1.4	69

CANTINA								
LEVEL	**SPACE**	**CUSTOMER AREA SQ. FT. CONDITIONED**	**CUSTOMER AREA SQ. FT. OUTSIDE**	**TOTAL CUSTOMER AREA**	**NON-CUSTOMER AREA**	**CUSTOMER AREA PARKING**	**NON-CUSTOMER AREA PARKING**	**PARKING REQUIRED**
L1	CANTINA	1808	816	2624	625	58.3	3.1	61
L2	ROOF CLUB		3268	3268	498	72.6	2.5	75

SPORTS BAR								
LEVEL	**SPACE**	**CUSTOMER AREA SQ. FT. CONDITIONED**	**CUSTOMER AREA SQ. FT. OUTSIDE**	**TOTAL CUSTOMER AREA**	**NON-CUSTOMER AREA**	**CUSTOMER AREA PARKING**	**NON-CUSTOMER AREA PARKING**	**PARKING REQUIRED**
L1	SPORTS BAR	1506	684	2190	1761	48.7	8.8	57
L2	ROOF TERRACE		2657	2657	81	59.0	0.4	59

Additional F+B Venues								
LEVEL	**SPACE**	**CUSTOMER AREA SQ. FT. CONDITIONED**	**CUSTOMER AREA SQ. FT. OUTSIDE**	**TOTAL CUSTOMER AREA**	**NON-CUSTOMER AREA**	**CUSTOMER AREA PARKING**	**NON-CUSTOMER AREA PARKING**	**PARKING REQUIRED**
L1	REMOTE BAR 1	0	300	300	153	6.7	0.8	7
L1	REMOTE BAR 2	0	300	300	153	6.7	0.8	7
L1	CORNER TERRACE BAR 1	0	532	532	333	11.8	1.7	13
L1	CORNER TERRACE BAR 2	0	450	450	250	10.0	1.3	11

VIP SUITES				
LEVEL	**ROOM**	**QUANTITY**	**PARKING SPACE PER UNIT**	**PARKING REQUIRED**
L3	SUITES	5	2	10

TOTAL PARKING REQUIRED	**548**	**18**	**442**

PARKING SUPPLY	**TOTAL**
G1	143
G2	178
TOTAL SUPPLIED	**321**
REQUIRED PARKING FOR BEACH CLUB	442
DELTA	-121

BEACH CLUB SPECIAL EVENT PARKING DEMAND

LOUNGE AREA								
LEVEL	**SPACE**	**CUSTOMER AREA SQ. FT. CONDITIONED**	**CUSTOMER AREA SQ. FT. OUTSIDE**	**TOTAL CUSTOMER AREA**	**NON-CUSTOMER AREA**	**CUSTOMER AREA PARKING**	**NON-CUSTOMER AREA PARKING**	**PARKING REQUIRED**
L1	Lounging Spaces (chaise lounges, daybeds, cabanas)		7810	7810	0	174	0	174

PARKING DEMAND NARRATIVE

For large or special events, as well as roof-terrace customer activity, any incremental parking demand that exceeds the on-site baseline will be accommodated through off-site facilities secured by agreement, supported by valet operations and shuttle service as needed. This approach ensures that even the portion of demand that cannot be met within the parking structure is fully managed through coordinated operational measures.

The Beach Club will also promote rideshare and taxi use by providing designated pick-up and drop-off areas and including clear guidance in event-related communications. With these measures in place, peak event parking demand can be effectively addressed without increasing on-site supply and without creating spillover impacts on surrounding streets.

COVA Public Beach Club Area Program

Beach Club

Area / Room	% of Total Area	Size Estimate (SF)	Notes
Indoor Bar & Lounge		3,000	Bar seats + lounge tables
Roof top Lounge		3,024	Standing +lounge tables
Check-In/ Arrival		100	Guest check-in
Restrooms (Indoor)		400	Men's, Women's, and Family/ADA Restroom
Circulation (Paths, Hallways, 2 Stairs, Elevator)		350	Connects all areas fluidly
BOH		282	
Total		**7,156**	
Exterior Area		**7,613**	
Interior Area (Gross)		**(457)**	

Restaurant 1 (Sports Bar)

Area / Room	Size Estimate (SF)	Notes
Indoor Dining / Bar Seating	1,200	60–70 seats, includes high-tops, booths, bar stools
Outdoor Patio Seating	500	30–40 seats, covered if possible (awnings, heaters)
Bar (Service Counter + Bar Back)	300	Main focal point, directly serves indoor and outdoor guests
Kitchen (Hot Line + Prep)	1,761	Focus on fast, casual food (wings, burgers, apps)
Restrooms	660	Men's + Women's + ADA access
Circulation / Paths	227	Walkways between tables, bar, kitchen
Total	**4,648**	
Exterior Area	**2,659**	
Interior Area (Gross)	**1,989**	

Restaurant 2 (Cantina)

Area / Room	Size Estimate (SF)	Notes
Indoor Dining + Bar Seating	1,200	~60–65 seats inside (tables, high-tops, bar stools)
Outdoor Patio Dining	500	~35–40 seats
Bar (Main bar, indoor-outdoor service)	350	Full tequila/mezcal-focused bar, direct access to patio
Kitchen (Hot Line + Cold Prep)	625	Fast service kitchen — tacos, small plates, fryers, grill
Restrooms (Indoor + Outdoor Access)	928	ADA accessible, 2–4 stalls total
BOH	500	Storage
Circulation (Hallways, Access Paths)	266	Clear paths between indoor, bar, and outdoor areas
Total	**4,369**	
Exterior Area	**3,234**	
Interior Area (Gross)	**1,135**	
Grand Indoor Total	**16,173**	SF
Exterior Total	**13,506**	

RESOLUTION NO. PC2026-27

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF COACHELLA, CALIFORNIA, RECOMMENDING THAT THE CITY COUNCIL ADOPT AN ORDINANCE AMENDING CHAPTER 17.28 OF TITLE XVII OF THE COACHELLA MUNICIPAL CODE TO ALLOW SINGLE-FAMILY RESIDENTIAL USES IN CONJUNCTION WITH A RESORT USE AS A CONDITIONAL USE WITHIN THE (R-C) REGIONAL COMMERCIAL ZONE AND DETERMINE, PURSUANT TO STATE CEQA GUIDELINES SECTION 15183, THAT NO FURTHER ENVIRONMENTAL REVIEW IS REQUIRED.

WHEREAS, pursuant to the authority granted to the City of Coachella ("City") by Article XI, Section 7 of the California Constitution, the City has the police power to regulate the use of land and property within the City in a manner designed to promote public convenience and general prosperity, as well as public health, welfare, and safety; and,

WHEREAS, adoption and enforcement of comprehensive zoning regulations and other land use regulations lies within the City's police power; and,

WHEREAS, on July 7, 2025, Relevant Coachella Owner, LLC ("Applicant"), submitted an application for a Tentative Tract Map, Architectural Review, Conditional Use Permit, Environmental Assessment, and Development Agreement for the proposed "COVA" project, consisting of hotel, resort, residential, commercial and public beach club use on approximately 87 acres comprising four contiguous parcels (APNs 780-040-001, 780-040-003, 780-060-001, and 780-060-002) located south of Avenue 52, west of Van Buren Street and east of Calhoun Street ("Project"); and

WHEREAS, in late 2026, the applicant submitted an application for a Zoning Ordinance Amendment for the proposal to allow single-family residential uses within the Regional Commercial Zone regulated by Chapter 17.28 of Title XVII of the Coachella Municipal Code; and,

WHEREAS, Zoning Ordinance Amendment No. 26-02 proposes an Ordinance, attached hereto as Attachment "A" and incorporated herein by reference, amending Chapter 17.28 of Title XVII of the Coachella Municipal Code to allow single-family residential uses in conjunction with a resort use as a conditional use within the Regional Commercial (R-C) Zone; and

WHEREAS, the Project site has a zoning designation of (R-C) Regional Commercial and a General Plan land use designation of Regional Retail District, which allows a residential density of 10 to 15 dwelling units per acre and a floor area ratio of 0.35 to 2.0. The Project proposes a residential density of approximately 14.4 dwelling units per acre and a floor area ratio of approximately 0.65, consistent with the development density and intensity established by the General Plan; and,

WHEREAS, Zoning Ordinance Amendment No. 26-02 would establish the land use

approval pathway necessary to consider the single-family residential component of the Project, which remains subject to separate approval of Conditional Use Permit No. 407 and all other applicable project approvals and conditions; and

WHEREAS, Public Resources Code section 21083.3 and State CEQA Guidelines section 15183 provide that a project consistent with the development density established by an existing general plan for which an EIR was certified does not require additional environmental review except as necessary to examine whether the project would result in project-specific significant effects peculiar to the project or its site; and

WHEREAS, the City, as lead agency under the CEQA, prepared a Modified Initial Study/Section 15183 Checklist for the Project (the "15183 Checklist") to determine whether further environmental review of the Project is required; and

WHEREAS, the 15183 Checklist concludes that the Project would not result in any environmental effects that (1) are peculiar to the Project or the parcel on which the Project would be located; (2) were not analyzed as significant effects in the certified General Plan EIR; (3) are potentially significant off-site or cumulative impacts that were not discussed in the General Plan EIR; or (4) are previously identified significant effects that, as a result of substantial new information not known when the General Plan EIR was certified, are determined to have a more severe adverse impact than discussed in the General Plan EIR. The 15183 Checklist further concludes that the potential environmental effects associated with the Project are within the scope of the impacts analyzed in the General Plan EIR and that all feasible mitigation measures from the General Plan EIR applicable to the Project, together with applicable uniformly applied development policies and standards, have been incorporated into or otherwise apply to the Project; and

WHEREAS, a notice of a public hearing to consider Tentative Tract Map No. 39330, Zoning Ordinance Amendment No. 26-02, Zoning Ordinance Amendment No. 26-03, Conditional Use Permit No. 396, Conditional Use Permit No. 407, Architectural Review No. 25-07, and Development Agreement No. 25-01 was issued in accordance with Coachella Municipal Code Section 16.12.110, 17.72.010J, 17.74.010G, 17.80.010E, and 17.100.060 inclusive of the publication on September 17, 2026, of a legal public hearing notice which was published in the Desert Sun, the City's newspaper of record and mailing of a public hearing notice to a certified list of property owners within 300 feet of the subject properties on September 17, 2026; and,

WHEREAS, on October 7, 2026, the Planning Commission held a duly noticed public hearing to consider the application for the Project during which evidence, both written and oral, including the staff report and supporting documents, was presented at said hearing; and,

WHEREAS, after said public hearing, the Planning Commission recommended that the City Council approve this Ordinance.

NOW THEREFORE, THE PLANNING COMMISSION OF THE CITY OF COACHELLA, CALIFORNIA, DOES HEREBY RESOLVE AS FOLLOWS:

SECTION 1. **Incorporation of Recitals.** The Planning Commission hereby specifically finds that all of the facts set forth in the recitals of this Resolution are true and correct and are incorporated into this Resolution by reference and constitute a material part of this Resolution.

SECTION 2. CEQA. The Planning Commission has reviewed and considered the previously certified Coachella General Plan Update 2035 EIR (SCH No. 2009021007), the 15183 Checklist and supporting technical studies prepared for the Project, the staff report, all written and oral comments received, and the entire administrative record. Based on substantial evidence in the record, the Planning Commission recommends that the City Council make the following determinations:

1) The 15183 Checklist was prepared in compliance with CEQA and the State CEQA Guidelines and reflects the City's independent judgment and analysis.
2) The Project is consistent with the City's General Plan Update 2035 for which an EIR was certified.
3) The Project would not result in any environmental effects that: (a) are peculiar to the Project or the parcel on which the Project would be located; (b) were not analyzed as significant effects in the certified General Plan EIR; (c) are potentially significant off-site or cumulative impacts that were not discussed in the General Plan EIR; or (d) are previously identified significant effects that, as a result of substantial new information not known at the time the General Plan EIR was certified, are determined to have a more severe adverse impact than discussed in the General Plan EIR.
4) All potential environmental effects associated with the Project are within the scope of the impacts analyzed in the General Plan EIR, and all feasible mitigation measures from the General Plan EIR applicable to the Project, together with applicable uniformly applied development policies and standards, have been incorporated into or otherwise apply to the Project.
5) The Project is exempt from further environmental review pursuant to Public Resources Code section 21083.3 and State CEQA Guidelines section 15183.

SECTION 3. Recommendation to City Council. Based on the entire record before the Planning Commission, all written and oral evidence presented to the Planning Commission, and the findings made in the staff report and this Resolution, the Planning Commission of the City of Coachella hereby recommends that the City Council adopt Ordinance No. _____ entitled: "AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF COACHELLA, CALIFORNIA, AMENDING CHAPTER 17.28 TO TITLE XVII OF THE COACHELLA MUNICIPAL CODE TO ALLOW SINGLE-FAMILY RESIDENTIAL USES IN CONJUNCTION WITH A RESORT USE AS A CONDITIONAL USE WITHIN THE (R-C) REGIONAL COMMERCIAL ZONE." which is attached hereto as Attachment "A" and incorporated herein by reference.

SECTION 4. Findings. The Planning Commission finds that the amendments to the Coachella Municipal Code (Zoning) proposed by the above referenced ordinance are consistent with, advances, and implements the goals and policies of the City of Coachella General Plan, including but not limited to the following:

1. The amendment is consistent with and implements the General Plan's purposes,

objectives, and land use provisions.

The General Plan's Regional Retail District designation allows residential uses at a density of 10 to 15 dwelling units per acre, with residential uses supporting the district's commercial environment. The existing Regional Commercial (R-C) zoning provisions accommodate multi-family residential uses subject to a Conditional Use Permit but do not expressly provide a corresponding approval pathway for single-family residential uses.

This difference prompted the proposed amendment, which would allow single-family residential uses in conjunction with a resort, subject to a Conditional Use Permit. The amendment brings the zoning code into closer alignment with the residential uses contemplated by the General Plan while preserving the commercial purpose of the R-C zone.

For the COVA project, the amendment would provide a land use approval pathway for single-family units intended to accommodate fractional ownership within an integrated resort development. The ownership arrangement does not replace the requirement to demonstrate compliance with applicable density requirements, General Plan policies, and project approval conditions.

2. The amendment is justified by public necessity and convenience.

The amendment establishes a defined approval process for single-family residential uses associated with resort development. It responds to the difference between the General Plan's broader allowance for residential uses and the zoning code's existing conditional allowance for multi-family residential uses.

Requiring a Conditional Use Permit for single-family residential uses provides comparable discretionary review of both residential building types. Applicants may propose a residential configuration suited to an integrated resort, while the City retains the ability to evaluate whether the proposed uses are appropriate for the site and consistent with applicable policies and standards.

The amendment therefore serves public necessity and convenience by providing regulatory clarity and a consistent review mechanism for residential uses within the R-C zone.

3. The amendment promotes the general welfare.

The amendment balances flexibility for resort development with the preservation of land for regional-serving commercial activities. Requiring single-family residential uses to occur in conjunction with a resort limits the proposed allowance to integrated resort developments rather than establishing a general allowance for independent single-family subdivisions throughout the R-C zone.

The Conditional Use Permit process allows the City to evaluate whether the residential component supports the resort and maintains the development's commercial function.

Review also addresses compatibility, circulation, parking, infrastructure, noise, lighting, and other relevant development and operational characteristics.

This approach promotes the general welfare by accommodating residential uses contemplated by the General Plan while retaining commercial development opportunities and review of potential conflicts with surrounding properties.

4. The amendment constitutes good zoning practice.

The amendment establishes a conditional approval pathway for single-family residential uses that is comparable to the existing Conditional Use Permit requirement for multi-family residential uses. This approach allows consideration of different residential building types while maintaining discretionary review.

Limiting the allowance to single-family residential uses in conjunction with a resort preserves the R-C zone's primary commercial purpose and reduces the potential for commercial properties to be developed as independent single-family subdivisions under this amendment. Each proposal must demonstrate an integrated relationship between its residential and resort components and satisfy the applicable Conditional Use Permit findings.

The amendment authorizes a land use category rather than independently approving fractional ownership arrangements, short-term rental operations, or a particular development. Those matters remain subject to applicable regulations and project approvals. Accordingly, the amendment provides flexibility and regulatory clarity while protecting the intended function of the commercial zone.

SECTION 5. Certification. The Secretary shall certify to the adoption of this Resolution.

SECTION 6. Location and Custodian of Records. The documents and materials that constitute the record of proceedings on which these findings are based are located at Coachella Civic Center. The Development Services Director is the custodian of the record of proceedings.

SECTION 7. Execution of Resolution. The Chairperson shall sign this Resolution and the Planning Commission Secretary shall attest and certify to the passage and adoption thereof.

SECTION 8. Severability. If any section, subsection, sentence, clause, phrase, or portion of this Resolution is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Resolution. The Planning Commission of the City of Coachella hereby declares that it would have adopted this Resolution and each section, subsection, sentence, clause, phrase, or portion thereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, phrases, or portions be declared invalid or unconstitutional.

PASSED APPROVED and ADOPTED this 7th day of October 2026.

AYES:

NOES:

ABSENT:

ABSTAIN:

_____
Eva Lara, Chairperson
City of Coachella

ATTEST:

_____
Kendra Reif
Planning Commission Secretary

APPROVED AS TO FORM:

_____
Best Best & Krieger
City Attorney

ORDINANCE NO. ___

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF COACHELLA, CALIFORNIA, AMENDING CHAPTER 17.28 TO TITLE XVII OF THE COACHELLA MUNICIPAL CODE TO ALLOW SINGLE-FAMILY RESIDENTIAL USES IN CONJUNCTION WITH A RESORT USE AS A CONDITIONAL USE WITHIN THE (R-C) REGIONAL COMMERCIAL ZONE.

WHEREAS, pursuant to the authority granted to the City of Coachella ("City") by Article XI, Section 7 of the California Constitution, the City has the police power to regulate the use of land and property within the City in a manner designed to promote public convenience and general prosperity, as well as public health, welfare, and safety; and,

WHEREAS, adoption and enforcement of comprehensive zoning regulations and other land use regulations lies within the City's police power; and,

WHEREAS, on July 7, 2025, Relevant Coachella Owner, LLC ("Applicant"), submitted an application for a Tentative Tract Map, Architectural Review, Conditional Use Permit, Environmental Assessment, and Development Agreement for the proposed "COVA" project, consisting of hotel, resort, residential, commercial and public beach club use on approximately 87 acres comprising four contiguous parcels (APNs 780-040-001, 780-040-003, 780-060-001, and 780-060-002) located south of Avenue 52, west of Van Buren Street and east of Calhoun Street ("Project"); and

WHEREAS, in late 2026, the applicant submitted an application for a Zoning Ordinance Amendment for the proposal to allow single-family residential uses within the Regional Commercial Zone regulated by Chapter 17.28 of Title XVII of the Coachella Municipal Code; and,

WHEREAS, Zoning Ordinance Amendment No. 26-02 proposes an Ordinance, attached hereto as Attachment "A" and incorporated herein by reference, amending Chapter 17.28 of Title XVII of the Coachella Municipal Code to allow single-family residential uses in conjunction with a resort use as a conditional use within the Regional Commercial (R-C) Zone; and

WHEREAS, the Project site has a zoning designation of (R-C) Regional Commercial and a General Plan land use designation of Regional Retail District, which allows a residential density of 10 to 15 dwelling units per acre and a floor area ratio of 0.35 to 2.0. The Project proposes a residential density of approximately 14.4 dwelling units per acre and a floor area ratio of approximately 0.65, consistent with the development density and intensity established by the General Plan; and,

WHEREAS, Zoning Ordinance Amendment No. 26-02 would establish the land use approval pathway necessary to consider the single-family residential component of the Project, which remains subject to separate approval of Conditional Use Permit No. 407 and all other applicable project approvals and conditions; and

WHEREAS, Public Resources Code section 21083.3 and State CEQA Guidelines section 15183 provide that a project consistent with the development density established by an existing

general plan for which an EIR was certified does not require additional environmental review except as necessary to examine whether the project would result in project-specific significant effects peculiar to the project or its site; and

WHEREAS, the City, as lead agency under the CEQA, prepared a Modified Initial Study/Section 15183 Checklist for the Project (the "15183 Checklist") to determine whether further environmental review of the Project is required; and

WHEREAS, the 15183 Checklist concludes that the Project would not result in any environmental effects that (1) are peculiar to the Project or the parcel on which the Project would be located; (2) were not analyzed as significant effects in the certified General Plan EIR; (3) are potentially significant off-site or cumulative impacts that were not discussed in the General Plan EIR; or (4) are previously identified significant effects that, as a result of substantial new information not known when the General Plan EIR was certified, are determined to have a more severe adverse impact than discussed in the General Plan EIR. The 15183 Checklist further concludes that the potential environmental effects associated with the Project are within the scope of the impacts analyzed in the General Plan EIR and that all feasible mitigation measures from the General Plan EIR applicable to the Project, together with applicable uniformly applied development policies and standards, have been incorporated into or otherwise apply to the Project; and

WHEREAS, a notice of a public hearing to consider Tentative Tract Map No. 39330, Zoning Ordinance Amendment No. 26-02, Zoning Ordinance Amendment No. 26-03, Conditional Use Permit No. 396, Conditional Use Permit No. 407, Architectural Review No. 25-07, and Development Agreement No. 25-01 was issued in accordance with Coachella Municipal Code Section 16.12.110, 17.72.010J, 17.74.010G, 17.80.010E, and 17.100.060 inclusive of the publication on September 17, 2026, of a legal public hearing notice which was published in the Desert Sun, the City's newspaper of record and mailing of a public hearing notice to a certified list of property owners within 300 feet of the subject properties on September 17, 2026; and,

WHEREAS, on October 7, 2026, the Planning Commission held a duly noticed public hearing to consider the application for the Project during which evidence, both written and oral, including the staff report and supporting documents, was presented at said hearing; and,

WHEREAS, after said public hearing, the Planning Commission recommended that the City Council approve this Ordinance.

WHEREAS, on _____ the City Council held a duly noticed public hearing to review the ordinance at which time during the hearing members of the public were given an opportunity to testify regarding the Project; and

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF COACHELLA DOES ORDAIN AS FOLLOWS:

SECTION 1. INCORPORATION OF RECITALS. The City Council hereby finds that all of the foregoing recitals presented herewith are true and correct and are hereby incorporated and adopted as findings of the City Council.

SECTION 2. Amendment to Coachella Municipal Code Title 17, Zoning, is hereby amended as identified

in Exhibit A.

SECTION 3. GENERAL PLAN CONSISTENCY FINDINGS

The City Council hereby finds that this Ordinance is consistent with, advances, and implements the goals and policies of the City of Coachella General Plan, including but not limited to the following:

1. The amendment is consistent with and implements the General Plan's purposes, objectives, and land use provisions.

The General Plan's Regional Retail District designation allows residential uses at a density of 10 to 15 dwelling units per acre, with residential uses supporting the district's commercial environment. The existing Regional Commercial (R-C) zoning provisions accommodate multi-family residential uses subject to a Conditional Use Permit but do not expressly provide a corresponding approval pathway for single-family residential uses.

This difference prompted the proposed amendment, which would allow single-family residential uses in conjunction with a resort, subject to a Conditional Use Permit. The amendment brings the zoning code into closer alignment with the residential uses contemplated by the General Plan while preserving the commercial purpose of the R-C zone.

For the COVA project, the amendment would provide a land use approval pathway for single-family units intended to accommodate fractional ownership within an integrated resort development. The ownership arrangement does not replace the requirement to demonstrate compliance with applicable density requirements, General Plan policies, and project approval conditions.

2. The amendment is justified by public necessity and convenience.

The amendment establishes a defined approval process for single-family residential uses associated with resort development. It responds to the difference between the General Plan's broader allowance for residential uses and the zoning code's existing conditional allowance for multi-family residential uses.

Requiring a Conditional Use Permit for single-family residential uses provides comparable discretionary review of both residential building types. Applicants may propose a residential configuration suited to an integrated resort, while the City retains the ability to evaluate whether the proposed uses are appropriate for the site and consistent with applicable policies and standards.

The amendment therefore serves public necessity and convenience by providing regulatory clarity and a consistent review mechanism for residential uses within the R-C zone.

3. The amendment promotes the general welfare.

The amendment balances flexibility for resort development with the preservation of land for regional-serving commercial activities. Requiring single-family residential uses to occur in conjunction with a resort limits the proposed allowance to integrated resort developments rather

than establishing a general allowance for independent single-family subdivisions throughout the R-C zone.

The Conditional Use Permit process allows the City to evaluate whether the residential component supports the resort and maintains the development's commercial function. Review also addresses compatibility, circulation, parking, infrastructure, noise, lighting, and other relevant development and operational characteristics.

This approach promotes the general welfare by accommodating residential uses contemplated by the General Plan while retaining commercial development opportunities and review of potential conflicts with surrounding properties.

4. The amendment constitutes good zoning practice.

The amendment establishes a conditional approval pathway for single-family residential uses that is comparable to the existing Conditional Use Permit requirement for multi-family residential uses. This approach allows consideration of different residential building types while maintaining discretionary review.

Limiting the allowance to single-family residential uses in conjunction with a resort preserves the R-C zone's primary commercial purpose and reduces the potential for commercial properties to be developed as independent single-family subdivisions under this amendment. Each proposal must demonstrate an integrated relationship between its residential and resort components and satisfy the applicable Conditional Use Permit findings.

The amendment authorizes a land use category rather than independently approving fractional ownership arrangements, short-term rental operations, or a particular development. Those matters remain subject to applicable regulations and project approvals. Accordingly, the amendment provides flexibility and regulatory clarity while protecting the intended function of the commercial zone.

SECTION 4. CEQA. The City Council has reviewed and considered the previously certified Coachella General Plan Update 2035 EIR (SCH No. 2009021007), the 15183 Checklist and supporting technical studies prepared for the Project, the staff report, all written and oral comments received, and the entire administrative record. Based on substantial evidence in the record, the City Council makes the following determinations:

1) The 15183 Checklist was prepared in compliance with CEQA and the State CEQA Guidelines and reflects the City's independent judgment and analysis.
2) The Project is consistent with the City's General Plan Update 2035 for which an EIR was certified.
3) The Project would not result in any environmental effects that: (a) are peculiar to the Project or the parcel on which the Project would be located; (b) were not analyzed as significant

effects in the certified General Plan EIR; (c) are potentially significant off-site or cumulative impacts that were not discussed in the General Plan EIR; or (d) are previously identified significant effects that, as a result of substantial new information not known at the time the General Plan EIR was certified, are determined to have a more severe adverse impact than discussed in the General Plan EIR.

4) All potential environmental effects associated with the Project are within the scope of the impacts analyzed in the General Plan EIR, and all feasible mitigation measures from the General Plan EIR applicable to the Project, together with applicable uniformly applied development policies and standards, have been incorporated into or otherwise apply to the Project.
5) The Project is exempt from further environmental review pursuant to Public Resources Code section 21083.3 and State CEQA Guidelines section 15183.

SECTION 5. Certification. The City Clerk shall certify to the adoption of this Ordinance.

SECTION 6. Location and Custodian of Records. The documents and materials that constitute the record of proceedings on which these findings are based are located at Coachella Civic Center. The Development Services Director is the custodian of the record of proceedings.

SECTION 7. Execution of the Ordinance. The Mayor shall sign this Ordinance and the City Clerk shall attest and certify to the passage and adoption thereof.

SECTION 8. Severability. If any section, subsection, sentence, clause, phrase, or portion of this Ordinance is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Ordinance. The City Council of the City of Coachella hereby declares that it would have adopted this Ordinance and each section, subsection, sentence, clause, phrase, or portion thereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, phrases, or portions be declared invalid or unconstitutional.

I hereby certify that the foregoing Ordinance was **PASSED, APPROVED AND ADOPTED** by the City Council of the City of Coachella on the XXth day of XX, 2026.

_____
DR. FRANK FIGUEROA
MAYOR

ATTEST:

ANGELA M. ZEPEDA
CITY CLERK

APPROVED AS TO FORM:

RYAN GUIBOA
CITY ATTORNEY

STATE OF CALIFORNIA)
COUNTY OF RIVERSIDE) ss.
CITY OF COACHELLA)

I HEREBY CERTIFY that the foregoing Ordinance No. ___ was duly adopted by the City Council of the City of Coachella at a regular meeting thereof, held on this XXth day of XX 2026 by the following vote of Council:

AYES:

NOES:

ABSENT:

ABSTAIN:

_____
Delia Granados
Deputy City Clerk

Chapter 17.28 R-C REGIONAL COMMERCIAL ZONE[1]

17.28.010 Intent and purpose.

This zone is intended to provide for and encourage a wide range of shopping and entertainment in a variety of urban and suburban formats. These include regional shopping centers, mixed destination centers or similar uses. The uses allowed in this zone will cater to regional clientele and provide a unique amenity to all residents of the Coachella Valley and an important revenue source for the City. Implementing the Regional Retail land use designation in the General Plan, the primary purpose of the zone is to provide for commercial opportunities, with residential uses supporting the retail environment.

(Ord. No. 1204, § 3(Exh. A.1), 7-26-23)

17.28.020 Permitted uses.

The following uses are permitted in the R-C (Regional Commercial) zone, subject to all provisions of this chapter:

A. Primary Uses.

1. All retail establishments including big box retail (> thirty-five thousand (35,000) square feet).
2. Automobile rental.
3. Hotel.
4. Motel.
5. Resort.
6. Restaurants.
7. Private swimming pools.
8. Public Utility Facilities (City-Initiated).

B. All uses permitted by Section 17.26.020 in Chapter 17.26 C-G (General Commercial).

C. Accessory Uses. The following buildings, structures, and uses are permitted when clearly incidental and accessory to primary permitted use:

1. Dwelling, where used by a proprietor, manager, or custodian of a use permitted within this zone.
2. Ice vending machines, of three-ton capacity or less subject to all other provisions of this zone. Such machines shall be located so as not to interfere with the movement of traffic on the site.

[1]Editor's note(s)—Ord. No. 1204, § 3(Exh. A.1), adopted July 26, 2023, repealed the former Ch. 17.28, §§ 17.28.010—17.28.030, and enacted a new Ch. 17.28 as set out herein. The former Ch. 17.28 pertained to C-T Tourist Commercial Zone and derived from Prior code §§ 046.01—046.03; Ord. No. 1088, § 3, adopted Dec. 14, 2016.

D. Conditional Uses. The following uses may be permitted the R-C (Regional Commercial) zone subject to obtaining a conditional use permit as specified in Section 17.74.010.

1. Amusement center or theme park.
2. Automotive repair garage as an accessory to automobile service station.
3. Automobile service station.
4. Bars and Cocktail lounges.
5. Billiard parlor.
6. Bowling alley.
7. Bus terminals, depots, and similar transit facilities.
8. Car washes as part of a multi-tenant retail center.
9. Commercial Parking Lot.
10. Drive-in or walk-up or other fast-food service establishments.
11. Exhibition hall, conference center, theater, amphitheater, auditorium.
12. Golf courses, driving ranges.
13. Hospital Uses.
14. Liquor sales, subject to Section 17.74.015;
15. Medical offices.
16. Microbreweries and taproom.
17. Mini-storage warehouse as an accessory to a permitted use.
18. Multiple-family residential (five plus units).
19. New and used automobile sales and recreational vehicle sales.
20. Recreational vehicle storage as an accessory to a permitted use.
21. Restaurants with liquor sales.
22. Skating rinks.
23. Special event establishments.
24. Sports Complex.
25. Theater, including drive-in.
26. Single-family residential uses in conjunction with a resort use.

(Ord. No. 1204, § 3(Exh. A.1), 7-26-23)

17.28.030 Property development standards.

The following standards of development shall apply in the R-C (Regional Commercial) zone:

A. Residential Density and Non-Residential Intensity.

1. Minimum Density. Ten (10) dwelling units/acre, when residential uses are provided.

2. Maximum Density. Fifteen (15) dwelling units/acre.

3. Maximum Non-Residential FAR. 2.0.

B. Residential uses shall follow the development standards in Section 17.14.030 for multi-family uses and the City of Coachella Multifamily Objective Design Standards.

C. Lot Requirements.

1. Minimum Lot Size. The minimum lot size shall be twenty thousand (20,000) square feet for commercial uses.

2. Minimum Lot Width. None.

3. Minimum Lot Depth. None.

4. Maximum Lot Coverage. None.

D. Yard Requirement.

1. Front Yard. Each lot or building site shall have a front yard of at least fifteen (15) feet in depth, except where one or both adjoining zones are residential, in which case the required yard shall be increased to equal the average of the required front yards of the adjoining zones.

2. Side Yard. There shall be no side yard requirement except where a R-C (Regional Commercial) zone adjoins a street or a residential zone, in which case there shall be a side yard of not less than ten (10) feet on the side or sides adjoining said street or residential zones. In the case of a reversed corner lot, the side yard adjoining the street shall be not less than the required front yard of the adjoining key lot to the rear.

3. Rear Yard. There shall be no rear yard requirement except where the R-C (Regional Commercial) zone adjoins a residential zone, in which case there shall be a rear yard of not less than ten (10) feet adjoining that residential zone. This shall not apply where there exists a public alley separating the two zones.

4. Permitted Encroachments in Required Yards.

a. The yards required in subsections 1—3 of this section may be used as part of an automobile parking area, provided however that a minimum three-foot wide screen planting strip shall be maintained adjacent to the planned highway right-of-way line.

b. Swimming pools provided as an accessory use to a hotel or motel may encroach into the rear two-thirds of the required front yard.

5. All landscape areas shall be maintained consistent with approved landscape plans. Landscape modifications shall be approved by the planning director and referred to the planning commission for review at the director's discretion.

E. Height Limits.

1. The maximum height of any building located within one hundred fifty (150) feet of any S-N or G-N zone, or any agricultural zone, shall be one story or twenty (20) feet, whichever is less. Vehicular rights-of-way shall be included in calculating the distance.

2. The maximum height of all other buildings shall be two stories or thirty-five (35) feet, whichever is less, except that hotels shall have a maximum height of eighty-five (85) feet.

3. Rooftop mechanical equipment shall be screened by a parapet wall or other architectural features. Any rooftop screening elements shall be architecturally consistent and well integrated with overall building architecture.

F. Landscape Setback. The minimum perimeter landscape setback for residential or hotel projects without frontage of buildings along perimeter street shall equal at minimum ten (10) feet at any point and have an average perimeter landscape setback of twenty (20) feet for the entire frontage. Equestrian and agricultural themed improvements including equestrian rail fencing, agrarian lighting, agrarian signage, 10-foot-wide decomposed granite multi-purpose trail and date palms planted twenty (20) feet on center shall be installed along Avenue 52, Van Buren Street, and Calhoun Street.

G. Energy Efficient Design and Heat Island Reduction Strategies. New development shall submit an energy efficient design and heat island reduction plan that incorporates heat island reduction strategies such as light-colored cool roofs, light-colored paving, permeable paving, substantial shade tree coverage, shade structures and shaded asphalt paving. Energy efficient building and site design strategies shall be incorporated such as appropriate solar orientation, thermal mass, use of natural daylight and ventilation, and shading. Shade tree plantings in surface parking areas shall be installed to provide shade over fifty (50) percent of the parking area within ten (10) years. Solar photovoltaic shade structures or shade structures with cool roofing materials shall be permitted in whole or in part in lieu of shade tree plantings.

H. Distance Between Buildings. No requirements, except that buildings not actually adjoining shall be determined through site plan review.

I. Off-Street Parking and Loading. Off-street parking and loading facilities shall be provided in accordance with the provisions of Section 17.54.010.

J. Screening. Where the R-C zone abuts upon a residential zone, there shall be provided screening not less than six feet, or more than eight feet in height on the zone boundary line. Said screening shall be reduced to forty-two (42) inches in height within a required yard adjacent to a street or highway.

K. Other Property Development Standards.

1. All uses shall be conducted entirely within a completely enclosed building, except for off-street parking and loading facilities, those outdoor uses permitted by Section 17.28.020(A)(7), and certain uses permitted subject to a conditional use permit by Section 17.28.020(D).

2. No building or structure having exterior walls of sheet metal shall be erected in this zone.

L. Architectural Review. All development in the R-C (Regional Commercial) zone, is subject to architectural review as set forth in Section 17.72.010 of this title.

M. All new single-family residential development shall be designed pursuant to the design standards included in Chapter 17.19 (Supplemental Standards for Single-Family Residential).

(Ord. No. 1204, § 3(Exh. A.1), 7-26-23; Ord. No. 1220, § 2(Exh. A), 2-26-25)

RESOLUTION NO. PC2026-28

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF COACHELLA, CALIFORNIA, RECOMMENDING THAT THE CITY COUNCIL ADOPT AN ORDINANCE AMENDING CHAPTER 5.80 OF TITLE V OF THE COACHELLA MUNICIPAL CODE TO MODIFY THE SHORT-TERM RENTAL ORDINANCE AND DETERMINE, PURSUANT TO STATE CEQA GUIDELINES SECTION 15183, THAT NO FURTHER ENVIRONMENTAL REVIEW IS REQUIRED.

WHEREAS, pursuant to the authority granted to the City of Coachella ("City") by Article XI, Section 7 of the California Constitution, the City has the police power to regulate the use of land and property within the City in a manner designed to promote public convenience and general prosperity, as well as public health, welfare, and safety; and,

WHEREAS, adoption and enforcement of comprehensive zoning regulations and other land use regulations lies within the City's police power; and,

WHEREAS, on July 7, 2025, Relevant Coachella Owner, LLC ("Applicant"), submitted an application for a Tentative Tract Map, Architectural Review, Conditional Use Permit, Environmental Assessment, and Development Agreement for the proposed "COVA" project, consisting of hotel, resort, residential, commercial and public beach club use on approximately 87 acres comprising four contiguous parcels (APNs 780-040-001, 780-040-003, 780-060-001, and 780-060-002) located south of Avenue 52, west of Van Buren Street and east of Calhoun Street ("Project"); and

WHEREAS, in late 2026, the Applicant submitted an application for Zoning Ordinance Amendment No. 26-03 to amend Chapter 5.80 of Title V of the Coachella Municipal Code relating to the regulation of short-term vacation rentals; and

WHEREAS, Zoning Ordinance Amendment No. 26-03 proposes an Ordinance, attached hereto as Attachment "A" and incorporated herein by reference, amending Chapter 5.80 of Title V of the Coachella Municipal Code to provide exceptions for qualifying projects with approved development agreements to the short-term vacation rental permit limit per owner and the percentage limit on units permitted for short-term rental use, together with such additional modifications as may be expressly authorized by the amended ordinance and an approved development agreement; and

WHEREAS, Zoning Ordinance Amendment No. 26-03 establishes a regulatory mechanism through which qualifying projects with approved development agreements may receive specified exceptions or modifications to otherwise applicable provisions of Chapter 5.80, but does not independently approve short-term vacation rental operations or exempt a project from requirements of Chapter 5.80 that are not expressly modified pursuant to the Ordinance and an approved development agreement; and

WHEREAS, the Project site has a zoning designation of (R-C) Regional Commercial and a General Plan land use designation of Regional Retail District, which allows a residential density of 10 to 15 dwelling units per acre and a floor area ratio of 0.35 to 2.0. The Project proposes a residential density of approximately 14.4 dwelling

units per acre and a floor area ratio of approximately 0.65, consistent with the development density and intensity established by the General Plan; and,

WHEREAS, Public Resources Code section 21083.3 and State CEQA Guidelines section 15183 provide that a project consistent with the development density established by an existing general plan for which an EIR was certified does not require additional environmental review except as necessary to examine whether the project would result in project-specific significant effects peculiar to the project or its site; and

WHEREAS, the City, as lead agency under the CEQA, prepared a Modified Initial Study/Section 15183 Checklist for the Project (the "15183 Checklist"), to determine whether further environmental review of the Project is required; and

WHEREAS, the 15183 Checklist concludes that the Project would not result in any environmental effects that (1) are peculiar to the Project or the parcel on which the Project would be located; (2) were not analyzed as significant effects in the certified General Plan EIR; (3) are potentially significant off-site or cumulative impacts that were not discussed in the General Plan EIR; or (4) are previously identified significant effects that, as a result of substantial new information not known when the General Plan EIR was certified, are determined to have a more severe adverse impact than discussed in the General Plan EIR. The 15183 Checklist further concludes that the potential environmental effects associated with the Project are within the scope of the impacts analyzed in the General Plan EIR and that all feasible mitigation measures from the General Plan EIR applicable to the Project, together with applicable uniformly applied development policies and standards, have been incorporated into or otherwise apply to the Project; and

WHEREAS, a notice of a public hearing to consider Tentative Tract Map No. 39330, Zoning Ordinance Amendment No. 26-02, Zoning Ordinance Amendment No. 26-03, Conditional Use Permit No. 396, Conditional Use Permit No. 407, Architectural Review No. 25-07, and Development Agreement No. 25-01 was issued in accordance with Coachella Municipal Code Section 16.12.110, 17.72.010J, 17.74.010G, 17.80.010E, and 17.100.060 inclusive of the publication on September 17, 2026, of a legal public hearing notice which was published in the Desert Sun, the City's newspaper of record and mailing of a public hearing notice to a certified list of property owners within 300 feet of the subject properties on September 17, 2026; and,

WHEREAS, on October 7, 2026, the Planning Commission held a duly noticed public hearing to consider the application for the Project during which evidence, both written and oral, including the staff report and supporting documents, was presented at said hearing; and,

WHEREAS, after said public hearing, the Planning Commission recommended that the City Council approve this Ordinance.

NOW THEREFORE, THE PLANNING COMMISSION OF THE CITY OF COACHELLA, CALIFORNIA, DOES HEREBY RESOLVE AS FOLLOWS:

SECTION 1. **Incorporation of Recitals.** The Planning Commission hereby specifically finds that all of the facts set forth in the recitals of this Resolution are true and correct and are incorporated into this Resolution by reference and constitute a material part of this Resolution.

SECTION 2. CEQA. The Planning Commission has reviewed and considered the previously certified Coachella General Plan Update 2035 EIR (SCH No. 2009021007), the 15183

Checklist and supporting technical studies prepared for the Project, the staff report, all written and oral comments received, and the entire administrative record. Based on substantial evidence in the record, the Planning Commission recommends that the City Council make the following determinations:

1) The 15183 Checklist was prepared in compliance with CEQA and the State CEQA Guidelines and reflects the City's independent judgment and analysis.
2) The Project is consistent with the City's General Plan Update 2035 for which an EIR was certified.
3) The Project would not result in any environmental effects that: (a) are peculiar to the Project or the parcel on which the Project would be located; (b) were not analyzed as significant effects in the certified General Plan EIR; (c) are potentially significant off-site or cumulative impacts that were not discussed in the General Plan EIR; or (d) are previously identified significant effects that, as a result of substantial new information not known at the time the General Plan EIR was certified, are determined to have a more severe adverse impact than discussed in the General Plan EIR.
4) All potential environmental effects associated with the Project are within the scope of the impacts analyzed in the General Plan EIR, and all feasible mitigation measures from the General Plan EIR applicable to the Project, together with applicable uniformly applied development policies and standards, have been incorporated into or otherwise apply to the Project.
5) The Project is exempt from further environmental review pursuant to Public Resources Code section 21083.3 and State CEQA Guidelines section 15183.

SECTION 3. Recommendation to City Council. Based on the entire record before the Planning Commission, all written and oral evidence presented to the Planning Commission, and the findings made in the staff report and this Resolution, the Planning Commission of the City of Coachella hereby recommends that the City Council adopt Ordinance No. _____ entitled: "AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF COACHELLA, CALIFORNIA, AMENDING CHAPTER 5.80 TO TITLE V OF THE COACHELLA MUNICIPAL CODE TO MODIFY THE SHORT-TERM RENTAL ORDINANCE" which is attached hereto as Attachment "A" and incorporated herein by reference.

SECTION 4. Findings. The Planning Commission finds that the amendments to the Coachella Municipal Code (Business Licenses and Regulations) proposed by the above referenced ordinance are consistent with, advances, and implements the goals and policies of the City of Coachella General Plan, including but not limited to the following:

1. The amendment is consistent with and supports the General Plan's purposes and objectives.

The amendment provides flexibility to accommodate integrated hospitality developments containing residential accommodations, resort amenities, dining, recreation, and entertainment. For the COVA project, this flexibility would support the proposed relationship between residential ownership, including fractional ownership, and short-term rental operations within the resort.

Land Use and Community Character Element Policy 13.4, Diverse Tax Base, calls for a fiscally sound City supported by a sustainable and diversified tax base and user fees, including property tax, sales tax, transient occupancy tax, utilities user tax, and fees

supporting the cost of services. The amendment supports this policy by accommodating visitor-serving developments that may contribute to applicable City tax revenues.

The amendment also supports Policy 13.3, Efficient Growth, by allowing the City to evaluate potential revenues alongside infrastructure obligations, public service demands, and community compatibility through the development agreement and accompanying project approvals.

2. The amendment is justified by public necessity and convenience.

Chapter 5.80 establishes limits on permit ownership and the concentration of short-term vacation rentals. These limitations regulate vacation rental activity within residential areas but may constrain integrated hospitality developments where short-term accommodations are an intended component of the approved development.

The amendment establishes a defined mechanism for accommodating these developments through approved development agreements. It allows the City to coordinate applicable rental provisions with the project's ownership structure, operating arrangements, and development obligations.

This approach provides regulatory clarity for applicants, property owners, operators, and City staff while retaining City Council review of the development agreement and the project-specific provisions governing rental operations.

3. The amendment promotes the general welfare.

The amendment allows the City to address short-term rental operations in conjunction with negotiated development obligations and enforceable project requirements. Development agreements and accompanying approvals can address management responsibilities, complaint response, security, parking, noise, infrastructure, and applicable tax reporting and payment obligations.

The justification for exceptions must address the characteristics of the qualifying development and how its operating framework protects surrounding properties and community interests. Requirements of Chapter 5.80 that are not lawfully modified remain applicable.

Accordingly, the amendment provides flexibility for qualifying developments while retaining mechanisms to address public health, safety, neighborhood compatibility, and the demands placed on City services.

4. The amendment constitutes good regulatory practice.

The amendment establishes an express framework for coordinating Chapter 5.80 with City-approved development agreements. It clarifies the availability of exceptions to permit ownership and concentration limits and provides a documented basis for administering project-specific requirements.

Each development agreement must clearly identify the property and operations it covers, together with any additional authorized modifications and applicable obligations. The amendment does not independently approve a development, establish compliance with zoning requirements, or authorize rental operations without the applicable permits and project approvals.

This approach accommodates coordinated hospitality developments while maintaining a clear distinction between the exceptions authorized by the ordinance and additional provisions expressly established through a development agreement.

SECTION 5. Certification. The Secretary shall certify to the adoption of this Resolution.

SECTION 6. Location and Custodian of Records. The documents and materials that constitute the record of proceedings on which these findings are based are located at Coachella Civic Center. The Development Services Director is the custodian of the record of proceedings.

SECTION 7. Execution of Resolution. The Chairperson shall sign this Resolution and the Planning Commission Secretary shall attest and certify to the passage and adoption thereof.

SECTION 8. Severability. If any section, subsection, sentence, clause, phrase, or portion of this Resolution is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Resolution. The Planning Commission of the City of Coachella hereby declares that it would have adopted this Resolution and each section, subsection, sentence, clause, phrase, or portion thereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, phrases, or portions be declared invalid or unconstitutional.

PASSED APPROVED and ADOPTED this 7th day of October 2026.

AYES:

NOES:

ABSENT:

ABSTAIN:

_____
Eva Lara, Chairperson
City of Coachella

ATTEST:

_____
Kendra Reif
Planning Commission Secretary

APPROVED AS TO FORM:

_____
Best Best & Krieger
City Attorney

ORDINANCE NO. ___

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF COACHELLA, CALIFORNIA, AMENDING CHAPTER 5.80 TO TITLE V OF THE COACHELLA MUNICIPAL CODE TO MODIFY THE SHORT-TERM RENTAL ORDINANCE

WHEREAS, pursuant to the authority granted to the City of Coachella ("City") by Article XI, Section 7 of the California Constitution, the City has the police power to regulate the use of land and property within the City in a manner designed to promote public convenience and general prosperity, as well as public health, welfare, and safety; and,

WHEREAS, adoption and enforcement of comprehensive zoning regulations and other land use regulations lies within the City's police power; and,

WHEREAS, on July 7, 2025, Relevant Coachella Owner, LLC ("Applicant"), submitted an application for a Tentative Tract Map, Architectural Review, Conditional Use Permit, Environmental Assessment, and Development Agreement for the proposed "COVA" project, consisting of hotel, resort, residential, commercial and public beach club use on approximately 87 acres comprising four contiguous parcels (APNs 780-040-001, 780-040-003, 780-060-001, and 780-060-002) located south of Avenue 52, west of Van Buren Street and east of Calhoun Street ("Project"); and

WHEREAS, in late 2026, the Applicant submitted an application for Zoning Ordinance Amendment No. 26-03 to amend Chapter 5.80 of Title V of the Coachella Municipal Code relating to the regulation of short-term vacation rentals; and

WHEREAS, Zoning Ordinance Amendment No. 26-03 proposes an Ordinance, attached hereto as Attachment "A" and incorporated herein by reference, amending Chapter 5.80 of Title V of the Coachella Municipal Code to provide exceptions for qualifying projects with approved development agreements to the short-term vacation rental permit limit per owner and the percentage limit on units permitted for short-term rental use, together with such additional modifications as may be expressly authorized by the amended ordinance and an approved development agreement; and

WHEREAS, Zoning Ordinance Amendment No. 26-03 establishes a regulatory mechanism through which qualifying projects with approved development agreements may receive specified exceptions or modifications to otherwise applicable provisions of Chapter 5.80, but does not independently approve short-term vacation rental operations or exempt a project from requirements of Chapter 5.80 that are not expressly modified pursuant to the Ordinance and an approved development agreement; and

WHEREAS, the Project site has a zoning designation of (R-C) Regional Commercial and a General Plan land use designation of Regional Retail District, which allows a residential density of 10 to 15 dwelling units per acre and a floor area ratio of 0.35 to 2.0. The Project proposes a residential density of approximately 14.4 dwelling units per acre and a floor area ratio of approximately 0.65, consistent with the development density and intensity established by the

General Plan; and,

WHEREAS, Public Resources Code section 21083.3 and State CEQA Guidelines section 15183 provide that a project consistent with the development density established by an existing general plan for which an EIR was certified does not require additional environmental review except as necessary to examine whether the project would result in project-specific significant effects peculiar to the project or its site; and

WHEREAS, the City, as lead agency under the CEQA, prepared a Modified Initial Study/Section 15183 Checklist for the Project (the "15183 Checklist"), to determine whether further environmental review of the Project is required; and

WHEREAS, the 15183 Checklist concludes that the Project would not result in any environmental effects that (1) are peculiar to the Project or the parcel on which the Project would be located; (2) were not analyzed as significant effects in the certified General Plan EIR; (3) are potentially significant off-site or cumulative impacts that were not discussed in the General Plan EIR; or (4) are previously identified significant effects that, as a result of substantial new information not known when the General Plan EIR was certified, are determined to have a more severe adverse impact than discussed in the General Plan EIR. The 15183 Checklist further concludes that the potential environmental effects associated with the Project are within the scope of the impacts analyzed in the General Plan EIR and that all feasible mitigation measures from the General Plan EIR applicable to the Project, together with applicable uniformly applied development policies and standards, have been incorporated into or otherwise apply to the Project; and

WHEREAS, a notice of a public hearing to consider Tentative Tract Map No. 39330, Zoning Ordinance Amendment No. 26-02, Zoning Ordinance Amendment No. 26-03, Conditional Use Permit No. 396, Conditional Use Permit No. 407, Architectural Review No. 25-07, and Development Agreement No. 25-01 was issued in accordance with Coachella Municipal Code Section 16.12.110, 17.72.010J, 17.74.010G, 17.80.010E, and 17.100.060 inclusive of the publication on September 17, 2026, of a legal public hearing notice which was published in the Desert Sun, the City's newspaper of record and mailing of a public hearing notice to a certified list of property owners within 300 feet of the subject properties on September 17, 2026; and,

WHEREAS, on October 7, 2026, the Planning Commission held a duly noticed public hearing to consider the application for the Project during which evidence, both written and oral, including the staff report and supporting documents, was presented at said hearing; and,

WHEREAS, after said public hearing, the Planning Commission recommended that the City Council approve this Ordinance.

WHEREAS, on _____ the City Council held a duly noticed public hearing to review the ordinance at which time during the hearing members of the public were given an opportunity to testify regarding the Project; and

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF COACHELLA DOES ORDAIN AS FOLLOWS:

SECTION 1. INCORPORATION OF RECITALS. The City Council hereby finds that all of the foregoing recitals presented herewith are true and correct and are hereby incorporated and adopted as findings of the City Council.

SECTION 2. Amendment to Municipal Code Title 5, Business Licenses and Regulations, is hereby amended as identified in Exhibit A.

SECTION 3. GENERAL PLAN CONSISTENCY FINDINGS

The City Council hereby finds that this Ordinance is consistent with, advances, and implements the goals and policies of the City of Coachella General Plan, including but not limited to the following:

1. The amendment is consistent with and supports the General Plan's purposes and objectives.

The amendment provides flexibility to accommodate integrated hospitality developments containing residential accommodations, resort amenities, dining, recreation, and entertainment. For the COVA project, this flexibility would support the proposed relationship between residential ownership, including fractional ownership, and short-term rental operations within the resort.

Land Use and Community Character Element Policy 13.4, Diverse Tax Base, calls for a fiscally sound City supported by a sustainable and diversified tax base and user fees, including property tax, sales tax, transient occupancy tax, utilities user tax, and fees supporting the cost of services. The amendment supports this policy by accommodating visitor-serving developments that may contribute to applicable City tax revenues.

The amendment also supports Policy 13.3, Efficient Growth, by allowing the City to evaluate potential revenues alongside infrastructure obligations, public service demands, and community compatibility through the development agreement and accompanying project approvals.

2. The amendment is justified by public necessity and convenience.

Chapter 5.80 establishes limits on permit ownership and the concentration of short-term vacation rentals. These limitations regulate vacation rental activity within residential areas but may constrain integrated hospitality developments where short-term accommodations are an intended component of the approved development.

The amendment establishes a defined mechanism for accommodating these developments through approved development agreements. It allows the City to coordinate applicable rental provisions with the project's ownership structure, operating arrangements, and development obligations.

This approach provides regulatory clarity for applicants, property owners, operators, and City staff while retaining City Council review of the development agreement and the project-specific provisions governing rental operations.

3. The amendment promotes the general welfare.

The amendment allows the City to address short-term rental operations in conjunction with negotiated development obligations and enforceable project requirements. Development agreements and accompanying approvals can address management responsibilities, complaint

response, security, parking, noise, infrastructure, and applicable tax reporting and payment obligations.

The justification for exceptions must address the characteristics of the qualifying development and how its operating framework protects surrounding properties and community interests. Requirements of Chapter 5.80 that are not lawfully modified remain applicable.

Accordingly, the amendment provides flexibility for qualifying developments while retaining mechanisms to address public health, safety, neighborhood compatibility, and the demands placed on City services.

4. The amendment constitutes good regulatory practice.

The amendment establishes an express framework for coordinating Chapter 5.80 with City-approved development agreements. It clarifies the availability of exceptions to permit ownership and concentration limits and provides a documented basis for administering project-specific requirements.

Each development agreement must clearly identify the property and operations it covers, together with any additional authorized modifications and applicable obligations. The amendment does not independently approve a development, establish compliance with zoning requirements, or authorize rental operations without the applicable permits and project approvals.

This approach accommodates coordinated hospitality developments while maintaining a clear distinction between the exceptions authorized by the ordinance and additional provisions expressly established through a development agreement.

SECTION 4. CEQA. The City Council has reviewed and considered the previously certified Coachella General Plan Update 2035 EIR (SCH No. 2009021007), the 15183 Checklist and supporting technical studies prepared for the Project, the staff report, all written and oral comments received, and the entire administrative record. Based on substantial evidence in the record, the City Council makes the following determinations:

1) The 15183 Checklist was prepared in compliance with CEQA and the State CEQA Guidelines and reflects the City's independent judgment and analysis.

2) The Project is consistent with the City's General Plan Update 2035 for which an EIR was certified.

3) The Project would not result in any environmental effects that: (a) are peculiar to the Project or the parcel on which the Project would be located; (b) were not analyzed as significant effects in the certified General Plan EIR; (c) are potentially significant off-site or cumulative impacts that were not discussed in the General Plan EIR; or (d) are previously identified significant effects that, as a result of substantial new information not known at the time the General Plan EIR was certified, are determined to have a more severe adverse impact than discussed in the General Plan EIR.

4) All potential environmental effects associated with the Project are within the scope of the impacts analyzed in the General Plan EIR, and all feasible mitigation measures from the General Plan EIR applicable to the Project, together with applicable uniformly applied development policies and standards, have been incorporated into or otherwise apply to the Project.

5) The Project is exempt from further environmental review pursuant to Public Resources Code section 21083.3 and State CEQA Guidelines section 15183.

SECTION 5. Certification. The City Clerk shall certify to the adoption of this Ordinance.

SECTION 6. Location and Custodian of Records. The documents and materials that constitute the record of proceedings on which these findings are based are located at Coachella Civic Center. The Development Services Director is the custodian of the record of proceedings.

SECTION 7. Execution of Ordinance. The Mayor shall sign this Ordinance and the City Clerk shall attest and certify to the passage and adoption thereof.

SECTION 8. Severability. If any section, subsection, sentence, clause, phrase, or portion of this Ordinance is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Ordinance. The City Council of the City of Coachella hereby declares that it would have adopted this Ordinance and each section, subsection, sentence, clause, phrase, or portion thereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, phrases, or portions be declared invalid or unconstitutional.

I hereby certify that the foregoing Ordinance was **PASSED, APPROVED AND ADOPTED** by the City Council of the City of Coachella on the XXth day of XX, 2026.

_____
DR. FRANK FIGUEROA
MAYOR

ATTEST:

_____
ANGELA M. ZEPEDA
CITY CLERK

APPROVED AS TO FORM:

_____
RYAN GUIBOA
CITY ATTORNEY

STATE OF CALIFORNIA)
COUNTY OF RIVERSIDE) ss.
CITY OF COACHELLA)

I HEREBY CERTIFY that the foregoing Ordinance No. ___ was duly adopted by the City Council of the City of Coachella at a regular meeting thereof, held on this XXth day of XX 2026 by the following vote of Council:

AYES:

NOES:

ABSENT:

ABSTAIN:

_____
Delia Granados
Deputy City Clerk

Chapter 5.80 REGULATION OF SHORT-TERM VACATION RENTALS

5.80.005 Purpose.

A. The purpose of this chapter is to establish regulations for the use of privately owned residential dwelling units as short-term vacation rentals to minimize secondary impacts of such uses on surrounding residential neighborhoods and to ensure the collection and payment of transient occupancy taxes.

B. This chapter is not intended to provide any owner of residential property with the right or privilege to violate any private conditions, covenants and restrictions applicable to the owner's property that may prohibit the use of such owner's residential property for short-term rental purposes as defined in this chapter.

(Ord. No. 1105, § 2, 5-10-17; Ord. No. 1221, § 1, 2-26-25; Ord. No. 1222, § 1, 3-12-25)

5.80.010 Definitions.

The definitions set forth in this section shall govern the meaning and construction of the words and phrases used in this chapter, except where the context of such words and phrases clearly indicates a different meaning or construction.

"Agent" means a person or entity, who does not hold any interest in the property and who has authority to act on behalf of the owner pursuant to Section 5.80.040.

"Annual permit" means an annual permit issued by the city to allow an owner to rent a short-term vacation rental pursuant to the regulations contained in this chapter. An annual permit shall have a term of one year from issuance and then must be renewed as provided herein.

"Bedroom" shall mean a room within a short-term vacation rental designed primarily for sleeping purposes that meets the definition of the applicable California Building, Housing and related codes currently adopted by the city.

"Good neighbor guidelines" means a document or documents prepared by the city that summarizes the general rules of conduct, consideration, and respect, including, without limitation, provisions of this Code and other applicable laws, rules or regulations pertaining to the use and occupancy of short-term vacation rentals.

"Hosting platform" or "hosting site" means a person or entity who participates in leasing short-term vacation rentals by collecting or receiving a fee, directly or indirectly through an agent or intermediary, for conducting a booking transaction using any medium of facilitation. Examples include, but are not limited to, VRBO.com, Airbnb.com, homestay.com and other internet and non-internet based services that facilitate bookings for a fee.

"Owner of a short-term vacation rental" or "owner" shall mean the person(s) or entity(ies) that hold(s) record legal and or equitable title to the subject short-term vacation rental.

"Responsible party" means the lessee of a short-term vacation rental property, as set forth in any rental oral or written contract.

"Seasonal permit" means a limited-time permit issued by the city to allow an owner to rent a short-term vacation rental at the owner's primary residence pursuant to the regulations contained in this chapter. A seasonal permit shall have a limited term from March 1 to June 1 in any year and shall not allow renting of the subject short-term vacation rental during any other time of year. A seasonal permit then must be renewed as provided herein to be used during the limited-time period in a subsequent year.

"Short-term vacation rental" shall mean a "dwelling unit" in a residential property as defined by the city's zoning ordinance, or any portion thereof, that is rented by the owner to another party for a period of not more than thirty (30) consecutive days in exchange for any form of monetary or non-monetary consideration such as but not limited to trade, fee, swap or any other means lieu of cash payments. A hotel or motel room, porch, canopy, tent, "pop-up," or other structure that is not a "dwelling unit," shall not constitute a short-term vacation rental.

(Ord. No. 1105, § 2, 5-10-17; Ord. No. 1221, § 1, 2-26-25; Ord. No. 1222, § 1, 3-12-25)

5.80.020 Administration.

The provisions of this chapter shall be administered by the finance director or such other city employee as may be designated by the city manager, hereinafter referred to as the "permit administrator." In order to facilitate orderly administration of this chapter, the permit administrator shall have the authority to make interpretations and to promulgate administrative regulations consistent with the provisions of this chapter for the purpose of interpreting, clarifying, carrying out, furthering and enforcing the requirements and provision of this chapter. A copy of such administration regulations shall be on file in the office of the city clerk.

(Ord. No. 1105, § 2, 5-10-17; Ord. No. 1221, § 1, 2-26-25; Ord. No. 1222, § 1, 3-12-25)

5.80.030 Permit requirement.

A. No owner of a short-term vacation rental shall rent, offer to rent, or advertise for rent the short-term vacation rental to another person without a valid and active annual or seasonal permit approved and issued in the manner provided for by this chapter. Annual permits shall have a term of one year from issuance and shall be required to be renewed on an annual basis in order to remain valid and active. Seasonal permits shall have a limited term from March 1 to June 1 of the year of issuance. Permits are non-transferrable. The permit shall be conspicuously posted inside the short-term vacation rental and, as set forth in Section 5.80.050, the city permit number shall be included on all advertisements or solicitations for the short-term vacation rental, including, but not limited to hosting sites, websites, social media postings, emails, and print advertisements.

B. No person shall rent, offer to rent, or advertise for rent a balcony, patio, porch, canopy, tent or other outdoor area of a short-term vacation rental property ("outdoor area") if such rental does not occur in connection with the rental of the residence or dwelling unit, or indoor portion thereof, to which the outdoor area is attached.

C. No owner may hold more than five permits of any kind at any one time, except that an owner holding more than five permits as of April 1, 2025, may renew those permits unless they have been revoked or not renewed. This limit shall apply collectively to any corporation, partnership, limited liability company or business entity holding a permit as an owner under this chapter and to any other corporation, partnership, limited liability company or business entity which is established by, owned by, controlled by, or otherwise affiliated with the permit holder. For example, if a corporation that holds five legal permits under this chapter forms another business entity, that new business entity may not obtain a permit under this chapter due to the collective limit already being reached.

D. The city many not issue annual permits to more than twenty (20) percent of the residential dwelling units located within any neighborhood of the city.

    1. For purposes of this subsection, a "neighborhood" shall be that area identified in a final recorded subdivision map as being in that neighborhood. If there is no final recorded subdivision map for a particular neighborhood, it shall be defined as the area identified in the official neighborhood map of the city.

2. If annual permits have already been issued to more than twenty (20) percent of the residential dwelling units located within a particular neighborhood, the city shall issue no further annual permits for short-term vacation rentals in that neighborhood until sufficient annual permits have expired or have been revoked to reduce the total of issued annual permits below this twenty (20) percent limit.

3. This limit shall not apply to the issuance of seasonal permits, provided the owner otherwise meets the applicable requirements of this chapter.

E. No person shall rent, offer to rent, or advertise for rent a dwelling unit, or any portion thereof, as a short-term vacation rental to any partnership, corporation, limited liability company, commercial enterprise, or similar entity.

F. No person who has rented a short-term vacation rental shall sublease such dwelling unit, or any portion thereof, to any other person or entity.

G. No person shall charge an admission fee or request or require a donation for entrance into any short-term vacation rental, independent of the lawful charges and fees for renting the short-term vacation rental.

F. Development projects with an approved development agreement shall be exempt from the limitations in subsection C and D above limiting the number of units that can be owned by one owner and limiting the percent of units that can be permitted for short-term rentals.

(Ord. No. 1105, § 2, 5-10-17; Ord. No. 1221, § 1, 2-26-25; Ord. No. 1222, § 1, 3-12-25)

5.80.040 Authorized agent or representative.

A. An owner may authorize an agent to comply with the requirements of this chapter on behalf of the owner.

B. The owner shall give prior written notice to the city of any grant of such authority, including the identity and contact information for the agent. The owner shall promptly give the city written notice of any change to any such grant of authority.

C. Notwithstanding subsection (A), the owner of the short-term vacation rental is responsible for compliance with the provisions of this chapter and the owner shall not be relieved from any personal responsibility and/or personal liability for non-compliance with any applicable law, rule or regulation pertaining to the use and occupancy of the subject short-term vacation rental, regardless of whether such non-compliance was committed by the owner's agent, a responsible party, or the occupants of the owner's short-term vacation rental or their guests. Failure of an agent to comply with this chapter shall be deemed non-compliance by the owner.

(Ord. No. 1105, § 2, 5-10-17; Ord. No. 1221, § 1, 2-26-25; Ord. No. 1222, § 1, 3-12-25)

5.80.050 Advertising shall include permit number.

A. No person shall offer to rent or advertise for rent a short-term vacation rental without including in the offer or advertisement (whether the advertisement is via website, hosting sites, social media posting, e-mail, print media, radio and/or television) the city permit number applicable to the property. If the offer to rent or advertisement contains different sizes of type or fonts, the permit number shall be printed in the same size type as the large type used in the main body of the offer or advertisement. In the case of audio-only advertising, the city permit number shall be read as part of the advertising.

B. Any person advertising or causing the advertisement of a short-term vacation rental that contains information regarding the maximum overnight occupancy of the short-term vacation rental, shall advertise only the overnight maximum occupancy limit as set forth in the permit issued pursuant to this chapter.

(Ord. No. 1105, § 2, 5-10-17; Ord. No. 1221, § 1, 2-26-25; Ord. No. 1222, § 1, 3-12-25)

5.80.060 Short-term vacation rental permit applications.

A. The owner or the owner's agent shall submit an application for a new or renewed short-term vacation rental permit required by this chapter in a form required by the city and shall contain the following information and/or documents:

1. The name, address, and telephone number of the owner of the subject short-term vacation rental.
2. The name, address, and telephone number of the owner's agent for the subject short-term vacation rental, if any.
3. The type of permit sought (annual or seasonal).
4. The address of the proposed short-term vacation rental unit.
5. The number of bedrooms in the short-term vacation rental unit.
6. A nuisance response plan containing the information required by this chapter.
7. A copy of owner's transient occupancy registration certificate and city business license.
8. An agreement in a form approved by the city and signed by the owner, whereby the owner agrees to hold harmless and indemnify the city for any actual or alleged liability arising out of conduct occurring at or rental of a short-term vacation rental.
9. An insurance certificate or other written proof of not less than one million dollars ($1,000,000.00) comprehensive general liability insurance coverage in compliance with subsection [5.80.100](R) herein, to insure against claims or injuries to persons or damages to property which may arise from or in connection with conduct occurring at or rental of a short-term vacation rental.
10. Such other information as the permit administrator deems reasonably necessary to administer this chapter.

B. Application Fee.The permit application and renewal applications shall be accompanied by an application fee in the amount established by resolution of the city council. The renewal fee shall be paid before a permit may be approved and before the short-term vacation rental may be subsequently rented.The fee shall be non-refundable and shall be sufficient to allow for comprehensive and complete enforcement of the regulations in this chapter.

C. If an owner submits a renewal application with the city prior to the permit's expiration date, the permit shall remain valid until the city renders a decision on the permit renewal. Any renewal of an annual permit shall have a term of one year following the date of expiration of the prior permit. Any renewal of a seasonal permit shall have a term from March 1 through June 1 for the upcoming year. If an owner seeking renewal of a permit fails to provide all required application information to the city within thirty (30) days following written demand by the city, the application for renewal shall be closed out, no permit renewal shall be issued, and the owner shall be required to submit a new application and fee to the city to seek a new permit.

D. Change in Ownership. Upon a change of property ownership, the permit shall automatically expire and the successor owner or successor owner's agent shall submit an application for a new permit, which must be obtained prior to continuing to rent the subject property as a short-term vacation rental. A change in ownership of a business entity that owns a short-term vacation rental property which is subject to property tax reassessment constitutes a change of ownership for the purposes of this provision and results in the expiration of the permit. Notwithstanding the above, a change of short-term vacation rental ownership between family members or among spouses, including as a result of death or divorce or transfer to a personal or family trust, shall not result in expiration of a permit. "Family members" shall mean spouses, as

well as biological or adopted children, parents, brothers/sisters, grandparents, grandchildren, uncles, aunts, nephews or nieces of the owner. An owner shall notify the city in writing of any change in ownership, whether or not resulting in expiration of the permit, not later than fourteen (14) days after the change.

(Ord. No. 1105, § 2, 5-10-17; Ord. No. 1221, § 1, 2-26-25; Ord. No. 1222, § 1, 3-12-25)

5.80.070 Content of nuisance response plans.

A. Each nuisance response plan accompanying an application for a permit required by this chapter shall contain the following information and otherwise be in a form required by the permit administrator.

   1. The mailing address and telephone number of the owner or owners of the residential dwelling unit to be used as a short-term vacation rental pursuant to the permit;

   2. The name, address and telephone number of the local contact person or persons who will be available in person and by telephone twnety-four (24) hours per day, and who will be responsible for responding to or causing a prompt response to a phone call by code enforcement within fifteen (15) minutes and within forty-five (45) minutes in person at the rental location to a nuisance or other complaint arising out of the occupancy, condition, operation or use of the short-term rental(s) by responsible parties, occupants, and/or their guests and for undertaking remedial action to resolve any such nuisance or other complaint or correct a violation.

B. The manner of assuring timely corrective action to remedy the conditions that caused the nuisance or other complaint. For the purposes of this chapter, "timely corrective action" shall include, at a minimum, a telephone call to the responsible party within fifteen (15) minutes of being informed by the city of the nuisance or other complaint.

(Ord. No. 1105, § 2, 5-10-17; Ord. No. 1221, § 1, 2-26-25; Ord. No. 1222, § 1, 3-12-25)

5.80.080 Amendment of response plans.

At any time following the issuance of a permit required by this chapter, the owner of the short-term vacation rental being operated pursuant to such permit may change the content of the nuisance response plan by filing an amended response plan with the permit administrator. Such amended response plan shall contain all of the information and be in the form required by Section 5.80.070 of this chapter, and shall be accompanied by an amended response plan fee, if any, in an amount established by the resolution of the city council to recover the costs of review and enforcement of the nuisance response plan.

(Ord. No. 1105, § 2, 5-10-17; Ord. No. 1221, § 1, 2-26-25; Ord. No. 1222, § 1, 3-12-25)

5.80.090 Permit approval and issuance.

A. Upon receipt of an application for a permit required by this chapter, the permit administrator will review the application and supporting documents, and will approve and issue a permit to the owner of the property or properties that are the subject(s) of the application that authorizes the use and occupancy of such property as a short-term vacation rental if the permit administrator finds that the required application fee has been paid, the nuisance response plan submitted with the application conforms to the requirements of this chapter and the short-term vacation rental complies with the provisions of Section 5.80.100 of this chapter. Any permit issued shall contain on its face its annual or seasonal status and the overnight maximum occupancy limit as determined by Section 5.80.100 of this chapter.

B. An application may be denied if the applicant has had a prior short-term vacation rental application for the same unit revoked within the past twelve (12) calendar months. An application for a new or renewed permit may also be denied if the owner has any unpaid city taxes or fines outstanding that the owner is responsible for, if all administrative appeals have been exhausted, unless the owner has entered into an agreement with the city for payment of said taxes or fines that allows renewal of a permit.

(Ord. No. 1105, § 2, 5-10-17; Ord. No. 1221, § 1, 2-26-25; Ord. No. 1222, § 1, 3-12-25)

5.80.100 Operational requirements and performance standards established.

A. Each owner, and each responsible party or occupant of a short-term vacation rental, shall at all times comply with or cause compliance with the operational and performance standards applicable to short-term vacation rentals they own, lease or occupy, as established by this section.

B. The owner and agent shall ensure that the short-term vacation rental complies with all applicable codes regarding fire, building and safety, and all other relevant laws and ordinances.

C. The owner shall require the responsible party to be an adult twenty-one (21) years of age or older. The responsible party shall provide a telephone number to the owner and shall be accessible to the owner by telephone at all times.

D. Prior to occupancy, the owner or agent shall obtain the name, address, and driver's license number or a copy of the passport of the responsible party. The owner or agent shall also provide to the responsible party a copy of the city's good neighbor guidelines. The responsible party is legally responsible for compliance of all occupants of the short-term vacation rental or their guests with all provisions of this chapter and/or the Coachella Municipal Code. This information shall be readily available upon request of any police officer or employee of the city authorized to enforce this chapter or state law.

E. The owner shall limit overnight occupancy of the short-term vacation rental to the following:

1. The maximum number of overnight occupants shall not exceed two persons per bedroom plus two additional persons. The number of bedrooms in a short-term vacation rental shall be verified by the permit administrator using county assessor and/or city building records, prior to the issuance of a permit.

2. Notwithstanding the above, the city may permit increased overnight occupancy greater than the limits above for single family residential lots that are at least one-half acre in area. An owner whose lot meets this criterion may apply to the city for increased overnight occupancy greater than the limits set forth above. The permit administrator may request an interior and/or exterior site visit in order to verify the facts stated in the application and/or may request additional written or photographic documentation from the owner to support the application for increased overnight occupancy. The owner shall be present during any site visit. The permit administrator may allow the increased overnight occupancy if he or she determines that it will not cause undue negative effects or otherwise be detrimental to the surrounding neighborhood. The permit administrator may impose reasonable time limits and conditions of approval for the increased overnight occupancy. The permit administrator's determination on an application for increased overnight occupancy shall be final. No hearing shall be required or conducted. The permit administrator shall be afforded broad discretion with respect to applications for increased overnight occupancy.

F. During the hours of 10:00 p.m. through 8:00 a.m. of the following day, the short-term vacation rental shall not exceed the overnight maximum occupancy limit, except as allowed by the permit administrator pursuant to subsection (E) above.

G. Parking. One vehicle per bedroom shall be permitted for the rented premises with a total maximum of four vehicles on any rented premises. All vehicles of occupants of the short-term residential rental shall be parked only in an approved driveway or garage on the premises. For purposes of this chapter, a "vehicle" shall include passenger cars, trucks, towing trailers, boats and off-road vehicles. Notwithstanding the above, the permit administrator may allow for additional parking on the rented premises beyond these limits as part of an application for increased overnight occupancy under subsection (E) above.

H. Trash and refuse shall not be left stored within public view, except in proper containers for the purpose of collection by the city's authorized waste hauler on scheduled trash collection days. The owner of the short-term vacation rental shall provide sufficient trash collection containers and service to meet the demand of the occupants. No trash container shall be placed in or adjacent to a street or public right-of-way for collection service more than twenty-four (24) hours prior to the normal collection time. Containers shall be removed from, within or adjacent to the street or right-of-way within twenty-four (24) hours after collection.

I. A short-term vacation rental may be rented pursuant to either an oral or written agreement between the owner and the responsible party.

1. Each written rental agreement for a short-term vacation rental shall include the following terms, notifications and disclosures, which shall also be posted in a conspicuous location inside the unit;

a. The name, age, address of the responsible party along with a copy of the responsible party's government issued identification.

b. The maximum number of overnight occupants that are permitted pursuant to the overnight maximum occupancy limit set forth in the permit.

c. A list containing the names of all guests that will occupy the short-term vacation rental provided to the owner by the responsible party, including a list of their vehicles by make and model and license plate numbers.

d. An acknowledgment and agreement of the responsible party that he or she is legally responsible for compliance of all occupants of the short-term vacation rental and their guests with all provisions of this chapter and/or the Coachella Municipal Code.

e. Notification, acknowledgement and agreement of the responsible party that failure to comply with the maximum overnight occupancy limit and/or operational requirements in the provisions of Section 5.80.100 and the subsequent refusal to comply with the instructions of the owner, agent and/or local contact person in order to remedy such violations, shall subject the responsible party and his/her guests and/or other occupants to an immediate order to vacate the short-term vacation rental by the owner or local contact person in accordance with the provisions contained within the rental agreement.

f. The trash pick-up day and applicable rules and regulations pertaining to leaving or storing trash or refuse on the exterior of the property.

g. Notification that the responsible party and/or occupant(s) may be cited or fined by the city and/or immediately evicted by the owner or agent pursuant to state law, in addition to any other remedies available at law, for creating a disturbance or for violating any provisions of this chapter.

h. Notification that failure to conform to the overnight occupancy requirements of the short-term vacation rental is a violation of this chapter.

i. Notification that amplified sound, including radios, televisions and other electronic devices are subject to the city's noise ordinance as set forth in Coachella Municipal Code Chapter 7.04.

j. A notification about the prohibition on illegal loud parties, along with notification of the city' s right to recover the costs of special enforcement needed to address certain loud parties under the circumstances described in Coachella Municipal Code Sections 7.05.010 through 7.05.060.

k. A notification about the requirement that the occupant(s) participate in neighborhood quiet hours by avoiding parties and loud social events between the hours of 10:00 p.m. and 8:00 a.m. unless otherwise allowed by the permit administrator under subsection [5.80.100](E) of this chapter.

l. The name of the owner, agent, or local contact person, of the short-term vacation rental, and a telephone number at which each may be reached at all times.

m. A copy of the good neighbor guidelines which may from time to time be prepared and amended by the permit administrator. These guidelines may include location specific information, such as local speed limits.

n. Notification that the property is part of the city of Coachella's short-term vacation rental program.

o. A copy of this chapter of the Coachella Municipal Code, as it may be amended from time to time.

2. The written rental agreement and documentation of compliance with this subsection (I) shall be maintained by the owner and/or agent for a period of three years and be made readily available upon request of the permit administrator or any police officer or employee of the city authorized to enforce this chapter or state law.

J. During the rental term of each short-term vacation rental, the owner, agent or local contact person shall be available by phone and in-person twenty-four (24) hours per day, seven days per week for the purpose of: (i) responding to the city and to the responsible party by telephone within fifteen (15) minutes of complaints regarding the occupancy, condition, operation or use of the short-term vacation rental; (ii) responding in-person within forty-five (45) minutes to any additional or successive complaints regarding the occupancy, condition, operation or use short-term vacation rental; and (iii) taking action to resolve any complaint and/or correct any violation as set forth in subsection (K) of this Section 5.80.100.

K. Upon receipt of a nuisance complaint or such other complaint or upon notification that any occupant and/or guest of the short-term vacation rental has created unreasonable noise or disturbances, engaged in disorderly conduct, or committed violations of this chapter, the Coachella Municipal Code or any state law, the owner, agent or the local contact person shall promptly respond to such complaint and take corrective action to remedy the complaint and prevent a recurrence of such conduct by those occupants or guests. For purposes of this paragraph, "promptly respond" shall mean a response by telephone to the responsible party within fifteen (15) minutes of the complaint whereby the responsible party is advised of the nature of the complaint and a correction of any violation is made and a physical presence at the premises of the short-term vacation rental within forty-five (45) minutes to any unresolved, additional or successive complaints regarding the occupancy, condition, operation or use short-term vacation rental whereby the responsible party or other occupant is advised of the nature of the complaint and a correction of any violation is made. If the nature of the violation involves an action that would take more than an hour, "promptly respond" shall mean notifying the permit administrator of the nature of the complaint and thereafter diligently pursuing to completion the correction of the violation. Failure of the owner, agent or the local contact person to promptly respond and/or to take timely corrective action regarding the occupancy, condition, operation, or use of the short-term vacation rental shall be a violation of this chapter and shall be grounds for the imposition of penalties as set forth in this chapter and/or revocation or suspension of the permit. An owner, agent or local contact person is not required or authorized to act as a peace officer or to intervene in situations that pose a risk to personal safety. The owner, agent or the local contact person shall keep and maintain a written log or other record of the nature of the complaint or violation and the date, and time of each complaint, disturbance, response and the corrective action taken. Such written log or record shall be

readily available upon request of the city, including the permit administrator, and any police officer or employee of the city authorized to enforce this chapter or state law and shall be retained for a minimum of three years.

L. The owner, agent and/or local contact person shall order the responsible party and his/her guests and/or other occupants to immediately vacate the short-term vacation rental if the responsible party and/or guests or other occupants fail to comply with the maximum overnight occupancy limit and/or violate the provisions of this chapter and subsequently refuse to comply with the instructions of the owner, agent and/or local contact person in order to remedy or correct the violation.

M. The owner shall keep written records documenting compliance with all elements of the performance standards and the approved nuisance response plan. Such records shall be retained for a minimum of three years and shall be available during regular business hours upon request of the city, including the permit administrator, and any police officer or employee of the city authorized to enforce this chapter or state law.

N. The short-term vacation rental use shall not involve the use of commercial vehicles for the delivery of materials to and from the premises beyond those commercial vehicles normally associated with residential uses nor storage of delivered materials beyond those items which would normally be associated with a residential use of property.

O. The operational requirements and performance standards may be modified by the permit administrator upon request of the owner or agent based upon site specific circumstances for the purpose of allowing reasonable accommodation of a short-term vacation rental occupant as may be required by state or federal disability laws. All requests must be in writing and shall identify how the strict application of the standard conditions creates an unreasonable hardship to an occupant such that, if the requirement is not modified, reasonable use of the property for a short-term vacation rental by an occupant would not be allowed. Any hardships identified must relate to physical constraints to the subject site and shall not be self-induced or economic. Any modifications of the standard conditions shall not further exacerbate an already existing problem.

P. The permit administrator shall have the authority to impose additional conditions on the use of any given short-term vacation rental unit to ensure that any potential secondary effects unique to the subject vacation rental unit are avoided or adequately mitigated.

Q. No radio receiver, musical instrument, phonograph, loudspeaker, sound amplifier, or other any machine or device for the producing or reproducing of any sound may be operated on the vacation rental property unless it is in compliance with the city's noise ordinance.

R. The owner shall, at the owner's expense, procure and maintain, for the duration of any permit, comprehensive general liability insurance with a limit of no less than one million dollars ($1,000,000.00) per occurrence to insure against claims for injuries to persons or damages to property which may arise from or in connection with rental or operation of a short-term vacation rental. Such insurance shall be at least as broad as the latest version of Insurance Services Office Commercial General Liability coverage (occurrence form CG 0001).

S. No accessory dwelling unit (ADU) may be rented as a short-term vacation rental in the city.

(Ord. No. 1105, § 2, 5-10-17; Ord. No. 1221, § 1, 2-26-25; Ord. No. 1222, § 1, 3-12-25)

5.80.105 Payment of transient occupancy taxes.

A. The owner and/or the agent is responsible for collecting and remitting transient occupancy tax to the city and shall comply with all provisions of Section 4.28.030 et. seq. of the Municipal Code concerning transient

occupancy taxes, including, but not limited to, submission of a return in accordance with Chapter 4.28, which shall be filed even if the vacation rental unit was not rented during each such reporting period.

B. Beginning April 1, 2025, hosting platforms shall be responsible for collecting all applicable transient occupancy taxes and remitting the same to the city. The hosting platform shall be considered an agent of the owner/host for purposes of transient occupancy tax collections and remittance pursuant to Chapter 4.28.

C. Owners and/or agents shall be responsible for submitting transient occupancy tax forms reporting nightly stays and gross receipts even if a hosting platform is remitting the taxes due on their behalf.

D. Permittees making two or more late submittals in a 12-month period shall not have their permit renewed upon expiration.

E. Owners shall provide all transient occupancy tax-related documents to the city within five business days of the city's written request, as more particularly set forth in Section 5.80.150. If any documents are not in the possession of an owner but are in the possession of an agent, the owner shall promptly request said documents from the agent within three business days of the city's written request and the documents shall be provided to the city within five business days thereafter.

F. Timely payment of applicable transient occupancy taxes for a short-term vacation rental shall not excuse an owner's noncompliance with any other provisions of this chapter and the city may impose fines or take other action as set forth in this chapter to address said noncompliance.

(Ord. No. 1221, § 1, 2-26-25; Ord. No. 1222, § 1, 3-12-25)

5.80.110 Terminating the use of a property as short-term rental.

Where the owner of property used and occupied as a short-term vacation rental pursuant to a permit approved and issued in the manner provided for by this chapter determines to terminate such use and restore the property either to an owner-occupied residence or a long-term rental, the property owner shall promptly cause a notice of such determination/termination to be filed with the permit administrator. Once such notice is received by the city, the property shall not again be leased, offered for lease or otherwise occupied as a short-term vacation rental until a new permit is obtained by the owner.

(Ord. No. 1105, § 2, 5-10-17; Ord. No. 1221, § 1, 2-26-25; Ord. No. 1222, § 1, 3-12-25)

5.80.120 Violations.

A. It is unlawful and a violation of this chapter for any person or entity owning, renting, leasing, occupying or having charge, control or possession of any real or improved property within the City of Coachella to cause, permit, maintain or allow any violation of this chapter to exist thereon. Any person who violates any provision of this chapter is guilty of a misdemeanor. Such violation is punishable as set forth in Section 1.08 of this Code. Each and every day, or portion thereof, that a violation of this chapter exists constitutes a separate and distinct violation.

B. Alternatively, this chapter may be enforced through the issuance of an administrative citation in accordance with Chapter 1.08 of this Code, except that the fine for each separate violation shall be as follows: (1) an administrative fine in an amount not to exceed one thousand dollars ($1,000.00) for the first citation; (2) an administrative fine an amount not to exceed two thousand dollars ($2,000.00) for a second citation issued for the same offense within a 12-month period of the date of the first offense; and (3) an administrative fine in an amount not to exceed three thousand dollars ($3,000.00) for a third and any subsequent citation issued for the same offense within a 12-month period of the date of the first offense. Each and every day such a violation exists shall constitute a separate and distinct violation of this chapter.

C. Notwithstanding subsection (B) of this Section 5.80.120, operating a short-term vacation rental without a valid permit shall be subject to an administrative fine in the following amounts: (1) an administrative fine in an amount not to exceed one thousand five hundred dollars ($1,500.00) for the first citation; (2) an administrative fine in an amount not to exceed three thousand dollars ($3,000.00) for a second citation issued for the same offense within a 12-month period of the date of the first offense; and (3) an administrative fine in an amount not to exceed five thousand dollars ($5,000.00) for a third and any subsequent citation issued for the same offense within a 12-month period of the date of the first offense. Each and every day such a violation exists shall constitute a separate and distinct violation of this chapter.

D. In addition to the foregoing, a violation of any provision of this chapter shall constitute a public nuisance and shall be subject to abatement by the city by means of a civil action or administrative abatement pursuant to Chapter 3.10 of this Code, and each day such condition continues it shall be regarded as a new and separate offense.

E. This remedies provided for in this section are in addition to, and not in lieu of, all other legal remedies, criminal or civil, which may be pursued by the city to address any violation of this chapter.

(Ord. No. 1105, § 2, 5-10-17; Ord. No. 1221, § 1, 2-26-25; Ord. No. 1222, § 1, 3-12-25)

5.80.130 Permit suspension, modification or revocation.

A. In addition to any other remedy provided by this chapter, a permit issued pursuant to this chapter may be suspended, modified or revoked for any violations of this chapter, for violation of any other law on the premises of the short-term vacation rental, or for the maintenance of such other conditions as may be shown to be injurious to the public health and safety or if the applicant made any false, misleading or fraudulent statement of a material fact in the application for permit, or any report or record required to be filed pursuant to this chapter.

B. Prior to suspension, modification or revocation of a permit, a hearing shall be held thereon by the permit administrator or a hearing officer designated by the permit administrator. The permittee shall be notified in writing of the grounds for suspension, modification or revocation of the permit at least ten (10) days prior to the scheduled hearing. The decision of the permit administrator or hearing officer shall be rendered within five days of the hearing. The decision shall be in writing, and shall set forth the findings and reasons for the decision. The decision of the permit administrator or hearing officer is final.

(Ord. No. 1105, § 2, 5-10-17; Ord. No. 1221, § 1, 2-26-25; Ord. No. 1222, § 1, 3-12-25)

5.80.140 Hosting platforms.

A. Subject to applicable laws, hosting platforms shall, upon written request by the city, promptly disclose to the city each short-term vacation rental located in the city that they list, the host ID, listing ID, and names of the persons responsible for each such listing, the address of each such listing, the length of stay for each such listing, and the price paid for each stay.

B. A hosting platform shall promptly remove any listing upon receipt of a take-down notice from the city indicating that a listing violates applicable legal requirements.

C. A hosting platform is responsible for collecting and remitting transient occupancy taxes on behalf of their hosts in accordance with this Code, either directly to the city or through the owner/agent.

D. A hosting platform shall require all hosts to include a valid permit number in a designated field dedicated to the license number.

(Ord. No. 1105, § 2, 5-10-17; Ord. No. 1221, § 1, 2-26-25; Ord. No. 1222, § 1, 3-12-25)

5.80.150 Records and inspection.

Each owner or agent shall provide access to each short-term vacation rental and any records related to the use and occupancy of the short-term vacation rental to the city manager or his designee at any time during normal business hours, for the purpose of inspection or audit to determine that the objective and conditions of this chapter are being fulfilled.

(Ord. No. 1105, § 2, 5-10-17; Ord. No. 1221, § 1, 2-26-25; Ord. No. 1222, § 1, 3-12-25)

5.80.160 Requirements not exclusive.

The requirements of this chapter shall be in addition to any license, permit or fee required under any other provision of the Coachella Municipal Code. The issuance of any permit pursuant to this chapter shall not relieve any person of the obligation to comply with all other provisions of the Coachella Municipal Code pertaining to the use and occupancy of the short-term vacation rental or the property on which it is located.

(Ord. No. 1105, § 2, 5-10-17)

RESOLUTION NO. PC2026-29

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF COACHELLA RECOMMENDING THAT THE CITY COUNCIL CONDITIONALLY APPROVE CONDITIONAL USE PERMIT NO. 396 TO APPROVE THE PROPOSED BARS, COCKTAIL LOUNGES, LIQUOR SALES, AND SPECIAL EVENT ESTABLISHMENT USES, FOR THE "COVA" PROJECT PROPOSING THE DEVELOPMENT OF A HOTEL, RESORT, RESIDENTIAL, AND COMMERCIAL PUBLIC BEACH CLUB LOCATED ON APPROXIMATELY 87 ACRES ON FOUR CONTIGUOUS PARCELS (APNS 780-040-001, 780-040-003, 780-060-001, AND 780-060-002) SOUTH OF AVENUE 52, WEST OF VAN BUREN STREET AND EAST OF CALHOUN STREET, AND DETERMINE, PURSUANT TO STATE CEQA GUIDELINES SECTION 15183, THAT NO FURTHER ENVIRONMENTAL REVIEW IS REQUIRED. APPLICANT: RELEVANT COACHELLA OWNER, LLC

WHEREAS, on April 22, 2015, the City approved Resolution No. 2015-03 certifying the Program Environmental Impact Report ("EIR") (SCH #2009021007) for the City of Coachella General Plan Update 2035 ("General Plan") and Climate Action Plan; adopting environmental findings, a mitigation monitoring and reporting program, and a statement of overriding considerations; and approving the General Plan and Climate Action Plan pursuant to the California Environmental Quality Act, herein incorporated by reference; and

WHEREAS, on July 7, 2025, Relevant Coachella Owner, LLC ("Applicant"), submitted an application for a Tentative Tract Map, Architectural Review, Conditional Use Permit, Environmental Assessment, and Development Agreement for the proposed "COVA" project, consisting of hotel, resort, residential, commercial and public beach club uses on approximately 87 acres comprising four contiguous parcels (APNs 780-040-001, 780-040-003, 780-060-001, and 780-060-002) located south of Avenue 52, west of Van Buren Street and east of Calhoun Street ("Project"); and

WHEREAS, the Applicant subsequently submitted applications for Zoning Ordinance Amendment Nos. 26-02 and 26-03 as related entitlements for the Project; and

WHEREAS, the Project site has a zoning designation of (R-C) Regional Commercial and a General Plan 2035 land use designation of Regional Retail District, which allows a residential density of 10 to 15 dwelling units per acre and a floor area ratio of 0.35 to 2.0. The Project proposes a residential density of approximately 14.4 dwelling units per acre and a floor area ratio of approximately 0.65, consistent with the development density and intensity established by the General Plan; and,

WHEREAS, Conditional Use Permit No. 396 proposes to authorize bars and cocktail lounges, liquor sales, and special event establishment uses in conjunction with the COVA Project, including special event activities within designated areas of the private-

sector hotel and resort, including the event barn and outdoor DJ island, as well as the public-sector beach club; and

WHEREAS, the proposed Project is consistent with and intended to implement the vision of the Coachella Municipal Code and the General Plan pertaining to land use patterns, building and site design, and public right-of-way improvements; and,

WHEREAS, Public Resources Code section 21083.3 and State CEQA Guidelines section 15183 provide that a project consistent with the development density established by an existing general plan for which an EIR was certified does not require additional environmental review except as necessary to examine whether the project would result in project-specific significant effects peculiar to the project or its site; and

WHEREAS, the City, as lead agency under the CEQA, prepared a Modified Initial Study/Section 15183 Checklist for the Project (the "15183 Checklist"), to determine whether further environmental review of the Project is required; and

WHEREAS, the 15183 Checklist concludes that the Project would not result in any environmental effects that (1) are peculiar to the Project or the parcel on which the Project would be located; (2) were not analyzed as significant effects in the certified General Plan EIR; (3) are potentially significant off-site or cumulative impacts that were not discussed in the General Plan EIR; or (4) are previously identified significant effects that, as a result of substantial new information not known when the General Plan EIR was certified, are determined to have a more severe adverse impact than discussed in the General Plan EIR. The 15183 Checklist further concludes that the potential environmental effects associated with the Project are within the scope of the impacts analyzed in the General Plan EIR and that all feasible mitigation measures from the General Plan EIR applicable to the Project, together with applicable uniformly applied development policies and standards, have been incorporated into or otherwise apply to the Project; and

WHEREAS, a notice of a public hearing to consider Tentative Tract Map No. 39330, Zoning Ordinance Amendment No. 26-02, Zoning Ordinance Amendment No. 26-03, Conditional Use Permit No. 396, Conditional Use Permit No. 407, Architectural Review No. 25-07, and Development Agreement No. 25-01 was issued in accordance with Coachella Municipal Code Section 16.12.110, 17.72.010J, 17.74.010G, 17.80.010E, and 17.100.060 inclusive of the publication on September 17, 2026, of a legal public hearing notice which was published in the Desert Sun, the City's newspaper of record and mailing of a public hearing notice to a certified list of property owners within 300 feet of the subject properties on September 17, 2026; and,

WHEREAS, on October 7, 2026, the Planning Commission held a duly noticed public hearing to consider the application for the Project during which evidence, both written and oral, including the staff report and supporting documents, was presented at said hearing; and,

WHEREAS, all other legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, BE IT RESOLVED, THE PLANNING COMMISSION OF THE CITY OF COACHELLA, CALIFORNIA DOES HEREBY FIND DETERMINE AND RESOLVE AS FOLLOWS:

SECTION 1. Incorporation of Recitals. The Planning Commission hereby specifically finds that all of the facts set forth in the recitals of this Resolution are true and correct and are incorporated into this Resolution by reference and constitute a material part of this Resolution.

SECTION 2. Compliance with California Environmental Quality Act. The Planning Commission has reviewed and considered the previously certified Coachella General Plan Update 2035 EIR (SCH No. 2009021007), the 15183 Checklist and supporting technical studies prepared for the Project, the staff report, all written and oral comments received, and the entire administrative record. Based on substantial evidence in the record, the Planning Commission recommends that the City Council make the following determinations:

1) The 15183 Checklist was prepared in compliance with CEQA and the State CEQA Guidelines and reflects the City's independent judgment and analysis.
2) The Project is consistent with the City's General Plan Update 2035 for which an EIR was certified.
3) The Project would not result in any environmental effects that: (a) are peculiar to the Project or the parcel on which the Project would be located; (b) were not analyzed as significant effects in the certified General Plan EIR; (c) are potentially significant off-site or cumulative impacts that were not discussed in the General Plan EIR; or (d) are previously identified significant effects that, as a result of substantial new information not known at the time the General Plan EIR was certified, are determined to have a more severe adverse impact than discussed in the General Plan EIR.
4) All potential environmental effects associated with the Project are within the scope of the impacts analyzed in the General Plan EIR, and all feasible mitigation measures from the General Plan EIR applicable to the Project, together with applicable uniformly applied development policies and standards, have been incorporated into or otherwise apply to the Project.
5) The Project is exempt from further environmental review pursuant to Public Resources Code section 21083.3 and State CEQA Guidelines section 15183.

The applicable mitigation measures adopted in connection with the General Plan Update 2035 (GPU) EIR shall remain applicable to the Project and shall be incorporated into the Project's mitigation monitoring and reporting requirements.

SECTION 3. Conditional Use Permit Findings. Based upon the evidence presented at the hearing, including the staff report and written and verbal testimony, which are all incorporated herein by reference, the Planning commission finds that:

1. The proposed use will be in harmony with and in accordance with the objectives of the General Plan.

The proposed bars and cocktail lounges, liquor sales, and special event establishment are consistent with and supportive of the Regional Retail District land use designation applicable to the Project site. The proposed uses are components of the larger COVA resort development and are intended to provide dining, beverage, recreation, entertainment, and visitor-serving amenities in conjunction with the Project's hotel, resort, residential, restaurant, and other commercial uses.

The bars and cocktail lounges and associated liquor sales will complement the hospitality and visitor-serving functions of the Project, while the special event establishment will serve as a principal recreational and visitor-serving amenity within the overall resort. These uses support the development of the Project as an integrated destination rather than as a conventional residential development and are consistent with General Plan objectives encouraging commercial, hospitality, recreational, and visitor-serving development and a diversified local economy.

2. The proposed use will be compatible with the existing or intended character of the general vicinity and will not change its essential character.

The proposed bars and cocktail lounges, liquor sales, and special event establishment have been incorporated into the comprehensive design of the COVA resort development and are compatible with the intended hospitality, commercial, recreational, and entertainment character of the Project.

The proposed special event establishments serve an integral recreational and visitor-serving component of the resort rather than as an independent use unrelated to the overall development. Similarly, the bars and cocktail lounges and liquor sales are intended to operate in conjunction with the Project's hospitality, restaurant, recreational, and visitor-serving uses.

The Project's site planning and prescribed conditions of approval provide mechanisms to address potential operational effects associated with these uses, including noise, lighting, security, parking, circulation, hours of operation, alcohol service, and fire and life safety. Alcohol sales and service will also remain subject to applicable requirements of the California Department of Alcoholic Beverage Control.

With implementation of the conditions of approval and compliance with applicable City and State requirements, the proposed uses will be located, designed, constructed, operated, and maintained in a manner compatible with the intended character of the Project and surrounding area and will not change the essential character of the area.

3. Consideration has been given to scale, bulk, coverage, density, public facilities, utilities, neighborhood character, traffic generation, street capacity, and other relevant impacts.

The scale, bulk, coverage, and intensity of the proposed bars and cocktail lounges, liquor sales, and special event establishments have been considered as part of the overall COVA

development and the associated Architectural Review, Tentative Tract Map, Conditional Use Permits, and other Project entitlements.

The special event establishments and food-and-beverage uses are integrated into the overall Project site plan and will be served by the Project's proposed vehicular and pedestrian circulation systems, parking facilities, utilities, water and sewer facilities, drainage improvements, emergency access, landscaping, lighting, and other infrastructure.

The Project is subject to conditions of approval requiring the construction of necessary infrastructure and compliance with applicable requirements of the City and other responsible agencies. Potential effects associated with traffic, parking, noise, lighting, alcohol service, security, and operation of the proposed uses are addressed through the Project design, applicable Municipal Code requirements, and prescribed conditions of approval.

4. Any potentially hazardous or disturbing characteristics are justified by the common public interest as a benefit to the community as a whole.

The proposed bars and cocktail lounges, liquor sales, and special event establishments may have the potential to generate operational effects associated with noise, alcohol consumption, security, lighting, parking, traffic, and hours of operation. However, the proposed uses are located within and have been designed as integral components of the larger COVA resort development rather than as stand-alone uses. The proposed Project is consistent with the land use framework established by the City of Coachella General Plan and evaluated in the certified General Plan Environmental Impact Report. The General Plan EIR evaluated and contemplated the potential environmental effects associated with development of the Project area consistent with the General Plan, including potential noise impacts associated with the types and intensity of development anticipated for the area.

Potential operational impacts associated with the proposed uses have been further addressed through the Project design, applicable provisions of the Coachella Municipal Code, applicable requirements of the California Department of Alcoholic Beverage Control, and the conditions of approval imposed on Conditional Use Permit No. 396 and the Project as a whole. These requirements provide mechanisms to address noise, security, lighting, parking, circulation, alcohol service, and other operational considerations and to ensure that the uses operate in a manner compatible with surrounding and reasonably anticipated uses.

The proposed bars and cocktail lounges, liquor sales, and special event establishments will provide dining, recreational, entertainment, hospitality, and visitor-serving amenities that support the intended function of the COVA development as an integrated resort destination. The special event establishments will provide a recreational and visitor-serving amenity, while the bars, cocktail lounges, and associated liquor sales will complement the Project's restaurant, hospitality, recreational, and commercial components.

5. Vehicular approaches are designed to reasonably minimize interference with traffic on surrounding public streets or roads.

Vehicular access to the proposed bars and cocktail lounges, liquor sales, and special event establishments will occur through the access and internal circulation system designed for the overall COVA development. The proposed conditional uses will not rely upon separate uncontrolled access points directly serving the individual uses from surrounding public streets.

The Project provides coordinated vehicular access from the surrounding roadway network and an internal circulation system designed to distribute vehicles among the resort, residential, commercial, recreational, and visitor-serving components of the development. Parking and pedestrian circulation serving the proposed uses are similarly incorporated into the overall Project design.

The Project is subject to conditions of approval requiring compliance with applicable City engineering, circulation, access, fire, and public safety requirements. As designed and conditioned, vehicular approaches serving the proposed conditional uses will provide reasonable access while minimizing interference with traffic on surrounding public streets.

SECTION 4. Location and Custodian of Records. The documents and materials that constitute the record of proceedings on which these findings are based are located at Coachella Civic Center. The Community Development Director is the custodian of the record of proceedings.

SECTION 5. Execution of Resolution. The Planning Commission Chairperson shall sign this Resolution and the Planning Commission Secretary shall attest and certify to the passage and adoption thereof.

SECTION 6. Recommendation to City Council. Based on the foregoing recitals and findings, and the written and oral comments, facts, and evidence presented, the City of Coachella Planning Commission recommends that the City Council conditionally approve Conditional Use Permit No. 396 to authorize bars and cocktail lounges, liquor sales, and special event establishment uses, including special event activities within the designated event barn, outdoor DJ island, and public event areas, for the "COVA" Project located on approximately 87 acres on four contiguous parcels (APNs 780-040-001, 780-040-003, 780-060-001, and 780-060-002) south of Avenue 52, west of Van Buren Street, and east of Calhoun Street ("Project"), subject to the Conditions of Approval set forth in Exhibit "A" of this Resolution.

SECTION 7. Severability. If any section, subsection, sentence, clause, phrase, or portion of this Resolution is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Resolution. The Planning Commission of the City of Coachella hereby declares that it would have adopted this Resolution and each section, subsection, sentence, clause, phrase, or portion thereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, phrases, or portions be declared invalid or unconstitutional.

PASSED APPROVED and ADOPTED this 7th day of October 2026.

AYES:

NOES:

ABSENT:

ABSTAIN:

_____
Eva Lara, Chairperson
City of Coachella

ATTEST:

_____
Kendra Reif
Planning Commission Secretary

APPROVED AS TO FORM:

_____
Best Best & Krieger
City Attorney

Exhibit A – Resolution No. PC2026-29

CONDITIONS OF APPROVAL FOR CONDITIONAL USE PERMIT NO. 396

General Conditions

1. Conditional Use Permit No. 396 is approved for the "COVA" project proposing the development of a hotel, resort, residential, and commercial public beach club located on approximately 87 acres on four contiguous parcels (APNs 780-040-001, 780-040-003, 780-060-001, and 780-060-002) south of Avenue 52, west of Van Buren Street and east of Calhoun Street ("Project"), and determine, pursuant to State CEQA Guidelines Section 15183, that no further environmental review is required.

2. The applicant shall defend, indemnify and hold harmless the City of Coachella, its officials, officers, employees, and agents from and against any claim, action, or proceeding against the City, its officials, officers, employees or agents to attack, set aside, void or annul any project approval or condition of approval of the city concerning this project, including but not limited to any approval or condition of approval or mitigation measure imposed by the City Council or Planning Commission. The City shall promptly notify the applicant of any claim, action, or proceeding concerning the project and the City shall cooperate fully in the defense of the matter. The City reserves the right, at its own option, to choose its own attorney to represent the City, its officials, officers, employees and agents in the defense of the City Attorney, within five days of the effective date of this approval.

3. The applicant shall comply with all requirements and conditions of approval as included in Tentative Tract Map No. 39330, Zoning Ordinance Amendment No. 26-02, Zoning Ordinance Amendment No. 26-03, Conditional Use Permit No. 396, Conditional Use Permit No. 407, Architectural Review No. 25-07, and Development Agreement No. 25-01, and any modifications or extensions thereof, as listed in those Resolutions for each respective approval.

RESOLUTION NO. PC2026-30

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF COACHELLA RECOMMENDING THAT THE CITY COUNCIL CONDITIONALLY APPROVE CONDITIONAL USE PERMIT NO. 407 TO APPROVE THE PROPOSED SINGLE-FAMILY RESIDENTIAL USES IN CONJUNCTION WITH A RESORT USE, FOR THE "COVA" PROJECT PROPOSING THE DEVELOPMENT OF A HOTEL, RESORT, RESIDENTIAL, AND COMMERCIAL PUBLIC BEACH CLUB LOCATED ON APPROXIMATELY 87 ACRES ON FOUR CONTIGUOUS PARCELS (APNS 780-040-001, 780-040-003, 780-060-001, AND 780-060-002) SOUTH OF AVENUE 52, WEST OF VAN BUREN STREET AND EAST OF CALHOUN STREET, AND DETERMINE, PURSUANT TO STATE CEQA GUIDELINES SECTION 15183, THAT NO FURTHER ENVIRONMENTAL REVIEW IS REQUIRED. APPLICANT: RELEVANT COACHELLA OWNER, LLC

WHEREAS, on April 22, 2015, the City approved Resolution No. 2015-03 certifying the Program Environmental Impact Report ("EIR") (SCH #2009021007) for the City of Coachella General Plan Update 2035 ("General Plan") and Climate Action Plan; adopting environmental findings, a mitigation monitoring and reporting program, and a statement of overriding considerations; and approving the General Plan and Climate Action Plan pursuant to the California Environmental Quality Act, herein incorporated by reference; and

WHEREAS, on July 7, 2025, Relevant Coachella Owner, LLC ("Applicant"), submitted an application for a Tentative Tract Map, Architectural Review, Conditional Use Permit, Environmental Assessment, and Development Agreement for the proposed "COVA" project, consisting of hotel, resort, residential, commercial and public beach club uses on approximately 87 acres comprising four contiguous parcels (APNs 780-040-001, 780-040-003, 780-060-001, and 780-060-002) located south of Avenue 52, west of Van Buren Street and east of Calhoun Street ("Project"); and

WHEREAS, Conditional Use Permit No. 407 proposes to authorize 162 single-family residential units in conjunction with the COVA resort, including estate lots, zero lot line lots, bungalow condominiums, and VIP suites, as part of the integrated resort development; and

WHEREAS, the Applicant subsequently submitted an application for Zoning Ordinance Amendment No. 26-02 to amend Chapter 17.28 of Title XVII of the Coachella Municipal Code to allow single-family residential uses in conjunction with a resort use as a conditional use within the Regional Commercial (R-C) Zone; and

WHEREAS, implementation of the single-family residential uses proposed under Conditional Use Permit No. 407 is contingent upon City Council adoption and effectiveness of Zoning Ordinance Amendment No. 26-02; and

WHEREAS, the Project site has a zoning designation of (R-C) Regional Commercial and a General Plan 2035 land use designation of Regional Retail District, which allows a residential density of 10 to 15 dwelling units per acre and a floor area ratio of 0.35 to 2.0. The Project proposes a residential density of approximately 14.4 dwelling units per acre and a floor area ratio of approximately 0.65, consistent with the development density and intensity established by the General Plan; and,

WHEREAS, the proposed Project is consistent with and intended to implement the vision of the Coachella Municipal Code and the General Plan pertaining to land use patterns, building and site design, and public right-of-way improvements; and,

WHEREAS, Public Resources Code section 21083.3 and State CEQA Guidelines section 15183 provide that a project consistent with the development density established by an existing general plan for which an EIR was certified does not require additional environmental review except as necessary to examine whether the project would result in project-specific significant effects peculiar to the project or its site; and

WHEREAS, the City, as lead agency under the CEQA, prepared a Modified Initial Study/Section 15183 Checklist for the Project (the "15183 Checklist") to determine whether further environmental review of the Project is required; and

WHEREAS, the 15183 Checklist concludes that the Project would not result in any environmental effects that (1) are peculiar to the Project or the parcel on which the Project would be located; (2) were not analyzed as significant effects in the certified General Plan EIR; (3) are potentially significant off-site or cumulative impacts that were not discussed in the General Plan EIR; or (4) are previously identified significant effects that, as a result of substantial new information not known when the General Plan EIR was certified, are determined to have a more severe adverse impact than discussed in the General Plan EIR. The 15183 Checklist further concludes that the potential environmental effects associated with the Project are within the scope of the impacts analyzed in the General Plan EIR and that all feasible mitigation measures from the General Plan EIR applicable to the Project, together with applicable uniformly applied development policies and standards, have been incorporated into or otherwise apply to the Project; and

WHEREAS, a notice of a public hearing to consider Tentative Tract Map No. 39330, Zoning Ordinance Amendment No. 26-02, Zoning Ordinance Amendment No. 26-03, Conditional Use Permit No. 396, Conditional Use Permit No. 407, Architectural Review No. 25-07, and Development Agreement No. 25-01 was issued in accordance with Coachella Municipal Code Section 16.12.110, 17.72.010J, 17.74.010G, 17.80.010E, and 17.100.060 inclusive of the publication on September 17, 2026, of a legal public hearing notice which was published in the Desert Sun, the City's newspaper of record and mailing of a public hearing notice to a certified list of property owners within 300 feet of the subject properties on September 17, 2026; and,

WHEREAS, on October 7, 2026, the Planning Commission held a duly noticed public hearing to consider the application for the Project during which evidence, both

written and oral, including the staff report and supporting documents, was presented at said hearing; and,

WHEREAS, all other legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, BE IT RESOLVED, THE PLANNING COMMISSION OF THE CITY OF COACHELLA, CALIFORNIA DOES HEREBY FIND DETERMINE AND RESOLVE AS FOLLOWS:

SECTION 1. **Incorporation of Recitals.** The Planning Commission hereby specifically finds that all of the facts set forth in the recitals of this Resolution are true and correct and are incorporated into this Resolution by reference and constitute a material part of this Resolution.

SECTION 2. **Compliance with California Environmental Quality Act.** The Planning Commission has reviewed and considered the previously certified Coachella General Plan Update 2035 EIR (SCH No. 2009021007), the 15183 Checklist and supporting technical studies prepared for the Project, the staff report, all written and oral comments received, and the entire administrative record. Based on substantial evidence in the record, the Planning Commission recommends that the City Council make the following determinations:

1) The 15183 Checklist was prepared in compliance with CEQA and the State CEQA Guidelines and reflects the City's independent judgment and analysis.
2) The Project is consistent with the City's General Plan Update 2035 for which an EIR was certified.
3) The Project would not result in any environmental effects that: (a) are peculiar to the Project or the parcel on which the Project would be located; (b) were not analyzed as significant effects in the certified General Plan EIR; (c) are potentially significant off-site or cumulative impacts that were not discussed in the General Plan EIR; or (d) are previously identified significant effects that, as a result of substantial new information not known at the time the General Plan EIR was certified, are determined to have a more severe adverse impact than discussed in the General Plan EIR.
4) All potential environmental effects associated with the Project are within the scope of the impacts analyzed in the General Plan EIR, and all feasible mitigation measures from the General Plan EIR applicable to the Project, together with applicable uniformly applied development policies and standards, have been incorporated into or otherwise apply to the Project.
5) The Project is exempt from further environmental review pursuant to Public Resources Code section 21083.3 and State CEQA Guidelines section 15183.

The applicable mitigation measures adopted in connection with the General Plan Update 2035 (GPU) EIR shall remain applicable to the Project and shall be incorporated into the Project's mitigation monitoring and reporting requirements.

SECTION 3. Conditional Use Permit Findings. Based upon the evidence presented at the hearing, including the staff report and written and verbal testimony, which are all incorporated herein by reference, the Planning commission finds that:

1. The proposed use will be in harmony with and in accordance with the objectives of the General Plan.

The General Plan's Regional Retail District designation accommodates residential uses supporting a regional-serving commercial environment. The proposed single-family residential component would be integrated with the COVA resort's lodging, recreational amenities, dining, and other commercial facilities rather than developed as an independent residential subdivision.

The overall residential component includes 162 single-family residential units and 240 condominium cottages, totaling 402 units within approximately 28 residential acres. Commercial acreage is excluded from this calculation. The resulting density is approximately 14.4 dwelling units per acre, within the General Plan's Regional Retail District range of 10 to 15 dwelling units per acre.

The integrated development supports Policy 7.8's mix of regional-serving uses and Policy 7.10's encouragement of resort development, subject to the applicable compatibility and connectivity requirements. It also supports Subarea 3's objectives for coordinated commercial development and appropriate transitions to surrounding properties.

Authorization of the single-family use is contingent upon adoption and effectiveness of Zoning Ordinance Amendment No. 26-02.

2. The proposed use will be compatible with the existing or intended character of the general vicinity and will not change its essential character.

The single-family units would be developed in conjunction with the resort and would share its circulation system, recreational amenities, infrastructure, and coordinated development framework. This relationship maintains the residential component's connection to the intended commercial function of the Regional Commercial zone.

Architecture, landscaping, setbacks, perimeter improvements, and applicable operating requirements address compatibility within the development and with surrounding properties. The relationship between residential accommodations and nearby entertainment activities must also be addressed through the project's noise analysis and approved design and operating controls.

The CUP shall require the single-family component to remain integrated with the resort as authorized by the approved plans and conditions. As conditioned, the use will be compatible with the intended character of the area.

3. Consideration has been given to scale, bulk, coverage, density, public facilities, utilities, neighborhood character, traffic generation, street capacity, and other relevant impacts.

The single-family component is evaluated together with the overall resort development through the tentative map, architectural review, environmental analysis, and infrastructure and circulation review. The overall residential density of approximately 14.4 dwelling units per acre falls within the applicable General Plan range.

The proposed project is compatible with the network and connectivity guidelines of the Regional Retail District general plan designation. The proposed project provides a block length of approximately 600 feet on Calhoun Street, 2,543 feet on Avenue 52, and 1,880 feet on Van Buren Street. In total the block length is approximately 5,023 feet. Although the project has a long block size and perimeter, the project is conditioned to construct 6-foot sidewalks, bicycle paths and multi-use paths along the entire project frontage along Calhoun Street, Avenue 52, and Van Buren Street. The project common area includes a separated sidewalk design that includes a 4-foot curb adjacent landscape buffer, 6-foot sidewalk, equestrian fence, 10-foot d.g. equestrian trail, and additional landscaping that provides a total 30-foot landscape and sidewalk common area along the entire project frontage along Calhoun Street, Avenue 52, and Van Buren Street.

The Calhoun and Van Buren Street common areas are characterized by two rows of palm trees, while Avenue 52 features a combination of palm trees and shade trees. The project includes decorative landscape lighting throughout the common areas, including tree uplighting, palm-ring lighting, and entry sign illumination. The Van Buren Street median includes tree uplighting and light poles. The common areas feature a desert native inspired landscape design incorporating drought-tolerant plant species, along with decorative gravel and boulders of varying sizes. The proposed project will also reintegrate the existing date palms on the site into the new development design. The proposed project will provide a stucco face block wall design for fencing visible from perimeter streets with a decorative cap. Overall, these common area improvements help offset the longer block lengths by providing enhanced pedestrian connectivity, landscaping, and lighting that contribute to visual interest and enhance the overall design of the common areas along Calhoun Street, Avenue 52, and Van Buren Street.

The project's public area does provide network connectivity access points within every 400 to 500 feet as envisioned by the general plan network and connectivity guidelines. The project's public area does not provide "Virtual Blocks" due to the smaller size of the area. The project's private area does not provide network connectivity access points at 400- to 500-foot intervals. However, the perimeter common-area design and internal street network provide a high-quality circulation system that helps offset the greater spacing between network connectivity access points. The project's private area does not provide "Virtual Blocks", as the internal private street network is designed to serve the hotel, residential, and resort uses. The project design provides direct and convenient access to project amenities, and guests and residents are anticipated to navigate the site primarily by walking and golf carts, as evidenced by the 193 golf cart parking spaces planned for the project. Overall, the design of the project internal street network provides a design that serves the specific hotel, residential, resort, and commercial uses of the project. As a result, the project is consistent

with the network and connectivity guidelines of the Regional Retail District general plan designation.

The proposed project is compatible with the street design guidelines of the Regional Retail District general plan designation. As indicated above, internal private street network is designed to serve the hotel, residential, and resort uses. The project design provides direct and convenient access to project amenities, and guests and residents are anticipated to navigate the site primarily by walking and golf carts, as evidenced by the 193 golf cart parking spaces planned for the project. Overall, the design of the project internal street network provides a design that serves the specific hotel, residential, resort, and commercial uses of the project. The project internal street design provides substantial palm tree cover along internal streets that are in line with the private area resort, hotel, and residential use. As a result, the project is consistent with the street design guidelines of the Regional Retail District general plan designation.

The proposed project is compatible with the parks and open space guidelines of the Regional Retail District general plan designation. The project public area provides an open space lagoon and water features that serves as an on-site resort amenity for the residents and guests of the public area.

The proposed project is compatible with the urban form guidelines of the Regional Retail District general plan designation. The buildings throughout the project are designed to be high quality and compatible with the retail, lodging, entertainment, and residential uses envisioned by the General Plan. The private-sector architectural design reflects a contemporary modern style, with building heights limited to a maximum of four stories for the proposed hotel uses. The public beach club incorporates a distinctive agave flower-inspired design and a waterfall feature, providing unique architectural features that contributes to the overall visual identity and character of the development. The development is designed for the comfort and wayfinding of shoppers within the Regional Retail District, as the distinctive agave flower-inspired design and waterfall feature of the public sector projects a unique and compelling image from the adjoining streets to entice passersby to visit the District. The ground-floor shopfronts are generally located near the sidewalk, creating an active and pedestrian-oriented frontage along the public right-of-way. While some shopfronts incorporate service functions facing the street, these elements do not detract from the development’s architectural character or views from the public right-of-way. Parking for the project is integrated into the overall site design, and provided via private streets. Drainage improvements for the project are required to comply with city engineering conditions of approval to ensure adequate stormwater flow and drainage throughout the site. The project is also required to incorporate drought-tolerant landscaping consistent with city requirements. As a result, the project is consistent with the urban form guidelines of the Regional Retail District.

As a result, the proposed use will be located, designed, constructed, operated and maintained so as to be compatible with the existing or intended character of the general vicinity and shall not change the essential character of the same area.

The required water, sewer, drainage, fire protection, and circulation improvements must accommodate the residential units together with the commercial and resort uses.

The project's identified parking deficiencies must be resolved through an approved and implemented parking arrangement serving the affected uses.

4. Any potentially hazardous or disturbing characteristics are justified by the common public interest as a benefit to the community as a whole.

The single-family use provides a residential accommodation type within an integrated resort development while retaining commercial activities and amenities. The CUP framework allows this residential building type to be considered through discretionary review comparable to that required for multi-family residential uses.

The proposed use may accommodate fractional ownership, but ownership arrangements do not replace land use, safety, or operating requirements. Any short-term rental operations remain subject to applicable regulations, authorized development agreement provisions, and project conditions.

Potential conflicts involving residential occupancy, resort entertainment, vehicle activity, and property management must be addressed through approved design and operating requirements. As conditioned, the use supports the community interest in coordinated resort development while maintaining compatibility and protecting surrounding properties.

5. Vehicular approaches are designed to reasonably minimize interference with traffic on surrounding public streets or roads.

The private resort component is served by an entrance on Avenue 52 and two access points on Van Buren Street, including the proposed back-of-house access. Internal circulation connects the residential accommodations with resort amenities and supporting facilities.

Required engineering and Fire Department review addresses driveway design, internal circulation, emergency access, and required improvements. Residential parking, guest arrivals, service activities, and passenger pickup must be accommodated within the approved circulation and parking framework.

Subject to the supporting traffic analysis and implementation of the approved improvements, the vehicular approaches will reasonably minimize interference with surrounding streets.

SECTION 4. Location and Custodian of Records. The documents and materials that constitute the record of proceedings on which these findings are based are located at Coachella Civic Center. The Community Development Director is the custodian of the record of proceedings.

SECTION 5. Execution of Resolution. The Planning Commission Chairperson shall sign this Resolution and the Planning Commission Secretary shall attest and certify to the passage and adoption thereof.

SECTION 6. Recommendation to City Council. Based on the foregoing recitals and findings above, and the written and oral comments, facts and evidence presented, the City of Coachella Planning Commission recommends the City Council to conditionally approve Conditional Use Permit No. 407 for the "COVA" project proposing the development of a hotel, resort, residential, and commercial public beach club located on approximately 87 acres on four contiguous parcels (APNs 780-040-001, 780-040-003, 780-060-001, and 780-060-002) south of Avenue 52, west of Van Buren Street and east of Calhoun Street ("Project"). The applicant shall demonstrate compliance with ALL Conditions of Approval, as set forth in Exhibit "A" of this Resolution. Failure to demonstrate compliance with these conditions of approval may result in the delay of the Proposed Use or the rescinding of the City of Coachella's conditional approval. Where the term "Applicant" is used in any condition of approval, this term shall also apply to the Property Owner, any developer, or any successor in the interest of the Applicant. It is the Applicant's or Applicant's successor in interest responsibility to fully comply with the conditions of approval unless subsequently modified in accordance with the City's required processes and procedures.

SECTION 7. Severability. If any section, subsection, sentence, clause, phrase, or portion of this Resolution is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Resolution. The Planning Commission of the City of Coachella hereby declares that it would have adopted this Resolution and each section, subsection, sentence, clause, phrase, or portion thereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, phrases, or portions be declared invalid or unconstitutional.

PASSED APPROVED and ADOPTED this 7th day of October 2026.

AYES:

NOES:

ABSENT:

ABSTAIN:

_____

Eva Lara, Chairperson
City of Coachella

ATTEST:

_____

Kendra Reif

Planning Commission Secretary

APPROVED AS TO FORM:

_____

Best Best & Krieger
City Attorney

Exhibit A – Resolution No. PC2026-30

CONDITIONS OF APPROVAL FOR CONDITIONAL USE PERMIT NO. 407

General Conditions

1. Conditional Use Permit No. 407 is approved for the "COVA" project proposing the development of a hotel, resort, residential, and commercial public beach club located on approximately 87 acres on four contiguous parcels (APNs 780-040-001, 780-040-003, 780-060-001, and 780-060-002) south of Avenue 52, west of Van Buren Street and east of Calhoun Street ("Project"), and determine, pursuant to State CEQA Guidelines Section 15183, that no further environmental review is required.

2. The applicant shall defend, indemnify and hold harmless the City of Coachella, its officials, officers, employees, and agents from and against any claim, action, or proceeding against the City, its officials, officers, employees or agents to attack, set aside, void or annul any project approval or condition of approval of the city concerning this project, including but not limited to any approval or condition of approval or mitigation measure imposed by the City Council or Planning Commission. The City shall promptly notify the applicant of any claim, action, or proceeding concerning the project and the City shall cooperate fully in the defense of the matter. The City reserves the right, at its own option, to choose its own attorney to represent the City, its officials, officers, employees and agents in the defense of the City Attorney, within five days of the effective date of this approval.

3. The applicant shall comply with all requirements and conditions of approval as included in Tentative Tract Map No. 39330, Zoning Ordinance Amendment No. 26-02, Zoning Ordinance Amendment No. 26-03, Conditional Use Permit No. 396, Conditional Use Permit No. 407, Architectural Review No. 25-07, and Development Agreement No. 25-01, and any modifications or extensions thereof, as listed in those Resolutions for each respective approval.

RESOLUTION NO. PC2026-31

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF COACHELLA RECOMMENDING THAT THE CITY COUNCIL CONDITIONALLY APPROVE ARCHITECTURAL REVIEW NO. 25-07 TO APPROVE THE SITE PLAN, ARCHITECTURE, ASSOCIATED STRUCTURES AND IMPROVEMENTS FOR THE "COVA" PROJECT PROPOSING THE DEVELOPMENT OF A HOTEL, RESORT, RESIDENTIAL, AND COMMERCIAL PUBLIC BEACH CLUB LOCATED ON APPROXIMATELY 87 ACRES ON FOUR CONTIGUOUS PARCELS (APNS 780-040-001, 780-040-003, 780-060-001, AND 780-060-002) SOUTH OF AVENUE 52, WEST OF VAN BUREN STREET AND EAST OF CALHOUN STREET, AND DETERMINE, PURSUANT TO STATE CEQA GUIDELINES SECTION 15183, THAT NO FURTHER ENVIRONMENTAL REVIEW IS REQUIRED. APPLICANT: RELEVANT COACHELLA OWNER, LLC

WHEREAS, on April 22, 2015, the City approved Resolution No. 2015-03 certifying the Program Environmental Impact Report ("EIR") (SCH #2009021007) for the City of Coachella General Plan Update 2035 ("General Plan") and Climate Action Plan; adopting environmental findings, a mitigation monitoring and reporting program, and a statement of overriding considerations; and approving the General Plan and Climate Action Plan pursuant to the California Environmental Quality Act, herein incorporated by reference; and

WHEREAS, on July 7, 2025, Relevant Coachella Owner, LLC ("Applicant"), submitted an application for a Tentative Tract Map, Architectural Review, Conditional Use Permit, Environmental Assessment, and Development Agreement for the proposed "COVA" project, consisting of hotel, resort, residential, commercial and public beach club uses on approximately 87 acres comprising four contiguous parcels (APNs 780-040-001, 780-040-003, 780-060-001, and 780-060-002) located south of Avenue 52, west of Van Buren Street and east of Calhoun Street ("Project"); and

WHEREAS, Architectural Review No. 25-07 proposes approval of the site plan, architecture, landscaping, associated structures, and site improvements for the COVA Project, including the commercial, lodging, resort, residential, recreational, and publicly accessible beach club components of the Project; and

WHEREAS, the Applicant subsequently submitted applications for Zoning Ordinance Amendment Nos. 26-02 and 26-03 as related entitlements for the Project; and

WHEREAS, the Project site has a zoning designation of (R-C) Regional Commercial and a General Plan 2035 land use designation of Regional Retail District, which allows a residential density of 10 to 15 dwelling units per acre and a floor area ratio of 0.35 to 2.0. The Project proposes a residential density of approximately 14.4 dwelling units per acre and a floor area ratio of approximately 0.65, consistent with the development

density and intensity established by the General Plan; and,

WHEREAS, the proposed Project is consistent with and intended to implement the vision of the Coachella Municipal Code and the General Plan pertaining to land use patterns, building and site design, and public right-of-way improvements; and,

WHEREAS, Public Resources Code section 21083.3 and State CEQA Guidelines section 15183 provide that a project consistent with the development density established by an existing general plan for which an EIR was certified does not require additional environmental review except as necessary to examine whether the project would result in project-specific significant effects peculiar to the project or its site; and

WHEREAS, the City, as lead agency under the CEQA, prepared a Modified Initial Study/Section 15183 Checklist for the Project (the "15183 Checklist") to determine whether further environmental review of the Project is required; and

WHEREAS, the 15183 Checklist concludes that the Project would not result in any environmental effects that (1) are peculiar to the Project or the parcel on which the Project would be located; (2) were not analyzed as significant effects in the certified General Plan EIR; (3) are potentially significant off-site or cumulative impacts that were not discussed in the General Plan EIR; or (4) are previously identified significant effects that, as a result of substantial new information not known when the General Plan EIR was certified, are determined to have a more severe adverse impact than discussed in the General Plan EIR. The 15183 Checklist further concludes that the potential environmental effects associated with the Project are within the scope of the impacts analyzed in the General Plan EIR and that all feasible mitigation measures from the General Plan EIR applicable to the Project, together with applicable uniformly applied development policies and standards, have been incorporated into or otherwise apply to the Project; and

WHEREAS, a notice of a public hearing to consider Tentative Tract Map No. 39330, Zoning Ordinance Amendment No. 26-02, Zoning Ordinance Amendment No. 26-03, Conditional Use Permit No. 396, Conditional Use Permit No. 407, Architectural Review No. 25-07, and Development Agreement No. 25-01 was issued in accordance with Coachella Municipal Code Section 16.12.110, 17.72.010J, 17.74.010G, 17.80.010E, and 17.100.060 inclusive of the publication on September 17, 2026, of a legal public hearing notice which was published in the Desert Sun, the City's newspaper of record and mailing of a public hearing notice to a certified list of property owners within 300 feet of the subject properties on September 17, 2026; and,

WHEREAS, on October 7, 2026, the Planning Commission held a duly noticed public hearing to consider the application for the Project during which evidence, both written and oral, including the staff report and supporting documents, was presented at said hearing; and,

WHEREAS, all other legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, BE IT RESOLVED, THE PLANNING COMMISSION OF THE CITY OF COACHELLA, CALIFORNIA DOES HEREBY FIND DETERMINE AND RESOLVE AS FOLLOWS:

SECTION 1. **Incorporation of Recitals.** The Planning Commission hereby specifically finds that all of the facts set forth in the recitals of this Resolution are true and correct and are incorporated into this Resolution by reference and constitute a material part of this Resolution.

SECTION 2. **Compliance with California Environmental Quality Act.** The Planning Commission has reviewed and considered the previously certified Coachella General Plan Update 2035 EIR (SCH No. 2009021007), the 15183 Checklist and supporting technical studies prepared for the Project, the staff report, all written and oral comments received, and the entire administrative record. Based on substantial evidence in the record, the Planning Commission recommends that the City Council make the following determinations:

1) The 15183 Checklist was prepared in compliance with CEQA and the State CEQA Guidelines and reflects the City's independent judgment and analysis.
2) The Project is consistent with the City's General Plan Update 2035 for which an EIR was certified.
3) The Project would not result in any environmental effects that: (a) are peculiar to the Project or the parcel on which the Project would be located; (b) were not analyzed as significant effects in the certified General Plan EIR; (c) are potentially significant off-site or cumulative impacts that were not discussed in the General Plan EIR; or (d) are previously identified significant effects that, as a result of substantial new information not known at the time the General Plan EIR was certified, are determined to have a more severe adverse impact than discussed in the General Plan EIR.
4) All potential environmental effects associated with the Project are within the scope of the impacts analyzed in the General Plan EIR, and all feasible mitigation measures from the General Plan EIR applicable to the Project, together with applicable uniformly applied development policies and standards, have been incorporated into or otherwise apply to the Project.
5) The Project is exempt from further environmental review pursuant to Public Resources Code section 21083.3 and State CEQA Guidelines section 15183.

The applicable mitigation measures adopted in connection with the General Plan Update 2035 (GPU) EIR shall remain applicable to the Project and shall be incorporated into the Project's mitigation monitoring and reporting requirements.

SECTION 3. Architectural Review Findings. Based upon the evidence presented at the hearing, including the staff report and written and verbal testimony, which are all incorporated herein by reference, the Planning Commission finds that:

1. The proposed project is consistent with the General Plan.

The approximately 87-acre project site is designated Regional Retail District in the City of Coachella General Plan and is located within Subarea 3 – Van Buren Corridor. The project integrates hotel and resort accommodations, residential units, a publicly accessible commercial beach club, restaurants, entertainment uses, and recreational amenities. This combination supports the designation's intended mix of commercial, lodging, entertainment, and supporting residential development.

For purposes of the residential density calculation, all 402 units are included within approximately 28 acres allocated to residential development, resulting in approximately 14.4 dwelling units per acre. The commercial components are excluded from this residential acreage calculation. The resulting residential density falls within the General Plan range of 10 to 15 dwelling units per acre. The public sector uses have a combined FAR of approximately 0.65, which is consistent with the Regional Retail standard of 0.35 to 2.0. The project meets the intent and purpose, intended physical character, allowed land uses, and development intensity allowed in the Regional Retail District general plan designation. The project is compatible with the design standards for network connectivity, street design, parks and open space, and urban form guidelines of the Regional Retail District general plan designation.

The project supports the Subarea 3 direction for regional commercial destinations that coexist with surrounding neighborhoods. Its proposed landscaped frontage improvements along Avenue 52, Calhoun Street, and Van Buren Street include separated sidewalks, landscaping, and an equestrian trail. The Van Buren Corridor is at a key location between Indio, Coachella, and La Quinta and much of the land through the corridor is still available for quality development, providing Coachella with a great opportunity to create a strong neighborhood center and regional shopping district. The Van Buren Corridor will transform into a major sub-regional retail destination that will provide a wide variety of goods and services for Coachella residents, as well as neighboring communities. The large format, regional-serving retail will be built in a fashion so it coexists with existing and future neighborhood development in and around the Van Buren Corridor. The new commercial development will promote walkability with a mix of appropriately scaled buildings fronting the streets and large, block scale buildings throughout. These improvements enhance the project's interface with surrounding streets and contribute to the corridor's intended pedestrian environment.

Together, the integrated land uses, compliant residential density, architectural treatment, frontage improvements, and documented circulation design support consistency with the applicable General Plan designation and Subarea 3 policies.

2. The proposed project complies with zoning regulations.

The project site is zoned Regional Commercial (R-C). The Project is subject to the Zoning Ordinance of the City of Coachella which includes Chapter 17.28 R-C Regional Commercial Zone and Chapter 17.19 Supplemental Standards for Single-Family Residential of the Coachella Municipal Code (CMC). The project proposes a hotel, resort, residential, and commercial public beach club is consistent with the permitted uses of the R-C zone, including Hotel, Resort, Restaurant, and Private Swimming Pool uses. The project requires

approval of a Conditional Use Permit (CUP) to allow bars and cocktail lounges, liquor sales, and a special event establishment. The project requires approval of a CUP to allow single-family residential uses in conjunction with resort uses on the project site. The project includes a Zoning Ordinance Amendment to establish single-family residential uses in conjunction with resort uses as a conditionally permitted use in the R-C zone. The project proposes a mixed-use development, consisting of a total of 402 units on approximately 28 acres (14.4 du/ac), which is consistent with the R-C zoning residential density range of 10 to 15 dwelling units per acre. The project is compliant with Chapter 17.28 R-C Regional Commercial Zone and Chapter 17.19 Supplemental Standards for Single Family Residential of the CMC, except for certain development standards that comply with the standards allowed pursuant to the project Development Agreement in accordance with Chapter 17.100 – Development Agreements of the CMC.

The project is compliant with the residential density requirements, supplemental standards for single-family residential, yard requirements, landscape setback requirements, Energy Efficient Design and Heat Island Reduction Strategies, distance between building requirements, off-street parking and loading requirements, screening requirements, other property development standards, and architectural review standards as required by Chapter 17.28 – R-C Regional Commercial Zone. The project height requirements will be allowed flexible standards pursuant to the project Development Agreement in accordance with Chapter 17.100 – Development Agreements of the CMC.

The proposed single-family residential component requires adoption and effectiveness of Zoning Ordinance Amendment No. 26-02 to establish single-family residential uses in conjunction with a resort as a conditionally permitted use within the R-C zone, together with approval of Conditional Use Permit No. 407. Implementation of the single-family residential component shall be contingent upon those approvals.

3. The proposed project is consistent with the City's design guidelines.

The project provides a coordinated architectural and landscape design for the commercial, residential, and lodging components within both the publicly accessible and private resort areas. The contemporary architectural character, complementary materials, earth-tone colors, and coordinated landscape treatments establish a cohesive development while distinguishing the buildings according to their functions.

Within the publicly accessible component, the agave-inspired beach club provides an architectural focal point complemented by the restaurants, supporting commercial facilities, lodging and residential buildings, and recreational amenities. Coordinated building placement, pedestrian connections, landscaping, and screening of service areas support compatibility among these uses.

Within the private resort component, the residential and lodging buildings incorporate complementary façade treatments, wood siding, dark metal-framed windows, and metal roofing. These features establish a consistent architectural character throughout the resort. Incorporation of existing date palms and drought-tolerant landscaping further integrates the public and private components with the surrounding desert environment.

Each commercial, lodging, and residential building shall comply with the City's applicable design requirements for its approved use and building type, including applicable single-family residential supplemental standards and multifamily objective design standards where applicable. Final plans shall demonstrate compliance with required building articulation, entry treatments, materials, screening, privacy, lighting, and pedestrian access provisions. Implementation of the single-family residential component remains contingent upon adoption and effectiveness of Zoning Ordinance Amendment No. 26-02 and approval of Conditional Use Permit No. 407.

The project is required to comply with the Supplemental Standards for Single-Family Residential, as required by the Regional Commercial zone. The project is compliant with the access and connectivity, street and pathway landscaping, parking, service and utilities, refuse and recycling, architectural variability, façade modulation and articulation, window trim and recess, building entries, building roofs, colors and materials, transitions and privacy, and accessory structures standards for single-family residential of the Coachella Municipal Code (CMC). As a result, the project is in compliance with the city's design guidelines.

Based on these design features and subject to the applicable approvals and conditions of approval, the commercial and residential components within both the publicly accessible and private resort areas are consistent with the City's applicable design guidelines.

4. The proposed development will not be detrimental to public health, safety, or welfare, or materially injurious to nearby properties and improvements.

The project's site design separates public commercial access from private resort access and includes a separate back-of-house entrance. This arrangement provides a basis for managing visitor, resident, employee, service, and emergency circulation.

The approved plans and conditions shall require accessible pedestrian routes, safe crossings where pedestrian routes intersect vehicular circulation, required emergency access, and compliance with applicable building and fire requirements. Parking and loading shall comply with applicable requirements or an expressly authorized alternative supported by the required analysis.

Exterior lighting shall be designed and directed to control glare and light spill onto adjoining properties and public streets. Refuse areas, loading areas, mechanical equipment, and utility facilities shall receive appropriate screening. Required grading, drainage, utility, and geotechnical improvements shall be incorporated into the final construction plans.

Special event and alcohol-related operations remain subject to their respective CUP requirements, including applicable controls addressing noise, attendance, hours, security, and parking. With implementation of these design requirements and operational conditions, the development will protect public health, safety, and welfare and avoid material injury to surrounding properties.

Furthermore, the project is consistent with the analysis performed for the GPU EIR. Further, the GPU EIR adequately anticipated and described the impacts of the project, identified applicable mitigation measures necessary to reduce project specific impacts, and the project implements these mitigation measures (see Table 1.0-1, Impacts Overview Matrix, of the GPU EIR for complete list of GPU Mitigation Measures).

A comprehensive environmental evaluation has been completed for the project as documented in the attached §15183 Exemption Checklist. This evaluation concludes that the project qualifies for an exemption from additional environmental review because it is consistent with the development density and use characteristics established by the City General Plan, as analyzed by the City GPU EIR (SCH #2009021007), and all required findings can be made.

In accordance with CEQA Guidelines §15183, the project qualifies for an exemption because the following findings can be made:

1. The project is consistent with the development density established by existing zoning, community plan or general plan policies for which an EIR was certified.

The project is located within the City's General Plan Regional Retail District, and Regional Commercial (R-C) zoning designation. Regional Retail Districts and R-C zones allow 10 – 15 dwelling units per acre and a floor area ratio (FAR) of 0.35 – 2.0. The project would be consistent with the Regional Retail District land use designation identified for the site in the GPU. Similarly, the project would be consistent with the Regional Commercial (R-C) zoning designation for the site in the Zoning Map once the application to amend the City's Zoning Code is approved, as discussed above. The project proposes 14.4 dwelling units per acre and 0.65 FAR, which is consistent with the Regional Retail Districts and R-C zone.

2. There are no project specific effects which are peculiar to the project or its site, and which the GPU EIR failed to analyze as significant effects.

The subject property currently operates as a combination of an active date palm grove and grape vines that have been allowed to go fallow. The site is surrounded by agricultural uses, vacant land, and scattered residential properties. Currently, the subject property operates similarly to the surrounding uses. The project proposes to develop a hospitality project with resort, residential, and recreational uses. The project is consistent with the City's Regional Retail District land use designation and Regional Commercial zoning designation. The project does not propose project-specific effects which are peculiar to the project or its site. The project site does not contain any unique or peculiar environmental features that would result in environmental effects beyond those previously identified and analyzed.

In addition, as explained further in the §15183 Exemption Checklist below, all project impacts were adequately analyzed by the GPU EIR. Applicable mitigation measures specified within the GPU EIR have been applied to the project.

3. There are no potentially significant off-site and/or cumulative impacts which the GPU EIR failed to evaluate.

Preparation of the §15183 Exemption Checklist did not identify any significant off-site and/or cumulative impacts which the GPU EIR failed to evaluate.

4. There is no substantial new information which results in more severe impacts than anticipated by the GPU EIR.

As explained in the §15183 Exemption Checklist below, no new information has been identified which would result in a determination of a more severe impact than what had been anticipated by the GPU EIR.

5. The project will undertake feasible mitigation measures specified in the GPU EIR.

As explained in the §15183 Exemption Checklist below, the project will undertake feasible mitigation measures specified in the GPU EIR. These GPU EIR mitigation measures will be undertaken through project design, compliance with regulations and ordinances, or through the project's conditions of approval.

5. The project is compatible with the existing or intended character of the surrounding area and will not change its essential character.

The project's integrated commercial, resort, entertainment, and residential components are compatible with the intended Regional Retail District character of the Van Buren Corridor. The publicly accessible commercial component preserves the site's role as a regional destination, while the residential component is integrated with the resort.

The coordinated architectural materials and colors, distinctive beach club design, landscaped frontages, and decorative perimeter walls establish a consistent visual character. Required setbacks, building placement, landscape buffers, screening, and privacy treatments shall provide transitions between the project and nearby residential properties.

Compatibility also depends on the approved building heights, pedestrian connections, lighting controls, service-area treatment, and operational restrictions. These requirements shall be maintained throughout the life of the project. With these measures, the development will be compatible with the area's existing residential context and intended regional commercial character without changing its essential character.

SECTION 4. Location and Custodian of Records. The documents and materials that constitute the record of proceedings on which these findings are based are located at Coachella Civic Center. The Community Development Director is the custodian of the record of proceedings.

SECTION 5. Execution of Resolution. The Planning Commission Chairperson shall sign this Resolution and the Planning Commission Secretary shall attest and certify to the passage and adoption thereof.

SECTION 6. Recommendation to City Council. Based on the foregoing recitals and findings above, and the written and oral comments, facts and evidence presented, the City of Coachella Planning Commission recommends the City Council to conditionally approve Architectural Review No. 25-07 for the "COVA" project proposing the development of a hotel, resort, residential, and commercial public beach club located on approximately 87 acres on four contiguous parcels (APNs 780-040-001, 780-040-003, 780-060-001, and 780-060-002) south of Avenue 52, west of Van Buren Street and east of Calhoun Street ("Project"). The applicant shall demonstrate compliance with ALL Conditions of Approval, as set forth in Exhibit "A" of this Resolution. Failure to demonstrate compliance with these conditions of approval may result in the delay of the Proposed Use or the rescinding of the City of Coachella's conditional approval. Where the term "Applicant" is used in any condition of approval, this term shall also apply to the Property Owner, any developer, or any successor in the interest of the Applicant. It is the Applicant's or Applicant's successor in interest responsibility to fully comply with the conditions of approval unless subsequently modified in accordance with the City's required processes and procedures.

SECTION 7. Severability. If any section, subsection, sentence, clause, phrase, or portion of this Resolution is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Resolution. The Planning Commission of the City of Coachella hereby declares that it would have adopted this Resolution and each section, subsection, sentence, clause, phrase, or portion thereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, phrases, or portions be declared invalid or unconstitutional.

PASSED APPROVED and ADOPTED this 7th day of October 2026.

AYES:

NOES:

ABSENT:

ABSTAIN:

_____

Eva Lara, Chairperson
City of Coachella

ATTEST:

_____
Kendra Reif
Planning Commission Secretary

APPROVED AS TO FORM:

_____
Best Best & Krieger
City Attorney

Exhibit A – Resolution No. PC2026-31

CONDITIONS OF APPROVAL FOR ARCHITECTURAL REVIEW NO. 25-07

General Conditions

1. Architectural Review No. 25-07 is approved for the "COVA" project proposing the development of a hotel, resort, residential, and commercial public beach club located on approximately 87 acres on four contiguous parcels (APNs 780-040-001, 780-040-003, 780-060-001, and 780-060-002) south of Avenue 52, west of Van Buren Street and east of Calhoun Street ("Project"), and determine, pursuant to State CEQA Guidelines Section 15183, that no further environmental review is required.

2. The applicant shall defend, indemnify and hold harmless the City of Coachella, its officials, officers, employees, and agents from and against any claim, action, or proceeding against the City, its officials, officers, employees or agents to attack, set aside, void or annul any project approval or condition of approval of the city concerning this project, including but not limited to any approval or condition of approval or mitigation measure imposed by the City Council or Planning Commission. The City shall promptly notify the applicant of any claim, action, or proceeding concerning the project and the City shall cooperate fully in the defense of the matter. The City reserves the right, at its own option, to choose its own attorney to represent the City, its officials, officers, employees and agents in the defense of the City Attorney, within five days of the effective date of this approval.

3. The applicant shall comply with all requirements and conditions of approval as included in Tentative Tract Map No. 39330, Zoning Ordinance Amendment No. 26-02, Zoning Ordinance Amendment No. 26-03, Conditional Use Permit No. 396, Conditional Use Permit No. 407, Architectural Review No. 25-07, and Development Agreement No. 25-01, and any modifications or extensions thereof, as listed in those Resolutions for each respective approval.

RESOLUTION NO. PC2026-32

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF COACHELLA RECOMMENDING THAT THE CITY COUNCIL ADOPT AN ORDINANCE APPROVING DEVELOPMENT AGREEMENT NO. 25-01 FOR THE "COVA" PROJECT PROPOSING THE DEVELOPMENT OF A HOTEL, RESORT, RESIDENTIAL, AND COMMERCIAL PUBLIC BEACH CLUB LOCATED ON APPROXIMATELY 87 ACRES ON FOUR CONTIGUOUS PARCELS (APNS 780-040-001, 780-040-003, 780-060-001, AND 780-060-002) SOUTH OF AVENUE 52, WEST OF VAN BUREN STREET AND EAST OF CALHOUN STREET, AND DETERMINE, PURSUANT TO STATE CEQA GUIDELINES SECTION 15183, THAT NO FURTHER ENVIRONMENTAL REVIEW IS REQUIRED. APPLICANT: RELEVANT COACHELLA OWNER, LLC

WHEREAS, on April 22, 2015, the City approved Resolution No. 2015-03 certifying the program environmental impact report ("EIR") (SCH #2009021007) for the City of Coachella General Plan Update 2035 ("General Plan") and Climate Action Plan; adopting environmental findings, a mitigation monitoring and reporting program, and a statement of overriding considerations; and approving the general plan and climate action plan pursuant to the California Environmental Quality Act, herein incorporated by reference; and

WHEREAS, on July 7, 2025, Relevant Coachella Owner, LLC ("Applicant"), submitted an application for a Tentative Tract Map, Architectural Review, Conditional Use Permit, Environmental Assessment, and Development Agreement for the proposed "COVA" project, consisting of a hotel, resort, residential, commercial and public beach club uses on approximately 87 acres comprising four contiguous parcels (APNs 780-040-001, 780-040-003, 780-060-001, and 780-060-002) located south of Avenue 52, west of Van Buren Street and east of Calhoun Street ("Project"); and

WHEREAS, Development Agreement No. 25-01 establishes the terms governing the development and operation of the COVA Project, including vested development rights, infrastructure obligations, development fees, fiscal incentives, community benefits, and continuing operational and maintenance obligations, and provides for a 50-year term with a 20-year period for Project buildout; and

WHEREAS, the Applicant subsequently submitted applications for Zoning Ordinance Amendment Nos. 26-02 and 26-03 as related entitlements for the Project; and

WHEREAS, the Project site has a zoning designation of (R-C) Regional Commercial and a General Plan 2035 land use designation of Regional Retail District, which allows a residential density of 10 to 15 dwelling units per acre and a floor area ratio of 0.35 to 2.0. The Project proposes a residential density of approximately 14.4 dwelling units per acre and a floor area ratio of approximately 0.65, consistent with the development

density and intensity established by the General Plan; and,

WHEREAS, the proposed Project is consistent with and intended to implement the vision of the Coachella Municipal Code and the General Plan pertaining to land use patterns, building and site design, and public right-of-way improvements; and,

WHEREAS, Public Resources Code section 21083.3 and State CEQA Guidelines section 15183 provide that a project consistent with the development density established by an existing general plan for which an EIR was certified does not require additional environmental review except as necessary to examine whether the project would result in project-specific significant effects peculiar to the project or its site; and

WHEREAS, the City, as lead agency under the CEQA, prepared a Modified Initial Study/Section 15183 Checklist for the Project (the "15183 Checklist") to determine whether further environmental review of the Project is required; and

WHEREAS, the 15183 Checklist concludes that the Project would not result in any environmental effects that (1) are peculiar to the Project or the parcel on which the Project would be located; (2) were not analyzed as significant effects in the certified General Plan EIR; (3) are potentially significant off-site or cumulative impacts that were not discussed in the General Plan EIR; or (4) are previously identified significant effects that, as a result of substantial new information not known when the General Plan EIR was certified, are determined to have a more severe adverse impact than discussed in the General Plan EIR. The 15183 Checklist further concludes that the potential environmental effects associated with the Project are within the scope of the impacts analyzed in the General Plan EIR and that all feasible mitigation measures from the General Plan EIR applicable to the Project, together with applicable uniformly applied development policies and standards, have been incorporated into or otherwise apply to the Project; and

WHEREAS, a notice of a public hearing to consider Tentative Tract Map No. 39330, Zoning Ordinance Amendment No. 26-02, Zoning Ordinance Amendment No. 26-03, Conditional Use Permit No. 396, Conditional Use Permit No. 407, Architectural Review No. 25-07, and Development Agreement No. 25-01 was issued in accordance with Coachella Municipal Code Section 16.12.110, 17.72.010J, 17.74.010G, 17.80.010E, and 17.100.060 inclusive of the publication on September 17, 2026, of a legal public hearing notice which was published in the Desert Sun, the City's newspaper of record and mailing of a public hearing notice to a certified list of property owners within 300 feet of the subject properties on September 17, 2026; and,

WHEREAS, on October 7, 2026, the Planning Commission held a duly noticed public hearing to consider the application for the Project during which evidence, both written and oral, including the staff report and supporting documents, was presented at said hearing; and,

WHEREAS, all other legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, BE IT RESOLVED, THE PLANNING COMMISSION OF THE CITY OF COACHELLA, CALIFORNIA DOES HEREBY FIND DETERMINE AND RESOLVE AS FOLLOWS:

SECTION 1. **Incorporation of Recitals.** The Planning Commission hereby specifically finds that all of the facts set forth in the recitals of this Resolution are true and correct and are incorporated into this Resolution by reference and constitute a material part of this Resolution.

SECTION 2. **Compliance with California Environmental Quality Act.** The Planning Commission has reviewed and considered the previously certified Coachella General Plan Update 2035 EIR (SCH #2009021007), 15183 Checklist and supporting technical studies prepared for the Project, the staff report, all written and oral comments received, and the entire administrative record. Based on substantial evidence in the record, the Planning Commission recommends that the City Council make the following determinations:

1) The 15183 Checklist was prepared in compliance with CEQA and the State CEQA Guidelines and reflects the City's independent judgment and analysis.
2) The Project is consistent with the City's General Plan Update 2035 for which an EIR was certified.
3) The Project would not result in any environmental effects that: (a) are peculiar to the Project or the parcel on which the Project would be located; (b) were not analyzed as significant effects in the certified General Plan EIR; (c) are potentially significant off-site or cumulative impacts that were not discussed in the General Plan EIR; or (d) are previously identified significant effects that, as a result of substantial new information not known at the time the General Plan EIR was certified, are determined to have a more severe adverse impact than discussed in the General Plan EIR.
4) All potential environmental effects associated with the Project are within the scope of the impacts analyzed in the General Plan EIR, and all feasible mitigation measures from the General Plan EIR applicable to the Project, together with applicable uniformly applied development policies and standards, have been incorporated into or otherwise apply to the Project.
5) The Project is exempt from further environmental review pursuant to Public Resources Code section 21083.3 and State CEQA Guidelines section 15183.

The applicable mitigation measures adopted in connection with the General Plan Update 2035 (GPU) EIR shall remain applicable to the Project and shall be incorporated into the Project's mitigation monitoring and reporting requirements.

SECTION 3. Development Agreement Findings. Based upon the evidence presented at the hearing, including the staff report and written and verbal testimony, which are all incorporated herein by reference, the Planning Commission finds that:

A. Is consistent with the objectives, policies, general land uses and programs specified in the general plan and any applicable specific plan;

The approximately 87-acre project site is designated Regional Retail District and is located within Subarea 3 – Van Buren Corridor. The Development Agreement establishes a framework for implementing an integrated hotel, resort, residential, dining, entertainment, and recreational development. The publicly accessible Commercial Beach Club Sector provides commercial and recreational opportunities for residents and visitors, while the Private Resort Sector combines lodging and supporting residential accommodations with shared resort amenities.

For General Plan density purposes, all 402 units are included within approximately 28 acres allocated to residential development, resulting in approximately 14.4 dwelling units per acre. Commercial acreage is excluded from this residential density calculation. The proposed density falls within the applicable range of 10 to 15 dwelling units per acre.

The agreement supports the Regional Retail District's destination-oriented mix of uses and Subarea 3's direction for commercial development that is compatible with surrounding neighborhoods. Its obligations for public improvements and frontage landscape maintenance support implementation of the project's approved site design. The project's pedestrian connections, external connectivity, commercial intensity, and transitions to adjacent development are addressed through the General Plan consistency analysis and required project improvements.

Together with the related project approvals and documented General Plan consistency analysis, the agreement implements the applicable land use and community character objectives. No specific plan applies to the project site.

B. Is compatible with the uses authorized in and the regulations prescribed for the land use district in which the real property is located;

The project site is zoned Regional Commercial (R-C). The proposed hotel and resort use, beach club, restaurants, and supporting amenities are compatible with the commercial and hospitality uses authorized within the district, subject to applicable development standards and required permits. Special event and alcohol-related uses are subject to Conditional Use Permit No. 396 and any additional required approvals.

The single-family residential component requires adoption and effectiveness of Zoning Ordinance Amendment No. 26-02 and approval of Conditional Use Permit No. 407. These approvals would authorize single-family residential uses in conjunction with the resort while retaining the site's integrated commercial and hospitality function.

The agreement establishes development rights by reference to the approved project and applicable regulations. Any departure from otherwise applicable development standards shall be specifically identified and lawfully authorized in the final approvals. Short-term rental treatment shall conform to the adopted provisions of Zoning Ordinance Amendment No. 26-03 and the express operational requirements of the final agreement.

With effectiveness of the required amendments and permits, and incorporation of the authorized development standards, the agreement is compatible with the uses and regulations applicable to the R-C district.

C. Is in conformity with the public necessity, public convenience, general welfare and good land use practices;

The agreement coordinates development of the project with the provision of infrastructure and facilities necessary to serve its approved uses. Section 3.8.1 of the Development Agreement requires the developer to design, engineer, and construct required public improvements and generally complete improvements serving each phase before issuance of the first certificate of occupancy within that phase, unless an earlier deadline applies.

The agreement also requires water and sewer extensions, participation in necessary electrical infrastructure, and construction or funding of a portion of off-site sewer main upsizing serving other planned housing developments. Section 4.6 of the Development Agreement requires maintenance of enhanced landscaping along the project's public street frontages.

The publicly accessible beach club, restaurants, and entertainment facilities would expand recreational and commercial opportunities. Development and operation would also create construction and permanent employment opportunities.

The agreement's infrastructure obligations, phased implementation framework, and compliance review provisions support coordinated development and delivery of the identified public benefits. Together with the related project approvals and conditions, these provisions conform to public convenience, general welfare, and good land use practices.

D. Will be detrimental to the health, safety and general welfare;

The agreement requires development in accordance with the project approvals and applicable requirements. Section 2.3 of the Development Agreement preserves application of the California Building Standards Code and applicable construction codes. Section 2.4 of the Development Agreement retains City authority to address dangerous or hazardous conditions, subject to the procedures established in the agreement.

Required improvements and conditions address emergency access, fire protection, grading, drainage, geotechnical conditions, utility service, pedestrian safety, and parking. Special event and alcohol-related operations remain subject to applicable permit requirements and approved controls governing noise, attendance, hours, security, and circulation.

The agreement's environmental provisions require compliance with CEQA, including additional review where legally required for subsequent approvals. Applicable mitigation measures and essential health and safety conditions shall remain enforceable under the final agreement.

With implementation of these requirements and safeguards, the agreement will not be detrimental to public health, safety, or general welfare.

E. Will adversely affect the orderly development of property or the preservation of property values;

The agreement provides a coordinated framework for the project's land uses, infrastructure, phasing, and continuing operational responsibilities. Required public improvements serving each phase must be completed in accordance with the agreement and project approvals, supporting orderly development and avoiding occupancy before necessary improvements are available.

The approved architectural design, landscape treatments, setbacks, screening, lighting controls, and operational conditions provide transitions between the project and surrounding properties. The developer's obligation to maintain enhanced frontage landscaping contributes to the continuing appearance of the development along Avenue 52, Calhoun Street, and Van Buren Street.

Annual compliance review and applicable enforcement procedures provide mechanisms for monitoring performance of agreement obligations. Continuing resort management, maintenance, and operational requirements shall be established in the final agreement and related approvals for the applicable properties and successors.

These provisions support orderly development and maintenance of the site while protecting surrounding properties from incompatible physical and operational effects. Accordingly, the agreement will not adversely affect orderly development or preservation of property values.

F. Will have a positive fiscal impact on the city.

The project would generate potential City revenues through taxable lodging, commercial activity, property taxes, and applicable fees. Section 4.5 of the Development Agreement proposes a rebate of 50 percent of eligible transient occupancy tax revenue exceeding the applicable annual retention threshold for the first 15 years following resort opening at Phase 1 buildout, subject to a cumulative rebate cap of $25 million.

The City would retain the first $1 million of actual annual TOT collections at Phase 1 buildout of 167 units, the first $1.5 million upon Phase 2 completion at 273 units, and the first $2 million at full buildout of 402 units. These thresholds establish priority retention of actual collections and do not constitute guaranteed developer payments. The developer is not obligated to cover a shortfall. The City would retain all project TOT after the incentive period expires or the rebate cap is reached, subject to applicable tax requirements.

SECTION 4. Location and Custodian of Records. The documents and materials that constitute the record of proceedings on which these findings are based are located at Coachella Civic Center. The Community Development Director is the custodian of the record of proceedings.

SECTION 5. Execution of Resolution. The Planning Commission Chairperson shall sign this Resolution and the Planning Commission Secretary shall attest and certify to the passage and adoption thereof.

SECTION 6. Recommendation to City Council. Based on the foregoing recitals and findings above, and the written and oral comments, facts and evidence presented, the City of Coachella Planning Commission recommends that the City Council adopt an ordinance approving Development Agreement No. 25-01 for the "COVA" project proposing the development of a hotel, resort, residential, and commercial public beach club located on approximately 87 acres on four contiguous parcels (APNs 780-040-001, 780-040-003, 780-060-001, and 780-060-002) south of Avenue 52, west of Van Buren Street and east of Calhoun Street ("Project"). The applicant shall demonstrate compliance with ALL Conditions of Approval, as set forth in Exhibit "A" and Development Agreement in Exhibit "B" of this Resolution. Failure to demonstrate compliance with these conditions of approval may result in the delay of the Proposed Use or the rescinding of the City of Coachella's conditional approval. Where the term "Applicant" is used in any condition of approval, this term shall also apply to the Property Owner, any developer, or any successor in the interest of the Applicant. It is the Applicant's or Applicant's successor in interest responsibility to fully comply with the conditions of approval unless subsequently modified in accordance with the City's required processes and procedures.

SECTION 7. Severability. If any section, subsection, sentence, clause, phrase, or portion of this Resolution is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Resolution. The Planning Commission of the City of Coachella hereby declares that it would have adopted this Resolution and each section, subsection, sentence, clause, phrase, or portion thereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, phrases, or portions be declared invalid or unconstitutional.

PASSED, APPROVED, and ADOPTED this 7th day of October 2026.

AYES:

NOES:

ABSENT:

ABSTAIN:

_____

Eva Lara, Chairperson
City of Coachella

ATTEST:

_____
Kendra Reif
Planning Commission Secretary

APPROVED AS TO FORM:

_____
Best Best & Krieger
City Attorney

Exhibit A – Resolution No. PC2026-32

CONDITIONS OF APPROVAL FOR DEVELOPMENT AGREEMENT NO. 25-01

General Conditions

1. Development Agreement No. 25-01 is approved for the "COVA" project proposing the development of a hotel, resort, residential, and commercial public beach club located on approximately 87 acres on four contiguous parcels (APNs 780-040-001, 780-040-003, 780-060-001, and 780-060-002) south of Avenue 52, west of Van Buren Street and east of Calhoun Street ("Project"), and determine, pursuant to State CEQA Guidelines Section 15183, that no further environmental review is required.

2. The applicant shall defend, indemnify and hold harmless the City of Coachella, its officials, officers, employees, and agents from and against any claim, action, or proceeding against the City, its officials, officers, employees or agents to attack, set aside, void or annul any project approval or condition of approval of the city concerning this project, including but not limited to any approval or condition of approval or mitigation measure imposed by the City Council or Planning Commission. The City shall promptly notify the applicant of any claim, action, or proceeding concerning the project and the City shall cooperate fully in the defense of the matter. The City reserves the right, at its own option, to choose its own attorney to represent the City, its officials, officers, employees and agents in the defense of the City Attorney, within five days of the effective date of this approval.

3. The applicant shall comply with all requirements and conditions of approval as included in Tentative Tract Map No. 39330, Zoning Ordinance Amendment No. 26-02, Zoning Ordinance Amendment No. 26-03, Conditional Use Permit No. 396, Conditional Use Permit No. 407, Architectural Review No. 25-07, and Development Agreement No. 25-01, and any modifications or extensions thereof, as listed in those Resolutions for each respective approval.

DEVELOPMENT AGREEMENT
BETWEEN
THE CITY OF COACHELLA
AND
RELEVANT COACHELLA OWNER, LLC

THIS DEVELOPMENT AGREEMENT ("**Agreement**") dated for reference purposes only as of _____, 2026, and effective as of the Effective Date, is by and between the **City of Coachella**, a California municipal corporation ("**City**"), and **Relevant Coachella Owner, LLC,** a Delaware limited liability company ("**Developer**") pursuant to the authority of Sections 65864 *et seq.* of the California Government Code. City and Developer are also sometimes referred to individually as a "**Party**" and together as the "**Parties**." An index of all capitalized defined terms is included at the end of this document.

RECITALS

This Agreement is entered upon the basis of the following facts, understandings and intentions of City and Developer.

A. In order to strengthen the public planning process, encourage private participation in comprehensive planning, and reduce the economic costs and risk of development, the Legislature of the State of California enacted Section 65864 *et seq*. of the Government Code (the "**Development Agreement Statute**"), which authorizes the City and a developer having a legal or equitable interest in real property to enter into a binding development agreement, establishing certain development rights in the property.

B. Developer is the owner of that certain real property located in the City of Coachella, County of Riverside, California and legally described on **Exhibit A** attached hereto and incorporated herein (the "**Property**" or "**Project Site**"). The rights and obligations of Developer under this Agreement shall attach to all property currently owned by Developer, as described on Exhibit A, upon recordation of this Agreement. The Project Site is located south of Avenue 52, west of Van Buren Street, and east of Calhoun Street, in the southwestern portion of the City, and is comprised of four contiguous parcels totaling approximately 87 acres in size. The Assessor's Parcel Numbers (APNs) for the Project Site are 780-040-001, 780-040-003, 780-060-001, and 780-060-002.

C. Developer intends to develop the Property with a hospitality-oriented, mixed-use resort community known as "**COVA**", consisting of a Private Resort Sector and a Commercial Beach Club Sector, including up to 402 total units comprised of 240 condo cottages and 162 single-family residential units, a recreational lagoon and associated water features, resort amenities, and a public-facing beach club, restaurant, and sports bar, as well as associated infrastructure, roadways, landscaping, parking, and signage (the "**Project**") as depicted in **Exhibit B**. The Project is more fully described in, and subject to, (i) this Agreement, (ii) the amendment of the City's Zoning Code to allow single-family residential uses within the Regional Commercial (RC) zone, approved by the City Council on _____ by Resolution No. _____, (iii) the CEQA Guideline 15183 consistency determination/exemption checklist prepared for the Project

(the "**CEQA Compliance Documentation**"), approved by the City Council on _____ by City Council Resolution No. _____, (iv) Tentative Tract Map No. 39330, (v) the Conditional Use Permit, Architectural Review, and Entertainment Permit approved or to be approved by the City Council for the Project, (vi) any future discretionary or ministerial approvals and/or permits issued for the Project (collectively, the "**Project Site Development Permits**"), and (vii) the conditions of approval associated with each and all of the foregoing approvals (collectively, the "**Conditions of Approval**") as depicted in **Exhibit H**. The documents, permits, approvals, and conditions described in the foregoing clauses (i) through (vii) are collectively referenced herein as the "**Project Approvals**" or "**Entitlements**."

D. In connection with the Project Approvals, Developer has also applied for (i) an amendment to the City's Short-Term Rental Ordinance (Coachella Municipal Code Chapter 5.80) to exempt projects with an approved development agreement from the provisions of that ordinance limiting the number of units that may be owned by a single owner and limiting the percentage of units that may be permitted for short-term rental use, as well as any other provisions of that ordinance specifically modified by this Agreement, and (ii) confirmation that the Private Resort Sector shall be treated as a First Class Hotel under the City's Municipal Code, rather than as a residential project, for purposes of short-term vacation rental ("**STVR**") regulation (collectively, the "**STVR Ordinance Amendment**").

E. The complexity, magnitude and long-range nature of the Project would be difficult for Developer to undertake if the City had not determined, through this Development Agreement, to inject a sufficient degree of certainty in the land use regulatory process to justify the substantial financial investment associated with development of the Project. As a result of the execution of this Agreement, both Parties can be assured that the Project can proceed without disruption caused by a change in planning and development policies and requirements, which assurance will thereby reduce the actual or perceived risk of planning, financing, and proceeding with construction of the Project.

F. For the reasons recited herein, City and Developer have determined that the Project is a development for which this Development Agreement is appropriate. This Development Agreement will eliminate or reduce uncertainty regarding Project Approvals, thereby encouraging planning for, investment in, and commitment to the use and development of the Property. Development of the Project will in turn provide substantial employment, transient occupancy tax, and sales tax benefits, as well as other public benefits, thereby achieving the goals and purposes for which the Development Agreement Statute was enacted.

G. The City Council has determined that this Agreement is consistent with the City's General Plan, including the goals and objectives thereof, including the Regional Retail District land use designation applicable to the Project Site, subject to applicable mitigation measures and regulatory requirements as depicted in **Exhibit G**, in accordance with the CEQA Compliance Documentation.

H. All actions taken by the City in connection with approving this Agreement have been duly taken in accordance with all applicable legal requirements, including the California Environmental Quality Act (*Public Resources Code* Section 21000, et seq.) ("**CEQA**"), and all other requirements for notice, public hearings, findings, votes and procedural matters. In

connection therewith, the City Council has found and determined that this Agreement is consistent with and part of the Project Approvals and that the Project qualifies for a consistency exemption under CEQA Guideline 15183, and that all potentially significant environmental effects of the Project Approvals, as well as feasible measures to mitigate those effects to the maximum extent feasible, have been analyzed and disclosed as set forth in the CEQA Compliance Documentation.

I. On _____, 2026, the City Council adopted its Ordinance No.___ approving this Agreement.

NOW, THEREFORE, in consideration of the foregoing recitals of fact and the mutual covenants and promises set forth herein, the City and Developer hereby agree as follows:

AGREEMENT

ARTICLE 1
GENERAL PROVISIONS

1.1 **Incorporation of Preamble, Recitals, and Exhibits**. The preamble paragraph, Recitals, Exhibits, and any Appendices, and all defined terms contained therein, are hereby incorporated into this Agreement by this reference as if set forth in full.

1.2 **Definitions**. The capitalized terms used in this Agreement shall have the meanings set forth in **Appendix I** attached hereto and otherwise as defined in the body of this Agreement.

1.3 **Term**.

1.3.1 **Effective Date**. This Agreement shall become effective upon the later of (i) the effective date of Ordinance No. _____ approving this Agreement, or (ii) the expiration of the period for challenging the ordinance or this Agreement under CEQA, or, if timely challenged, the date such challenge is finally resolved in favor of the validity of this Agreement (the "**Effective Date**"). Notwithstanding the foregoing or any provision of this Agreement to the contrary, if after all appeals or time to appeal have been exhausted, a court of competent jurisdiction enters a final judgment or issuance of a final order directed to the City to set aside, withdraw, or abrogate the approval of this Agreement, then this Agreement shall be deemed to have no force or effect upon either Party.

1.3.2 **Term of Agreement**. The term of this Agreement shall commence upon the Effective Date and shall continue in full force and effect thereafter for a period of fifty (50) years (the "**Term**"), unless earlier terminated as provided elsewhere in this Agreement or extended by mutual written agreement of the Parties. The Parties acknowledge that the extended Term is warranted in light of the operational characteristics of the Project's transient occupancy tax and sales tax generating uses, and to permit the resort and residential uses contemplated by the Project within the Property's existing commercial zoning designation. Notwithstanding the foregoing, the provisions of this Agreement governing the buildout, construction, and phasing of the Project (including the obligations set forth in Article 3) shall be limited to a period of twenty (20) years from the Effective Date (the "**Buildout Period**"), but all other rights and obligations of the Parties under this Agreement, including the Vested Elements and the Community Benefits, shall continue for the balance of the Term.

ARTICLE 2
APPLICABLE LAW

2.1 **Applicable Rules**. Except as otherwise expressly provided in this Agreement, during the Term, the Project Approvals, including any future applications for discretionary or ministerial approvals and/or permits necessary or convenient for implementation of the Project (collectively, "**Subsequent Approvals**") shall be processed, considered, reviewed, and acted upon in accordance with the rules, regulations, ordinances, and officially adopted policies of the City in full force and effect as of the Effective Date of this Agreement (collectively, the

"**Applicable Rules**"). The Applicable Rules include the City's confirmation that the single-family residential units within the Project constitute an allowed use on the Property and that the STVR Ordinance Amendment applies to the Project as described in Recital D.

2.2 **Future Changes to Applicable Rules**.

2.2.1 To the extent any changes in the Applicable Rules, or any provisions of future general plans, specific plans, zoning ordinances, or other rules, regulations, ordinances or policies (whether adopted by means of ordinance, initiative, referenda, resolution, policy, order, moratorium, or other means) of the City (collectively, "**Future Changes to the Applicable Rules**") are not in conflict with the Vested Elements (as defined in Section 3.2 below), such Future Changes to the Applicable Rules shall be applicable to the Project.

2.2.2 Future Changes to the Applicable Rules shall be deemed to be in "conflict" with the Vested Elements if any one of the following would occur:

2.2.2.1 Alter or change any land use, including permitted or conditional uses, of the Project Site from that permitted under this Agreement and the Applicable Rules, including the permitted use of the Private Resort Sector for short-term vacation rentals as a First Class Hotel use.

2.2.2.2 Limit or reduce the height or bulk of the Project, or any portion thereof, or otherwise require any reduction in the height or bulk of individual proposed buildings or other improvements from that permitted under this Agreement and the Applicable Rules.

2.2.2.3 Limit or reduce the density or intensity of the Project, or any portion thereof, or otherwise require any reduction in the square footage, number of proposed units or buildings, parking or loading spaces, or other improvements from that permitted under this Agreement and the Applicable Rules.

2.2.2.4 Except as otherwise provided in this Agreement, in any manner unreasonably control, delay, or limit the rate, timing, phasing, or sequencing of the approval, development, or construction of all or part of the Project.

2.2.2.5 Increase any Development Fees, except as expressly permitted by this Agreement.

2.2.2.6 Except as otherwise provided in this Agreement, materially increase (by an amount greater than 15%) the cost of performance of, or preclude compliance with, any provision of the Project Approvals.

2.2.2.7 Conflict with or materially increase the obligations of Developer under this Agreement.

2.2.2.8 Adversely affect in any material respect the rights of Developer under this Agreement, including Developer's vested right to operate short-term vacation rentals as described in Section 3.2.

2.2.2.9 Except as otherwise provided in this Agreement, limit or restrict the availability of public utilities, services, infrastructure, or facilities (for example, without limitation, water rights, water connection or sewage capacity rights, sewer connections, electrical service, etc.) to the Project.

2.2.2.10 Except as expressly provided herein, impose limits or controls in the rate, timing, phasing, or sequencing of development of the Project beyond those existing on the Effective Date.

2.2.2.11 Limit or control the location of buildings, structures, grading, or other improvements of the Project inconsistently with or more restrictively than limitations included in the Project Approvals.

2.2.2.12 Apply to the Project any Future Changes to the Applicable Rules otherwise allowed by this Agreement that are not uniformly applied to all substantially similar types of development projects and project sites under the City's jurisdiction.

2.2.2.13 Require the issuance of additional permits or approvals by the City other than those required by the Applicable Rules.

2.2.2.14 Establish, enact, increase, or impose against the Project or Property any fees, assessments, or other monetary obligations other than those specifically permitted by this Agreement; provided, however, that the foregoing shall not prevent or limit the imposition or collection of any generally applicable real or personal property taxes, transient occupancy taxes, or any generally applicable sales, use, excise taxes, or business license fees with respect to any commercial uses within the Project.

2.2.2.15 Impose against the Project any condition, dedication, or other exaction not specifically authorized by the Project Approvals, the Applicable Rules, or this Agreement.

2.2.2.16 Subject to Section 2.7, limit the processing of applications and approvals of Subsequent Approvals, including without limitation Future Changes to the Applicable Rules that require additional processing of such applications and approvals of Subsequent Approvals.

2.2.3 To the extent that Future Changes to the Applicable Rules conflict with the Vested Elements, they shall not apply to the Project and the Vested Elements shall apply to the Project, except as provided in this Section 2.2.3 and in Sections 2.3 through 2.6, inclusive. A Future Change in the Applicable Rules that conflicts with the Vested Elements shall nonetheless apply to the Property and the Project if, and only if (i) consented to in writing by Developer in its sole and absolute discretion; (ii) it is determined by the City, and evidenced through express findings supported by substantial evidence, that the change or provision is reasonably required in order to prevent a condition dangerous to the public health or safety as set forth in Section 2.4 below; (iii) required by changes in State or Federal law as set forth in Section 2.5 below; (iv) it consists of changes in, or new fees permitted by, Section 4.2.3.2; (v) it consists of revisions to, or new Uniform Code Regulations to the extent permitted by Section 2.3 below; or (vi) it is otherwise

expressly permitted by this Agreement. In the event of any of the foregoing, the applicable Future Change to the Applicable Rules shall be deemed to be a part of the Applicable Rules.

2.2.4 Pursuant to Section 65865.4 of the Development Agreement Statute, unless this Agreement is terminated by mutual agreement of the Parties as provided for under Section 8.1, or terminated pursuant to Section 8.2, either Party may enforce this Agreement notwithstanding any Future Changes to the Applicable Rules.

2.3 **Applicability of Uniform Code Regulations**. Notwithstanding any provision herein to the contrary, nothing in this Agreement shall preclude the City from applying to the Project any provisions, requirements, rules, or regulations applicable across the City's jurisdiction that are contained at any time during the Term in the California Building Standards Code, as amended by the City in accordance with the California Health and Safety Code, including requirements of the applicable Building Code, Administrative Code, Energy Code, Residential Code, Mechanical Code, Electrical Code, Plumbing Code, Fire Code, or other applicable construction codes (collectively, "**Uniform Code Regulations**").

2.4 **Public Health and Safety Exception**. The City shall exercise its discretion under this Agreement and the Applicable Rules in a manner which is consistent with the public health, safety, and welfare. Notwithstanding any provision in this Agreement to the contrary, and in addition to application to the Project of Uniform Code Regulations, City shall retain, at all times, its authority to take any legally valid action necessary to protect persons or property from dangerous or hazardous conditions which create a threat to the public health or safety, including, without limitation, authority to condition or deny a permit, approval, or agreement or other entitlement or to change or adopt any new regulations applicable to the Project so long as such condition or denial or new law (i) is limited solely to addressing a specific and identifiable issue in each case required to protect the physical health and safety of the public, and (ii) is based on written findings by City and transmitted to Developer, specifically identifying, based on objective and quantifiable evidence in the official record, the precise nature and extent of the dangerous or hazardous conditions requiring such condition or denial or change in the Applicable Rules, why there are no reasonable alternatives to the imposition of such condition or denial or changes in the law, and how such condition or denial or new law would alleviate the dangerous or hazardous condition ("**Public Health and Safety Exception**"). Developer retains the right to dispute any City reliance on the Public Health and Safety Exception.

2.5 **Changes in State or Federal Laws**. In accordance with Government Code Section 65869.5, in the event that state or federal laws or regulations enacted after the Effective Date ("**State or Federal Law**") prevent or preclude compliance with one or more provisions of this Agreement, the Parties shall meet in good faith for a period not exceeding sixty (60) days (unless such period is extended by mutual written consent of the Parties) to determine the feasibility of any modification or suspension of this Agreement that may be necessary to comply with such State or Federal Law, to determine the effect such modification or suspension would have on the purposes and intent of this Agreement and the Vested Elements, and to prepare such modification. Following the meeting between the Parties, the provisions of this Development Agreement may, to the extent feasible, and upon mutual agreement of the Parties, be modified or suspended, but only to the minimum extent necessary to comply with such State or Federal Law. In such an event, this Development Agreement together with any required modifications

shall continue in full force and effect. In the event that the State or Federal Law operates to frustrate materially and irremediably (a) the Vested Elements, or (b) the City's right to receive the community benefits as set forth in this Agreement, Developer, in the event of item (a), or the City, in the event of item (b), may terminate this Agreement. In addition, Developer shall have the right to challenge (by any method, including litigation), at its sole cost, the State or Federal Law preventing compliance with, or performance of, the terms of this Development Agreement and, in the event that such challenge is successful, this Development Agreement shall remain unmodified and in full force and effect, unless the Parties mutually agree otherwise, except that if the Term of this Development Agreement would otherwise terminate during the period of any such challenge and Developer has not commenced with the development of the Project in accordance with this Development Agreement as a result of such challenge, the Term shall be extended for the period of any such challenge. If Developer raises such a challenge, then City agrees, upon Developer's written request and at Developer's sole cost and expense, to cooperate with Developer concerning Developer's challenge, which cooperation shall be subject to the provisions of Section 6.2; provided, however, that City shall not have any obligation to commence, prosecute, or defend any litigation with respect to any such challenge.

2.6 **CEQA**. Nothing in this Agreement shall be deemed to limit the City's ability to comply or compel Developer compliance with CEQA, including the CEQA Compliance Documentation and any applicable General Plan mitigation measures or other uniformly applied development policies and standards identified therein (collectively, "**GPU Mitigation Measures**").

2.7 **Subsequent Approvals**.

2.7.1 Processing of Subsequent Approvals. To develop the Project as contemplated in this Agreement, the Project will require land use approvals, entitlements, development permits, and use and/or construction approvals other than the Initial Approvals, which may include, without limitation: final subdivision and condominium maps, conditional and administrative use permits, entertainment permits, plot plans, street abandonments, design plan approvals, certificates of compliance, demolition permits, improvement agreements, infrastructure agreements, grading permits, building permits, right of way permits, site plans, sewer and water connection permits, certificates of occupancy, parcel and condominium maps, encroachment permits, ABC license approvals related to the Commercial Beach Club Sector, and amendments thereto and to the Project Approvals (collectively, "**Subsequent Approvals**"). City, provided Developer submits all legally required material, reports, and requisite data in order to deem any subsequent approvals complete, will accept, make completeness determinations, and process, promptly and diligently to completion, all applications for Subsequent Approvals in accordance with Applicable Rules and the terms of this Agreement. At such time as any Subsequent Approval is approved by the City, then such Subsequent Approval shall become subject to all the terms and conditions of this Development Agreement applicable to Project Approvals and shall be treated as a "**Project Approval**" under this Development Agreement.

2.7.2 Scope of Review of Subsequent Approvals. By approving the Initial Approvals and this Agreement, City has made a final policy decision that the Project is in the best interests of the public health, safety, and general welfare. Accordingly, City shall not use its authority in considering any application for a discretionary Subsequent Approval to change the

policy decisions reflected by the Initial Approvals or otherwise to prevent or delay development of the Project as set forth in the Initial Approvals. Instead, the Subsequent Approvals shall be deemed to be tools to implement those final policy decisions. The scope of the review of applications for Subsequent Approvals shall be limited to a review of substantial conformity with the Vested Elements as set forth and subject to Section 3.2 (and except as otherwise provided by Sections 2.2 through 2.6, inclusive, and other Applicable Rules). Where such conformity/compliance exists, City shall not deny an application for a Subsequent Approval. This paragraph includes, without limitation, the Entertainment Permit and any ABC-related approvals for the Commercial Beach Club Sector described in Section 4.6.

2.7.3 Conditions of Subsequent Approvals.

(a) City shall have the right to impose reasonable conditions upon Subsequent Approvals including, without limitation, normal and customary dedications for rights of way or easements for public access, utilities, water, sewers, and drainage necessary for the Project; provided, however, such conditions and dedications shall not be inconsistent with the Applicable Rules, nor inconsistent with the development of the Project as contemplated by this Agreement except to the extent required by the Applicable Rules. Developer may protest any conditions, dedications, or fees while continuing to develop the Property. In the event of a protest by Developer, the City retains the right to pause any Subsequent Approval processes until the protest is resolved, to ensure that the Project proceeds in a manner consistent with the City's interests and regulations, but the City shall not withhold or delay any permit or other approval for any aspect of the Project not directly subject to the Subsequent Approval that is the subject of the protest.

(b) Conditions imposed on Subsequent Approvals may only require dedications or reservations for, or construction or funding of, Public Improvements beyond those already included or referenced in the Initial Approvals, the Mitigation Measures (except to the extent required by CEQA in connection with any Subsequent Approvals) or Section 3.8.1, in the event of a Public Health and Safety Exception, as defined in Section 2.4 of this Agreement. In addition, any and all conditions imposed on Subsequent Approvals for the Project must comply with Section 4.2 (Payment of Fees and Costs).

2.8 **Regulatory Agency Approvals**. The Parties acknowledge and agree that, in addition to the Initial Approvals and any Subsequent Approvals, the Project, including the provision of some of the community benefits, may require Developer to obtain approvals or clearances from various Regulatory Agencies, other third-party public agencies and utilities (collectively, the "**Third-Party Agency Approvals**"). Without limitation, the Third-Party Agency Approvals may include approvals or clearances from the Coachella Water Authority, the Imperial Irrigation District ("**IID**"), the Regional Water Quality Control Board ("**RWQCB**"), the State Water Resources Control Board ("**SWRCB**"), the South Coast Air Quality Management District ("**SCAQMD**"), and the California Department of Alcoholic Beverage Control with respect to the Commercial Beach Club Sector. Developer agrees to use diligent and commercially reasonable efforts to procure the Third-Party Agency Approvals. If requested by Developer, the City shall cooperate with Developer, at Developer's sole cost, in Developer's efforts to obtain the Third-Party Agency Approvals. If after using all reasonable efforts, Developer is unable to obtain any Third-Party Agency Approval needed in order for Developer

to develop the Project or meet its obligations under this Agreement, including providing the public benefits described in this Agreement, such inability shall constitute a Permitted Delay subject to the provisions of Section 11.6.

2.9 **Changes to Development Agreement Statute**. This Agreement has been entered into in reliance upon the provisions of the Development Agreement Statute as those provisions existed at the Effective Date. No amendment or addition to those provisions, which would materially affect the interpretation or enforceability of this Agreement, shall be applicable to this Agreement unless such amendment or addition is specifically required by the California Legislature, or is mandated by a court of competent jurisdiction. In the event of the application of such a change in the Development Agreement Statute, the Parties shall meet in good faith to determine the feasibility of any modification or suspension of this Agreement that may be necessary to comply with such change in law and to determine the effect such modification or suspension would have on the purposes and intent of this Agreement and the Vested Elements. Following the meeting between the Parties, the provisions of this Agreement may, to the extent feasible and upon mutual agreement of the Parties, be modified or suspended but only to the minimum extent necessary to comply with such change in law. If such amendment or change is permissive rather than mandatory, this Agreement shall not be affected by the same unless the Parties mutually agree in writing to amend this Agreement to permit such applicability.

ARTICLE 3
DEVELOPMENT OF THE PROJECT

3.1 **Development Rights**. Developer shall have a vested right to develop the Project on the Property, in accordance with the Vested Elements.

3.2 **Vested Elements**. The overall design, development, construction, and use of the Project and all improvements in connection therewith, including without limitation, permitted uses of the Property (including the Private Resort Sector and Commercial Beach Club Sector uses described in Section 4.6, and the right to operate short-term vacation rentals as described in Recital D and the STVR Ordinance Amendment), the maximum density of development, the intensity of use, the maximum height and size of the proposed buildings, provisions for reservation or dedication of land for public purposes, the conditions, terms, restrictions, and requirements for subsequent discretionary actions, the provisions for and financing for Public Improvements, and the other terms and conditions of development applicable to the Property are as set forth in the Project Approvals, and are hereby vested in Developer, subject to, and as provided in, the provisions of this Development Agreement (the "**Vested Elements**"). The intent of this Section 3.2 is to cause all development rights which may be required to develop the Project in accordance with this Agreement and the Project Approvals to be deemed to be "vested rights" as that term is defined under California law applicable to the development of land or property and the right of a public agency to regulate or control such development of land or property. City hereby agrees to be bound with respect to the Vested Elements, subject to Developer's full and timely compliance with the terms and conditions of this Agreement, the Project Approvals, and all Applicable Rules. By stating that the terms and conditions of this Agreement and the Project Approvals control the overall design, development and construction of the Project, this Agreement is consistent with the requirements of California Government Code Section 65865.2 (requiring a development agreement to state permitted uses of the

property, the density or intensity of use, the maximum height and size of proposed buildings and provisions for reservation or dedication of land for public purposes). Notwithstanding the preceding provisions of this Section 3.2 or any other provision in this Agreement to the contrary, in the event of any conflict between the terms and conditions of any Project Approvals (including Developer's rights and obligations thereunder) other than as provided in the body of this Agreement, including without limitation any Subsequent Approvals, and the terms and conditions of this Agreement (including Developer's rights and obligations hereunder), the terms and conditions of this Agreement shall control. For the avoidance of doubt, in the event of any conflict between the body of this Agreement and the Conditions of Approval or GPU Mitigation Measures attached as exhibits hereto, the terms and conditions set forth int eh body of this Agreement shall control.

3.3 **Life of Subdivision Maps and Other Project Approvals**.

3.3.1 Life of Subdivision Maps. The terms (lifespan) of Tentative Tract Map No. 39330 and any other Subdivision Maps approved by the City for the Project shall be automatically extended such that such maps remain in effect for a period of time coterminous with the Term of this Agreement, or such longer period as may be permitted under state law.

3.3.2 Life of Other Project Approvals. The term of all other Project Approvals, including all implementing approvals, conditional use permits ("CUPs"), architectural review approvals, and the Entertainment Permit, shall be automatically extended such that the Project Approvals remain in effect for the same term as the Term of this Agreement, with the exception of construction permit approvals, which shall be valid for the period of time identified within the applicable California Building Standards Code.

3.3.3 Termination of Agreement. In the event that this Agreement is terminated prior to the expiration of the Term of the Agreement for any reason other than a Developer Event of Default, the term of any Subdivision Map approved by the City for the Project or any other Project Approval, as well as the vesting period for any vesting Subdivision Map approved as a Project Approval, shall be the term otherwise applicable to such approval in accordance with the California Subdivision Map Act, which term shall commence to run on the date that such termination of this Agreement takes effect. In the event of any termination of this Agreement for a Developer Event of Default, the provisions of Section 8.2.3 shall govern with respect to the term of the Project Approvals.

3.4 **Compliance with CEQA**. The Parties acknowledge that the City has determined, pursuant to Section 15183 of the CEQA Guidelines, that the environmental effects of the Project have been adequately addressed by the environmental review previously conducted for the applicable General Plan and the CEQA Compliance Documentation prepared for the Project, except to the extent that further environmental review is expressly required pursuant to CEQA Guidelines Section 15183. The CEQA Compliance Documentation addresses the potential environmental effects of the Project as described in the Initial Approvals and identifies the GPU Mitigation Measures, if any, applicable to the Project. In considering any Subsequent Approval, the City shall rely upon the CEQA Compliance Documentation and the environmental review previously conducted for the applicable General Plan to the fullest extent permitted by CEQA, including CEQA Guidelines Section 15183. The City shall not require preparation of a

new initial study, negative declaration, environmental impact report, or other environmental document, repeat environmental analysis previously conducted, or impose additional mitigation measures with respect to environmental effects previously analyzed and adequately addressed, except to the extent expressly required by CEQA. Nothing in this Agreement shall limit the City's authority to conduct such additional environmental review or impose such additional mitigation measures in connection with a Subsequent Approval as are required by CEQA, including where changes to the Project or other circumstances result in environmental effects for which additional environmental review is required pursuant to CEQA Guidelines Section 15183 or other applicable provisions of CEQA. Any such additional environmental review and mitigation shall be limited to the environmental effects for which additional review or mitigation is required by CEQA and shall not include reconsideration of environmental effects previously analyzed and adequately addressed to the extent CEQA precludes or does not require such reconsideration.

3.5 **Compliance with Project Approvals**. In developing the Project, Developer shall at all times comply with the Project Approvals and Applicable Rules, and Developer further agrees that all improvements required to be constructed by Developer for the Project (including all onsite improvements and offsite improvements) shall be constructed in accordance with this Agreement, the Project Approvals, and Applicable Law.

3.6 **Development Timing**.

3.6.1 *Pardee* Finding. Development of the Project Site is permitted to occur in phases as described and contemplated in **Exhibit C** ("**Construction Phasing**"). The Parties wish to avoid the result of *Pardee Construction Co. v. City of Camarillo*, 37 Cal.3d 465 (1984), where the failure of the parties there to expressly provide for the timing of development resulted in the court's determination that a later-adopted initiative restricting the timing of development prevailed over the parties' agreement. Accordingly, the Parties acknowledge and agree that Developer shall have the right, subject to the provisions of the Project Approvals and the requirements of Sections 4.1 and 4.2 of this Agreement, to develop the Project at such time and in such phases as Developer deems appropriate in the exercise of its subjective business judgment, subject to the Buildout Period described in Section 1.3.2.

3.7 **Final Subdivision and Condominium Maps**. Developer may from time to time file applications for Subsequent Approvals of final subdivision and condominium maps (including phased final maps) with respect to some or all of the Project Site in accordance with the provisions of the Subdivision Map Act.

3.8 **Provision and Financing of Public Improvements**.

3.8.1 Construction and Dedication. Subject to the other provisions of this Agreement, Developer shall be responsible for the design, engineering, and construction of all roadways, sidewalks, drainage, sewer, water, storm drain, and electrical distribution improvements, and all other infrastructure and improvements for the Project, including any onsite improvements or offsite improvements, that may or are to be dedicated or otherwise made available for public use pursuant to this Agreement or the Project Approvals ("**Public Improvements**"). The Public Improvements to be constructed by Developer are further identified in **Exhibit C**. Except as set forth in this Section 3.8.1 or otherwise agreed to in writing by the

City, in its reasonable discretion, all Public Improvements necessary to serve any particular phase of the Project shall be completed prior to the City's issuance of the first Certificate of Occupancy for any development within that phase or any earlier date specified in the Project Approvals.

3.8.2 Energy Infrastructure. The Parties shall cooperate in good faith to facilitate the delivery of adequate electrical service to the Project Site, the details of which remain to be determined but may include the construction of a new IID substation on or off the Project Site, new distribution facilities extending from an area substation, and/or the incorporation of on-site alternative energy facilities, including solar generation and battery storage systems. Developer shall pay its fair share of the cost of any new or upgraded electrical infrastructure required to serve the Project, and the Parties shall reasonably cooperate in good faith in pursuing a cost-sharing and/or reimbursement arrangement with IID or other third parties to the extent either Party advances or funds costs for such infrastructure in excess of that Party's fair share of total costs. In the event the City adopts or applies a fee to fund electrical infrastructure, Developer shall be entitled to credit against any such fee for all amounts spent by Developer on publicly owned electrical infrastructure.

3.8.3 Developer shall maintain and be liable for all Public Improvements until formally accepted by City, or when finally accepted by another authority if another authority has jurisdiction over the Public Improvements, and/or when finally accepted by a public utility if a public utility has jurisdiction over the Public Improvements. Upon completion of required Public Improvements hereunder in conformance with the approved plans, Developer shall offer for dedication to City, from time to time as such Public Improvements are completed, those Public Improvements for which the Project Approvals require such offer of dedication, and City shall promptly accept from Developer such completed Public Improvements in accordance with Applicable Rules (the "**Dedicated Public Improvements**"). Developer may offer dedication of Dedicated Public Improvements in phases and City shall not refuse to accept such phased dedications or refuse phased releases of bonds or other security so long as all other conditions and requirements for acceptance have been satisfied by Developer, and subject to any such conditions to the Project Approvals pertaining to maintenance of the Public Improvements following acceptance. Upon Developer's request, and at Developer's sole cost, City shall reasonably cooperate with Developer (a) to locate any new easements required for the Project so as to minimize interference with development of the Project, and (b) in Developer's efforts to relocate or remove easements to facilitate development of the Project, provided that such cooperation does not entail any financial or legal liability for the City.

3.8.4 Financing. Except as otherwise expressly provided in this Agreement or negotiated with the City, Developer shall fund all Public Improvements for the Project by means of its own funds and any other means of financing, subject to approval by the City, as generally described in this Section 3.8.4 (the "**Financing Plan**"). The City agrees to use best efforts to reasonably cooperate with Developer in the formation of a Mello-Roos Community Facilities District ("**CFD**") or other assessment district or other financing mechanism, as deemed appropriate by Developer to help implement the Financing Plan, provided that such cooperation does not entail any financial or legal liability for the City, including but not limited to entering into Joint Community Facilities Agreements ("**JCFAs**") with the Coachella Water Authority, IID, and/or other public agencies to fund public facilities, including capital facilities fees and development impact fees of the City and any participating agency (each, a "**Financing Mechanism**") that

Developer in its sole discretion may elect to initiate related to the Project as and when so requested by Developer, provided that such Financing Mechanisms shall be subject to the following:

3.8.4.1 Developer shall, without need for a written request from the City, advance amounts necessary to pay all actual costs and expenses of City to evaluate and structure any Financing Mechanism, to the end that City will not be obligated to pay any costs related to the formation or implementation of any Financing Mechanism. Developer shall pay all costs of formation and administration of any CFD formed pursuant to this Section.

3.8.4.2 Any Financing Mechanism will provide for the reimbursement to Developer of any advances by Developer described in Section 3.8.4.1, and any other costs incurred by Developer that are related to the Financing Mechanism, such as the costs of legal counsel, special tax consultants, engineers, etc. Developer agrees to promptly submit to City a detailed accounting of all such other costs incurred by Developer, along with supporting documentation, at such time as Developer makes application for reimbursement.

3.8.4.3 City shall, without limiting its discretion, consult with Developer prior to engaging any consultant (including bond counsel, underwriters, appraisers, market absorption analysts, financial advisors, special tax consultants, assessment engineers, and other consultants deemed necessary to accomplish any financing). However, City retains the sole right to make the final selection of any such consultants.

3.8.4.4 Developer shall submit to City Developer's phasing plan for any Public Improvements to be financed, including the priority and financing needs, as well as proposed improvement areas and/or tax zones. City shall act as the lead agency in forming the Financing Mechanism, with one or more Improvement Areas and/or Tax Zones, and will use available proceeds of any public financing in accordance with such priorities, and as otherwise provided in this Agreement. Any Financing Mechanism may fund capital facilities and development impact fees of the City and any participating agency, and any other public improvements owned and maintained by a public agency.

3.8.4.5 City and Developer will determine, following consultation with any other participating public agencies, the means by which any Public Improvements may be acquired by City or other public agency, as applicable.

3.8.4.6 In addition, any financing may include amounts necessary to discharge any assessment, special tax, or other liens on the Property.

3.8.4.7 Any public financing shall be secured solely by assessments or special taxes levied within the respective district, proceeds of the bonds issued that are placed in a bond fund, reserve fund, or other such fund for the financing and investment earnings thereon.

3.8.4.8 The payment of actual initial and annual administrative costs of City to be incurred in connection with any Financing Mechanism shall be adequately assured, through the inclusion in any assessment or special tax methodology of appropriate provision for such costs as estimated by City, to the end that City shall not be called upon to provide for any initial or annual administrative costs related to any Financing Mechanism.

3.8.4.9 The bond term of any Financing Mechanism shall not exceed thirty-five (35) years, and bonds may be issued in one or more series; the maximum effective tax rate shall not exceed two percent (2.00%), and special taxes shall be authorized to escalate by two percent (2.00%) annually. The first CFD formed pursuant to this Section may be formed no earlier than the time of recording of the first Final Map for the Project.

3.8.4.10 The status of Entitlement applications and fee deposits as of the Effective Date is summarized in **Exhibit D** (Summary of Entitlement Applications and Fee Deposits).

ARTICLE 4
OBLIGATIONS OF DEVELOPER

4.1 **Energy and Utility Infrastructure Cooperation**.

4.1.1 Cooperation in Facilitating Electrical Service. The Parties shall reasonably cooperate in good faith in facilitating adequate electrical service to the Project, as described in Section 3.8.2. Developer shall connect the Project to existing water, sewer, gas, and electrical facilities serving the Project Site and shall construct all onsite and offsite utility extensions required to serve the Project, as identified in the applicable Project Approvals.

4.1.2 Water and Sewer Connections. Developer shall extend public water and sewer lines to the Project Site from the nearest existing mains, including the extension of approximately 2,760 feet of 12-inch public water lines and approximately 174 feet of 12-inch public sewer lines, as more particularly described in the Project Approvals, and shall construct all interior public and private utility lines necessary to serve the Project.

4.2 **Payment of Fees and Costs**.

4.2.1 General. All fees, exactions, dedications, reservations, or other impositions to which the Project would be subject, but for this Development Agreement, are referred to in this Development Agreement either as "Administrative Fees" or "Development Fees". Developer shall timely pay or perform, as applicable, all Administrative Fees and Development Fees applicable to the Project or the Project Site in accordance with the terms of this Agreement.

4.2.2 Administrative Fees. As used in this Agreement, "**Administrative Fees**" means fees charged by the City, on a City-wide basis in effect at the time to cover the costs of City's review of applications for any permit or other approval or review or inspection by City. Administrative Fees are not Development Fees. Applications for Subsequent Approvals shall be charged, and Developer shall timely pay to the City, Administrative Fees to allow City to recover its actual and reasonable costs of processing Subsequent Approvals. Administrative Fees shall be paid in accordance with the City's ordinances or requirements, as applicable, and the provisions of this Section. Without limiting the foregoing, Developer shall reimburse City or pay directly all reasonable and actual costs relating to the hiring of consultants and the performing of studies as may be necessary to review or process any applications for Project Approvals or perform any related environmental review and City shall provide Developer with detailed invoices relating thereto as part of any reimbursement request. Prior to engaging the services of any such consultant, or authorizing the expenditure of any funds for such consultant, the City shall consult with

Developer in an effort to mutually agree to terms regarding (i) the scope of work to be performed, (ii) the projected costs associated with the work, and (iii) the particular consultant that would be engaged to perform the work.

4.2.3 Development Impact Fees ("DIF").

(a) Definition. As used in this Agreement, "**Development Fees**" or "**DIF**" means all fees, contributions, exactions, dedications, reservations, or impositions, other than taxes or assessments, whether established for or imposed upon the Project individually or as part of a class of projects, that are imposed by City on the Project in connection with any Project Approval for any purpose, including, without limitation, defraying all or a portion of the cost of public services and/or facilities construction, improvement, operation, and maintenance attributable to the burden created by the Project. Development Fees do not include: (a) any Administrative Fee; (b) any GPU Mitigation Measure (unless the Mitigation Measure consists of payment of a Development Fee); (c) any Community Benefit to be provided by Developer hereunder; (d) taxes or special assessments, including the Transient Occupancy Tax described in Section 4.5; (e) any utility connection fees in effect from time to time generally applicable on a City-wide basis to similar land uses as the Project; or (f) any fees, taxes, assessments, or impositions imposed by other entities that the City collects on behalf of such other entities, all of which shall be due and payable by Developer as and when due in accordance with applicable law.

(b) Applicability, Freeze, and Payment. No Development Fees shall be applicable to the Project except as provided in this Agreement. The Project shall be subject only to the Development Fees as set forth in **Exhibit E** ("**Existing Development Fees**"), except as otherwise expressly permitted by this Section 4.2.3.2. There shall be no increase in the amounts of the Existing Development Fees, and no new categories of Development Fees shall apply to the Project, for a period of fifteen (15) years from the Effective Date of this Agreement (the "**DIF Freeze Period**"), subject to a reasonable automatic annual inflation adjustment tied to the Construction Cost Index. Following expiration of the DIF Freeze Period, Development Fees shall be paid at the amounts then in effect at the time of payment. Developer shall pay all applicable Development Fees at the time of issuance of the certificate of occupancy for the applicable unit or structure.

(c) Fee Credits. Developer shall receive Development Impact Fee offsets and credits ("**Fee Credits**") for all Public Improvements constructed by Developer that are included in the City's capital improvement plans and/or any fee studies supporting the City's adopted Development Fees, in the amounts set forth in **Exhibit E**, or as may be subsequently agreed to in writing by the Parties.

4.3 **Hold Harmless and Indemnification of City**. To the fullest extent permitted by law, Developer shall defend with counsel of Developer's choosing, subject to approval by City, and hold harmless the City and its elected and other officials, officers, agents, and employees ("**Indemnified Parties**") from and against any third party Claims brought against the Indemnified Parties: (a) to attack, set aside, void, or annul this Agreement; or (b) resulting or arising from death or injury to any person or for any damage to or loss of property resulting directly or indirectly from Developer's performance of this Agreement, except to the extent such Claims for death, injury, damage, or loss are ultimately determined by a court to be the result of

the gross negligence or willful misconduct of the City. In the event a third-party Claim is commenced against the City, City shall give prompt notice of same to Developer, which notice shall be a condition of Developer's obligations under this Section 4.3. If Developer is required to defend the City as set forth above, Developer shall be entitled to select legal counsel to defend the City, subject to the City's approval, at Developer's cost. In the event of a court order issued as a result of a successful legal challenge as described in item (a) above, the City shall, to the extent permitted by law or court order, in good faith seek to comply with the court order in such a manner as will maintain the integrity of the Project Approvals and avoid or minimize to the greatest extent possible (i) any impact to the development of the Project as provided for in, and contemplated by, the Vested Elements, or (ii) any conflict with the Vested Elements or frustration of the intent or purpose of the Vested Elements.

4.4 **Payment of Prevailing Wages**.

4.4.1 Developer acknowledges that the City has made no representation, express or implied, to Developer or any person associated with Developer regarding whether or not laborers employed relative to the construction and installation of improvements on the Property, if any, must be paid the prevailing per diem wage rate for their labor classification, as determined by the State of California, pursuant to California Labor Code Sections 1720, et seq. Developer agrees with the City that Developer shall assume the responsibility and be solely responsible for determining whether or not laborers employed relative to any construction of capital improvements on the Property or for the Development must be paid the prevailing per diem wage rate for their labor classification, as determined by the State of California, pursuant to California Labor Code Sections 1720, et seq.

4.4.2 If Civil Code sections 9550 et seq. require contractors to procure a payment bond for the improvements on the Property, then the Developer shall ensure that its contractors deliver the required bond.

4.4.3 Developer, on behalf of itself, its successors, and assigns, waives and releases the City from any right of action that may be available to any of them pursuant to California Labor Code Sections 1726 and 1781. Developer acknowledges the protections of California Civil Code Section 1542 relative to the waiver and release contained in this Section 4.4, which reads as follows:

> A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS THAT THE CREDITOR OR RELEASING PARTY DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE AND THAT, IF KNOWN BY HIM OR HER, WOULD HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR OR RELEASED PARTY.
>
> BY INITIALING BELOW, DEVELOPER KNOWINGLY AND VOLUNTARILY WAIVES THE PROVISIONS OF CALIFORNIA CIVIL CODE SECTION 1542 SOLELY IN CONNECTION WITH THE WAIVERS AND RELEASES OF THIS SECTION 4.4:

Developer's Initials

Developer's Initials

4.4.4 Developer shall defend with counsel reasonably acceptable to the City, indemnify and hold harmless City and its elected officials, officers, employees, agents and contractors from any and all liability, costs, claims, damages, fines, penalties and expense, including costs of litigation and attorneys' fees, arising out of or in any way connected with Developer's construction of the facilities and improvements described in this Agreement, and Developer shall indemnify, defend with counsel reasonably acceptable to the City and hold harmless the City against any claims pursuant to California Labor Code Section 1781 arising from this Agreement or the construction or installation of any improvements on the Property or for the Development, in accordance with the terms of this Section 4.4.

4.5 **Transient Occupancy Tax Rebate**.

4.5.1 Purpose. The Project is designed as a resort community that is anticipated to generate substantial transient occupancy tax ("**TOT**") and sales tax revenue for the City. In consideration of Developer's substantial investment in the Project's resort infrastructure and amenities, and consistent with the City's Hotel Operations Incentive Plan, City agrees to rebate a portion of the TOT generated by the Project as set forth in this Section 4.5.

4.5.2 Rebate Percentages. Subject to the Annual Minimum Payments described in Section 4.5.3 and the Rebate Cap described in Section 4.5.4, City shall rebate fifty percent (50%) of the TOT generated by the Project during the first fifteen (15) years following the opening of the resort at buildout of Phase 1 of the Project.

4.5.3 Annual Minimum Payments to City. Notwithstanding Section 4.5.2, City shall receive the first TOT revenue generated by the Project each year, before any rebate to Developer, until the City has received the following annual minimum amounts: (i) beginning upon opening of the resort at buildout of Phase 1 of the Project (167 total units), the first $1,000,000 in TOT revenue in that year; (ii) upon completion of Phase 2 (273 total units), the first $1,500,000 in TOT revenue in that year; and (iii) upon buildout of the resort (402 total units), the first $2,000,000 in TOT revenue in that year (collectively, the "**Annual Minimum Payments**"). Only TOT revenue in excess of the applicable Annual Minimum Payment for that year is subject to rebate under Section 4.5.2.

4.5.4 Lifetime Cap. The cumulative TOT rebated to Developer under this Section 4.5 over the life of this Agreement shall not exceed the total sum of Twenty-Five Million Dollars ($25,000,000.00) (the "**Rebate Cap**"). Once the Rebate Cap has been reached, City shall retain one hundred percent (100%) of TOT generated by the Project for the remainder of the Term.

4.5.5 No PILOT. This Section 4.5 does not constitute a payment in lieu of taxes and does not obligate Developer to make up any shortfall between actual TOT collected and the Annual Minimum Payments.

4.5.6 Reporting. Developer shall provide the City with such periodic reporting of TOT collections, short-term rental activity, and ADI documentation as the City may reasonably request to administer this Section 4.5.

4.6 **Provision of Community Benefits**. Developer will provide the development of an underutilized agricultural site into a destination resort community generating substantial new employment opportunities, transient occupancy tax revenue, and sales tax revenue for the City, thereby supporting the City's long-term fiscal and economic stability. In connection with the Project, Developer is providing the following benefits to the City and area residents (collectively, "**Community Benefits**"):

4.6.1 Fiscal Benefits. The Project is projected to generate substantial TOT and sales tax revenue, supporting the City's General Fund and long-term economic stability.

4.6.2 Public Infrastructure Improvements. Developer shall construct public infrastructure improvements to streets, sidewalks, utilities, and other public facilities serving the Project, and shall fund or construct a portion of the off-site sewer main upsizing needed to serve other planned housing developments in the City, as further described in **Exhibit C**.

4.6.3 Enhanced Landscaping. Developer shall maintain enhanced landscaping on all public street frontages of the Project, as described in the Project Approvals.

4.6.4 Employment. The Project will provide well-paying construction jobs for local labor, as well as permanent jobs ranging from entry-level to managerial positions in connection with the operation of the resort, beach club, restaurant, and sports bar.

4.6.5 No Affordable Housing Obligation. Developer shall not be conditioned to construct or provide any affordable housing units in connection with the Project.

4.7 **Scope of Development; Private Resort Sector and Commercial Beach Club Sector**. The Project is a mixed-use development comprised of two principal components:

4.7.1 Private Resort Sector. The Private Resort Sector shall consist of up to 240 condo hotel cottages and 162 single-family residential units, consisting of a combination of estate lots, zero lot line lots, bungalow condominiums, and VIP suites, that will operate collectively as a first-class resort operation, together with a recreational lagoon, pool/spa, courts, and other recreational amenities, and restaurant, bar, and clubhouse facilities. Units within the Private Resort Sector may be sold under a fractional ownership, timeshare, second-home, or other applicable model, with fee-simple deeded fractional interests to be managed and maintained by Developer or a licensed property management company. All units within the Private Resort Sector shall be available for TOT-generating short-term vacation rentals, centrally managed by an owners' association, club, and/or licensed property management company. Consistent with Recital D, this portion of the Project shall be treated as a First Class Hotel under the City's Municipal Code, rather than as a residential project, and shall be exempt from the short-term vacation rental provisions of

Coachella Municipal Code Chapter 5.80, subject to the reporting, operational, and TOT payment requirements set forth in this Agreement.

4.7.2 Commercial Beach Club Sector. The Commercial Beach Club Sector shall consist of a recreational lagoon and associated commercial beach club amenities, including a beach club, restaurant, and sports bar, and associated entertainment venues, that will be available to owners and resort guests as well as to the general public through reservation or event access. The parties agree that Developer shall be entitled to have live music and extended hours of operation for the Commercial Beach Club Sector's restaurant and entertainment uses to accommodate late-night operations, subject to compliance with applicable Alcoholic Beverage Control permit requirements and the Entertainment Permit.

4.8 **Developer Representations and Warranties**. Developer represents, warrants, and covenants to the City, as of the Effective Date and thereafter during the Term, as follows:

4.8.1 Authority. Developer is a California limited liability company duly organized and validly existing, and is authorized to own property and do business in the State of California. Developer has the capacity and full right, power, and lawful authority to own its property and perform the terms and covenants of this Agreement, and the execution, delivery, and performance of this Agreement by Developer has been fully authorized by all requisite action on the part of Developer. The person(s) executing this Agreement on behalf of Developer has all requisite power, right, and authority to do so and to bind Developer to this Agreement.

4.8.2 Valid Binding Agreement. This Agreement and all other documents and instruments which have been executed and delivered by or on behalf of Developer pursuant to or in connection with this Agreement constitute or, if not yet executed or delivered, will when so executed and delivered constitute legal, valid, and binding obligations of Developer, enforceable against Developer in accordance with their respective terms, except as such enforceability may be limited by bankruptcy, insolvency, reorganization, arrangement, and other laws affecting creditors' rights, or by application of equitable principles. Developer has no knowledge of any inability to perform its obligations under this Agreement. The execution and delivery of this Agreement by Developer have been duly and validly authorized by all necessary action. No consent, authorization, or approval of, or other action by, and no notice to or filing with any governmental authority, regulatory body, or any other person is required for the execution, delivery, and performance by Developer of this Agreement or any of the terms and covenants herein or therein.

4.8.3 No Breach of Law or Agreement. Neither the execution nor delivery of this Agreement or of any other documents or instruments executed and delivered, or to be executed or delivered, pursuant to this Agreement, nor the performance of any provision, condition, covenant, or other term hereof or thereof, will conflict with or result in a breach of or default under any agreement to which Developer is a party or will result in the creation or imposition of any lien upon any assets or property of Developer, other than liens established in accordance with this Agreement.

4.8.4 Pending Proceedings. Developer has no knowledge of any default under any law or regulation or under any order of any court, arbitrator, board, commission or agency,

and there are no known claims, actions, suits, or proceeding pending or, to the knowledge of Developer, threatened against or affecting Developer, at law or in equity, before any court, arbitrator, board, commission, or agency which might, if determined adversely to Developer, materially affect Developer's ability to perform its obligations under this Agreement.

ARTICLE 5
OBLIGATIONS OF CITY

5.1 **Cooperation on Energy Infrastructure**. City shall reasonably cooperate in good faith and support Developer's efforts to secure adequate electrical service to the Project, including cooperating with Developer's efforts to enter into a cost-sharing and reimbursement agreement with IID as described in Section 3.8.2. If City adopts or collects a surcharge or other fee or financing mechanism to fund electrical infrastructure within the City, the infrastructure costs incurred by Developer for the Project in excess of Developer's fair-share shall be given the highest priority (at least on par with any other electrical infrastructure) in receiving City funding contribution or reimbursement from the proceeds of such surcharge, fee, or other financing mechanism, which shall be in addition to fee credits for all amounts spent by Developer on publicly owned electrical infrastructure.

5.2 **Water and Sewer Service**. City shall cooperate and facilitate Developer's connection of the Project to water and sewer service from the Coachella Water Authority, and shall reasonably cooperate with Developer to ensure that, prior to issuance of the first building permit for the Project, adequate means and methods for providing water and sewer service to the Project are in place.

5.3 **Processing During Third-Party Litigation**. The filing of any third-party lawsuit(s) against the City or Developer relating to this Agreement, the Project Approvals, or other development issues affecting the Project or the Project Site, shall not delay or stop the development, processing, or construction of the Project or the issuance of Subsequent Approvals unless the third party obtains an injunction or other court order preventing the activity.

5.4 **Expedited Processing**. The Parties agree that Developer must be able to proceed rapidly with the development of the Property and, accordingly, that expedited City review of Subsequent Approvals, including but not limited to improvement plans, final maps, modifications to Project Approvals, building permits and construction inspections, is essential to the successful completion of the Project. Accordingly, to the extent that the applications and submittals are in conformity with the Project Approvals, Applicable Rules, and this Agreement, and adequate funding exists therefor, City agrees to provide adequate City resources to diligently accept, review, and take action on all subsequent applications and submittals made to City by Developer in furtherance of the Project. Similarly, to the extent that adequate funding exists therefor, City shall provide adequate City resources to promptly review and approve improvement plans, conduct construction inspections, and accept completed public facilities. Developer agrees to reimburse the City for all costs associated with providing expedited services, above and beyond those costs covered by the City's Processing Fees. In the event City does not have adequate resources, City shall authorize the use of "contract labor" for inspection and plan review purposes, which shall be reimbursed by Developer, pursuant to a mutually agreeable reimbursement agreement that also specifies any fee credit to Developer to avoid Developer

paying more than once for the same plan check, inspection, or other City service. City shall consult with Developer concerning the selection of the most knowledgeable, efficient and available "contract labor" for purposes of providing inspection and plan review duties for the City and the Project; provided, however, that City shall retain the exclusive right to select any "contract labor" it deems suitable.

5.5 **Exemption from Future Ordinances That Would Limit the Project**. Except as otherwise expressly provided in this Agreement, City agrees that the Project shall be exempt from any future ordinances that would limit construction on the Project Site or the uses proposed for the Project as set forth in the Project Approvals.

ARTICLE 6
MUTUAL OBLIGATIONS

6.1 **Notice of Completion or Revocation**. Upon the Parties' completion of performance or revocation of this Agreement, a written statement acknowledging such completion or revocation, signed by the appropriate agents of City and Developer, shall be recorded in the Office of the Recorder of the County of Riverside, California.

6.2 **Estoppel**. Each Party hereto shall provide, upon the request of the other Party and within thirty (30) days of such request, a signed estoppel certificate in a reasonable form for the benefit of third parties.

6.3 **Good Faith and Fair Dealing**. The Parties shall cooperate with each other and act in good faith in complying with the provisions of this Agreement. In their course of performance under this Agreement, the Parties shall cooperate and shall undertake such actions as may be reasonably necessary and appropriate to implement the Project as contemplated by this Agreement.

6.4 **Other Necessary Acts**. Each Party shall execute, acknowledge, and deliver to the other all further instruments and documents and shall take such further actions as may be reasonably necessary to carry out this Agreement in order to provide and secure to each Party the full and complete enjoyment of its rights and privileges hereunder.

6.5 **Compliance with Financing Plan**. Developer shall at all times comply with applicable provisions of the Financing Plan and Developer and City shall each at all times comply with their respective obligations under applicable provisions of the Financing Mechanism.

ARTICLE 7
ANNUAL REVIEW OF DEVELOPER'S COMPLIANCE

7.1 **Procedure**. The annual review required by Government Code Section 65865.1 shall be conducted for the purposes and in the manner stated in those laws as further provided herein ("**Annual Review**"). As part of each Annual Review, Developer must demonstrate good faith compliance with the provisions of the Development Agreement. Not more than sixty (60) days and not less than forty-five (45) days prior to the Annual Review Date, City shall provide Developer with written notice for Developer to provide a letter to the City containing substantial

evidence to show compliance with this Agreement. Within sixty (60) days after Developer submits its letter, City shall review the information submitted by Developer and all other available evidence on Developer's compliance with this Agreement. All such other available evidence shall, upon receipt by the City, be made available as soon as possible to Developer. City shall notify Developer in writing whether Developer has complied with the terms of this Agreement. If the City finds that Developer has not complied with the provisions of the Development Agreement, City may issue a finding of noncompliance. City's finding of compliance or noncompliance may be appealed to the City Council within ten (10) days after the issuance of such finding, and upon the filing of such an appeal, the City shall schedule a City Council hearing in accordance with the City's Municipal Code. The issuance of a finding of compliance or finding of noncompliance by the City and the expiration of the appeal period without appeal, or the confirmation of the issuance of the finding on such appeal, will conclude the review for the applicable period and such determination will be final, subject only to judicial review. In the absence of the City notice required above, to commence the annual review process, Developer shall be deemed to be in good faith compliance with the provisions of this Development Agreement until such annual review is subsequently completed.

7.1.1 Annual Review Costs. In accordance with Government Code Section 65865.1, Developer shall reimburse City for the actual and reasonable costs incurred in conducting each Annual Review, provided that: (a) City shall provide Developer with a written invoice identifying the Annual Review costs incurred; (b) reimbursable costs shall be limited to those directly related to the Annual Review process; (c) the total cost for any single Annual Review shall not exceed $2,500.00, unless otherwise agreed to in writing by the Parties; and (d) Developer shall have the right to dispute any Annual Review costs it believes to be unreasonable, in which case the Parties shall meet and confer in accordance with Section 10.2 of this Agreement to resolve any such dispute. City shall make reasonable efforts to minimize Annual Review costs.

7.2 **Noncompliance and Cure**. If City finds that Developer is not in compliance, City must specify in writing to the Developer the respects in which the Developer has failed to comply, and must set forth terms of compliance and specify a reasonable time for the Developer to meet the terms of compliance. Unless alleged noncompliance is an immediate threat to public health and safety, City shall grant a cure period of at least sixty (60) days and shall extend the sixty (60) day period if Developer is proceeding in good faith to cure the noncompliance and additional time is reasonably needed for Developer to prosecute such cure to completion. If Developer does not comply with any terms of compliance within the prescribed time limits, this Agreement will be subject to termination or modification by the City as applicable. Developer shall have the right to appeal any determination of non-compliance, and upon any unsuccessful appeal to the City Council, to seek judicial review.

7.3 **Effect on Permitted Transferees**. If Developer has transferred a portion of the Project to a Permitted Transferee (other than a Developer Affiliate) pursuant to Article 9 of this Agreement, then the Annual Review shall be conducted separately with respect to each such Permitted Transferee. If such Annual Review results in a final determination that such Permitted Transferee has not complied with this Agreement, such determination and any resulting termination or modification of this Agreement by the City shall be effective only as to the Permitted Transferee to whom the determination is made and the portions of the Project Site in which such Permitted Transferee has an interest. Such Permitted Transferee shall have the right

to appeal the City's determination of non-compliance, as described above. Such a termination or modification shall have no effect on Developer or any other Permitted Transferees which have an ownership interest in the Property, and which are in compliance with this Agreement.

ARTICLE 8
AMENDMENT; TERMINATION

8.1 **Amendment or Termination of Agreement**. This Agreement may be amended from time to time or canceled in whole or in part by mutual consent of both Parties in writing in accordance with the provisions of the Development Agreement Statute. Review and approval of an amendment to this Agreement shall be strictly limited to consideration of only those provisions to be added or modified. All amendments to this Agreement shall automatically become part of the Project Approvals. Notwithstanding the foregoing, no Insubstantial Modification or Operating Memorandum approved pursuant to Section 8.3, or the approval of a Subsequent Approval pursuant to Section 2.7, shall require an amendment to this Agreement. Upon approval, any such amendment shall be deemed to be incorporated automatically into the Project and the Vested Elements under this Agreement (subject to any conditions set forth in the amendment or Subsequent Approval).

8.2 **Expiration; Termination**.

8.3 Expiration of Term. Except as otherwise expressly provided in this Agreement, this Agreement shall be deemed terminated and of no further effect upon the expiration of the Term of this Agreement as set forth in Section 1.3; provided however, that such expiration shall not affect any right, duty, or expiration date arising from the Project Approvals (other than this Agreement) and, provided further that such expiration shall not relieve or release Developer from any obligation or liability for any Developer Event of Default arising prior to such expiration. As to any specific lot or unit containing a residential dwelling within the Project, this Agreement shall terminate as to such lot or unit upon the issuance by the City of a certificate of occupancy for the dwelling and the close of escrow of the initial sale of that dwelling, if applicable.

8.3.1 Survival of Obligations. Upon the expiration or termination of this Agreement as provided herein, neither Party shall have any further right or obligation with respect to the Property under this Agreement except with respect to any obligation that is specifically set forth as surviving the expiration or termination of this Agreement.

8.3.2 Termination by City. Notwithstanding any other provision of this Agreement, City shall not have the right to terminate this Agreement with respect to all or any portion of the Property before the expiration of the Term unless the City complies with all termination procedures set forth in the Development Agreement Statute and there is an alleged Developer Event of Default and such Developer Event of Default is not cured pursuant to Article 7 or Article 10 and Developer has first been afforded an opportunity to be heard regarding the alleged default before the City Council, and this Agreement is terminated only with respect to that portion of the Property to which the default applies. In the event of such termination by the City, the Project Approvals with respect to such portion of the Property shall automatically terminate and be of no further force or effect notwithstanding any provision to the contrary in the Project Approvals.

8.4 **Insubstantial Modifications and Operating Memoranda**. The Parties acknowledge that refinements and further development of the Project may demonstrate that minor changes are appropriate with respect to the details of the Project development and the performance of the parties under this Agreement. The parties desire to retain a certain degree of flexibility with respect to the details of the Project development and with respect to those items covered in general terms under this Agreement, and thus desire to provide a streamlined method of approving insubstantial modifications to, or clarifications of the Parties' responsibilities and obligations under this Agreement. Therefore, any minor modification or clarification to this Agreement which does not materially modify (i) the Term of this Agreement; (ii) permitted uses of the Project Site, (iii) maximum density or intensity of use within the Project, except as specifically allowed in the Project Approvals, (iv) provisions for the reservation or dedication of land, (v) conditions, terms, restrictions or requirements for subsequent discretionary actions, or (vi) monetary obligations of Developer (hereinafter an "**Insubstantial Modification**"), and that can be processed under CEQA as exempt from CEQA, or with the preparation of an addendum to the CEQA Compliance Documentation, shall not require a public hearing or City Council approval prior to the parties executing a modification to this Agreement. By way of example only, changes to the mix of unit types and allowed uses within the conceptual site plan that do not exceed the total unit count or square footage allowed on the Project site and do not materially increase the trip generation or VMT caused by the Project are anticipated to constitute Insubstantial Modifications. Either Party may propose an Insubstantial Modification, consent to which shall not be unreasonably withheld, conditioned, or delayed by the other Party. Upon receiving a written request from the Developer for a modification to this Agreement, the City Manager or a designated representative will evaluate the request. The evaluation will consider: (1) whether the requested modification falls under the definition of an "Insubstantial Modification"; (2) whether the requested modification aligns with Applicable Rules (excluding that portion of this Agreement sought to be modified); and (3) whether the requested modification aligns with the objectives of this Agreement. The City Manager will not unreasonably withhold a decision, but will also ensure the City's interests are adequately protected. If the City Manager or designee determines that the requested modification is an "Insubstantial Modification" that is consistent with Applicable Rules and tends to promote the goals of this Agreement, the proposed modification will be approved by the City as an Insubstantial Modification, and a written modification will be executed by the Parties and attached to this Agreement as an operating memorandum ("**Operating Memorandum**"). Neither an Operating Memorandum nor an Insubstantial Modification shall be deemed an "amendment" to this Agreement under Government Code Section 65858.

8.5 **Amendments to Project Approvals**. Notwithstanding any other provision of this Agreement, Developer may seek and City may review and grant amendments or modifications to the Project Approvals (including the Subsequent Approvals) subject to the following (except that the procedures for amendment of this Agreement are set forth in Section 8.1). Project Approvals (except for this Agreement) may be amended or modified from time to time, but only at the written request of Developer (at the City's discretion, subject to the terms of this Agreement) or with the written consent of Developer (at its sole discretion) and in accordance with Section 3.4 and relevant provisions of the City Municipal Code. All amendments to the Project Approvals shall automatically become part of the Project Approvals. The permitted uses of the Property, the intensity of use, the maximum height and size of the proposed buildings, provisions for reservation or dedication of land for public purposes, the

conditions, terms, restrictions and requirements for subsequent discretionary actions, the provisions for Public Improvements and financing of Public Improvements, and the other terms and conditions of development as set forth in all such amendments shall automatically become Vested Elements pursuant to this Agreement (subject to any conditions set forth in the amendments) without requiring an amendment to this Agreement. Amendments to the Project Approvals shall be governed by the Project Approvals and the Applicable Rules, subject to Section 3.4. City shall not request, process, or consent to any amendment to the Project Approvals that would affect the Property or the Project without Developer's prior written consent.

ARTICLE 9
TRANSFER AND ASSIGNMENT; RELEASE; RIGHTS OF MORTGAGEES; CONSTRUCTIVE NOTICE

9.1 **Right to Assign**. Provided that there does not then exist a Developer Event of Default, Developer shall have the right at any time during the Term, subject to the provisions of this Section 9.1, to sell, mortgage, hypothecate, assign, or transfer all or a portion of its rights, duties, and obligations arising under this Agreement (each, a "**Transfer**") to any person, partnership, joint venture, firm, or corporation (each, a "**Transferee**"). No Transfer shall be permitted unless made pursuant to a sale, assignment, or other transfer of all or a portion of Developer's interest in the Property. Notwithstanding any other provision of this Agreement to the contrary, each of the following Transfers are permitted and shall not require City consent under this Section 9.1:

9.1.1 Any Transfer for financing purposes to secure the funds necessary for construction and/or permanent financing of the Project;

9.1.2 An assignment of this Agreement to a parent or subsidiary of Developer or a company under common ownership with Developer ("**Developer Affiliate**"); provided such Developer Affiliate executes and delivers to the City a recordable Assignment and Assumption Agreement substantially in the form attached hereto as **Exhibit F** and otherwise reasonably acceptable to City ("**Assignment and Assumption Agreement**"); or

9.1.3 Dedications and grants of easements and rights of way required in accordance with the Project Approvals.

Any and all other Transfers hereunder, other than the sale, lease, or fractional conveyance of a residential unit, condo cottage, or commercial space within the Project to an end purchaser, tenant, or fractional owner in the ordinary course of business, shall require the prior written consent of the City, which consent shall not be unreasonably withheld or delayed. City's withholding of consent shall be deemed reasonable if, in light of the proposed Transferee's experience, reputation and financial resources, such Transferee would not, in City's reasonable determination, be able to perform the obligations proposed to be assumed by such Transferee. Such determination made by the City will be appealable to the City Council and subject to judicial review. If City consents to any such Transfer, the Transferee shall, in addition to any other conditions upon such consent, execute and deliver to City an Assignment and Assumption Agreement. Any Transfer consented to by City, or permitted without City's consent pursuant to this Section 9.1, is herein referred to as

a "**Permitted Transfer**" and the Transferee of a Permitted Transfer is herein referred to as a "**Permitted Transferee**."

9.2 **Release upon Permitted Transfer**. Effective upon any Permitted Transfer pursuant to Section 9.1, except for a Permitted Transfer to a Developer Affiliate pursuant to Section 9.1.2, Developer shall be released from its obligations under this Agreement with respect to the Property, or portion thereof so transferred, only after the City's written confirmation of successful transfer of obligations to the Transferee. Thereafter, a default under this Agreement by Developer shall not be considered or acted upon by City as a default by the Permitted Transferee and shall not affect the Permitted Transferee's rights or obligations hereunder. Likewise, a default by a Permitted Transferee shall not be considered or acted upon by the City as a default by Developer and shall not affect Developer's retained rights and obligations hereunder. The City is entitled to enforce each and every such obligation assumed by the Permitted Transferee directly against the Permitted Transferee as if the Permitted Transferee were an original signatory to this Agreement with respect to such obligation. A Permitted Transfer to a Developer Affiliate shall not relieve or release Developer from any of its obligations hereunder unless otherwise specifically agreed to in writing by the City in its sole discretion, which shall not be unreasonably withheld. Notwithstanding the foregoing provisions of this Section or any other provision of this Agreement to the contrary, a Permitted Transfer shall not relieve or release Developer from: (a) any indemnity obligations of Developer hereunder arising or accruing from any events occurring prior to the Permitted Transfer; or (b) any liability of Developer for any Developer Event of Default occurring prior to the Permitted Transfer unless otherwise specifically agreed to in writing by City, in its sole discretion, which shall not be unreasonably withheld.

9.3 **Rights of Mortgagees; Not Obligated to Construct; Right to Cure Default**.

9.3.1 Mortgagee Protection. This Agreement shall not prevent or limit Developer in any manner, at Developer's sole discretion, from encumbering the Property or any portion thereof or any improvement thereon by any mortgage, deed of trust, or other security device securing financing with respect to the Property ("**Mortgage**"). This Agreement shall be superior and senior to any lien placed upon the Property or any portion thereof after the date of recording this Agreement, including the lien of any Mortgage. Notwithstanding the foregoing, no breach hereof shall defeat, render invalid, diminish, or impair the lien of any Mortgage made in good faith and for value, but all of the terms and conditions contained in this Agreement shall be binding upon and effective against and inure to the benefit of any person or entity, including any deed of trust beneficiary or mortgagee ("**Mortgagee**") who acquires title to the Property, or any portion thereof, by foreclosure, trustee's sale, deed in lieu of foreclosure, or otherwise.

9.3.2 Mortgagee Not Obligated. Notwithstanding the provisions of Section 9.3.1, no Mortgagee (including a Mortgagee who obtains title to Developer's interest in the Property or the Project or any portion thereof as a result of foreclosure proceedings or transfer in lieu of foreclosure) shall in any way be obligated by the provisions of this Agreement to construct or complete the Project, unless the Mortgagee expressly assumes such obligation by written notice to City or by written agreement with City. Nothing in this Agreement shall be deemed to construe, permit, or authorize any such Mortgagee to devote the Property or the Project or any portion thereof to any uses or to construct any improvements thereon other than those uses or

improvements provided for or authorized by this Agreement, or by the Project Approvals and Applicable Rules, and only to the extent Mortgagee complies with the terms of this Agreement and executes and delivers to the City, in a form and with terms reasonably acceptable to City, an assumption agreement of Developer's obligations hereunder.

9.3.3 Notice of Default to Mortgagee, Right of Mortgagee to Cure. If City timely receives a notice from a Mortgagee requesting a copy of any Notice of Default given to Developer hereunder and specifying the address for service thereof, then City shall deliver to such Mortgagee, concurrently with service thereon to Developer, any notice given to Developer with respect to any claim by the City that Developer has committed a default, and if the City makes a determination of noncompliance hereunder, City shall likewise serve notice of such noncompliance on such Mortgagee concurrently with service thereof on Developer. If Developer does not cure or remedy the claimed default within the applicable cure period set forth in this Agreement, then City shall provide notice of such ("**Developer Non-Cure Notice**") to each Mortgagee who has previously made a written request to the City therefore. Each such Mortgagee shall (insofar as the rights of the City are concerned) have the right, at its option, to cure or remedy or commence to cure or remedy any such default within (a) fifteen (15) days (with respect to monetary defaults only) after receipt of the Developer Non-Cure Notice, or (b) sixty (60) days (with respect to non-monetary defaults), after receipt of the Developer Non-Cure Notice unless a further extension of time to cure is granted in writing by City. In case of a default which is not susceptible of being cured by such Mortgagee (including a bankruptcy of Developer), such Event of Default does not have to be cured. If a Mortgagee is required to obtain possession of the Property (or a portion thereof) in order to cure or remedy any claimed Event of Default, the time to cure shall be tolled so long as the Mortgagee is attempting in good faith to obtain possession, including by appointment of a receiver or foreclosure, and the Mortgagee shall be deemed to have timely cured or remedied the claimed Event of Default, provided the Mortgagee commences the proceedings necessary to obtain possession within sixty (60) days after receipt of the Developer Non-Cure Notice, diligently pursues such proceedings to completion, and after obtaining possession diligently completes such cure or remedy.

9.4 **Constructive Notice**. Every person or entity who now or hereafter owns or acquires any right, title, or interest in or to any portion of the Project or the Project Site and undertakes any development activities at the Project Site is, and shall be, constructively deemed to have consented and agreed to, and is obligated by, all of the terms and conditions of this Agreement, whether or not any reference to this Agreement is contained in the instrument by which such person acquired an interest in the Project or the Project Site.

ARTICLE 10
ENFORCEMENT OF AGREEMENT; REMEDIES FOR DEFAULT; DISPUTE RESOLUTION

10.1 **Events of Default**. Subject to any extensions of time by mutual consent of the Parties, in writing, and subject to the provisions of Section 11.6 regarding Permitted Delays and a Mortgagee's right to cure pursuant to Section 9.3, any failure by either Party (a "**Defaulting Party**") to perform any material term or provision of this Agreement shall constitute an event of default by the Defaulting Party ("**Event of Default**") (i) if such Defaulting Party does not cure such failure within sixty (60) days (such sixty (60) day period is not in addition to any sixty (60)

day cure period under Section 7.2, if Section 7.2 is applicable) following written notice of default from the other Party ("**Notice of Default**"), where such failure is of a nature that can be cured within such sixty (60) day period, or (ii) if such failure is not of a nature which can be cured within such sixty (60) day period, the Defaulting Party does not within such sixty (60) day period commence efforts to cure such failure, or thereafter does not within a reasonable time prosecute to completion such cure. Any Notice of Default given hereunder shall specify in detail the nature of the failures in performance that the noticing Party claims constitutes the Event of Default, all facts constituting substantial evidence of such failure, and the manner in which such failure may be satisfactorily cured in accordance with the terms and conditions of this Agreement. During the time periods herein specified for cure of a failure of performance, the Defaulting Party shall not be considered to be in default for purposes of (a) termination of this Agreement, (b) institution of legal proceedings with respect thereto, or (c) issuance of any Subsequent Approval with respect to the Project. The waiver by either Party of any Event of Default under this Agreement shall not operate as a waiver of any subsequent breach of the same or any other provision of this Agreement.

10.2 **Emergency Working Group Meeting**. Notwithstanding any other provision in this Agreement, neither Developer nor City shall commence any legal action, or willfully engage in any other act or omission inconsistent with the terms of this Agreement, including but not limited to withholding or delaying prompt issuance of any ministerial Subsequent Approvals by City, (collectively, a "**Self-Help Remedy**"), without first initiating, and participating in good faith in, an "**Emergency Working Group Meeting**" pursuant to the terms of this Section. Upon receipt of any Notice of Default, or upon the existence of any dispute or disagreement between the Parties arising out of or relating to this Agreement and/or the Project, any party may initiate an Emergency Working Group Meeting to address and seek to resolve the dispute or disagreement by giving written notice to the other Party setting forth the nature of the issue in dispute and the desire to hold an immediate Emergency Working Group Meeting. The Meeting shall be held within ten (10) business days of the written notice, unless extended by mutual written agreement of the Parties. The Emergency Working Group shall consist of the following members: (1) the City Manager; (2) the City Planning Director; (3) City Public Works Director; (4) City Building Official; (5) City Attorney; (6) Developer's President, Vice President or Managing Member; (7) Developer's project manager or other employee appointed by Developer; (8) Developer's legal counsel; and (9) at Developer's election, up to two other representatives of Developer, if Developer owns any interest in the Property at the time of the dispute. Nothing herein shall be construed to extend the time period for this Emergency Working Group Meeting obligation beyond the sixty (60) day cure period referred to in Section 10.1 (even if the sixty (60) day cure period itself is extended pursuant to Section 10.1(ii)) unless the Parties agree otherwise in writing.

10.3 **Remedies and Termination**. If, after notice, Emergency Working Group Meeting, and expiration of the cure periods and procedures set forth in Sections 10.1 and 10.2 (subject to the provisions of Section 10.2), the alleged Event of Default is not cured, the non-Defaulting Party, at its option, may institute legal proceedings pursuant to Section 10.4 and/or terminate this Agreement pursuant to Section 8.2.3 or Section 10.4.2 (as applicable). In the event that this Agreement is terminated pursuant to Section 8.2.3 or Section 10.4.2 and litigation is instituted that results in a final decision that such termination was improper, then this Agreement shall immediately be reinstated as though it had never been terminated.

10.4 **Legal Action by Parties**.

10.4.1 Remedies. Either Party may, in addition to any other rights or remedies, institute legal action to cure, correct, or remedy any Event of Default, enforce any covenant or agreement herein, enjoin any threatened or attempted violation thereof, enforce by specific performance the obligations and rights of the Parties hereto, or obtain any remedies consistent with the purpose of this Development Agreement. Without limiting the foregoing, in the event of a Developer Event of Default (that is not timely cured in accordance with Section 10.1), City may cease and terminate all processing of any applications for Subsequent Approvals to the extent otherwise permitted by Applicable Law. All remedies shall be cumulative and not exclusive of one another, and the exercise of any one or more of these remedies shall not constitute a waiver or election with respect to any other available remedy.

10.4.2 Limited Damages. Except as expressly set forth in this Section 10.4.2, neither Party shall be liable in damages for any default under this Agreement, it being expressly understood and agreed that, except as set forth below, the sole legal remedy available to either Party for a breach or violation of this Development Agreement by the other Party shall be an action in mandamus, specific performance, or other injunctive or declaratory relief to enforce the provisions of this Agreement by the other Party or to terminate this Agreement. This limitation on damages shall not preclude actions by a Party to enforce payments of monies or the performance of obligations requiring an obligation of money from the other Party pursuant to any of the following: (a) to make any payment due under any indemnity in this Agreement; (b) to advance or reimburse monies required under this Agreement; or (c) to pay attorneys' fees and costs as set forth in Section 10.5 or when required by an arbitrator or a court with jurisdiction. In no event shall either Party be liable hereunder for any consequential, special, or punitive damages. Notwithstanding anything to the contrary contained in this Agreement, in no event shall: (i) any partner, officer, director, member, shareholder, employee, affiliate, manager, representative, or agent of Developer be personally liable for any breach of this Agreement by Developer or for any amount which may become due to the City under the terms of this Agreement; or (ii) any board, commission, department, member, commissioner, officer, agent, or employee of the City be personally liable for any breach of this Agreement by City or for any amount which may become due to Developer under the terms of this Agreement.

10.5 **Attorneys' Fees**. Should any legal action be brought by either Party against the other for default under this Agreement or to enforce or interpret any provision hereof, the Party prevailing in such action shall be entitled to recover against the non-prevailing Party its reasonable attorneys' fees and costs incurred in such action. The provisions of this Section 10.5 shall survive the expiration or termination of this Agreement.

10.6 **Nexus/Reasonable Relationship Challenges**. Developer consents to, and waives any rights it may have now or in the future to challenge the legal validity of, the conditions or requirements set forth in this Agreement including, without limitation, any claim that they constitute an abuse of the police power, violate substantive due process, deny equal protection of the laws, effect a taking of property without payment of just compensation, or impose an unlawful tax. Developer reserves the right, however, to challenge in court any future fee, exaction, or other Applicable Rules that would, in Developer's opinion, conflict with

Applicable Law (including this Agreement) or reduce the development rights provided by this Agreement.

10.7 **No Waiver**. No waiver of any provision of this Agreement shall be binding unless executed in writing by the Party making the waiver. No waiver of any provision of this Agreement shall be deemed to constitute a waiver of any other provision, whether or not similar, nor shall any waiver constitute a continuing waiver unless the written waiver so specifies. Except as otherwise expressly provided in this Agreement, any failure or delay by a Party in asserting any of its rights or remedies as to any default shall not operate as a waiver of any default or of any such rights or remedies, nor shall it deprive any such Party of its right to institute and maintain any actions or proceedings that it may deem necessary to protect, assert, or enforce any such rights or remedies.

ARTICLE 11
MISCELLANEOUS PROVISIONS

11.1 **Entire Agreement**. This Agreement, including the preamble paragraph, Recitals, and Exhibits constitute the entire understanding and agreement between the Parties with respect to the subject matter of this Agreement.

11.2 **Binding Covenants; Run With the Land**. All of the provisions, agreements, rights, powers, standards, terms, covenants, and obligations contained in this Agreement shall be binding upon the Parties and their respective successors (by merger, reorganization, consolidation, or otherwise) and assigns, devisees, administrators, representatives, lessees, and all of the persons or entities acquiring the Property or any portion thereof, or any interest therein, whether by operation of law or in any manner whatsoever, and shall inure to the benefit of the Parties and their respective successors (by merger, consolidation, or otherwise) and assigns. All of the provisions of this Agreement shall be enforceable as equitable servitudes and constitute covenants running with the land pursuant to applicable law, including but not limited to, Section 1468 of the Civil Code of the State of California.

11.3 **Applicable Law and Venue**. This Agreement has been executed and delivered in and shall be interpreted, construed, and enforced in accordance with the laws of the State of California, without reference to any of its conflict of laws principles. All rights and obligations of the Parties under this Agreement are to be performed in the County of Riverside. The exclusive venue for any disputes or legal actions hereunder or arising out of or in connection with this Agreement shall be the Superior Court of California in and for the County of Riverside and all Parties waive their respective rights to change venue pursuant to Section 394 of the Code of Civil Procedure.

11.4 **Construction of Agreement**. The Parties have mutually negotiated the terms and conditions of this Agreement and its terms and provisions have been reviewed and revised by legal counsel for both City and Developer. Accordingly, no presumption or rule that ambiguities shall be construed against the drafting Party shall apply to the interpretation or enforcement of this Agreement. Language in this Agreement shall be construed as a whole and in accordance with its true meaning. As used herein: (a) the singular shall include the plural (and vice versa) and the masculine or neuter gender shall include the feminine gender (and vice

versa) where the context so requires; (b) locative adverbs such as "herein," "hereto," "hereof," and "hereunder" shall refer to this Agreement in its entirety and not to any specific section or paragraph; (c) the terms "include," "including," and similar terms shall be construed as though followed immediately by the phrase "but not limited to;" (d) "shall" and "must" are mandatory and "may" is permissive; and (e) "or" is not necessarily exclusive. Each reference in this Agreement to this Agreement shall be deemed to refer to this Agreement as amended from time to time pursuant to the provisions of this Agreement, as applicable, whether or not the particular reference refers to such possible amendment.

11.5 **Project Is a Private Undertaking; No Joint Venture or Partnership**. The development proposed to be undertaken by Developer on the Project Site is a private development, except for that portion to be devoted to Public Improvements to be constructed by Developer. Developer is not a state or governmental actor with respect to any activity conducted by the Developer hereunder. City has no interest in, responsibility for, or duty to third persons concerning any of said improvements. Nothing in this Agreement, in any actions or negotiations leading to this Agreement, in any acts or omissions under this Agreement, or otherwise is intended to or does establish the City and Developer as partners, co-venturers, or principal and agent with one another.

11.6 **Force Majeure**. Subject to the limitations set forth below, performance by any Party of its obligations hereunder shall be excused and the required date for performance thereof shall be extended day for day during any period of "**Permitted Delay**" as hereinafter defined, subject, however, to the requirement that Developer must promptly communicate with the City concerning the delay and provide reasonable documentation of Developer's good faith efforts to diligently pursue performance as required under this Agreement. For purposes hereof, Permitted Delay shall mean delay beyond the reasonable control and without the fault of the Party claiming the delay (and despite the good faith efforts of such Party) first arising after the Effective Date (except for item (xii) below) including, but not limited to: (i) acts of God; (ii) civil commotion; (iii) riots; (iv) strikes, picketing, or other labor disputes; (v) shortages of materials or supplies; (vi) damage to work in progress by reason of fire, floods, earthquake, or other casualties; (vii) an Event of Default of the other Party; (viii) restrictions imposed or mandated by any regulatory authorities, utility providers, or other public agencies, or delays in obtaining any Third-Party Agency Approvals; (ix) enactment of conflicting state or federal laws or regulations, (x) judicial decisions or similar legal incapacity to perform, (xi) epidemics and pandemics, including COVID 19-induced restrictions on the ability of any Party to perform its obligations of this Agreement; (xii) litigation brought by a third party attacking the validity of this Agreement; and (xiii) delays caused by the City.

11.7 **Recordation**. Pursuant to Section 65868.5 of the Development Agreement Statute the City shall cause this Agreement to be recorded with the Riverside County Recorder within ten (10) days after execution of the Agreement or any amendment thereto, with costs to be borne by Developer.

11.8 **Signature in Counterparts**. This Agreement may be executed in duplicate counterpart originals, each of which is deemed to be an original, and all of which when taken together shall constitute one and the same instrument.

11.9 **Computation of Time; Time of the Essence**. All references in this Agreement to "days" shall mean calendar days unless expressly referred to as "business days." The time in which any act is to be done under this Agreement is computed by excluding the first day, and including the last day, unless the last day is a Saturday, Sunday, or holiday, and then that day is also excluded. If the day for performance of any obligation under this Agreement is a Saturday, Sunday, or holiday, then the time for performance of that obligation shall be extended to the first following day that is not a Saturday, Sunday, or holiday under the laws of California.

11.10 **Notices**. Any notice, demand, or other communication required to be given by Developer or City pursuant to this Agreement shall be in writing and shall be sufficiently given if (a) addressed as set forth below and (b) delivered in one of the following ways, and shall be deemed to have been delivered or received (i) three (3) days after the date when deposited in the United States registered or certified mail, return receipt requested, with postage prepaid (except in the event of a postal disruption, by strike or otherwise, in the United States), (ii) when personally delivered, (iii) when sent by electronic means, provided receipt was promptly confirmed in writing by another means of notice allowed in this Section 11.10 within one (1) business day, or (iv) one business day after the date deposited with a nationally recognized courier service (e.g., Federal Express) for next day delivery. The current principal office addresses and email addresses of the City and Developer are as follows:

To City:	City of Coachella 53990 Enterprise Way Coachella, CA 92236 Attn: [___] E-mail: [___]
With a copy to:	[City Attorney's office / outside counsel] Attn: [___] E-mail: [___]
To Developer:	Relevant Coachella Owner, LLC [Address] Attention: [___] E-mail: [___]
With a copy to:	[___] [Address] E-mail: [___]

Either Party to this Agreement may at any time, upon written notice delivered via certified mail or email to the other Party, designate any other person or address in substitution of the person and address to which such notice or communication shall be given.

If failure to respond to a specified notice, request, demand, or other communication within a specified period would result in a deemed approval, a conclusive presumption, a prohibition against further action or protest, or other adverse result specifically provided under this Agreement, the notice, request, demand, or other communication shall state clearly and unambiguously on the

first page, with reference to the applicable provisions of this Agreement, that failure to respond in a timely manner could have a specified adverse result.

11.11 **No Third Party Beneficiaries**. This Agreement and all provisions hereof is made and entered into for the sole protection and benefit of City, Developer, and their successors and assigns. No other person shall have right of action based upon any provision in this Agreement.

11.12 **Conflict of Interest**. No member, official, or employee of City shall make any decision relating to this Agreement which affects his or her personal interest or the interest of any corporation, partnership, or association in which he or she is directly or indirectly interested.

11.13 **Severability**. If any term, provision, covenant, or condition of this Agreement or its application to any Party or circumstance is held by a court of competent jurisdiction to be invalid, void, or unenforceable to any extent, the remaining provisions of this Agreement or the application of the term, provision, condition, or covenant to persons or circumstances other than those as to whom or which it is invalid or unenforceable, shall not be affected and shall continue in full force and effect to the fullest extent permitted by law, unless enforcement of the remaining portions of the Agreement would be unreasonable or grossly inequitable under all the circumstances or would frustrate the purposes of this Agreement.

11.14 **Further City Actions**. Except as may be otherwise specifically provided herein, whenever any approval, notice, direction, consent, request, waiver, or other action by the City is required or permitted under this Agreement, such action may be given, made, or taken by the Designee. The Designee is authorized to execute and deliver, on behalf of the City and to take any action necessary or desirable to effectuate the provisions and intent of this Agreement.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of the day and year first above written.

DEVELOPER:

RELEVANT COACHELLA OWNER, LLC,
a Delaware limited liability company

By:_____
Name: Grant King
Title: Managing Partner

CITY:

CITY OF COACHELLA, a California
municipal corporation

By:_____
Name:
Title:

ATTEST:

_____
Name
City Clerk

APPROVED AS TO FORM
[LAW FIRM]

_____
Name
City Attorney

Exhibit A

Legal Description Of Property

Certain real property consisting of approximately 87 acres located in the City of Coachella, County of Riverside, California, legally described on Exhibit A attached to the Development Agreement, comprised of four contiguous parcels (APNs 780-040-001, 780-040-003, 780-060-001, and 780-060-002) generally located south of Avenue 52, west of Van Buren Street, and east of Calhoun Street.

Exhibit B

Project Description

The proposed Project would include the development of a hospitality-oriented, mixed-use resort community on approximately 87 acres in the southwestern portion of the City of Coachella, currently comprised of date palm and grape agricultural fields, an irrigation pond, and approximately three dilapidated agricultural support structures. The Project consists of a Private Resort Sector and a Commercial Beach Club Sector organized around a central 9.4-acre recreational lagoon. Below is a summary of the Project components:

- The Private Resort Sector consists of 240 condo cottages (of which up to 120 will be owned by a single entity and operated as short-term rentals by a hotel operator) and 162 single-family residential units comprised of estate lots, zero lot line lots, bungalow condominiums, and VIP suites, totaling up to 402 units on approximately 28 acres.
- On-site resort amenities include recreational courts, a spa/pool, the lagoon and water features, a bar and entertainment venue, a library, and a restaurant, for the use of guests and owners of the Private Resort Sector.
- The Commercial Beach Club Sector is situated on approximately six acres in the northwest corner of the Project Site and consists of an 11,950-square-foot beach club, a 28,800-square-foot beach club lounging area, a 7,690-square-foot restaurant, a 6,048-square-foot sports bar, an 11,907-square-foot back-of-house area, and a 103,297-square-foot parking garage, available to owners and resort guests as well as the general public through reservation or event access.
- A 2.5-acre lake situated in the southern portion of the Project Site will act as a stormwater detention basin. A 0.4-acre lagoon is proposed within the Commercial Beach Club Sector.
- Development of the Project will also include landscaping, street improvements, drive aisles, and parking, with 951 parking spaces and 193 cart spaces proposed on-site. Access will be provided from two access points on Avenue 52, two access points on Calhoun Street, and one or more access points on Van Buren Street.
- Utility connections to the Coachella Water Authority water and sewer mains, Southern California Gas Company natural gas facilities, and IID electrical facilities are proposed as part of Project implementation, together with on-site solar generation and battery storage systems.

Exhibit C

Construction Phasing And Public Improvements

The Project Site is proposed to be developed in four phases:

- Phase 1 will include the water features, the Commercial Beach Club Sector, and the resort uses of the Private Resort Sector and occupies the majority of the Project Site.
- Phase 2 will develop the residential uses south of the lagoon and surrounding the proposed lakes.
- Phase 3 will include the residential estate lots south of Phase 2.
- Phase 4 will develop the residential estate lots south and west of Phases 2 and 3.

For purposes of the Transient Occupancy Tax rebate structure described in Section 4.5, Phase 1 buildout corresponds to 167 total units, Phase 2 completion corresponds to 273 total units, and full buildout corresponds to 402 total units.

Public Improvements to be constructed by Developer include roadway, sewer, water, storm drain, and electrical distribution improvements serving the Project, together with a portion of the off-site sewer main upsizing needed to serve other planned housing developments in the City, as more particularly described in the Project Approvals.

[Detailed phasing table and public improvement specifications to be attached.]

Exhibit D

Summary of Entitlement Applications and Fee Deposits

Application	Description	Date Submitted	City File #	Notes
Zoning Code Amendment	Amend Regional Commercial (RC) zone to allow single-family residential use	[___]	[___]	
Tentative Tract Map No. 39330	Subdivision of the Project Site into residential, condominium, public beach club, back-of-house, amenity, street, and open space lots	[___]	# TTM 39330	
Conditional Use Permit	Resort, beach club, restaurant, and sports bar uses	[___]	[___]	
Architectural Review	Project architecture and site design	[___]	[___]	
Development Agreement		[___]	[___]	

[Note: an Entertainment Permit and other implementing approvals will be sought following the initial Project Approvals, per Section 2.7.]

Exhibit E

Existing Development Fees and Credits

[Existing Development Impact Fee schedule applicable to the Project as of the Effective Date, and Fee Credits available to Developer under Section 4.2.3.3, to be attached.]

Notes: Project subject to applicable regional and City-wide impact fees in effect at time of payment, subject to the fifteen (15) year DIF Freeze Period described in Section 4.2.3.2.

Exhibit F

Form: Assignment And Assumption Agreement

REQUESTED BY
AND WHEN RECORDED MAIL TO:

Exempt From Recording Fee Pursuant to Government Code § 27383

ASSIGNMENT AND ASSUMPTION AGREEMENT

This Assignment and Assumption Agreement ("Assignment") is entered into this ____ day of ____, 20__ by and between [DEVELOPER ENTITY], a [California ___] ("Assignor") and _____, a _____ ("Assignee") with reference to the following:

RECITALS

A. Assignor is the owner in fee simple of certain real property located in the City of Coachella, California, and legally described on Exhibit A attached hereto and incorporated herein by this reference (the "Property" or "Site").

B. On _____ the Assignor and the City of Coachella, a California municipal corporation and charter city ("City") entered into that certain Development Agreement, which was recorded against the [Site or Development Property] in the Official Records of the County of Riverside on _____, as Instrument No. _____ (the "Development Agreement").

C. Pursuant to the terms of the Development Agreement, the Site was to be used for a hospitality-oriented mixed-use resort development known as COVA (the "Project").

D. Assignor now desires to transfer the Site to Assignee, and concurrently therewith, to transfer to Assignee all of Assignor's rights and responsibilities under the Project Agreements [to the extent that such rights and responsibilities relate to the Site].

NOW, THEREFORE, in consideration of the foregoing Recitals, which are incorporated herein by this reference, and for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1. Assignor hereby assigns to Assignee all of Assignor's rights and responsibilities under the terms of the Development Agreement, [but only to the extent that such rights and responsibilities arise from the ownership of the Project and/or Site] from

and after the "Effective Date" (as that term is defined in Section 4 below) of this Assignment (collectively, the "Assigned Rights and Obligations").

2. Assignee hereby accepts the foregoing assignment of the Assigned Rights and Obligations, and agrees to be bound by the terms of the Development Agreement [to the extent that such terms affect or are affected by ownership of the Site].

3. The parties hereto acknowledge and agree that Assignee shall not be responsible for any of the obligations of the Development Agreement which arise from ownership of any portion of the Site and which arise prior to the Effective Date hereof. As such, a default by Assignor under the Development Agreement prior to the Effective Date hereof ("Assignor's Default") shall not be deemed a default by Assignee, and Assignor shall indemnify, defend and hold harmless Assignee from any and all losses, claims or liability, including without limitation reasonable attorneys' fees and costs, arising from an Assignor's Default. A default by Assignee under the Development Agreement with respect to the Site after the Effective Date hereof ("Assignee's Default") shall not be deemed a default by Assignor, and Assignee shall indemnify, defend and hold harmless Assignor from any and all losses, claims or liability, including without limitation reasonable attorneys' fees and costs, arising from an Assignee's Default.

4. This Assignment shall be deemed effective upon the last of the following events to occur: (a) conveyance of the Site to Assignee as evidenced by the recording of the grant deed therefor in the Official Records of the County of Riverside, California, and (b) the written consent to this Assignment by the City with respect to the Assigned Obligations arising under the Project Agreements (herein referred to as the "Effective Date").

5. Except as otherwise described in paragraph 4 above, the parties hereto each warrant and represent that they have taken all necessary corporate action to authorize the execution and performance of this Assignment and that the individuals executing this document on behalf of the parties are authorized to do so, and by doing so, create binding obligations as described herein of the party represented.

6. This Assignment shall be governed by the internal laws of the State of California, without regard to conflict of law principles.

7. This Assignment may be signed in counterparts which, when signed by both parties hereto, shall constitute a binding agreement.

WHEREFORE, the parties hereto have executed this Assignment on the date first written above.

"**ASSIGNOR**"

[DEVELOPER ENTITY],
a [California ___],
By:_____
Its: _____

"**ASSIGNEE**"

_____
By:_____
Its: _____

CONSENT

By execution below, the City hereby consents to the foregoing assignment.

CITY OF COACHELLA, a California municipal corporation

By: _____
Its: City Manager

ATTEST:

_____
City Clerk

APPROVED AS TO FORM:
[LAW FIRM]

_____
City Attorney

Exhibit G

(General Plan Update EIR Mitigation Measures and Uniformly Applicable Development Policies and Standards)

Exhibit H

(Conditions of Approval)

APPENDIX I

1. DEFINED TERMS.
   a. **Administrative Fees.** Fees charged by the City, on a City-wide basis in effect at the time of payment to cover the costs of City's review of applications for any permit or other approval or review or inspection by City.
   b. **Agreement.** This Development Agreement between the City of Coachella and [DEVELOPER ENTITY].
   c. **Annual Minimum Payments.** The annual minimum amounts of TOT revenue to be received by City before any TOT rebate to Developer, as described in Section 4.5.3 of the Agreement.
   d. **Annual Review.** Annual review as required by Government Code Section 65865.1 and further described in Article 7 of this Agreement.
   e. **Applicable Rules.** The rules, regulations, ordinances, and officially adopted policies of the City in full force and effect as of the Effective Date of this Agreement.
   f. **Assignment and Assumption Agreement.** A duly executed agreement between Developer and a Permitted Transferee whereby the Developer assigns and the Permitted Transferee assumes all of Developer's rights and obligations under this Agreement as to that portion of the Project Site or Property transferred to that Permitted Transferee pursuant to the provisions of Article 9 of this Agreement.
   g. **Buildout Period.** The twenty (20) year period from the Effective Date within which the Project is to be constructed, as described in Section 1.3.2 of the Agreement.
   h. **CEQA.** California Environmental Quality Act (*Public Resources Code Section 21000, et seq.*)
   i. **CEQA Compliance Documentation.** The CEQA Guideline 15183 consistency determination/exemption checklist prepared for the Project, as approved by the City Council as described in Recital C.
   j. **CFD.** Mello-Roos Community Facilities District.
   k. **City.** The City of Coachella.
   l. **Commercial Beach Club Sector.** The public-facing beach club, restaurant, sports bar, and associated entertainment amenities described in Section 4.6.2 of the Agreement.
   m. **Community Benefits.** The extraordinary benefits provided by Developer to City and its residents, as more specifically described in Section 4.5 [Community Benefits] of this Agreement.
   n. **Conditions of Approval.** The conditions of approval imposed by the City on the Project Site Development Permits, as identified in Recital C of the Agreement.
   o. **Construction Cost Index.** The Construction Cost Index published monthly by the Engineering News-Record (ENR) to track changes in the cost of construction over time, to the extent incorporated into the City's Existing Development Fees.
   p. **Construction Phasing.** Development of the Project Site is permitted to occur in phases as described and contemplated in Exhibit C.
   q. **Dedicated Public Improvements.** Those Public Improvements constructed by or on behalf of Developer that have been accepted by City in accordance with the Applicable Rules.
   r. **Defaulting Party.** Party who fails to perform any material term or provision of this Agreement as more fully described in Section 10.1 of the Agreement.

s. **Developer.** [DEVELOPER ENTITY], a [California ___].

t. **Developer Affiliate.** A parent or subsidiary of Developer or a company under common ownership with Developer.

u. **Developer Event of Default.** Any failure by Developer to perform any material term or provision of this Agreement that is not cured within 60 days following written notice of default from City (or such further time as may be reasonably required to cure), as more fully described in Article 10 of this Agreement.

v. **Development Agreement Statute.** Sections 65864 et seq. of the Government Code.

w. **Development Fees or DIF.** All fees, contributions, exactions, dedications, reservations, or impositions, other than taxes or assessments, whether established for or imposed upon the Project individually or as part of a class of projects, that are imposed by City on the Project in connection with any Project Approval for any purpose, including, without limitation, defraying all or a portion of the cost of public services and/or facilities construction, improvement, operation, and maintenance attributable to the burden created by the Project.

x. **DIF Freeze Period.** The fifteen (15) year period from the Effective Date during which the Existing Development Fees are frozen, subject to inflation adjustment, as described in Section 4.2.3.2 of the Agreement.

y. **Effective Date.** The later to occur of (i) the effective date of Ordinance No. ____ approving this Agreement, or (ii) the expiration of the CEQA challenge period, or, if timely challenged, the date such challenge is finally resolved in favor of the validity of this Agreement.

z. **Event of Default.** Any failure by either Party to perform any material term or provision of this Agreement that is not cured within 60 days following written notice of default from the other Party (or such further time as may be reasonably required to cure), as more fully described in Article 10 of this Agreement.

aa. **Existing Development Fees.** The Development Fees applicable to the Project as set forth on Exhibit E.

bb. **Fee Credits.** The Development Impact Fee offsets and credits applicable to the Project as set forth on Exhibit E and described in Section 4.2.3.3 of the Agreement.

cc. **Financing Mechanism.** A Mello-Roos Community Facilities District or other financing district used to fund public facilities.

dd. **Future Changes to the Applicable Rules.** Any changes in the Applicable Rules, or any provisions of future general plans, specific plans, zoning ordinances, or other rules, regulations, ordinances or policies (whether adopted by means of ordinance, initiative, referenda, resolution, policy, order, moratorium, or other means) occurring after the Effective Date.

ee. **IID.** Imperial Irrigation District.

ff. **Indemnified Parties.** The City and its elected and other officials, officers, agents, and employees.

gg. **Insubstantial Modification.** Any minor modification or clarification to this Agreement which does <u>not</u> materially modify (i) the Term of this Agreement; (ii) permitted uses of the Project Site, (iii) maximum density or intensity of use within the Project, except as specifically allowed in the Project Approvals, (iv) provisions for the reservation or dedication of land, (v) conditions, terms, restrictions or requirements for subsequent discretionary actions, or (vi) monetary obligations of Developer.

hh. **GPU Mitigation Measures.** Mitigation measures and uniformly applied development policies and standards identified in the CEQA Compliance Documentation.

ii. **Mortgage.** Any mortgage, deed of trust, or other security device securing financing with respect to the Property.

jj. **Mortgagee.** Any deed of trust beneficiary, mortgagee or other secured party who acquires title to the Property, or any portion thereof, by foreclosure, trustee's sale, or deed in lieu of foreclosure.

kk. **Notice of Default.** Written notice to a Party asserting that Party's failure to perform a material term of the Agreement.

ll. **Operating Memorandum.** Written modification executed by Parties approved by City Manager or designee as an Insubstantial Modification.

mm. **Party or Parties.** City of Coachella and [DEVELOPER ENTITY].

nn. **Permitted Delay.** Delay beyond the reasonable control and without the fault of the Party claiming the delay (and despite the good faith efforts of such Party) first arising after the Effective Date (except for item (xii) below) including, but not limited to: (i) acts of God; (ii) civil commotion; (iii) riots; (iv) strikes, picketing, or other labor disputes; (v) shortages of materials or supplies; (vi) damage to work in progress by reason of fire, floods, earthquake, or other casualties; (vii) an Event of Default of the other Party; (viii) restrictions imposed or mandated by any regulatory authorities, utility providers, or other public agencies, or delays in obtaining any Third-Party Agency Approvals; (ix) enactment of conflicting state or federal laws or regulations, (x) judicial decisions or similar legal incapacity to perform, (xi) epidemics and pandemics, including COVID 19-induced restrictions on the ability of any Party to perform its obligations of this Agreement; (xii) litigation brought by a third party attacking the validity of this Agreement; and (xiii) delays caused by the City.

oo. **Permitted Transfer.** Any Transfer consented to by City or permitted without City's consent under Section 9.1 of the Agreement.

pp. **Permitted Transferee.** Transferee of a Permitted Transfer.

qq. **Private Resort Sector.** The condo cottages, single-family residential units, and associated resort amenities described in Section 4.6.1 of the Agreement.

rr. **Project.** Development of the Property with a hospitality-oriented, mixed-use resort community, including the Private Resort Sector and the Commercial Beach Club Sector, together with associated infrastructure, roadways, landscaping, parking, and signage.

ss. **Project Approvals.** (i) This Agreement, (ii) the amendment of the City's Zoning Code to allow single-family residential uses within the Regional Commercial (RC) zone, approved by the City Council on _____ by Resolution No. _____, (iii) the CEQA Compliance Documentation approved by the City Council on _____ by City Council Resolution No. _____, (iv) Tentative Tract Map No. 39330, (v) the Conditional Use Permit, Architectural Review, and Entertainment Permit approved or to be approved by the City Council for the Project, (vi) any future discretionary or ministerial approvals and/or permits issued for the Project (collectively, the "Project Site Development Permits"), and (vii) the conditions of approval associated with each and all of the foregoing approvals.

tt. **Project Site Development Permits.** Any future discretionary or ministerial approvals and/or permits issued for the Project.

uu. **Property or Project Site.** Certain real property consisting of approximately 87 acres located in the City of Coachella, County of Riverside, California, legally described on Exhibit A attached to the Development Agreement and generally located south of Avenue 52, west of Van Buren Street, and east of Calhoun Street.

vv. **Public Health and Safety Exception.** City's authority to take any legally valid action necessary to protect persons or property from dangerous or hazardous conditions which create a threat to the public health or safety, including, without limitation, authority to condition or deny a permit, approval, or agreement or other entitlement or to change or adopt any new regulations applicable to the Project so long as such condition or denial or new law (i) is limited solely to addressing a specific and identifiable issue in each case required to protect the physical health and safety of the public, and (ii) is based on written findings by City and transmitted to Developer, specifically identifying, based on objective and quantifiable evidence in the official record, the precise nature and extent of the dangerous or hazardous conditions requiring such condition or denial or change in the Applicable Rules, why there are no reasonable alternatives to the imposition of such condition or denial or changes in the law, and how such condition or denial or new law would alleviate the dangerous or hazardous condition.

ww. **Public Improvements.** All roadways, sidewalks, drainage, sewer, water, storm drain, and electrical distribution improvements, and all other infrastructure and improvements for the Project, including any onsite improvements or offsite improvements, that may or are to be dedicated or otherwise made available for public use pursuant to this Agreement or the Project Approvals.

xx. **State or Federal Law.** A state or federal law or regulation enacted after the Effective Date.

yy. **STVR Ordinance Amendment.** The amendment to Coachella Municipal Code Chapter 5.80 and related confirmation that the Private Resort Sector is a First Class Hotel use, as described in Recital D of the Agreement.

zz. **Subsequent Approvals.** Any future applications for discretionary or ministerial approvals and/or permits necessary or convenient for implementation of the Project, which may include, without limitation: final subdivision and condominium maps, conditional and administrative use permits, entertainment permits, plot plans, street abandonments, design plan approvals, certificates of compliance, demolition permits, improvement agreements, infrastructure agreements, grading permits, building permits, right of way permits, site plans, sewer and water connection permits, certificates of occupancy, parcel and condominium maps, encroachment permits, ABC license approvals, and amendments thereto and to the Project Approvals.

aaa. **Term.** The fifty (50) year term of this Agreement, as may be extended or terminated, as described in Section 1.3.2 of the Agreement.

bbb. **Third-Party Agency Approvals.** Required approvals or clearances from various Regulatory Agencies, other third-party public agencies and utilities.

ccc. **TOT.** Transient occupancy tax.

ddd. **Transfer.** Any sale, mortgage, hypothecation, assignment or transfer all or a portion of Developer's rights, duties, and obligations arising under this Agreement.

eee. **Transferee.** Any person, partnership, joint venture, firm, or corporation who is receiving all or a portion of Developer's rights, duties, and obligations arising under this Agreement pursuant to a Transfer.

fff. **Uniform Code Regulations.** California Building Standards Code, as amended by the City in accordance with the California Health and Safety Code, including requirements of the applicable Building Code, Administrative Code, Energy Code, Residential Code, Mechanical Code, Electrical Code, Plumbing Code, Fire Code, or other applicable construction codes.

ggg. **Vested Elements.** The overall design, development, construction, and use of the Project and all improvements in connection therewith, including without limitation, permitted uses of the Property, the maximum density of development, the intensity of use, the maximum height and size of the proposed buildings, provisions for reservation or dedication of land for public purposes, the conditions, terms, restrictions, and requirements for subsequent discretionary actions, the provisions for and financing for public improvements, and the other terms and conditions of development applicable to the Property as set forth in the Project Approvals.

MSA CONSULTING, INC.
Civil Engineering • Land Surveying • Landscape Architecture
Planning • Environmental Services • Dry Utility Coordination • GIS

December 12, 2025

Adrian Moreno, Associate Planner
City of Coachella, Planning Division
53990 Enterprise Way
Coachella, CA 92236

Subject: Energy Efficient Design & Heat Island Reduction Plan for TTM 39330, CUP 396, EA 25-03-COVA

Dear Adrian,

This letter provides the requested Energy Efficient Design and Heat Island Reduction Plan pursuant to the City of Coachella Municipal Code and summarizes the Project's consistency with the City of Coachella Climate Action Plan (CAP) Development Review Checklist, based on the information evaluated in the Project's CEQA analysis and incorporated into the Project design.

1. Energy Efficient Design and Heat Island Reduction Plan (CMC)

Per the City's Municipal Code, new development shall submit an energy efficient design and heat island reduction plan incorporating strategies such as light-colored cool roofs, light-colored paving, permeable paving, substantial shade tree coverage, shade structures, and shaded asphalt paving, and shall incorporate energy-efficient building and site design strategies including appropriate solar orientation, thermal mass, use of natural daylight and ventilation, and shading.

Project Overview

The approximately 86-acre Project proposes development of 165 single-family units, 244 condo hotel units, recreational amenities, approximately 12 acres of water features, and associated improvements (including pedestrian sidewalks, paved aisles, parking spaces, and landscaping).

A. Heat Island Reduction Strategies

The Project will incorporate the following heat island reduction strategies through the final architectural, civil, and landscape plans:

- Cool roofs: Use of light-colored cool roofing materials consistent with current energy code requirements and project specifications.
- Hardscape treatments: Use of light-colored paving and shaded asphalt paving where feasible, and incorporation of permeable paving in appropriate locations as reflected in the civil and landscape plans.

- Shade coverage: Provision of substantial shade tree coverage and shade structures (including shade structures with cool roofing materials and/or solar photovoltaic shade structures) within pedestrian areas and parking areas to reduce surface temperatures and improve comfort.

B. Energy-Efficient Building and Site Design Strategies

Consistent with the Municipal Code and the Project's CEQA Energy analysis, the Project will incorporate:

- Appropriate solar orientation in site planning and building design to maximize energy efficiency and reduce solar heat gain;
- Building design strategies supporting thermal performance (including thermal mass and envelope performance, as applicable);
- Natural daylighting and ventilation strategies where feasible; and
- Shading through architectural features and landscape design.

C. Parking Lot Shade Requirement

The Municipal Code requires that shade tree plantings in surface parking areas be installed to provide shade over fifty (50) percent of the parking area within ten (10) years. The Project will comply by providing shade through a combination of:

- The Landscape Plan has been designed to place enough trees adjacent to sidewalks to provide shading of project sidewalks within 5 years of Project operation
- Solar photovoltaic shade structures and/or shade structures with cool roofing materials, which are permitted in whole or in part in lieu of shade tree plantings.

2. CEQA Energy Commitments Supporting the Plan

The CEQA Energy analysis concludes the Project is not anticipated to use an unnecessary or wasteful amount of energy and will comply with applicable State and local regulations to conserve energy and reduce greenhouse gas emissions. Key Project commitments include:

- Compliance with Title 20 (Appliance Efficiency Standards) and Title 24 Building Energy Efficiency Standards and CALGreen Building Standards Code;
- Use of energy-efficient appliances and high-efficiency lighting;
- Covered parking stalls with PV solar facilities;
- Receipt of a will-serve letter from IID and construction of a new on-site substation to provide electrical power to the Project site;
- Incorporation of solar generation and battery storage systems to help offset electricity demand from the regional grid;

- On-site solar systems that will provide 50 percent of electricity for single-family homes, condos/townhomes, movie theaters, and restaurants; and
- Full electrification of all residential buildings (single-family homes and condos/townhomes), eliminating natural gas use for those buildings.

The CEQA analysis further concludes the Project would not obstruct applicable State or local plans for renewable energy or energy efficiency and would be consistent with the State's climate direction (including the 2022 CARB Scoping Plan pathway toward carbon neutrality by 2045).

3. City of Coachella CAP – Development Review Checklist Consistency (Summary)

The City of Coachella CAP recommends GHG emissions targets consistent with State reduction targets and includes a development review checklist to determine compliance and eligibility for streamlining. Compliance with the CAP is determined based on checklist responses, and a "No" response to an applicable Project Design Feature requires project adjustment or an alternative compliance path.

Based on the Project's design features, CEQA commitments, and applicable regulatory requirements, the Project is consistent with the CAP Development Review Checklist items provided, including (summary highlights):

- Recycling: Designated recycling and trash service consistent with SB 939 requirements.
- General Plan Consistency / Subarea Character / Urban Form: Land uses allowed under the General Plan designation and consistent with the Regional Retail District vision and intent.
- Urban Forest: Landscape plan designed consistent with City guidelines requiring shade trees at approximately one tree per 50 feet along street frontages, open space frontages, and public walkways.
- Construction Emissions: Construction emissions reduction measures (including limiting idling beyond regulatory requirements and use of electric/hybrid equipment where feasible) consistent with the identified Project Design Features.
- Recycled Content / CD&D Waste: Construction recycling/diversion and reuse commitments consistent with applicable State law and Municipal Code requirements (including AB 341 and CALGreen).
- Energy Efficiency / Passive Solar Design / Solar Orientation: Project commitments to exceed Title 24 and incorporate passive solar design and orientation strategies consistent with CAP checklist standards.
- Shaded Public Spaces / Urban Heat Island: Shading provided through trees and/or shade structures to meet shading targets for public spaces and reduce heat island effects, supported by cool roof/cool pavement strategies and shade trees.

- Solar Energy: On-site PV systems providing 50% electricity for identified land uses consistent with the CAP checklist development standard (through implementation of MM GHG-2, as cited in the CEQA analysis).
- Pedestrian Connectivity / Complete Streets Elements: Internal pedestrian pathways linking uses and connecting to surrounding streets/sidewalk networks; traffic calming and low-speed private road design.
- EV Infrastructure / Lighting: Compliance with current Title 24 requirements for EV charging and energy-efficient LED lighting for streets and parking lots.
- Water / Stormwater / LID / Purple Pipe / Greywater Readiness: Low-impact design stormwater strategies and water efficiency commitments consistent with CAP checklist development standards and applicable regulations.

4. Conclusion

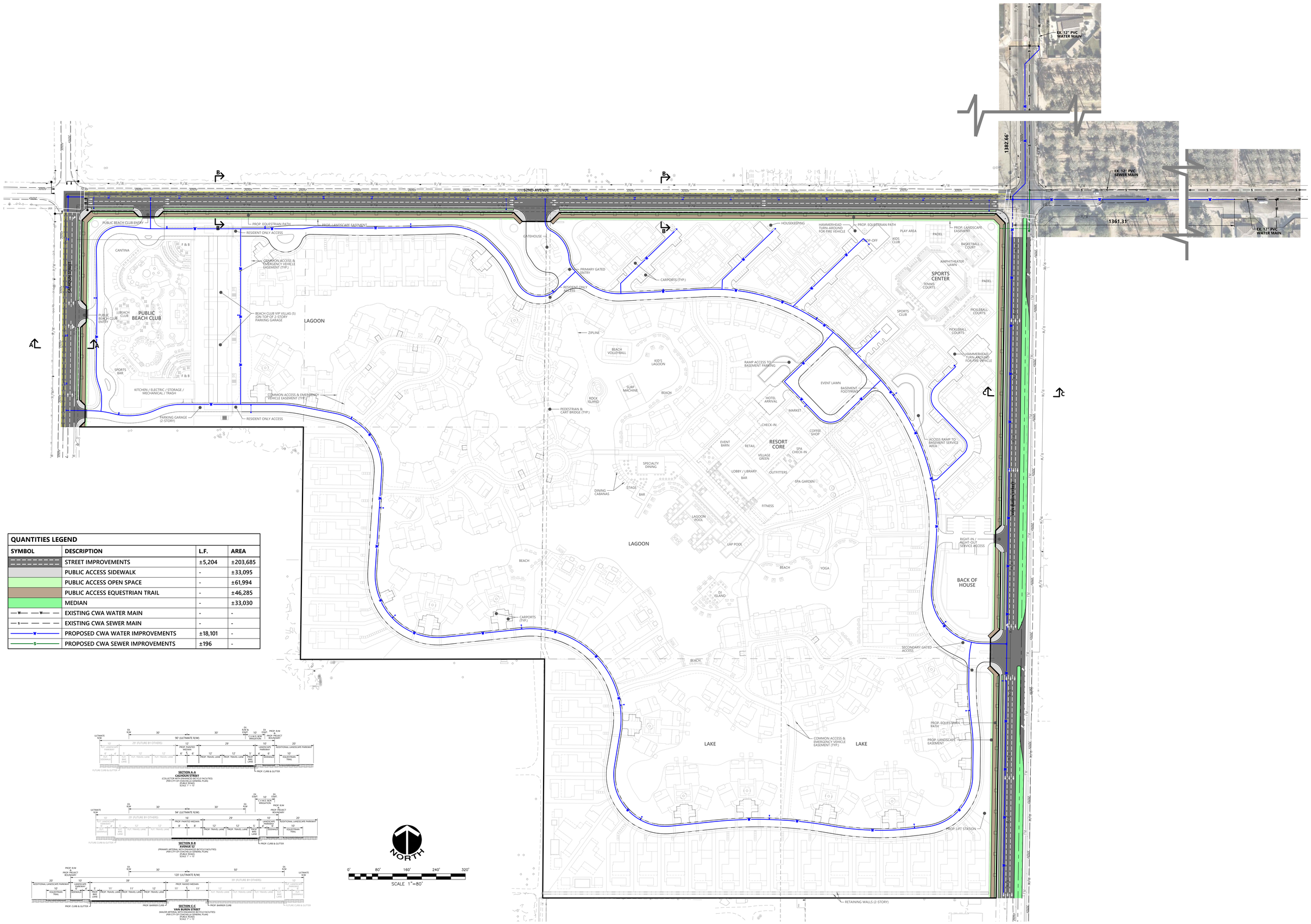
The enclosed information provides the City-requested Energy Efficient Design and Heat Island Reduction Plan and demonstrates the Project's consistency with the City's CAP development review checklist standards as summarized above. The Project will implement these strategies through final construction documents and applicable permit conditions.

Please let me know if any additional information is needed.

Thank you,

Nicole Vann

Nicole Vann
Planner/Project Manager



QUANTITIES LEGEND			
SYMBOL	**DESCRIPTION**	**L.F.**	**AREA**
	STREET IMPROVEMENTS	±5,204	±203,685
	PUBLIC ACCESS SIDEWALK	-	±33,095
	PUBLIC ACCESS OPEN SPACE	-	±61,994
	PUBLIC ACCESS EQUESTRIAN TRAIL	-	±46,285
	MEDIAN	-	±33,030
W W	EXISTING CWA WATER MAIN	-	-
S S	EXISTING CWA SEWER MAIN	-	-
W	PROPOSED CWA WATER IMPROVEMENTS	±18,101	-
S	PROPOSED CWA SEWER IMPROVEMENTS	±196	-

SECTION A-A
CALHOUN STREET
(COLLECTOR (MODIFIED) WITH CLASS II BIKE FACILITIES)
(PER CITY OF COACHELLA GENERAL PLAN)
PUBLIC ROAD
SCALE: 1" = 10'

SECTION B-B
AVENUE 52
(PRIMARY ARTERIAL WITH ENHANCED BICYCLE FACILITIES)
(PER CITY OF COACHELLA GENERAL PLAN)
PUBLIC ROAD
SCALE: 1" = 10'

SECTION C-C
VAN BUREN STREET
(MAJOR ARTERIAL WITH CLASS II BIKE FACILITIES)
(PER CITY OF COACHELLA GENERAL PLAN)
PUBLIC ROAD
SCALE: 1" = 10'

NORTH

0' 80' 160' 240' 320'
SCALE 1"=80'

MSA CONSULTING, INC.
> PLANNING > CIVIL ENGINEERING > LAND SURVEYING
34200 Bob Hope Drive, Rancho Mirage, CA 92270
760.320.9811 **msaconsultinginc.com**

PUBLIC IMPROVEMENTS EXHIBIT

SEPTEMBER 24, 2026

COVA

R:\2811\Acad\Exhibits\Public Improvements\2811 Public Improvements Exhibit.dwg, 9/24/2026 2:23:00 PM, dgallerani, MSA Consulting Inc.

AVENUE 52

CALHOUN STREET

VAN BUREN STREET

CITY OF COACHELLA
COUNTY OF RIVERSIDE

LAGOON
WSE 440.0
BOT 430.0

LAGOON
WSE 440.0
BOT 438.0

POND
MAXIMUM WSE 439.5
NORMAL WSE 434.2
BOT 430.0

778-360-005
EX. ZONING
REGIONAL COMMERCIAL (R-C)
EX. GENERAL PLAN
REGIONAL RETAIL DISTRICT

778-360-009
EX. ZONING
REGIONAL COMMERCIAL (R-C)
EX. GENERAL PLAN
REGIONAL RETAIL DISTRICT

778-360-002
EX. ZONING
REGIONAL COMMERCIAL (R-C)
EX. GENERAL PLAN
REGIONAL RETAIL DISTRICT

778-360-004
EX. ZONING
REGIONAL COMMERCIAL (R-C)
EX. GENERAL PLAN
REGIONAL RETAIL DISTRICT

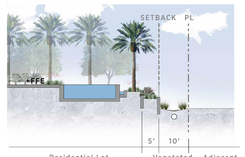
778-360-006
EX. ZONING
REGIONAL COMMERCIAL (R-C)
EX. GENERAL PLAN
REGIONAL RETAIL DISTRICT

778-360-008
EX. ZONING
REGIONAL COMMERCIAL (R-C)
EX. GENERAL PLAN
REGIONAL RETAIL DISTRICT

780-060-002
EX. ZONING
LIGHT AGRICULTURE (A-1-20)
EX. GENERAL PLAN
RURAL COMMUNITY - ESTATE DENSITY RESIDENTIAL

780-060-004
EX. ZONING
LIGHT AGRICULTURE (A-1-20)
EX. GENERAL PLAN
AGRICULTURE

780-060-003
EX. ZONING
LIGHT AGRICULTURE (A-1-20)
EX. GENERAL PLAN
AGRICULTURE



SECTION A-A
SOUTHERN PROPERTY LINE
N.T.S.

ESTIMATED EARTHWORK QUANTITIES

	CUT (CY)	FILL (CY)
RAW QUANTITIES	374,676	231,055
SUBSIDENCE	12,534	13,866
RAW ADJUSTED	362,142	244,921
SHRINKAGE		43,221
OVER EXCAVATION	268,620	268,620
OVER EXCAVATION SHRINKAGE		47,404
SUBTOTAL	630,762	604,166
EXPORT		26,596
TOTAL EARTHWORK	630,762	630,762

EARTHWORK FACTORS:

THE FOLLOWING FACTORS WERE USED IN THE PREPARATION OF THE EARTHWORK ANALYSIS:
SHRINKAGE: 15%
SUBSIDENCE: 0.20'
OVER-EX. : 4'

PROJECT NAME:	COVA
MAP NUMBER:	TENTATIVE TRACT MAP NO. 39330
PLAN:	PRELIMINARY GRADING EXHIBIT
EXHIBIT DATE:	JUNE 2026

MSA CONSULTING, INC.
Civil Engineering • Land Surveying • Landscape Architecture
Planning • Environmental Services • Dry Utility Coordination • GIS
34200 Bob Hope Drive Rancho Mirage, CA 92270 | 760.320.9811 | MSAConsultinginc.com

DESIGN BY	SAW
DRAWN BY	SAW
CHECK BY	JAD

NORTH
0' 60' 120' 180' 240'
SCALE 1"=60'

R:\2811\Acad\Grading\Preliminary\2811 Preliminary Grading Exhibit.dwg, 6/3/2026 1:31:39 PM, isenborg, MSA Consulting Inc.

USA TODAY CO.
LocaliQ
PO Box 631437 Cincinnati, OH 45263-1437

AFFIDAVIT OF PUBLICATION

Kendra Reif
City Of Coachella - Legals
53990 Enterprise WAY
Coachella CA 92236-3817

STATE OF WISCONSIN, COUNTY OF BROWN

The Desert Sun, a newspaper published in the city of Palm Springs, Riverside County, State of California, and personal knowledge of the facts herein state and that the notice hereto annexed was Published in said newspapers in the issue:

PDS desertsun.com 09/17/2026
PDS Palm Springs Desert Sun 09/17/2026

and that the fees charged are legal.
Sworn to and subscribed before on 09/17/2026

Legal Clerk

Notary, State of WI, County of Brown

9.19.29

My commission expires

Publication Cost:	$737.72	
Tax Amount:	$0.00	
Payment Cost:	$737.72	
Order No:	12634999	# of Copies:
Customer No:	1252586	1
PO #:	Permit No. 396,	

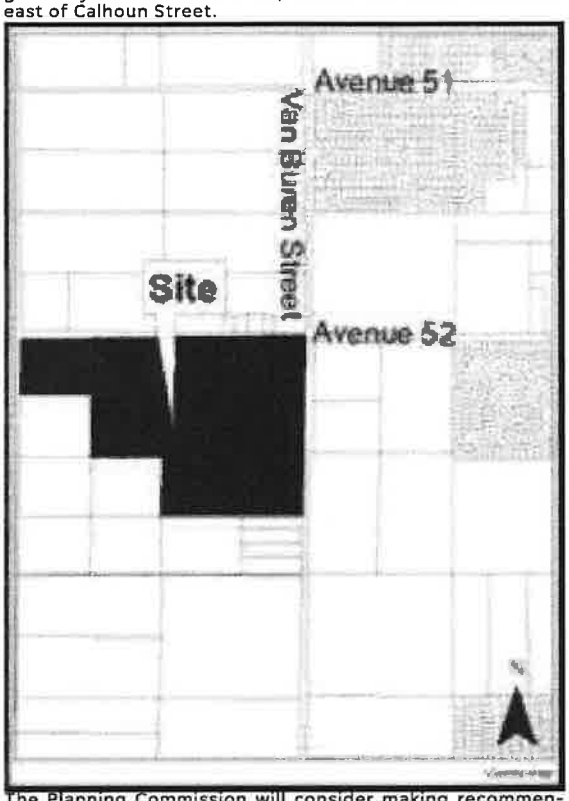
THIS IS NOT AN INVOICE!

Please do not use this form for payment remittance.

VICKY FELTY
Notary Public
State of Wisconsin

NOTICE OF PUBLIC HEARING
CITY OF COACHELLA PLANNING COMMISSION MEETING

NOTICE IS HEREBY GIVEN that the Planning Commission of the City of Coachella ("Planning Commission") will hold a public hearing on Wednesday, October 7th, 2026 at 6:00 p.m. at 1515 Sixth Street, Coachella CA 92236 to consider oral and written testimony regarding the "COVA" project, including Tentative Tract Map No. 39330, Conditional Use Permit No. 396, Architectural Review No. 25-07, Development Agreement No. 25-01, Zoning Ordinance Amendment No. 26-02 and Zoning Ordinance Amendment No. 26-03. The project proposes development of a hospitality focused, mixed-use development located on approximately 87 acres located on four contiguous parcels identified as APNs 780-040-001, 780-040-003, 780-060-001, and 780-060-002, generally south of Avenue 52, west of Van Buren Street and east of Calhoun Street.



The Planning Commission will consider making recommendations to the City Council on the following entitlements: Tentative Tract Map No. 39330, Conditional Use Permit No. 396, Architectural Review No. 25-07, Development Agreement No. 25-01, Zoning Ordinance Amendment No. 26-02 to allow single-family residential uses in the Regional Commercial Zone, and Zoning Ordinance Amendment No. 26-03 relating to the City's short-term rental regulations.

The project will feature two primary components: a private sector and public sector. The private sector will consist of 240 condo cottages, and 162 single-family residential (SFR) units. Of the 240 condo cottages approximately 120 will be owned by a single entity and operated as short term rentals by a hotel operator/hotel flag ("Hotel Condo Units"). The SFR units and up to 120 condo cottages will operate under fractional ownership, timeshare, second homes, and/or short-term rental models that will function together with the Hotel Condo Units as an integrated hospitality-oriented resort community organized around a central lagoon. These accommodations will be complemented by on-site resort amenities (i.e., recreation center, courts, spa/pool, beaches, bar and entertainment, library, restaurant), which will be used by guests/owners of this sector. The public sector will consist of an 11,950-square-foot beach club, 7,690-square-foot restaurant, and a 6,048-square-foot sports bar. These sub-areas are anticipated to operate with an assumed typical weekday capacity of 500 persons and an assumed weekend capacity of 1,500.

Development of the project would also include landscaping, street improvements, drive aisles, and parking. Access to the project will be provided from two entry points on Avenue 52, two access points on Calhoun Street, and two access points on Van Buren Street. The project proposes 951 parking spaces and 193 cart spaces onsite. The project includes a Conditional Use Permit (CUP) to approve the proposed special event establishment use and single-family residential use. The project includes a Development Agreement (DA).

The existing zoning designation is Regional Commercial (RC), which is consistent with the Regional Retail District except that single-family residential uses are not an expressly allowed use in this zone. Accordingly, the project analyzed in this document includes an application by the Developer to amend the City's Zoning Code to allow single-family residential uses in the Regional Commercial zone to bring the zone into full consistency with the General Plan land use designation.

To avoid any conflicts with the City's short-term rental ordinance (CMC Section 5.80), the Developer is seeking an amendment to that ordinance to provide that projects with an approved Development Agreement are exempt from the provisions of that ordinance limiting the number of units that can be owned by one owner and limiting the percent of units that can be permitted for short-term rentals, as well as any other provisions of the ordinance specifically modified in the approved Development Agreement. Applicant: Relevant Coachella Owner, LLC.

Pursuant to the California Environmental Quality Act ("CEQA"), Public Resources Code section 21083.3 and State CEQA Guidelines section 15183, projects that are consistent with the development density established by a general plan, community plan, or zoning action for which an environmental impact report ("EIR") was certified generally do not require additional environmental review, except to examine project-specific significant effects that are peculiar to the project or its site. The City has analyzed the project and determined that it is consistent with the development density established in the City's General Plan, for which the City Council certified an EIR on April 22, 2015 (Resolution No. 2015-03). The analysis further concludes that the Project will not result in: (1) environmental effects peculiar to the project or the parcel; (2) significant effects that were not analyzed in the General Plan EIR; (3) potentially significant off-site or cumulative impacts not discussed in the General Plan EIR; or (4) previously identified significant effects that, due to substantial new information unavailable when the General Plan EIR was certified, would be more severe than analyzed in that EIR. Accordingly, no additional environmental review is required for the project pursuant to Public Resources Code section 21083.3 and State CEQA Guidelines section 15183.

Copies of the Application materials submitted are available for public inspection at the Coachella Development Services Department 53990 Enterprise Way, Coachella, CA 92236 between the hours of 7:00 am and 6:00 pm, Monday through Thursday. City Hall is closed on Fridays. (Se Habla Español).

In addition to submitting written comments at the address noted above, you may email cityclerk@coachella.org or call (760) 398-3102 before 12:00 p.m. on the day of the meeting to leave a voice message. You may request to speak via zoom by contacting the City Clerk through the above means before 12:00 p.m. on the day of the meeting and requesting a Zoom link to the meeting. Public comments either received via email, telephonically or via Zoom must be limited to a maximum of 250 words written or three minutes spoken.

The live stream of the meeting may be viewed online by accessing the City's website at www.coachella.org, and clicking on the "Agendas/Minutes" tab located on the home page, and finding the Zoom Meetings link to the meeting on the posted agenda.

If any individual or group challenges this action in court, issues raised may be limited to those issues raised at the public hearing described in this notice or in written testimony. Any questions or comments may be directed to:

Adrian Moreno, Associate Planner
53-990 Enterprise Way, Coachella, CA 92236
(760) 398-3102

BY ORDER OF PLANNING COMMISSION SECRETARY

Published: September 17, 2026

MARKET STUDY

Proposed COVA Coachella

83857 52ND AVENUE
COACHELLA, CALIFORNIA



SUBMITTED TO:

Mr. Grant King
Relevant Coachella Owner, LLC
1605 North Cahuenga Boulevard
Los Angeles, California 90028

+1 (323) 466-1400

PREPARED BY:

HVS Consulting & Valuation
7561 SW 175 Street
Miami, Florida 33157

+1 (305) 525-8702

November 14, 2025

Mr. Grant King
Relevant Coachella Owner, LLC
1605 North Cahuenga Boulevard
Los Angeles, California 90028

Re: Proposed COVA Coachella
Coachella, California
HVS Reference: 2025020823

Dear Mr. King:

HVS MIAMI
7561 SW 175 Street
Miami, Florida 33157
+1 (305) 525-8702
+1 (516) 742-3059 FAX
www.hvs.com

Pursuant to your request, we herewith submit our market study pertaining to the above-captioned property. We have inspected the real estate and analyzed the market conditions in the Coachella Valley, California, area. We have studied the proposed project, and the results of our fieldwork and analysis are presented in this report. We have also reviewed the proposed improvements for this site.

We hereby certify that we have no undisclosed interest in the property, and our employment and compensation are not contingent upon our findings. This study is subject to the comments made throughout this report and to all assumptions and limiting conditions set forth herein.

Sincerely,
HVS Consulting & Valuation

DRAFT DOCUMENT

Gary L. Johnson, Senior Vice President - Shared Ownership Consulting
gjohnson@hvs.com, +1 (305) 525-8702

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1. Executive Summary

Subject of the Market Study

The subject of the market study is a site measuring 3,713,926 square feet (85.26 acres) that is planned to be improved with a phased luxury-level, wellness focused mixed- use project featuring residential, hotel, club, and co-ownership components; the hotel and residences are anticipated to be associated with a to-be-determined brand. The preliminary brands under consideration include Auberge, Rosewood, One and Only, One Hotels, and Montage. We assume the brand will be one of the preliminary brands or a similar brand within the luxury hotel tier.

The property, which is expected to open on March 1, 2030 (Phase 1), will feature 402 rentable units, inclusive of the following components which will participate within in a rental program.

- 240-room Condo-Hotel Townhomes featuring one-bedroom units
- 51 three and four-bedroom whole ownership Villas
- 39 four and five-bedroom whole ownership Residences
- 6 eight-bedroom whole ownership Estates
- 5 whole ownership Sky Villas

The concept of the proposed subject property will be focused on wellness, and is designed to be the premier destination for wellness in the Coachella Valley, featured wellness focused facilities such as an on-site longevity clinic, two-story fitness center, luxury spa, immersive outdoor onsen, 25-meter lap pool, and an island dedicated to yoga and meditation. In addition, the resort will feature a ten-acre swimmable lagoon in the center of the site which will offer sandy beaches, nine food & beverage outlets, sports center, surf machine, club membership program, beach club and live music venue, library, event spaces, outdoor amphitheater, kid's club, kid's pool, splash pad, and working barn. The property will also contain ample parking capacity and all necessary back-of-the-house space.

The illustrated master plan for the proposed COVA Coachella is illustrated on the following page.

FIGURE 1-1 ILLISTRATED MASTER PLAN FOR THE PROPOSED COVA COACHELLA



RENDERING OF THE PROJECT



The subject site's location is 83857 52nd Avenue, Coachella, California 92236.

Summary of Pertinent Projections

A summary of pertinent projections for the property's hotel, whole ownership, co-ownership, and members club components, are presented in the following tables,

FORECASTS OF HOTEL OCCUPANCY, AVERAGE RATE, AND REVPAR

Year	Occupancy	Average Rate Before Discount	Discount	Average Rate After Discount	ADR % Change	RevPAR	RevPAR % Change
2030/31	61 %	$1,702.20	10.0 %	$1,531.98	-7.3	$934.51	—
2031/32	65	1,753.26	0.0	1,753.26	14.4	1,139.62	21.9
2032/33	69	1,805.86	0.0	1,805.86	3.0	1,246.05	9.3
2033/34	69	1,860.04	0.0	1,860.04	3.0	1,283.43	3.0

FORECAST OF HOTEL REVENUE AND EXPENSE CONCLUSION

		Total Revenue		Gross Operating Profit		House Profit	EBITDA Less Replacement Reserve		
	Year	Total	% Change	Total	% Change	Ratio	Total	% Change	As a % of Ttl Rev
Projected	2030/31	$134,487,000	—	$56,470,000	—	42.0 %	$38,235,000	—	28.4 %
	2031/32	180,615,000	34.3 %	94,507,000	67.4 %	52.3	61,613,000	61.1 %	34.1
	2032/33	215,355,000	19.2	114,630,000	21.3	53.2	66,036,000	7.2	30.7
	2033/34	226,624,000	5.2	121,319,000	5.8	53.5	61,747,000	(6.5)	27.2
	2034/35	233,423,000	3.0	124,959,000	3.0	53.5	55,920,000	(9.4)	24.0

WHOLE OWNERSHIP SALES PROJECTION

	Units Sold	Total SF Sold	Avg. Sales Price per SF	Sales Volume
2028/30 [A]	56	96,808	$1,300	$125,851,000
2030/31 [B]	41	82,052	1,365	112,001,400
2031/32 [C]	52	118,819	1,433	170,297,222
2032/33 [D]	54	136,521	1,505	205,452,044
2033/34 [E]	45	91,130	1,580	143,999,324
2034/35 [F]	41	84,786	1,659	140,673,541
	289	**610,116**	**$1,472**	**$898,274,529**

A - Pre-sales, 45 condo hotel units, 4 residences, 2 Sky Villas, and 5 Villas

B - 30 condo hotel units, 7 residences, 1 Sky Villa, and 3 Villas

C - 30 condo hotel units, 1 Estate, 8 residences, 2 Sky Villas, and 11 Villas

D - 30 condo hotel units, 5 Estates, 8 residences, and 11 Villas

E - 28 condo hotel units, 6 residences, and 11 Villas

F - 25 condo hotel units, 6 residences, and 10 Villas

CO-OWNERSHIP INTEREST SALES PROJECTION

	1/8th Shares Sold	1/4th Shares Sold	1/8th Share Price	1/4th Share Price	Total Sales Volume
2028/30 *	20	15	$634,000	$1,267,500	$31,692,500
2030/31	35	22	665,700	1,330,875	52,578,750
2031/32	43	22	698,985	1,397,419	60,799,568
2032/33	50	21	733,934	1,467,290	67,509,796
2033/34	50	20	770,631	1,540,654	69,344,632
2034/35	50	20	809,163	1,617,687	72,811,863
	248	**120**	**$11,920**	**$2,956,143**	**$354,737,108**

* Pre-sales, March 1, 2028 through February 28, 2030

MEMBERSHIP CLUB SALES PROJECTION

Membership	**2030/31**	**2031/32**	**2032/33**	**2033/34**	**2034/35**
New Members	1,000	1,050	100	100	100
Members Turnover (5%)		(50)	(100)	(100)	(100)
Total Members	**1,000**	**2,000**	**2,000**	**2,000**	**2,000**
Membership - Initiation Rate	$250	$258	$265	$273	$281
Membership - Annual Rate	$2,500	$2,575	$2,652	$2,732	$2,814
Membership - Initiation Fees	$250,000	$270,375	$26,523	$27,318	$28,138
Membership - Annual Dues	$2,500,000	$5,150,000	$5,304,500	$5,463,635	$5,627,544
Total Membership Revenue	**$2,750,000**	**$5,420,375**	**$5,331,023**	**$5,490,953**	**$5,655,682**
Less Membership Expense (5%)	$137,500	$271,019	$266,551	$274,548	$282,784
Net Membership Revenue	**$2,612,500**	**$5,149,356**	**$5,064,471**	**$5,216,406**	**$5,372,898**

Pertinent Dates

The date of the report is November 11, 2025. The subject site was inspected by Gary L. Johnson on October 13, 2025. The first phase of the property is expected to open on March 1, 2030. The additional phases of the resort are anticipated to open on December 1, 2030, November 1, 2031, and September 1, 2032.

The phasing plan is illustrated in the following bullet points.

Phase 1 – Opening March 1, 2030

- 208 Condo-Hotel Units
- 12 Residences
- 9 Villas
- 6 Co-Ownership Villas
- 5 Sky Villas

Phase 2 – Opening December 1, 2030

- 55 Co-Ownership Villas
- 42 Villas (Whole Ownership)
- 32 Condo-Hotel Units
- 4 Estates

Phase 3 – Opening November 1, 2031

- 14 Residences

Phase 4 – September 1, 2032

- 13 Residences
- 2 Estates

Ownership of the Subject Site

The current owner of the subject site is Relevant Coachella Owner, LLC; the parent company of this owning entity is Relevant Partners, which is based in Hollywood, California. Relevant Partners is a vertically integrated real estate company specializing in highly branded, hospitality-centric residential development and investment. The partners have combined over 80 years of developing and financing projects, have raised over three billion for US real estate and private equity across over 30 projects, and have a network of over 600 limited partners across eight projects.

Management and Franchise Assumptions

Details pertaining to management terms were not yet determined at the time of this report; however, we assume that the proposed hotel will be managed by a professional hotel-operating company, with fees deducted at rates consistent with current market standards. Our projections reflect a total management fee of 3.0% of total revenues.

The preliminary brands under consideration include Auberge, Rosewood, One and Only, One Hotels, and Montage. Although a specific franchise affiliation and/or brand has yet to be finalized, based upon a review of several published franchise fees for brands that fall within the recommended product tier. The proposed hotel will reportedly be managed by the brand throughout the forecast period; as such, it will not be subject to franchise fees.

The subject whole ownership and co-ownership components are anticipated to be privately owned by third parties but will be required to participate in a rental program to be marketed for hotel use. Terms of the agreement were not yet determined at the time of this report. Based on our conversation with the developer, we have assumed the revenue generated by the rental program will be split between the unit owners and property ownership (50.0%/50.0%) after a 12.0% service charge.

Scope of Work

The methodology used to develop this study is based on the market research and valuation techniques set forth in the textbooks authored by Hospitality Valuation Services for the American Institute of Real Estate Appraisers and the Appraisal Institute, entitled *The Valuation of Hotels and Motels,*[1] *Hotels, Motels and Restaurants: Valuations and Market Studies,*[2] *The Computerized Income Approach to Hotel/Motel Market Studies and Valuations,*[3] *Hotels and Motels: A Guide to Market Analysis, Investment Analysis, and Valuations,*[4] and *Hotels and Motels – Valuations and Market Studies.*[5]

[1] Stephen Rushmore, *The Valuation of Hotels and Motels*. (Chicago: American Institute of Real Estate Appraisers, 1978).
[2] Stephen Rushmore, *Hotels, Motels and Restaurants: Valuations and Market Studies*. (Chicago: American Institute of Real Estate Appraisers, 1983).
[3] Stephen Rushmore, *The Computerized Income Approach to Hotel/Motel Market Studies and Valuations*. (Chicago: American Institute of Real Estate Appraisers, 1990).
[4] Stephen Rushmore, *Hotels and Motels: A Guide to Market Analysis, Investment Analysis, and Valuations* (Chicago: Appraisal Institute, 1992).
[5] Stephen Rushmore and Erich Baum, *Hotels and Motels – Valuations and Market Studies.* (Chicago: Appraisal Institute, 2001).

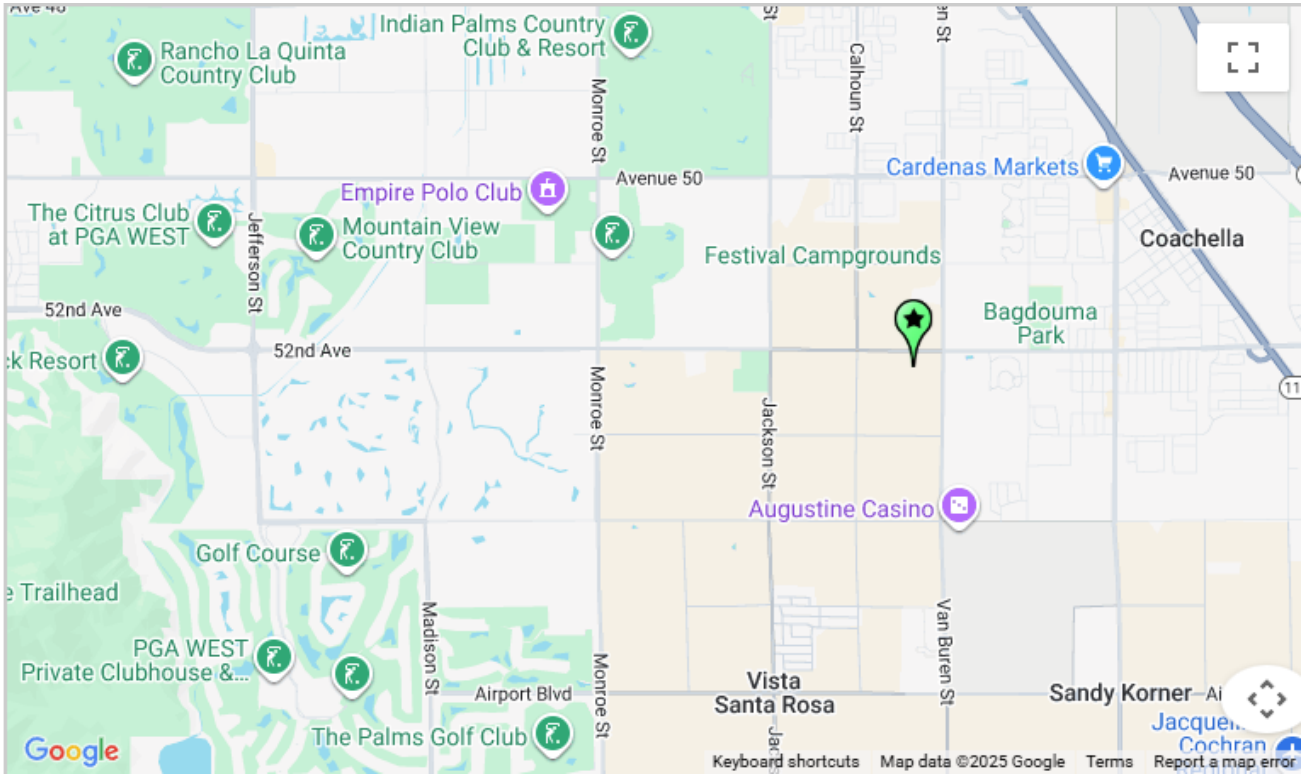
1. All information was collected and analyzed by the staff of HVS Consulting & Valuation. Information was supplied by the client and/or the property's development team.
2. The subject site has been evaluated from the viewpoint of its physical utility for the future operation of a mixed-use resort, as well as access, visibility, and other relevant factors.
3. The subject property's proposed improvements have been reviewed for their expected quality of construction, design, and layout efficiency.
4. The surrounding economic environment, on both an area and neighborhood level, has been reviewed to identify specific hostelry-related economic and demographic trends that may have an impact on future demand for hotels, co-ownership, and whole ownership.
5. Dividing the market for hotel accommodations into individual segments defines specific market characteristics for the types of travelers expected to utilize the area's hotels. The factors investigated include purpose of visit, average length of stay, facilities and amenities required, seasonality, daily demand fluctuations, and price sensitivity.
6. An analysis of existing and proposed competition provides an indication of the current accommodated demand, along with market penetration and the degree of competitiveness.
7. Documentation for an occupancy and ADR projection is derived utilizing the build-up approach based on an analysis of lodging activity.
8. Comparable whole ownership sales from Coachella Valley, as well as other comparable markets, were researched and reviewed to determine the appropriate market-based price points that could reasonably be achieved for the subject whole ownership components.
9. Review of reasonable commissions and closing costs, inclusive of administrative and general expenses, marketing, legal and other expenses were deducted to arrive at the forecast net sale proceeds for the proposed subject whole ownership components.
10. A detailed projection of income and expense made in accordance with the Uniform System of Accounts for the Lodging Industry (USALI) sets forth the anticipated economic benefits of the subject property's hotel component.

2. Description of the Site and Neighborhood

The suitability of the land for the operation of a mixed-use property is an important consideration affecting the economic viability of a property and its ultimate marketability. Factors such as size, topography, access, visibility, and the availability of utilities have a direct impact on the desirability of a particular site.

The subject site is located in an affluent neighborhood on the west site of Coachella, in the southwest quadrant of the intersection formed by Van Buren Street and 52nd Avenue. The subject site is proximate to the renowned Madison Club, The Hideaway Golf Club, and the Coachella Music Festival grounds. This site is in the city of Coachella, California.

LOCATION MAP



Physical Characteristics

The subject site comprises three contiguous parcels, which collectively measure approximately 85.26 acres, or 3,713,926 square feet. Identification of the subject parcel's is illustrated in the following table.

FIGURE 2-1 IDENTIFICATION OF THE SUBJECT PARCELS

Property ID #	Square Feet	Acres
780040003	2,862,328	65.71
780060002	428,630	9.84
780060001	422,968	9.71
Total	3,713,926	85.26

The parcel's adjacent uses are set forth in the following table.

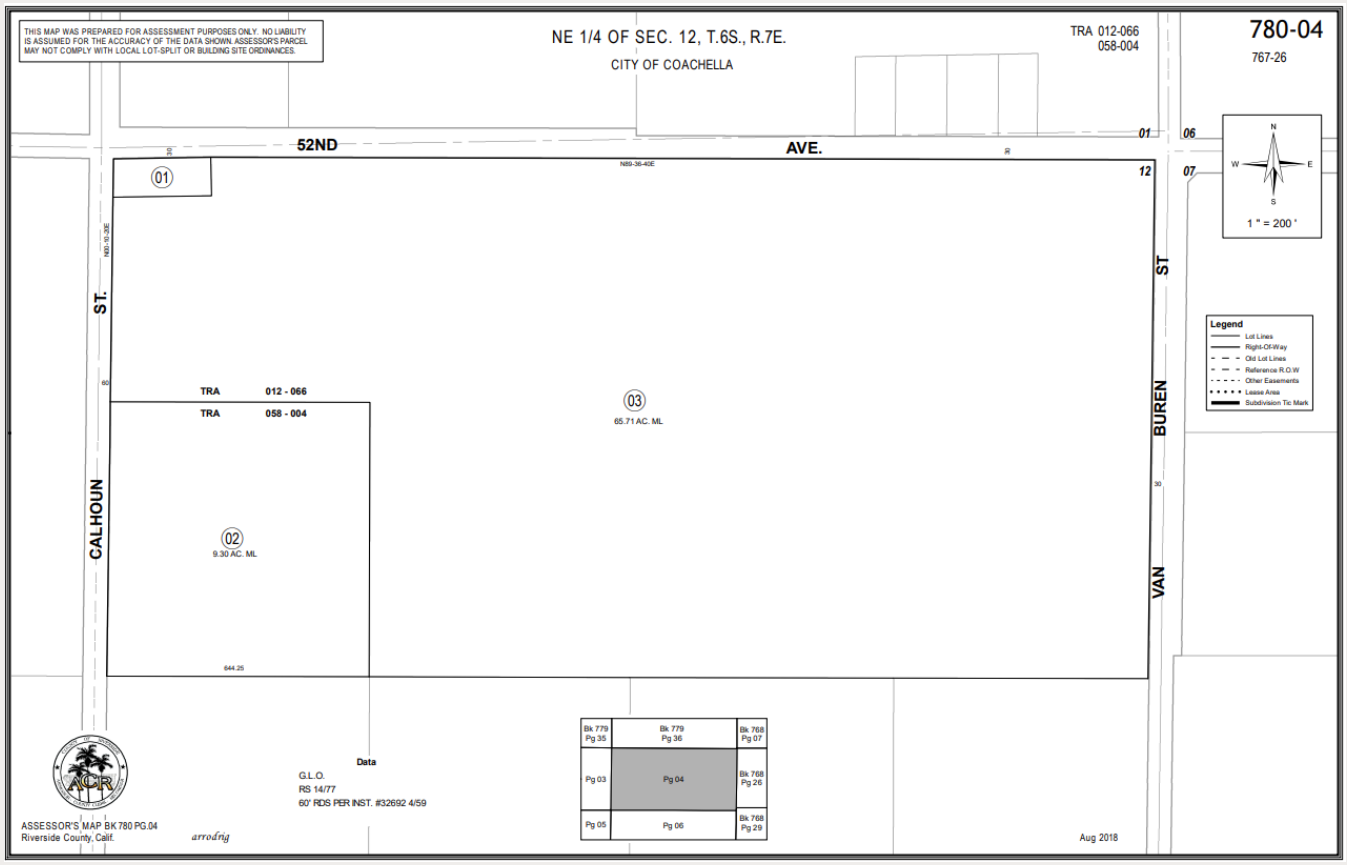
FIGURE 2-2 SUBJECT PARCEL'S ADJACENT USES

Direction	Adjacent Use
North	52nd Avenue
East	Van Buren Street
South	Agriculture
West	Calhoun Street, Agriculture

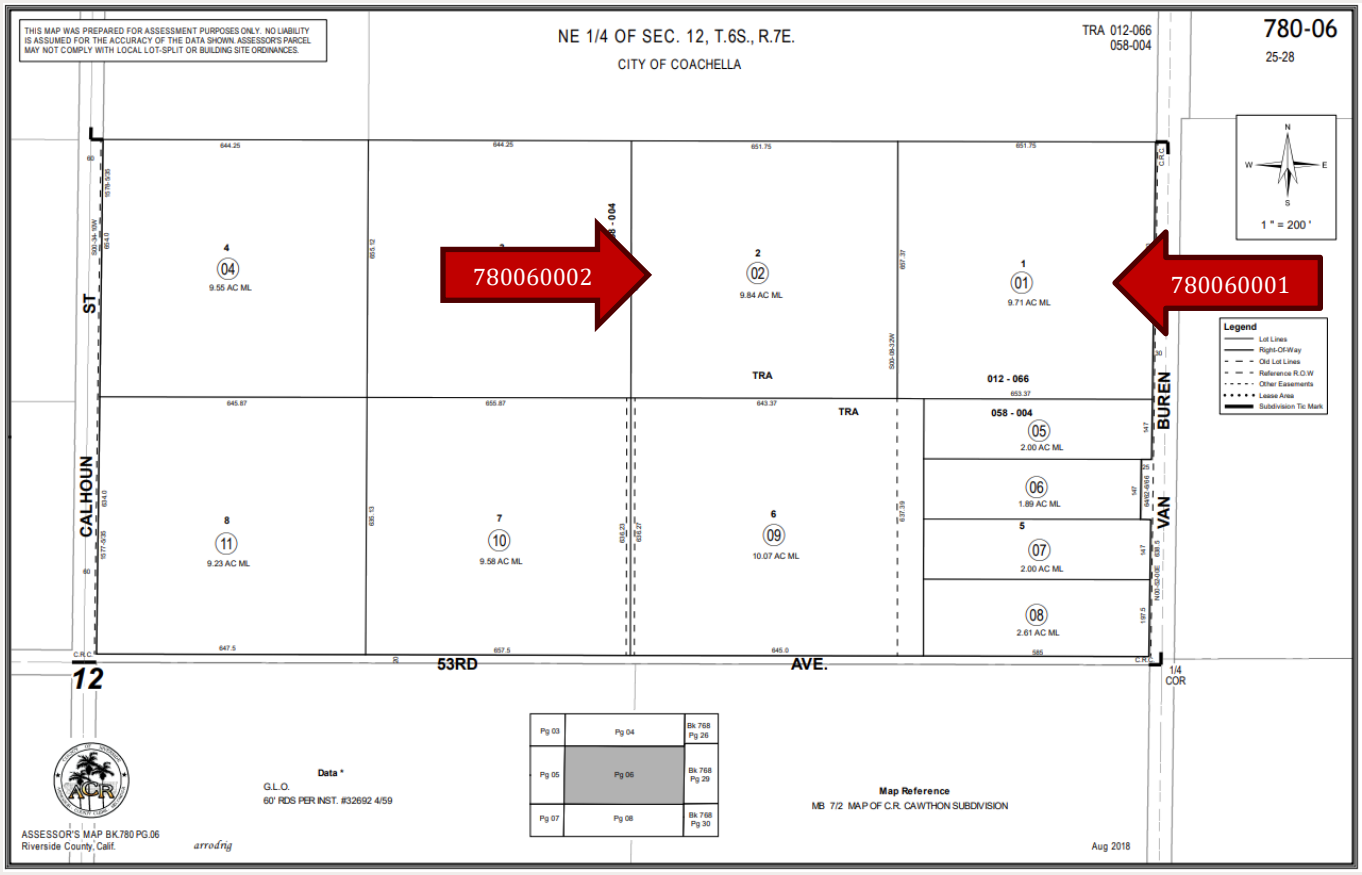
Topography and Site Utility

The topography of the site is generally flat and its shape should permit efficient use of the site for the buildings and other improvements, as well as ingress and egress. Upon completion of all construction efforts, the subject site will not contain any significant portion of undeveloped land that could be sold, entitled, and developed for alternate use. It is expected that the site will be developed fully with building and site improvements, thus contributing to the overall profitability of the resort.

RIVERSIDE COUNTY ASSESSOR'S MAP - PARCEL ID #78004003



RIVERSIDE COUNTY ASSESSOR'S MAP – PARCEL ID #780060002 AND #780060001



AERIAL VIEW OF SUBJECT SITE



VIEW OF SUBJECT SITE, AS OF OCTOBER 13, 2025



VIEW FROM SITE TO THE NORTHEAST



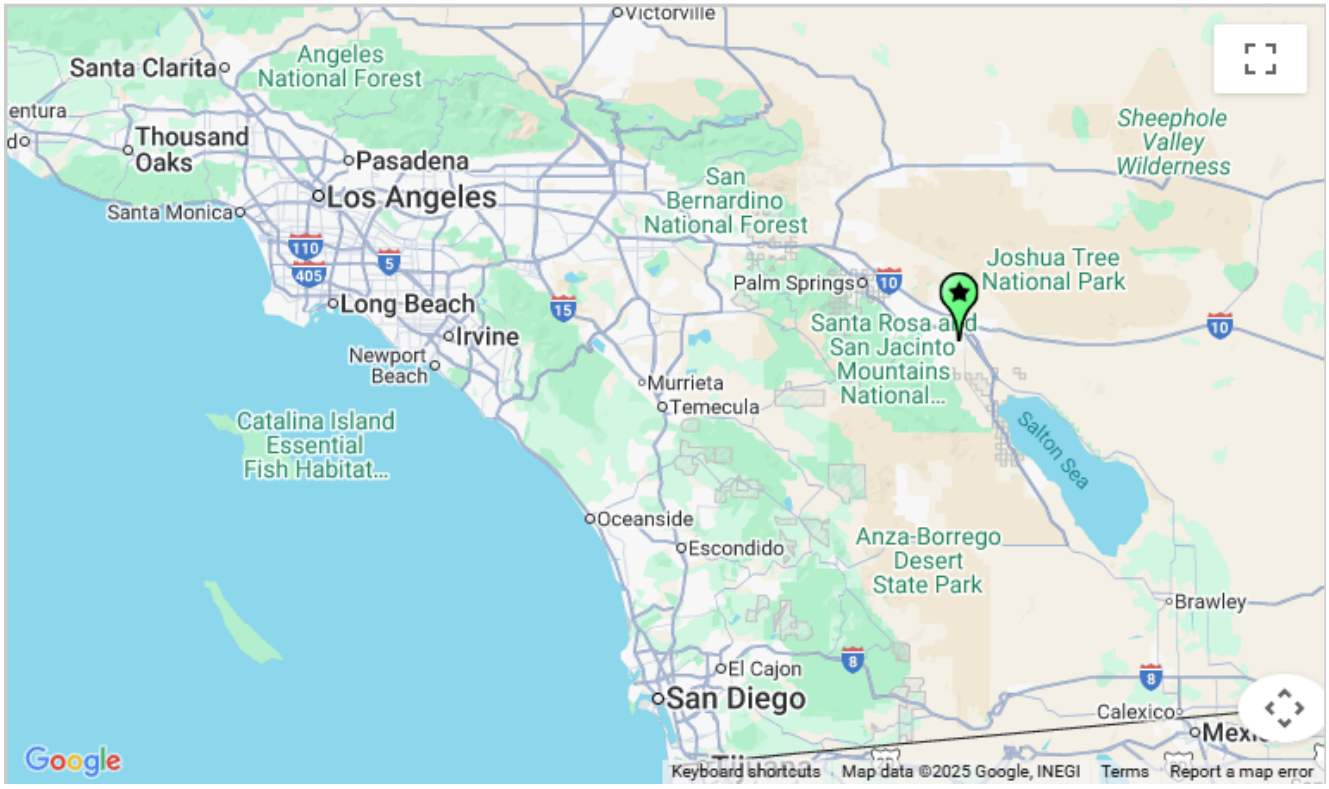
VIEW FROM SITE TO THE NORTHWEST



Access and Visibility

It is important to analyze the site with respect to regional and local transportation routes and demand generators, including ease of access. The subject site is readily accessible to a variety of local and county roads, as well as state and interstate highways.

MAP OF REGIONAL ACCESS ROUTES



Primary regional access through the area is provided by east/west Interstate 10, which extends to such cities as Phoenix, Arizona, to the east and the Los Angeles metro area to the west. North/south State Highway 111 is another major route, which provides local access to the desert cities of Palm Springs, Cathedral City, Palm Desert, Indian Wells, La Quinta, and Indio, and generally parallels Interstate 10 roughly five miles southwest of the interstate. State Highways 62, 74, and 86 also extend from Interstate 10 in this region and provide access to smaller communities in this part of the state.

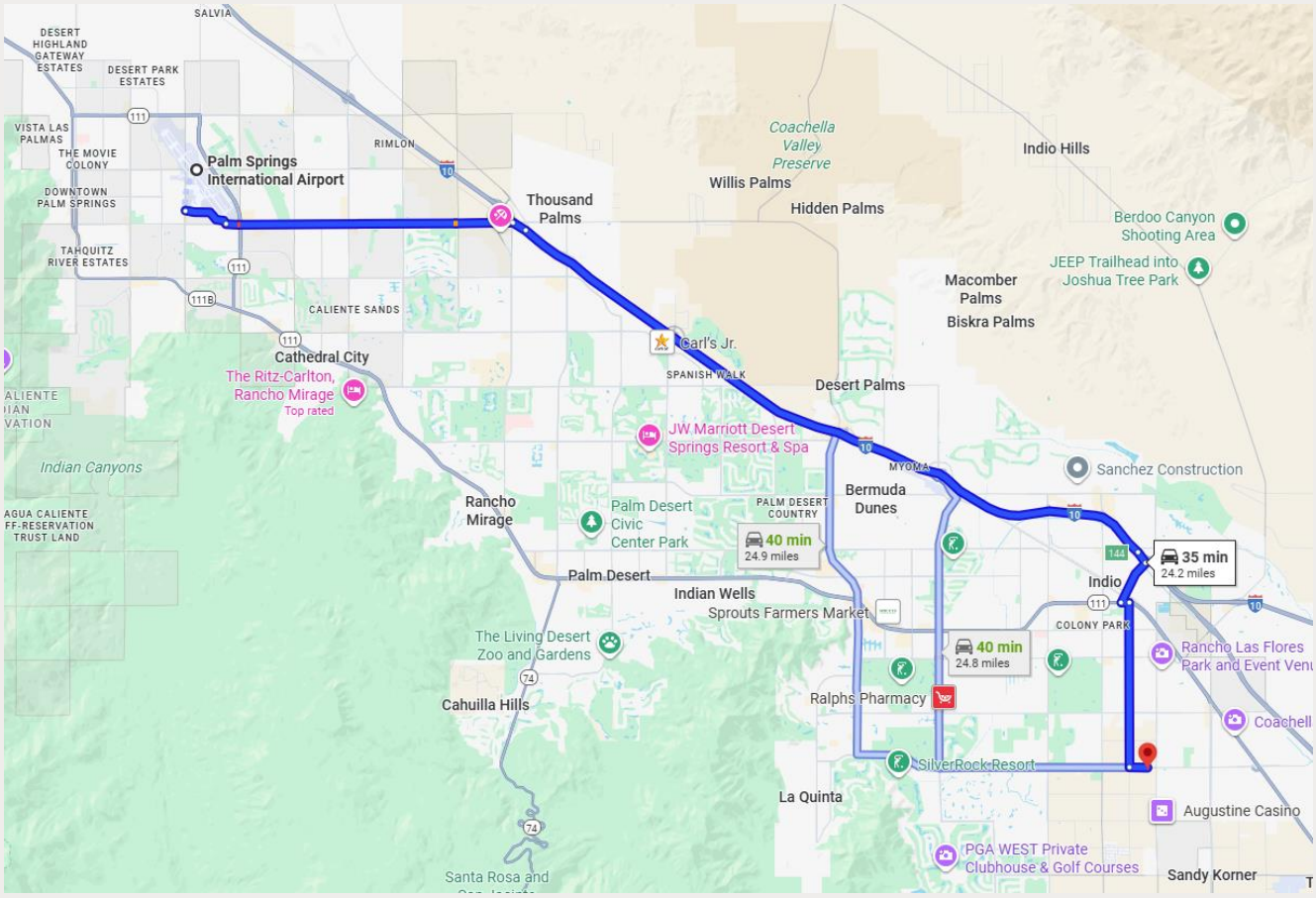
Primary vehicular access to the subject site is provided by 52nd Avenue. Access is also be available from Van Buren Street. The subject site is located near a busy intersection and is relatively simple to locate from Interstate 10, which is the

nearest major highway. The proposed subject property is anticipated to have adequate signage at the street. Overall, the subject site benefits from good accessibility, and the proposed resort is expected to enjoy good visibility from within its local neighborhood.

Airport Access

The proposed subject property will be served by Palm Springs International Airport, which is located approximately 18 miles to the northwest of the subject site.

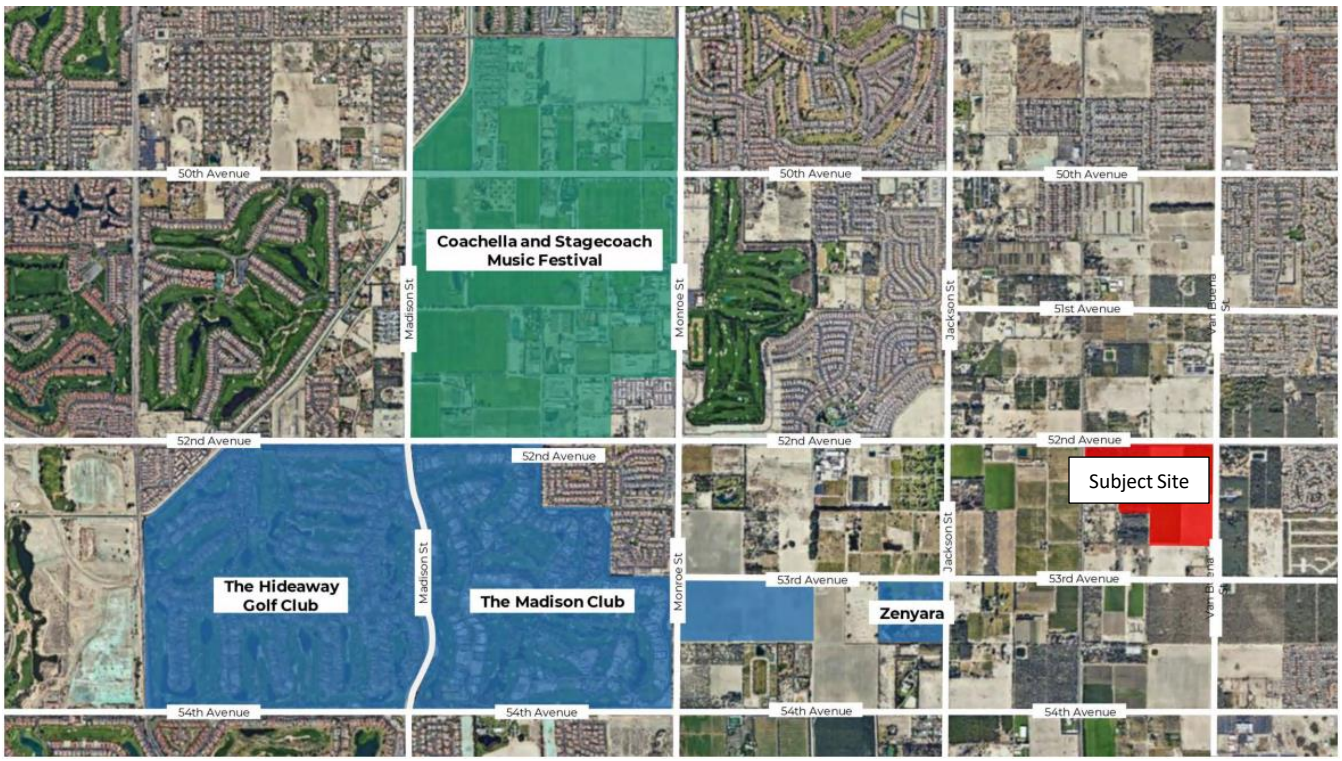
MAP OF AIRPORT ACCESS ROUTES



Neighborhood

The neighborhood that surrounds the subject site is generally defined by 48th Avenue to the north, Harrison Street to the east, Airport Boulevard to the south, and Jefferson Street to the west. The neighborhood is characterized by luxury residential area, golf courses, and agricultural area, primarily citrus fruit and date palms. Some specific entities in the area include the Coachella and Stagecoach Music Festival grounds, Madison Club, Hideaway Club, and Zenyara Luxury Resort Villas. Prominent golf courses in the vicinity include the Mountain View Country Club, PGA West, and The Quarry at La Quinta.

AERIAL MAP OF NEIGHBORHOOD



In general, this neighborhood is in the stable stage of its life cycle. Recent notable changes in the greater neighborhood include the planned development of a 2,200-acre master planned La Entrada community in Coachella. La Entrada is an approved plan that will include 7,800 master planned residential units in several distinct villages linked by over 550 acres of open space. Plans also include over 1.5 million square feet of retail and mixed use space, along with over 175 acres of sports/entertainment uses at a planned freeway interchange located at Avenue 50

and Interstate 10. The project's freeway interchange at Interstate 10 is expected to commence construction in late 2017 and open in early 2019.

Another significant development in the market is the construction of the Montage project in La Quinta; however, after numerous delays that put the developer, SilverRock Development Company in breach of contract with the city, the developer defaulted on the project and filed for bankruptcy on August 5, 2024. A motion to sell the raw and partially improved land to Turnbridge Equities was filed by the debtors on August 15, 2015. On October 21, 2025, a bankruptcy judge granted a motion for the sale to Turnbridge Equities allow the property to enter into escrow. The La Quinta City Council approved a reinstated and amended development agreement for the project under the new ownership, which is outlined as follows:

- One luxury hotel with approximately 154 guestrooms.
- 55,000-square-foot banquet/shared use facilities.
- 445 residences to include 29 branded residences north of the hotel with a private clubhouse, 70 condos and 293 homes east of the hotel, which can be short-term vacation rentals from which the city would receive TOT.
- 40,000-square-foot commercial area.
- 17,000-square-foot public golf clubhouse which will be moved closer to the entrance off of Avenue 52 and other public amenities for easier public access.
- 20,000-square-foot residential amenities building.

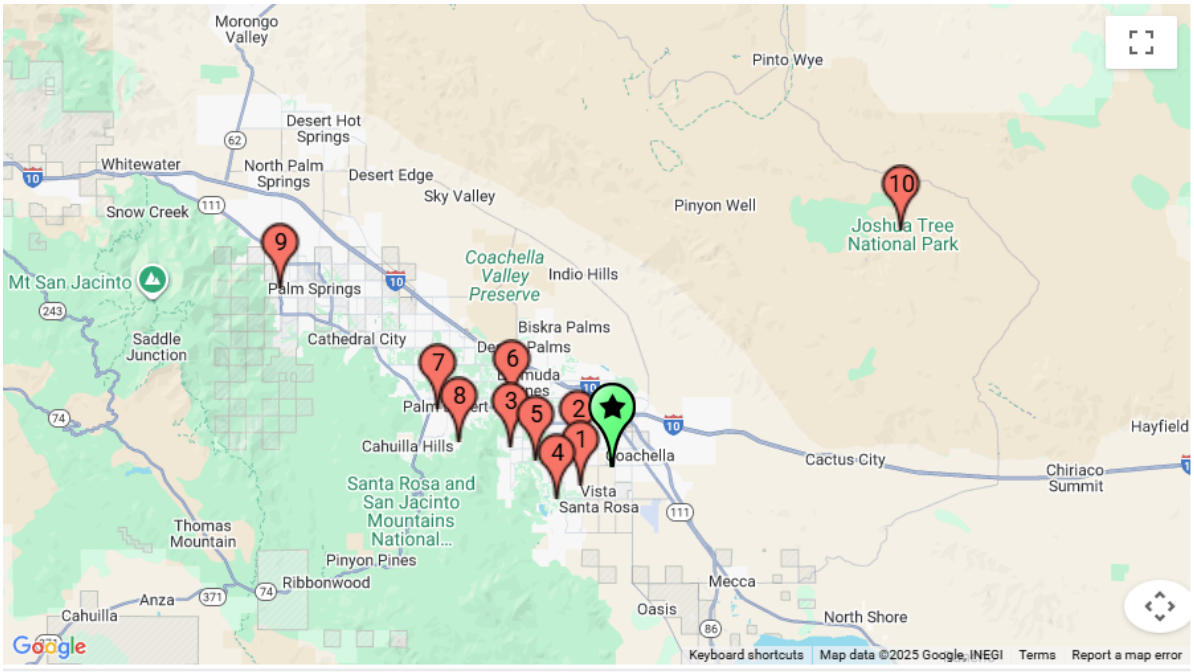
It is rumored but not yet confirmed that the project will be affiliated with Four Seasons Hotels and Resorts.

Overall, the supportive nature of the development in the immediate area is considered appropriate for and conducive to the operation of a fractional ownership resort.

Proximity to Local Demand Generators and Attractions

The subject site is located near the area's primary generators of lodging demand. A sample of these demand generators is reflected on the following map, including respective distances from and drive times to the subject site. Overall, the subject site is well situated with respect to demand generators.

ACCESS TO DEMAND GENERATORS AND ATTRACTIONS



	Demand Generator	Approx. Time from Subject Property	Approx. Distance
	Subject Property		
1	Coachella Valley Music and Arts Festival	7 minutes	3.3 miles
2	Empire Polo Club	8 minutes	3.5 miles
3	The La Quinta Country Club	15 minutes	8.0 miles
4	PGA WEST Pete Dye Stadium Course	13 minutes	6.1 miles
5	Old Town La Quinta	13 minutes	6.9 miles
6	Indian Wells Tennis Garden	20 minutes	10.3 miles
7	El Paseo Shopping District	28 minutes	14.4 miles
8	The Living Desert Zoo and Gardens	30 minutes	15.2 miles
9	Downtown Palm Springs	43 minutes	29.9 miles
10	Joshua Tree National Park	1 hour, 17 minutes	63.3 miles

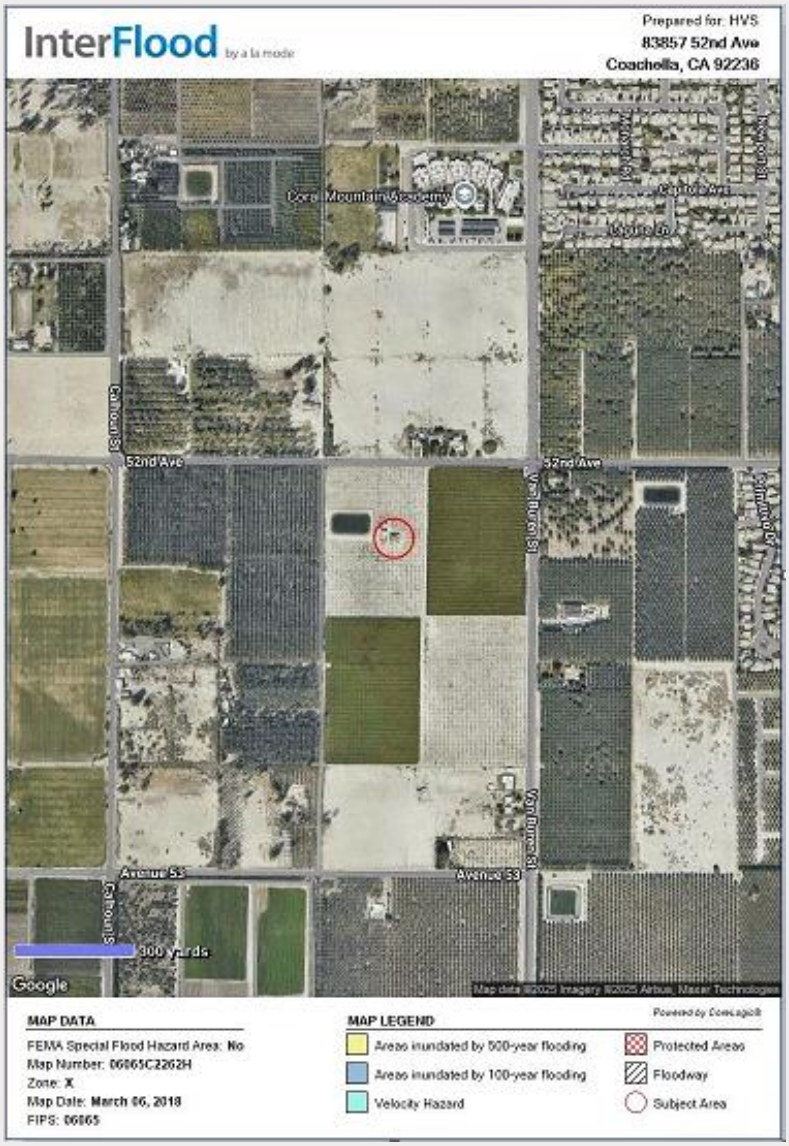
Utilities

The subject site is assumed to be served by all necessary utilities.

Flood Zone

According to the Federal Emergency Management Agency, the subject site is located in flood zone X.

FIGURE 2-3 COPY OF FLOOD MAP AND COVER



The flood zone definition for the Zone X designation is as follows: the flood insurance rate zone that corresponds to areas outside the 100-year floodplains, areas of 100-year sheet flow flooding where average depths are less than 1 foot, areas of 100-year steam flooding where the contributing drainage area is less than 1 square mile, or areas protected from the 100-year flood by levees. No Base Flood elevations or depths are shown within this zone.

Zoning

According to the local planning office, the subject property is zoned as follows: R-C - Regional Commercial. Additional details pertaining to the proposed subject property's zoning regulations are summarized in the following table.

FIGURE 2-4 ZONING

Municipality Governing Zoning	City of Coachella
Current Zoning	Regional Commercial
Current Use	Agricultural
Is Current Use Permitted?	Yes
Is Change in Zoning Likely?	No
Permitted Uses	Retail, Lodging, Entertainment, and Residential
Legally Non-Conforming	Not Applicable

According to the local planning office website, the subject project is currently under review for approval.

We assume that all necessary permits and approvals will be secured (including the appropriate liquor license as applicable) and that the subject property will be constructed in accordance with local zoning ordinances, building codes, and all other applicable regulations. Our zoning analysis should be verified before any physical changes are made to the site.

Conclusion

We have analyzed the issues of size, topography, access, visibility, and the availability of utilities. The subject site is favorably located near affluent residential developments and supporting amenities. In general, the site should be well suited for future hotel, residential, and co-ownership use, with acceptable access, visibility, and topography for an effective operation.

3. Description of the Proposed Improvements

Project Overview

The Proposed COVA Coachella will be a phased luxury-level, wellness focused mixed- use project featuring residential, hotel, membership club, and co-ownership components; the hotel and residences are anticipated to be associated with a to-be-determined brand. The preliminary brands under consideration include Auberge, Rosewood, One and Only, One Hotels, and Montage. We assume the brand will be one of the preliminary brands or a similar brand within the luxury hotel tier.

The property, which is expected to open on March 1, 2030 (Phase 1), will feature 402 rentable units, inclusive of the following components, which will participate within in a rental program.

- 240-room Condo-Hotel Townhomes featuring one-bedroom units
- 51 three and four-bedroom whole ownership Villas
- 39 four and five-bedroom whole ownership Residences
- 6 eight-bedroom whole ownership Estates
- 5 whole ownership Sky Villas

The first phase of the property is expected to open on March 1, 2030. The additional phases of the resort are anticipated to open on December 1, 2030, November 1, 2031 and September 1, 2032. Further details regarding the phased developments is provided later in this narrative,

The concept of the proposed subject property will be focused on wellness, and is designed to be the premier destination for wellness in the Coachella Valley, featured wellness focused facilities such as an on-site longevity clinic, two-story fitness center, luxury spa, immersive outdoor onsen, 25-meter lap pool, and an island dedicated to yoga and meditation. In addition, the resort will feature a ten-acre swimmable lagoon in the center of the site which will offer sandy beaches, eleven food & beverage outlets, sports center, surf machine, club membership program, beach club and live music venue, library, event spaces, outdoor amphitheater, kid's club, kid's pool, splash pad, and working barn. The property will also contain ample parking capacity and all necessary back-of-the-house space.

The illustrated master plan for the proposed COVA Coachella is illustrated on the following page.

FIGURE 3-1 ILLISTRATED MASTER PLAN FOR THE PROPOSED COVA COACHELLA



Summary of the Facilities

Based on information provided by the proposed subject hotel's development representatives, the following table summarizes the facilities that are expected to be available at the proposed subject property.

FIGURE 3-2 PROPOSED FACILITIES SUMMARY

Residential Unit Configuration	Number of Units
Condo Hotel Units	240
Villas - Whole Ownership	51
Villas - Co-Ownership	61
Residences	39
Estates	6
Sky Villas	5
Total	402

Food & Beverage Facilities	Seating Capacity
Cova Bistro	181
Asador	153
Cova Island	TBD
Lobby Bar + Rooftop Bar	195-260
Coffee by Cova	TBD
Vino Vinile	168
La Fleur	500
Cova Coastal	318
Cova Beach Club	258

Amenities & Services	
Ten-Acre Swimable Lagoon	Beaches
Sports Center	Fitness Center
Surf Machine	Live Music Venue
Library	Working Barn
Longevity Clinic	Full-Service Spa
Lap Pool	Oxygen Onsen
Event Spaces	Outdoor Amphitheater
Membership Club	Working Barn
Kid's Club	Kid's Pool/Splash Pad

The phasing plan is illustrated in the following table.

FIGURE 3-2 PHASING PLAN

	Phase 1	Phase 2	Phase 3	Phase 4	Total
One-Bedroom Condo-Hotel Units	208	32			240
Villas - Whole Ownership	9	42			51
Villas - Co-Ownership	6	55			61
Residences	12		14	13	39
Estates		4		2	6
Sky Villas	5				5

Food and Beverage Facilities

The proposed subject property's food and beverage operation is anticipated to be an important component of the resort. The food and beverage program is strategically designed to operate as one cohesive system, establishing the property as a culinary hub for the entire region. With six distinct outlets for the hotel and residences and three for the Beach Club, the programming is deliberately balanced to prevent self-cannibalization. The planned cuisines – American, Mexican, Seafood, Mediterranean, Italian, and Tropical – ensure a broad appeal with over-saturation. This multi-outlet approach is a deliberate strategy to attract the high-end local population. The program is designed to serve as a wellness and social anchor, seamlessly transitioning from daytime leisure at the pool, lagoon, or beach to vibrant evening experiences, Furthermore, the entire program is built to be an event-connected value, with operational models and design features that can scale to meet the needs of peak-season festivals and events.

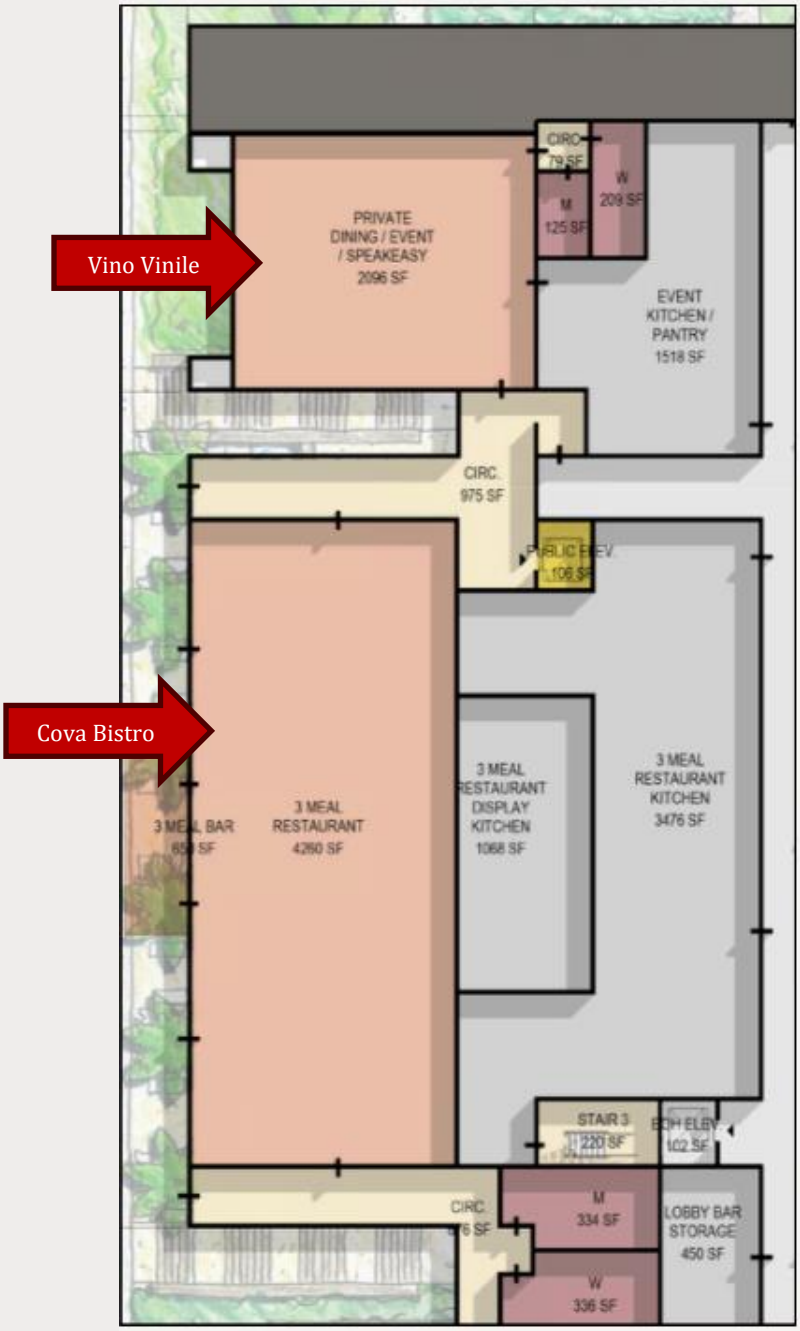
Cova Bistro

Cova Bistro will be the hotel's main restaurant and will be open for three meals a day. The concept will be a refined wine country bistro offering a seasonal menu from breakfast to dinner, with a focus on expertly prepared dishes and an international wine program. The culinary experience will be elevated by an in-house pastry chef, creative cocktails, and special services like tableside fish de-boning.

Vino Vinile

The concept for Vino Vinile will be an exclusive, intimate bar at the hotel that will combine a high-end beverage and light food program with a curated, intentional vinyl listening experience to foster social connection. The atmosphere will be designed for a multi-sensory indulgence, making music a central part of the experience.

COVA BISTRO AND VINO VINILE



Asador

Asador will be a Spanish-themed restaurant, where guests can embark on a culinary journey to the Iberian Peninsula, savoring traditional dishes prepared with an authentic Asador grill and enjoying large, communal platters of food. The refined yet relaxed ambiance, extensive Spanish win list, and charcuteria boards is designed to create an immersive dining experience to feel like a castle veranda overlooking the coast.

ASADOR



Cova Island

The concept for Cova Island is to offer a relaxed, tiki-style escape on a private island, featuring cocktails, wines, and simple fresh food like ahi bowls and conch fritters.

Lobby Bar + Rooftop Bar

This two-story bar located at the hotel will be a social hub that will transition from a coffee bar in the morning to a sophisticated evening lounge and will feature views from the second-floor windows.

LOBBY BAR + ROOFTOP BAR



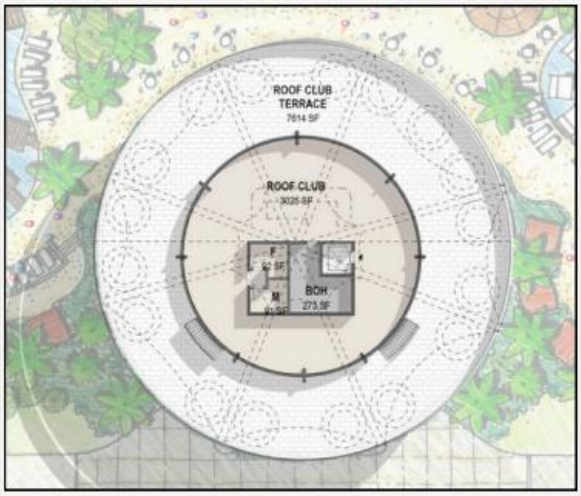
Coffee by Cova

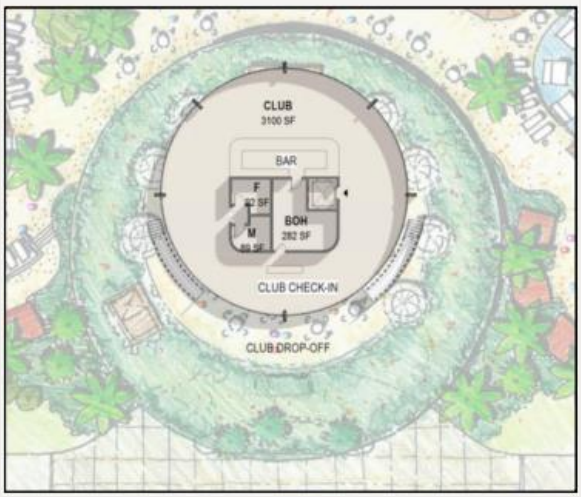
In collaboration with the hotel's main restaurant (Cova Bistro), Coffee by Cova will offer a selection of artisanal, seasonal pastries and coffee.

La Fleur

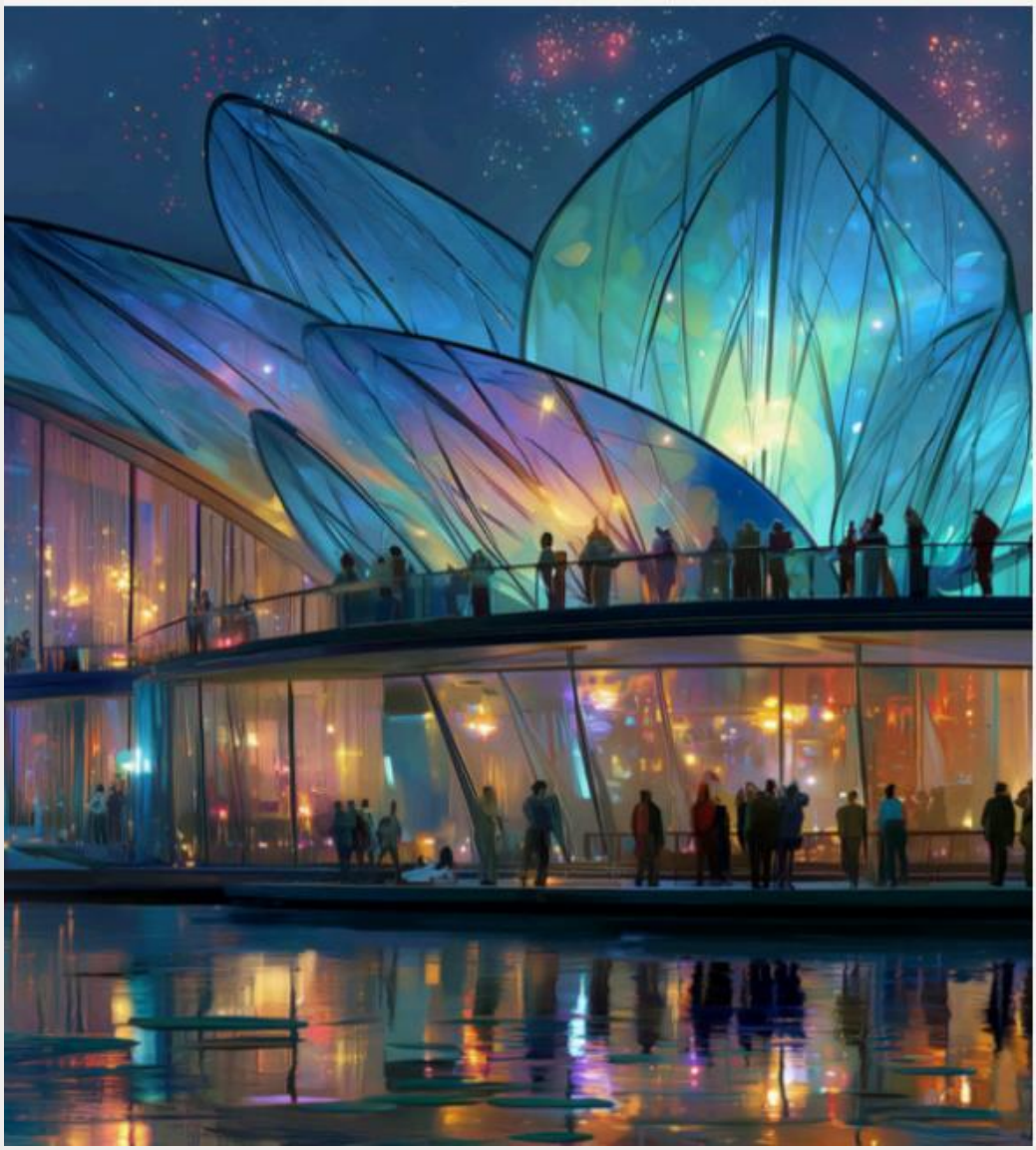
La Fleur will be the main bar and architectural centerpiece of the COVA Beach Club, offering a sophisticated, indoor-outdoor atmosphere and panoramic views from its second-floor location. Its cocktail program will feature large-format drinks for sharing and a signature menu of floral and botanical-infused concoctions, complimenting the space's vibrant energy.

LA FLEUR





RENDERING OF LA FLEUR



Cova Coastal

Located within the COVA Beach Club, the Coca Coastal oyster bar will offer a refined coastal dining experience with complimentary entertainment. Cova Coastal will feature fresh raw bar selections, seafood towers, and classic dishes, and operational ability to serve large crowds.

Cova Cantina

The concept for Cova Cantina will be a vibrant cantina offering an upscale, street-food-inspired dining experience, featuring crafted tacos and other Mexican fare, along with a bar boasting over 300 tequilas and an assortment of margaritas.

COVA CANTINA



The COVA Beach club layout is illustrated in the following rendering.

COVA BEACH CLUB LAYOUT



The following renderings provide the reader will views of the proposed resort's selected facilities and amenities.

HOTEL ARRIVAL VIEW



LOBBY BAR VIEW



SPORTS COURT VIEW



PUBLIC BEACH CLUB – SKY VILLA VIEW



PUBLIC BEACH CLUB – NIGHT CLUB VIEW 1



PUBLIC BEACH CLUB – NIGHT CLUB VIEW 2



CLUBHOUSE LAGOON



RESIDENCE LAGOON VIEW



ESTATE LAGOON VIEW



VILLAS LAGOON VIEW



ADA and Environmental

We assume that the resort buildings will be built according to all pertinent codes and brand standards. Moreover, we assume its construction will not create any environmental hazards (such as mold) and that the property will fully comply with the Americans with Disabilities Act.

Capital Expenditures

Our analysis assumes that, after its opening, the hotel will require ongoing upgrades and periodic renovations in order to maintain its competitive level in this market and to remain compliant with brand standards. These costs should be adequately funded by the forecasted reserve for replacement, as long as a successful, ongoing preventive-maintenance program is employed by hotel staff.

Construction Budget

The construction budget for the Proposed COVA Coachella, as provided by the project developer, is preliminarily estimated to be $858,000,000. A detailed construction budget was not available at the time of this report.

4. Market Area Analysis

The economic vitality of the market area and neighborhood surrounding the subject site is an important consideration in forecasting lodging demand and future income potential. Economic and demographic trends that reflect the amount of visitation provide a basis from which to project lodging demand. The purpose of the market area analysis is to review available economic and demographic data to determine whether the local market will undergo economic growth, stabilize, or decline. In addition to predicting the direction of the economy, the rate of change must be quantified. These trends are then correlated based on their propensity to reflect variations in lodging demand, with the objective of forecasting the amount of growth or decline in visitation by individual market segment (e.g., commercial, meeting and group, and leisure).

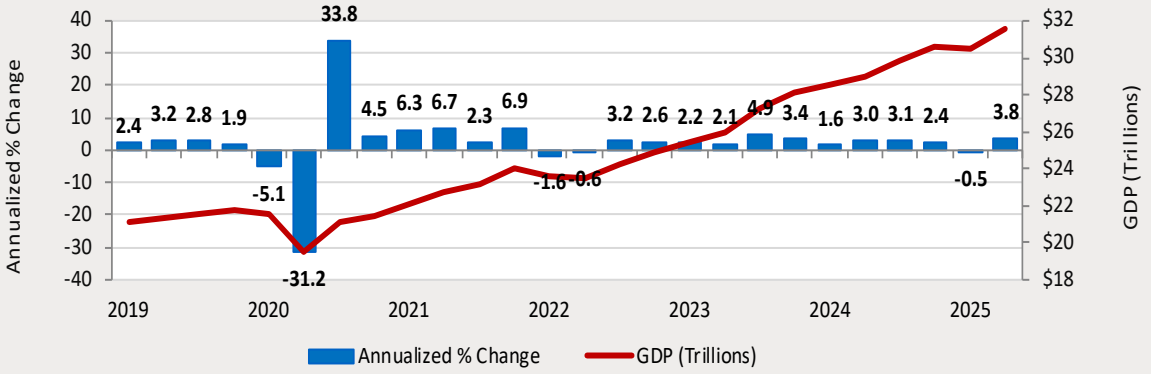
National Economic Overview

The local market and economy are influenced by national trends; thus, consideration of these trends is an important premise to this market-area analysis. The U.S. economy was severely affected by the COVID-19 pandemic, as illustrated in the following discussion. The onset of the pandemic resulted in decreased business activity, causing widespread economic hardships, including higher levels of unemployment. The depth and duration of this impact was influenced by the course of the pandemic and the nature and extent of restrictions on business and travel activity; the period of greatest impact was 2020. The shift of work locations from office environments to home offices also limited corporate transient and group travel. By all measures, the national economy had recovered from this downturn by year-end 2024, having recorded notable growth, while some select markets and sectors had experienced slower growth and were continuing to recover as of early 2025.

Gross domestic product (GDP) is a key measure of a country's economic health and trends. Research has also identified a high degree of correlation between GDP and lodging demand. For the eight quarters leading up to 2020, GDP quarterly growth ranged between 0.9% and 3.8%, reflecting moderate economic expansion. The impact of the pandemic was considerable in 2020. As shutdowns halted major components of the U.S. economy from mid-March through May, GDP contracted by an annualized rate of 31.2% in Q2 2020, the largest such decline in U.S. history. While shocking, this GDP decline was offset by a significant rebound in economic activity in Q3 2020, greatly moderating the overall impact for the year. The U.S. economy grew by 33.8% on an annualized basis in the third quarter, followed by more modest gains in the five quarters that followed through the end of 2021, with GDP having surpassed the pre-pandemic peak by Q1 2021. A pullback during the

first half of 2022 was driven by the trade deficit and decreases in government spending and inventory investment, although the decline was offset by gains during the second half of the year.

FIGURE 4-1 UNITED STATES GDP GROWTH RATE



Sources: tradingeconomics.com, Bureau of Economic Analysis

The positive trend continued through 2023 and 2024, registering 2.5% and 2.4% increases for the year, respectively. GDP then declined slightly (-0.5%) and bounced back by 3.8% in the first two quarters of 2025, respectively. According to the July 30, 2025, report from the Bureau of Economic Analysis, "The increase in real GDP in the second quarter primarily reflected a decrease in imports, which are a subtraction in the calculation of GDP, and an increase in consumer spending. These movements were partly offset by decreases in investment and exports." Within the hotel sector, 2025 was expected to bring a more active deal environment given this recent stability in growth; however, a pullback in international travel to the United States and the uncertainty surrounding what effect the tariffs would have on prices, trade, employment, and domestic travel prompted some buyers to retreat. As such, transaction activity has been relatively muted thus far in 2025. We will be closely monitoring how these changes impact employment, hotel demand, ADRs, transaction activity and, ultimately, hotel values.

The Wall Street Journal (WSJ) publishes an economic forecasting survey each quarter. Per the latest survey (July 2025), economists were newly optimistic that the United States would avoid a recession, reporting an average 33.0% probability that the country would experience a recession during the next twelve months (22.0% and 45.0% were the average probability levels for the same question in January 2025 and April 2025, respectively). Chad Moutray, chief economist at the

National Restaurant Association, was quoted, "Despite numerous headwinds, the U.S. economy is proving stubbornly resilient. Consumers are continuing to spend, but the mood has clearly shifted from bold to careful." Key averages from the latest release are illustrated in the following table.

FIGURE 4-2 GDP, CPI, AND UNEMPLOYMENT PREDICTIONS

Real GDP, Quarterly Annualized Growth Rate	
2nd Quarter 2024	1.60
3rd Quarter 2024	1.35
4th Quarter 2024	1.47
1st Quarter 2025	1.77
Real GDP, Year-Over-Year Growth Rate	
2024	1.72
2025	1.90
2026	2.01
CPI, Year-Over-Year Change	
June 2024	3.11
December 2024	2.73
June 2025	2.32
December 2025	2.29
Unemployment, Annual Level	
June 2024	3.89
December 2024	4.11
June 2025	4.17
December 2025	4.17

Source: Wall Street Journal Economic Forecasting Survey, April 2024

Driven by supply-chain disruptions and pent-up consumer demand, prices for most goods and services increased substantially in the wake of the pandemic; the CPI increased by 7.0% in 2021 and 6.5% in 2022. The Fed addressed inflation through successive interest-rate hikes (seven in 2022, and another four in 2023), and the pace of inflation decelerated, falling to the low 3.0% range by the end of 2023. While inflation increased to 3.5% by March 2024, it has since illustrated a slow and gradual decline, registering a relatively low 2.4% as of September 2024. In September, the Fed cut the federal funds rate for the first time since the COVID-19 pandemic, acknowledging the positive economic data and lower inflation in recent months, and two additional cuts followed in November and December. Prior to the September 2024 meeting, the target rate was between 5.25% and 5.5%. As of mid-

year 2025, it stood between 4.25% and 4.5%. On September 17, 2025, the Fed cut interest rates by a quarter percentage point, to a range of 4.0% to 4.25% (its first reduction of 2025), and projected two more cuts later this year. "Job gains have slowed," Fed officials said in a statement released following the meeting, "and the unemployment rate has edged up," noting that unemployment still remains relatively low.

The successive increases in GDP, lower inflation levels, cuts to the Fed rate in 2024, and strong job growth through Q1 2025 painted a positive picture of the U.S. economy. However, the first week of April 2025 sparked a notable change for this picture with the announcement of significant tariffs. As the year has progressed, many have been revised downward; these revisions, combined with the continued resiliency of the U.S. economy and gains in employment, have bolstered markets. Over time, expectations emerged that a recession in the near term was less likely, compared to the sentiment in March/April. Nevertheless, it remains unclear how the new policies of the current administration will ultimately impact the economy and the hotel sector.

Per the WSJ survey, unemployment levels are anticipated to remain relatively stable, hovering near the 4.4% mark. In the July 2025 survey, economists were asked what effect the current administration's preferences regarding interest rates would have under the next Fed chairman. Roughly 36.0% of respondents said that interest rates would be lower than otherwise based on the administration's influence, with 57.0% responding that no influence or change would occur based on this factor. Accordingly, economists surveyed expect the Fed funds rate to end 2025 at just under 4.0% and moderate downward by 70 basis points by the end of 2026. Moreover, inflation is anticipated to remain somewhat elevated, at just over 3.0% by December 2025, followed by a decline, falling to roughly 2.6% by the end of 2026.

Within the hospitality industry, labor availability and costs remain a concern for hotel operators, although these issues have diminished somewhat since the height of the pandemic. Inflation benefited the industry by supporting strong ADR growth in most markets but also resulted in increased expenses, which put pressure on profitability. Inflation moderated significantly and was approaching the Fed's target of 2.0% as of mid-year 2025, which was considered a positive factor; however, the impact of the newly announced tariffs in July 2025 may reverse this trend of inflation. We continue to closely monitor how these policy changes are affecting the U.S. lodging market and the local market analyzed within this report, as explained in the following chapter.

In preparing this report, we have considered the impact of these factors on the lodging and investment markets to the best of our ability. However, our analysis

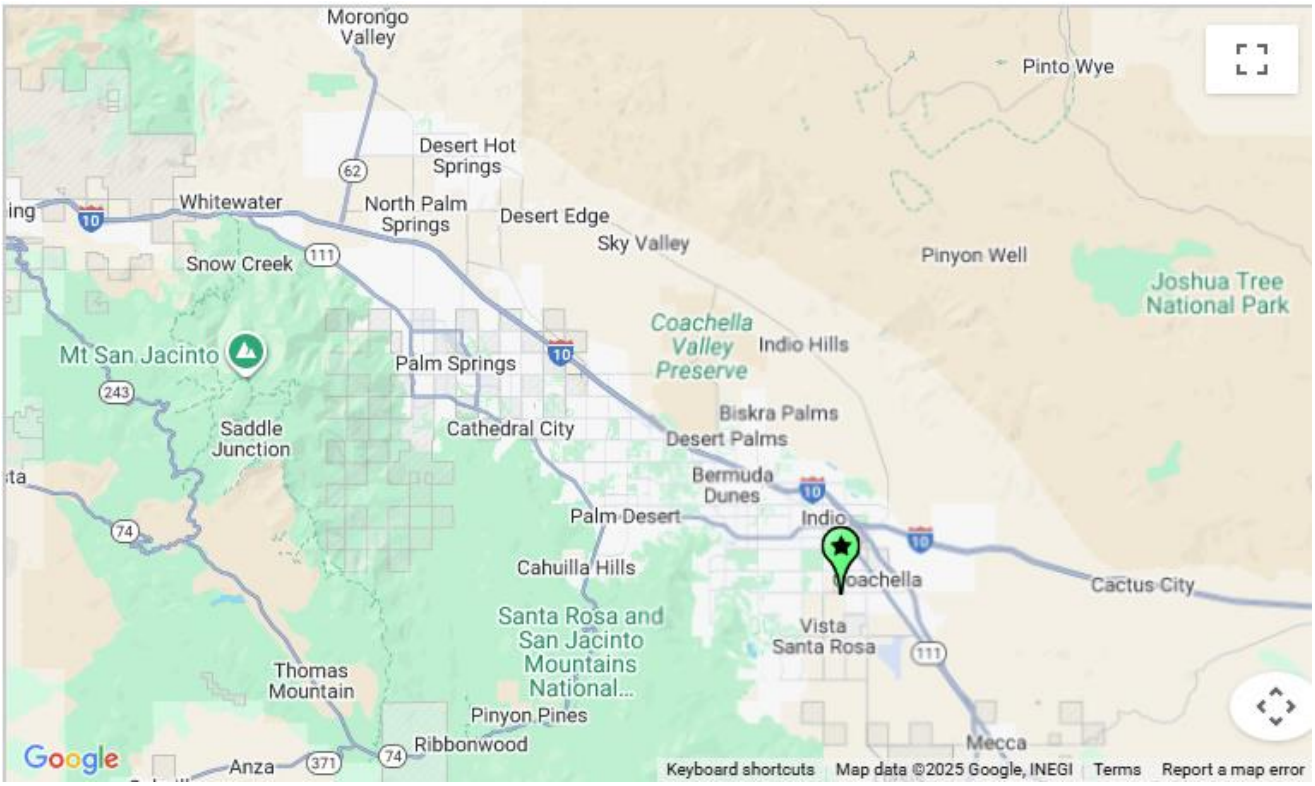
only considers what is known at the time of the effective date of the report, and there is a high degree of uncertainty currently influencing the market and the economy.

Market Area Definition

The market area for a lodging facility is the geographical region where the sources of demand and the competitive supply are located. The subject site is located in the city of Coachella, the county of Riverside, and the state of California. The Coachella Valley extends for approximately 45 miles in Riverside County and comprises the following nine cities: Palm Springs, Rancho Mirage, Palm Desert, La Quinta, Indio, Indian Wells, Desert Hot Springs, Coachella, and Cathedral City. The popular resort community of Palm Springs sits at the northwest end of the Valley. Palm Springs is often described as a small city with the cultural amenities of an urban area, featuring eclectic boutiques, mid-century-inspired furniture and home décor stores, dining, and recreational opportunities. Typically, the population nearly doubles during the winter months with part-time residents from colder climates who own second homes in the area due to its warmer temperatures. Tourism is typically the major industry in this area, with a variety of attractions and special events drawing significant numbers of leisure travelers.

The subject property's market area can be defined by its Combined Statistical Area (CSA): Los Angeles-Long Beach, CA. The CSA represents adjacent metropolitan and micropolitan statistical areas that have a moderate degree of employment interchange. Micropolitan statistical areas represent urban areas in the United States based around a core city or town with a population of 10,000 to 49,999; the MSA requires the presence of a core city of at least 50,000 people and a total population of at least 100,000 (75,000 in New England). The following exhibit illustrates the market area.

MAP OF MARKET AREA



Economic and Demographic Review

A primary source of economic and demographic statistics used in this analysis is the *Complete Economic and Demographic Data Source* published by Woods & Poole Economics, Inc.—a well-regarded forecasting service based in Washington, D.C. Using a database containing more than 900 variables for each county in the nation, Woods & Poole employs a sophisticated regional model to forecast economic and demographic trends. Historical statistics are based on census data and information published by the Bureau of Economic Analysis. Projections are formulated by Woods & Poole, and all dollar amounts have been adjusted for inflation, thus reflecting real change.

These data are summarized in the following table.

FIGURE 4-3 ECONOMIC AND DEMOGRAPHIC DATA SUMMARY

	2010	2020	2024	2029	Avg. Annual Compounded Chg. 2010-20	2010-24	2024-29
Resident Population (Thousands)							
Riverside County	2,200.2	2,423.0	2,535.4	2,755.3	1.0 %	1.0 %	1.7 %
Riverside-San Bernardino-Ontario, CA MSA	4,241.1	4,606.4	4,753.5	5,083.8	0.8	0.8	1.4
Los Angeles-Long Beach, CA CSA	17,906.4	18,628.3	18,444.1	19,061.1	0.4	0.2	0.7
State of California	37,322.9	39,503.2	39,259.5	40,701.2	0.6	0.4	0.7
United States	309,382.3	331,526.9	337,214.9	348,565.1	0.7	0.6	0.7
Per-Capita Personal Income*							
Riverside County	$34,214	$46,125	$45,867	$48,913	3.0	2.1	1.3
Riverside-San Bernardino-Ontario, CA MSA	33,397	45,084	45,511	48,490	3.0	2.2	1.3
Los Angeles-Long Beach, CA CSA	45,239	60,996	63,550	68,348	3.0	2.5	1.5
State of California	47,658	66,955	69,861	74,871	3.5	2.8	1.4
United States	44,807	56,530	59,191	63,789	2.4	2.0	1.5
W&P Wealth Index							
Riverside County	79.1	81.1	78.1	77.7	0.3	(0.1)	(0.1)
Riverside-San Bernardino-Ontario, CA MSA	76.6	78.7	76.9	76.2	0.3	0.0	(0.2)
Los Angeles-Long Beach, CA CSA	101.3	105.5	106.2	105.9	0.4	0.3	(0.0)
State of California	106.3	115.3	116.1	115.5	0.8	0.6	(0.1)
United States	100.0	100.0	100.0	100.0	0.0	0.0	0.0
Food and Beverage Sales (Millions)*							
Riverside County	$2,842	$3,712	$4,930	$5,841	2.7	4.0	3.5
Riverside-San Bernardino-Ontario, CA MSA	5,423	6,858	8,970	10,395	2.4	3.7	3.0
Los Angeles-Long Beach, CA CSA	31,735	40,575	50,520	56,632	2.5	3.4	2.3
State of California	65,211	83,734	104,641	117,800	2.5	3.4	2.4
United States	502,827	611,998	777,882	881,337	2.0	3.2	2.5
Total Retail Sales (Millions)*							
Riverside County	$27,838	$37,707	$45,617	$52,685	3.1	3.6	2.9
Riverside-San Bernardino-Ontario, CA MSA	53,905	75,245	89,693	101,877	3.4	3.7	2.6
Los Angeles-Long Beach, CA CSA	257,633	332,363	380,224	417,308	2.6	2.8	1.9
State of California	539,665	705,532	807,598	889,442	2.7	2.9	1.9
United States	4,638,710	5,826,739	6,781,526	7,456,593	2.3	2.7	1.9

* Inflation Adjusted

Source: Woods & Poole Economics, Inc.

The U.S. population grew at an average annual compounded rate of 0.6% from 2010 through 2024. The county's population has increased at a quicker pace than the nation's population; the average annual growth rate of 1.0% between 2010 and 2024 reflects a gradually expanding area. Per-capita personal income increased modestly, at 2.1% on average annually for the county between 2010 and 2024. Local wealth indexes have remained stable in recent years, registering a low 78.1 level for the county in 2024.

Food and beverage sales totaled $4,930 million in the county in 2024, versus $2,842 million in 2010. This reflects a 4.0% average annual change. The pace of growth is anticipated to be 3.5% through 2029. The retail sales sector demonstrated an annual increase of 3.6% from 2010 to 2024. An increase of 2.9% average annual change is expected in county retail sales through 2029.

Workforce Characteristics

The characteristics of an area's workforce provide an indication of the type and amount of transient visitation likely to be generated by local businesses. Sectors such as finance, insurance, and real estate (FIRE); wholesale trade; and services produce a considerable number of visitors who are not particularly rate sensitive. The government sector often generates transient room nights, but per-diem reimbursement allowances often limit the accommodations selection to budget and mid-priced lodging facilities. Contributions from manufacturing, construction, transportation, communications, and public utilities (TCPU) employers can also be important, depending on the company type.

The following table sets forth the county workforce distribution by business sector in 2010, 2020, and 2024, as well as a forecast for 2029.

FIGURE 4-4 HISTORICAL AND PROJECTED EMPLOYMENT (000S)

Industry	2010	Percent of Total	2020	Percent of Total	2024	Percent of Total	2029	Percent of Total	Avg. Annual Compounded Chg. 2010-2020	2020-2024	2024-2029
Farm	7.5	0.9 %	8.0	0.7 %	7.0	0.6 %	6.6	0.5 %	0.6 %	(3.2) %	(1.1) %
Forestry, Fishing, Related Activities And Other	7.6	0.9	6.6	0.6	6.7	0.5	6.5	0.5	(1.3)	0.4	(0.7)
Mining	2.0	0.2	1.8	0.2	1.7	0.1	1.7	0.1	(0.9)	(1.7)	(0.2)
Utilities	1.8	0.2	1.8	0.2	1.9	0.2	1.9	0.1	0.1	1.3	0.2
Construction	55.7	6.9	93.3	8.7	100.8	8.1	104.4	7.6	5.3	2.0	0.7
Manufacturing	41.8	5.2	48.9	4.5	51.0	4.1	51.2	3.7	1.6	1.1	0.0
Total Trade	124.7	15.5	145.8	13.5	161.7	13.0	168.6	12.2	1.6	2.6	0.8
Wholesale Trade	24.8	3.1	31.2	2.9	35.8	2.9	38.7	2.8	2.3	3.5	1.6
Retail Trade	99.9	12.4	114.6	10.6	126.0	10.1	130.0	9.4	1.4	2.4	0.6
Transportation And Warehousing	26.5	3.3	92.9	8.6	118.6	9.5	129.9	9.4	13.4	6.3	1.8
Information	13.0	1.6	8.2	0.8	10.0	0.8	10.4	0.8	(4.5)	5.3	0.7
Finance And Insurance	31.1	3.9	41.3	3.8	50.7	4.1	54.8	4.0	2.9	5.3	1.6
Real Estate And Rental And Lease	45.3	5.6	51.5	4.8	67.1	5.4	80.6	5.8	1.3	6.8	3.7
Total Services	323.5	40.1	443.8	41.2	531.0	42.6	617.2	44.8	3.2	4.6	3.1
Professional And Technical Services	40.5	5.0	50.7	4.7	57.7	4.6	62.6	4.5	2.3	3.3	1.6
Management Of Companies And Enterprises	3.4	0.4	4.2	0.4	4.7	0.4	4.6	0.3	2.2	2.7	(0.6)
Administrative And Waste Services	59.0	7.3	80.5	7.5	92.5	7.4	110.2	8.0	3.2	3.5	3.6
Educational Services	10.6	1.3	13.7	1.3	16.8	1.3	20.5	1.5	2.6	5.1	4.1
Health Care And Social Assistance	71.7	8.9	126.1	11.7	148.7	11.9	180.9	13.1	5.8	4.2	4.0
Arts, Entertainment, And Recreation	18.9	2.3	20.2	1.9	25.1	2.0	28.1	2.0	0.7	5.6	2.3
Accommodation And Food Services	64.1	7.9	77.2	7.2	104.5	8.4	121.2	8.8	1.9	7.8	3.0
Other Services, Except Public Administration	55.3	6.9	71.1	6.6	81.1	6.5	89.2	6.5	2.5	3.4	1.9
Total Government	126.5	15.7	132.5	12.3	138.4	11.1	145.1	10.5	0.5	1.1	1.0
Federal Civilian Government	7.7	1.0	7.8	0.7	7.7	0.6	8.0	0.6	0.2	(0.3)	0.7
Federal Military	3.7	0.5	4.0	0.4	3.9	0.3	3.9	0.3	0.8	(0.4)	(0.2)
State And Local Government	115.2	14.3	120.7	11.2	126.7	10.2	133.3	9.7	0.5	1.2	1.0
TOTAL	807.0	100.0 %	1,076.3	100.0 %	1,246.7	100.0 %	1,378.9	100.0 %	2.9 %	3.7 %	2.0 %
MSA	1,638.8	—	2,150.1	—	2,472.3	—	2,692.6	—	2.8 %	3.6 %	1.7 %
U.S.	172,901.7	—	195,286.6	—	218,894.3	—	232,833.6	—	1.2	2.9	1.2

Source: Woods & Poole Economics, Inc.

The preceding data illustrate the long-term employment trends in this market, including the recent impact of the pandemic and the subsequent recovery. Forecasts developed by Woods & Poole Economics, Inc. anticipate that total employment in the county will change by 2.0% on average annually through 2029. The trend is above the forecast rate of change for the United States as a whole during the same period.

The following table illustrates historical and projected employment, households, population, and average household income data, as provided by REIS for the overall San Bernardino/Riverside market, inclusive of the Coachella Valley.

FIGURE 4-5 HISTORICAL & PROJECTED EMPLOYMENT, HOUSEHOLDS, POPULATION, AND HOUSEHOLD INCOME STATISTICS

Year	Total Employment	% Chg	Office Employment	% Chg	Industrial Employment	% Chg	Households	% Chg	Population	% Chg	Household Avg. Income	% Chg
2012	1,196,200	—	321,217	—	153,147	—	1,341,160	—	4,330,360	—	$107,135	—
2013	1,250,600	4.5 %	331,040	3.1 %	158,899	3.8 %	1,354,610	1.0 %	4,362,510	0.7 %	107,029	(0.1) %
2014	1,315,230	5.2	348,440	5.3	165,870	4.4	1,366,030	0.8	4,401,520	0.9	111,891	4.5
2015	1,381,700	5.1	363,776	4.4	172,962	4.3	1,377,620	0.8	4,441,060	0.9	117,018	4.6
2016	1,417,630	2.6	363,619	(0.0)	174,215	0.7	1,392,230	1.1	4,486,670	1.0	121,799	4.1
2017	1,475,570	4.1	374,215	2.9	177,311	1.8	1,404,350	0.9	4,530,840	1.0	124,827	2.5
2018	1,520,270	3.0	382,381	2.2	181,874	2.6	1,418,990	1.0	4,562,170	0.7	130,153	4.3
2019	1,578,230	3.8	396,614	3.7	184,010	1.2	1,432,690	1.0	4,590,390	0.6	136,650	5.0
2020	1,517,630	(3.8)	372,601	(6.1)	172,881	(6.0)	1,437,170	0.3	4,627,560	0.8	151,110	10.6
2021	1,620,630	6.8	397,207	6.6	180,503	4.4	1,473,760	2.5	4,661,810	0.7	155,338	2.8
2022	1,663,970	2.7	403,067	1.5	183,766	1.8	1,493,140	1.3	4,689,340	0.6	160,662	3.4
2023	1,693,070	1.7	407,163	1.0	181,379	(1.3)	1,507,930	1.0	4,722,160	0.7	165,936	3.3
2024	1,707,230	0.8	410,842	0.9	178,620	(1.5)	1,534,780	1.8	4,778,040	1.2	175,101	5.5
Forecasts												
2025	1,718,860	*0.7 %*	414,179	*0.8 %*	179,756	*0.6 %*	1,553,030	*1.2 %*	4,814,480	*0.8 %*	182,533	*4.2 %*
2026	1,720,570	*0.1*	415,102	*0.2*	179,789	*0.0*	1,564,390	*0.7*	4,832,220	*0.4*	190,366	*4.3*
2027	1,726,920	*0.4*	417,841	*0.7*	180,111	*0.2*	1,572,620	*0.5*	4,842,160	*0.2*	197,904	*4.0*
2028	1,735,680	*0.5*	421,146	*0.8*	180,290	*0.1*	1,580,250	*0.5*	4,848,050	*0.1*	205,252	*3.7*
2029	1,746,890	*0.6*	424,964	*0.9*	180,467	*0.1*	1,589,670	*0.6*	4,857,780	*0.2*	213,095	*3.8*
Average Annual Compound Change												
2012 - 2024		3.0 %		2.1 %		1.3 %		1.1 %		0.8 %		4.2 %
Forecast 2025 - 2029		*0.4 %*		*0.6 %*		*0.1 %*		*0.6 %*		*0.2 %*		*3.9 %*

Source: REIS Report, 1st Quarter, 2025

For the San Bernardino/Riverside market, of the roughly 1,700,000 persons employed, 24% are categorized as office employees, while 10% are categorized as industrial employees. Total employment is expected to expand by 0.7% in 2025, while office employment is forecast to expand by 0.8% in 2025.

The number of households is forecast to expand by 0.6% on average annually between 2025 and 2029. Population is forecast to expand during this same period, at an average annual compounded rate of 0.2%. Household average income is forecast to grow by 3.9% on average annually from 2025 through 2029.

Radial Demographic Snapshot

The following table reflects radial demographic trends for our market area measured by three points of distance from the subject site.

FIGURE 4-6 DEMOGRAPHICS BY RADIUS

	0.00 - 1.00 miles	0.00 - 3.00 miles	0.00 - 5.00 miles
Population			
2030 Projection	9,268	65,372	129,656
2025 Estimate	9,123	64,812	128,328
2020 Census	8,840	63,712	125,741
Percent Change: 2025 to 2030	1.6%	0.9%	1.0%
Percent Change: 2020 to 2025	3.2%	1.7%	2.1%
Households			
2030 Projection	2,217	17,728	38,990
2025 Estimate	2,175	17,454	38,266
2020 Census	2,097	16,906	36,984
Percent Change: 2025 to 2030	1.9%	1.6%	1.9%
Percent Change: 2020 to 2025	3.7%	3.2%	3.5%
Income			
2025 Est. Average Household Income	$74,992	$82,056	$97,373
2025 Est. Median Household Income	54,345	60,995	68,499
2025 Est. Civ. Employed Pop 16+ by Occupation			
Architecture/Engineering	1	186	436
Arts/Design/Entertainment/Sports/Media	12	394	737
Building/Grounds Cleaning/Maintenance	567	3,333	5,589
Business/Financial Operations	67	569	1,384
Community/Social Services	50	290	853
Computer/Mathematical	6	52	319
Construction/Extraction	295	2,785	4,888
Education/Training/Library	111	762	1,888
Farming/Fishing/Forestry	169	1,572	1,978
Food Preparation/Serving Related	307	1,921	4,208
Healthcare Practitioner/Technician	64	759	1,655
Healthcare Support	177	1,271	2,686
Installation/Maintenance/Repair	285	1,666	3,092
Legal	3	77	272
Life/Physical/Social Science	5	52	289
Management	325	1,978	4,340
Office/Administrative Support	488	2,570	5,204
Production	169	865	1,907
Protective Services	30	504	1,152
Sales/Related	478	3,603	6,562
Personal Care/Service	60	995	2,223
Transportation/Material Moving	400	2,906	5,031

Source: Environics Analytics

This source reports a population of 128,328 and 38,266 households within a five-mile radius of the subject site. The average household income within this radius is reported at $97,373, while the median is $68,499.

Unemployment Statistics

The following table presents historical unemployment rates for the proposed subject hotel's market area.

FIGURE 4-7 UNEMPLOYMENT STATISTICS

Year	County	State	U.S.
2015	6.7 %	6.2 %	5.3 %
2016	6.2	5.5	4.9
2017	5.4	4.8	4.4
2018	4.5	4.3	3.9
2019	4.3	4.1	3.7
2020	10.2	10.1	8.1
2021	7.4	7.3	5.4
2022	4.3	4.3	3.6
2023	4.8	4.7	3.6
2024	5.3	5.3	4.0
Recent Month - Jul			
2024	6.0 %	5.9 %	4.2 %
2025	6.5	6.1	4.2

Source: U.S. Bureau of Labor Statistics

Prior to the pandemic, U.S. unemployment levels were firmly below the 4.6% level recorded in 2006 and 2007, the peak years of the economic cycle prior to the Great Recession. The national unemployment rate during the months leading up to the COVID-19 pandemic were in the 3.5%–3.7% range, reflecting a trend of stability and strength. However, in April 2020, after the onset of the pandemic, unemployment rose to 14.7%, while employment dropped by 20.7 million. Steady gains in employment have generally been registered since that time; however, job gains have fluctuated in recent months. The national unemployment rate was 4.3% in August 2025; approximately 79,000 and 22,000 new jobs were registered in July and August, respectively, following a contraction of about 13,000 jobs in June. In August, gains in healthcare employment were partially offset by losses in federal government jobs and in mining, quarrying, and oil and gas (O&G) extraction employment.

Locally, the unemployment rate was 5.3% in 2024; for this same area in 2025, the most recent month's unemployment rate was registered at 6.5%, versus 6.0% for the same month in 2024. As illustrated in the table, unemployment declined in 2016, and this positive trend generally continued through 2019. Economic development officials noted that local employment remained strong within the tourism and healthcare sectors. However, unemployment data for 2020 illustrate a sharp increase given the effects of the COVID-19 pandemic and related global economic crisis, which resulted in temporary closures of area resorts and attractions. Unemployment declined in 2021 and 2022 as the economy began to rebound, and the most recent comparative period shows where the local market stands in 2025 relative to the same month of 2024. The increase in the year-to-date period can be attributed to the slowdown in retail trade due to the inflationary environment.

Major Business and Industry

Providing additional context for understanding the nature of the regional economy, the following table presents a list of the major employers in the proposed subject property's market.

FIGURE 4-8 MAJOR EMPLOYERS

Rank	Employer	Number of Employees
1	Palm Springs Unified School District	2,716
2	Desert Regional Medical Center	2,591
3	Agua Caliente Casino Palm Springs	621
4	City of Palm Springs	515
5	Walmart Supercenter	378
6	California Nursing and Rehabilitation Center	257
7	Margaritaville Resort Palm Springs	251
8	The Home Depot	222
9	Palm Springs Health Care and Rehabiliation Center	156
10	Lowe's Home Improvement	134

Source: City of Palm Springs, CAFR 2024

Tourism has been the cornerstone of the local economy for some time, and this sector has realized notable growth during the last decade, as a younger generation is discovering the Coachella Valley and as certain submarkets are being revitalized. The popularity of special events and festivals, such as the Coachella Valley Music & Arts Festival, has been intensifying over the years, as well. The $250-million, 10,000-seat Coachella Valley Arena in Palm Desert opened in December 2022; it hosts the Seattle Kraken's American Hockey League team, as well as entertainment

events throughout the year. In October 2021, Los Angeles-based concert promoter Goldenvoice assumed operation of the Empire Polo Club in Indio, which allowed it to continue to host festivals, such as the Coachella Valley Music Festival, and to open up the facility to a broader spectrum of special events and private functions. In nearby Rancho Mirage, a 600-acre Disney-themed residential community known as Cotino broke ground in 2022, and the first residents are expected to arrive in the fall of 2025. The Agua Caliente Cultural Plaza opened in 2023, featuring a 48,000-square-foot museum. Despite the COVID-19 pandemic, the Coachella Valley has emerged as one of the top drive-to destinations in California given its proximity to three metropolitan areas, the attractiveness of the sprawling resort layouts, and the abundance of outdoor activities. In 2024, according to the Greater Palm Springs Tourism Authority, 14.5 million visitors spent $7.4 billion in the Greater Palm Springs economy, with year-over-year increases of 1.0% and 1.1%, respectively. Visitor activity generated a total economic impact of $9.1 billion.

Convention Activity

A convention center serves as a gauge of visitation trends to a particular market. Convention centers also generate significant levels of demand for area hotels and serve as a focal point for community activity. Typically, hotels within the closest proximity to a convention center—up to three miles away—will benefit the most. Hotels serving as headquarters for an event benefit the most by way of premium rates and hosting related banquet events. During the largest of conventions, peripheral hotels may benefit from compression within the city as a whole.

The Palm Springs Convention Center (PSCC) contains a total of 261,000 square feet of new rentable space, which includes 120,000 square feet of exhibit space divisible into five sections, 21 breakout rooms of various sizes, and an 18,000-square-foot lobby with panoramic mountain views. Following a $32.3 million expansion, the Center reopened in the fall of 2005 as a new state-of-the-art facility, offering a twelve-bay loading dock, outdoor function space, and high-speed Internet access. The Center is proximate to downtown hotels and restaurants and is located only a few minutes' drive from the Palm Springs International Airport. The other major meeting venue in the Coachella Valley region is the Desert Springs JW Marriott Resort & Spa in Palm Desert. The resort features 210,000 square feet of indoor and outdoor meeting space, 833 guestrooms, and 51 suites. This facility is considered one of the area's premier meeting destinations.

PALM SPRINGS CONVENTION CENTER



The following table illustrates recent usage statistics for this facility.

FIGURE 4-9 CONVENTION CENTER STATISTICS

Year	Number of Conventions	Percent Change	Number of Delegates	Percent Change
2016	105	—	141,824	—
2017	110	4.8 %	130,592	(7.9) %
2018	102	(7.3)	120,437	(7.8)
2019	120	17.6	135,375	12.4
2020	37	(69.2)	61,059	(54.9)
2021	54	45.9	43,835	(28.2)
2022	88	63.0	129,794	196.1
2023	102	15.9	72,651	(44.0)

Source: Palm Springs Convention Center

The year-end 2024 statistics were not available at the time of this report.

Airport Traffic

Airport passenger counts are important indicators of lodging demand. Depending on the type of service provided by a particular airfield, a sizable percentage of arriving passengers may require hotel accommodations. Trends showing changes in passenger counts also reflect local business activity and the overall economic health of the area.

Palm Springs International Airport (PSP), a public airport offering commercial airline service in Riverside County, serves a population of over 500,000 permanent residents in the Coachella Valley. The airport covers 940 acres, featuring two runways and one single terminal. PSP is highly seasonal, in that many flights do not operate during the summer. Major commercial airlines provide nonstop service to/from cities such as Dallas, Denver, Los Angeles, Phoenix, San Francisco, and Seattle, among others. Due to the increased passenger traffic, the City plans to spend approximately $100 million on airport infrastructure projects, including a remodel of the ticketing hall and construction of a new baggage-handling system. The baggage system was added in 2021, and the airport recently completed a $5.7-million renovation and expansion of the baggage handling area in 2023. Additionally, expansions to TSA checkpoints and restrooms, as well as new carpeting throughout the airport, are planned as part of the Airport Master Plan approved in 2015, which is slated for completion by 2026. Other long-term plans include expansions or additions of terminals and a new rental-car center; however, timelines for these projects have yet to be set.

The following table illustrates recent operating statistics for the Palm Springs International Airport, which is the primary airport facility serving the proposed subject property's submarket.

FIGURE 4-10 AIRPORT STATISTICS - PALM SPRINGS INTERNATIONAL AIRPORT

Year	Passenger Traffic	Percent Change*	Percent Change**
2015	1,888,657	—	—
2016	1,998,206	5.8 %	5.8 %
2017	2,100,072	5.1	5.4
2018	2,327,018	10.8	7.2
2019	2,563,955	10.2	7.9
2020	1,252,094	(51.2)	(7.9)
2021	2,092,943	67.2	1.7
2022	2,981,844	42.5	6.7
2023	3,237,325	8.6	7.0
2024	3,230,914	(0.2)	6.1
Year-to-date, Jul			
2024	2,065,467	—	#DIV/0!
2025	2,155,547	4.4 %	—

*Annual average compounded percentage change from the previous year

**Annual average compounded percentage change from first year of data

Source: Palm Springs International Airport

This facility recorded 3,230,914 passengers in 2024. The change in passenger traffic between 2023 and 2024 was -0.2%. The average annual change during the period shown was 6.1%. Data from 2020 illustrate a significant decline given the impact of the COVID-19 pandemic and the travel restrictions that were implemented. However, the 2021 data show a substantial rebound in passenger traffic, a trend that continued through 2022 and 2023 when passenger volume surpassed the level achieved in 2019, driven largely by Palm Springs' popularity as a leisure destination. This positive trend continued in the year-to-date 2024 period, albeit at a slower pace.

Tourist Attractions

The subject market benefits from a variety of tourism and leisure attractions in the area. Tourism in the Coachella Valley is strongest from January through April, when the area enjoys cooler desert temperatures but a warmer climate than most other cities; the weather is especially welcoming to those visiting from the northern regions. The area is popular as a resort, golf, and tennis destination. Other leisure demand generators include Downtown Palm Springs, Fantasy Springs Resort Casino, and Agua Caliente Casino. Special events also play a role during key

weekends, with major events usually occurring in March or April. Over three weekends, Indio's Empire Polo Club hosts the world-renowned Coachella Valley Music & Arts Festival, as well as the Stagecoach Country Music Festival. Although the festivals were canceled in 2020 and 2021 due to COVID-19 precautions within Riverside County, the valley's events were back in full swing beginning in 2022. Other key events that take place in the Coachella Valley include the BNP Paribas Open tennis championships, which were held in March 2023, and Palm Springs International Film Festival, which was held in January 2023. Now that conditions are beginning to normalize, no major changes related to these attributes of the market are expected over the long term.

EMPIRE POLO CLUB



Conclusion

This section discussed a wide variety of economic indicators for the market area. The Coachella Valley market area has experienced an economic rebound following the impacts of the COVID-19 pandemic. As noted previously, the local economy is primarily led by the tourism industry and the popularity of special events in the region. Tourism rebounded in the summer of 2021 and strengthened through year-to-date 2025 given the area's location within driving distance of the Los Angeles and San Diego metropolitan areas. Thus, the near-term market outlook is overall

positive given the return of special events, the area's reputation as one of the nation's premier leisure destinations.

5. Hotel Supply and Demand Analysis

In the lodging industry, price varies directly, but not proportionately, with demand and inversely, but not proportionately, with supply. Supply is measured by the number of guestrooms available, and demand is measured by the number of rooms occupied; the net effect of supply and demand toward equilibrium results in a prevailing price, or average daily rate (ADR). The purpose of this section is to investigate current supply and demand trends, as indicated by the current competitive market, and to set forth a basis for the projection of future supply and demand growth.

Definition of Subject Hotel Market

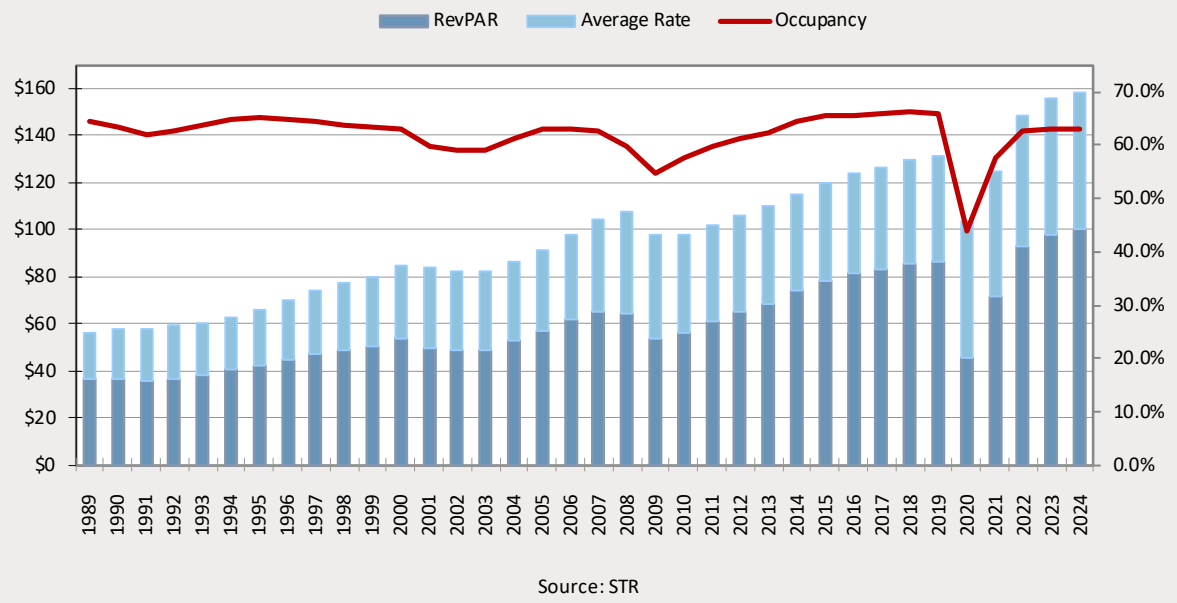
The subject site is located in the greater Coachella Valley lodging market. The proposed subject hotel is expected to compete with five hotels on a primary level based on their location in the subject market. We have considered an additional nine hotels located in comparable markets that were selected as benchmarks because they reflect similar characteristics as the proposed subject property.

National Trends Overview

A hotel's local lodging market is most directly affected by the supply and demand trends within the immediate area. However, individual markets are also influenced by conditions in the national lodging market. We have reviewed national lodging trends to provide a context for the forecast of the supply and demand for the proposed subject hotel's competitive set.

STR is an independent research firm that compiles data on the lodging industry, and this information is routinely used by typical hotel buyers. The following STR diagram presents annual hotel occupancy, ADR, and rooms revenue per available room (RevPAR) data since 1989. RevPAR is calculated by multiplying occupancy by ADR and provides an indication of how well rooms revenue is being maximized.

FIGURE 5-1 NATIONAL OCCUPANCY, ADR, AND REVPAR TRENDS



Source: STR

The preceding chart illustrates the impact of the recessions of the early 1990s, 2000s, the financial crisis of 2008/09, and the 2020/21 pandemic on the U.S. lodging industry. In each case, the downturn caused lodging demand to drop, resulting in an occupancy decline. The aggregate ADR also fell, as hoteliers used price as a marketing tool to attract demand and support occupancy levels. As occupancy recovered, ADR growth resumed, although the ADR recovery lagged somewhat behind occupancy levels, as price discounts contributed to the initial recovery of demand. Following the financial crisis of the Great Recession, occupancy fell by over eight points, and ADR declined by 5.9%, resulting in an 18.3% decrease in RevPAR. The market recovered steadily thereafter, with occupancy surpassing the 65.0% mark in 2015, and ADR also consistently growing, albeit at a decelerating pace.

FIGURE 5-2 NATIONAL OCCUPANCY AND ADR TRENDS

	Occupancy					Average Rate					RevPAR				
	2019	2021	2022	2023	2024	2019	2021	2022	2023	2024	2019	2021	2022	2023	2024
United States	66.0 %	57.5 %	62.6 %	63.0 %	63.0 %	$131.23	$124.96	$149.24	$156.00	$158.67	$86.64	$71.88	$93.39	$98.22	$99.94
Region															
New England	64.7 %	55.5 %	63.4 %	63.3 %	64.1 %	$161.08	$155.80	$179.29	$190.86	$195.48	$104.25	$86.54	$113.78	$120.86	$125.36
Middle Atlantic	69.0	55.2	62.6	65.0	66.3	166.27	144.08	179.82	192.15	200.48	114.81	79.56	112.48	124.96	132.92
South Atlantic	67.5	59.8	64.7	64.5	64.9	128.41	130.45	152.61	156.33	157.87	86.68	77.95	98.70	100.89	102.51
E. North Central	61.1	52.3	57.2	57.5	57.9	112.64	105.25	123.33	129.12	133.91	68.82	55.09	70.52	74.26	77.48
E. South Central	62.4	59.5	61.0	61.0	59.1	103.58	104.70	119.73	126.05	127.25	64.61	62.30	73.04	76.88	75.17
W. North Central	58.3	51.0	55.3	56.1	55.7	99.28	97.34	109.00	115.04	118.30	57.88	49.68	60.27	64.51	65.89
W. South Central	62.6	58.1	59.9	60.2	60.2	101.84	95.75	112.13	116.19	119.69	63.77	55.64	67.20	69.92	72.09
Mountain	66.9	59.3	66.3	67.2	66.1	121.89	125.74	153.87	166.61	169.15	81.54	74.59	101.94	111.97	111.85
Pacific	73.6	60.2	66.9	66.6	66.7	171.40	157.79	190.58	196.22	194.67	126.16	95.00	127.42	130.67	129.89
Class															
Luxury	70.9 %	52.5 %	65.3 %	66.0 %	66.7 %	$304.11	$322.00	$376.48	$384.66	$387.74	$215.73	$168.95	$245.93	$153.96	$258.56
Upper-Upscale	72.6	50.0	63.4	67.1	67.6	188.24	175.05	213.96	221.11	223.88	136.67	87.49	135.70	148.29	151.46
Upscale	71.5	59.3	66.8	68.7	69.1	143.60	132.34	156.30	163.81	166.20	102.68	78.42	104.39	112.53	114.80
Upper-Midscale	67.5	61.2	65.7	65.8	65.7	115.91	114.14	128.53	133.40	135.01	78.20	69.83	84.50	87.73	88.68
Midscale	59.5	56.8	59.7	58.7	58.4	95.82	98.83	100.19	101.41	101.85	57.03	56.10	59.83	59.57	59.46
Economy	59.4	58.7	56.4	54.3	53.5	75.50	76.14	77.65	79.32	78.90	44.83	44.72	43.80	43.04	42.24
Location															
Urban	73.2 %	51.8 %	63.3 %	66.4 %	67.5 %	$183.20	$152.81	$196.47	$207.36	$213.04	$134.12	$79.12	$124.44	$137.66	$143.84
Suburban	66.7	59.9	63.8	63.4	63.6	111.26	104.93	126.13	126.32	127.97	74.24	62.90	80.45	80.06	81.34
Airport	73.7	60.3	67.9	69.5	69.4	119.22	104.82	126.57	134.50	135.87	87.85	63.18	85.91	93.43	94.36
Interstate	57.9	57.8	58.5	57.7	57.1	87.86	92.22	100.90	106.58	108.69	50.85	53.31	59.04	61.54	62.01
Resort	70.0	57.7	66.8	68.6	67.8	182.74	209.77	236.76	238.86	239.05	127.85	121.06	158.20	163.82	162.10
Small Town	57.8	56.7	57.5	55.8	55.4	107.26	116.96	124.72	133.63	136.86	61.98	66.34	71.72	74.63	75.86
Chain Scale															
Luxury	73.8 %	48.0 %	63.1 %	65.8 %	67.7 %	$343.02	$383.48	$435.46	$427.97	$426.43	$253.17	$184.12	$274.64	$281.53	$288.49
Upper-Upscale	73.9	48.7	63.9	67.7	68.5	189.25	176.66	215.96	223.19	226.90	139.80	86.11	138.05	151.12	155.53
Upscale	72.6	59.6	67.4	69.2	69.5	142.38	128.62	155.28	161.85	164.20	103.32	76.68	104.58	112.00	114.20
Upper-Midscale	67.5	61.6	65.8	66.1	66.0	112.80	111.14	127.56	132.16	133.95	76.14	68.47	83.93	87.34	88.44
Midscale	58.1	56.5	60.1	59.0	58.7	86.61	89.48	95.19	95.94	96.69	50.30	50.59	57.18	56.65	56.77
Economy	58.7	59.7	57.2	55.0	54.4	63.70	66.88	72.24	72.69	72.12	37.36	39.90	41.34	40.00	39.26
Independents	63.5	56.9	60.0	59.2	58.6	133.08	137.44	155.20	162.24	163.39	84.44	78.24	93.05	96.00	95.81

Source: Year-End STR Lodging Reviews

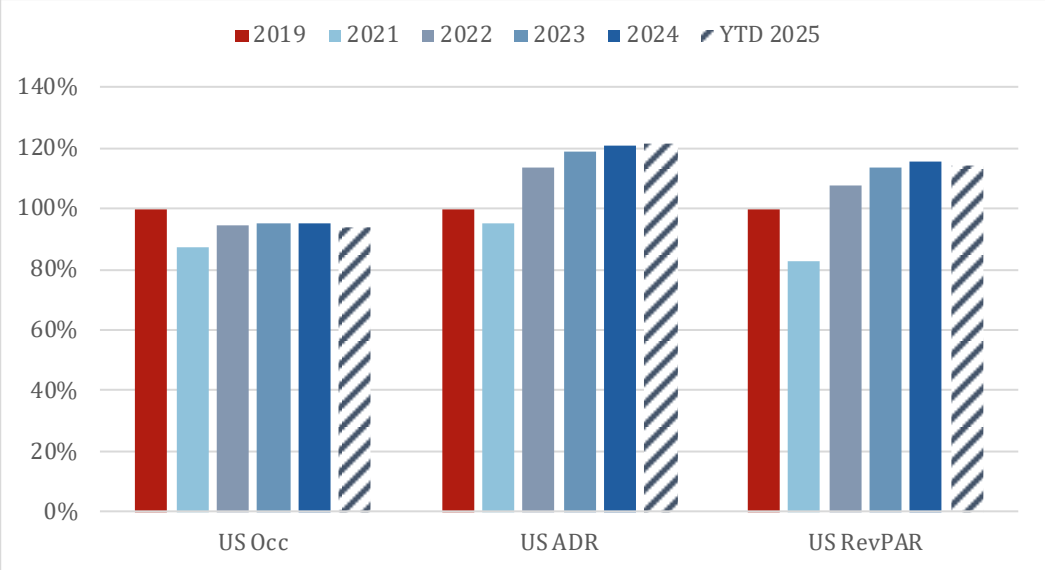
FIGURE 5-3 RECENT NATIONAL OCCUPANCY AND ADR TRENDS

	Occupancy - YTD September			Average Rate - YTD September			RevPAR - YTD September			Percent Change	
	2024	2025	% Change	2024	2025	% Change	2024	2025	% Change	Rms. Avail.	Rms. Sold
United States	64.0 %	63.4 %	(0.9) %	$159.07	$160.48	0.9 %	$101.84	$101.79	0.0 %	0.7 %	(0.2) %
Region											
New England	65.2 %	63.9 %	(1.9) %	$198.12	$199.33	0.6 %	$129.11	$127.44	(1.3) %	0.5 %	(1.4) %
Middle Atlantic	66.5	66.6	0.2	191.80	198.08	3.3	127.61	131.99	3.4	0.6	0.7
South Atlantic	65.2	65.0	(0.4)	158.91	162.08	2.0	103.62	105.28	1.6	0.8	0.4
E. North Central	59.2	59.9	1.2	134.71	135.90	0.9	79.73	81.38	2.1	0.8	2.0
E. South Central	60.2	59.4	(1.3)	127.57	126.54	(0.8)	76.75	75.14	(2.1)	2.2	0.9
W. North Central	57.1	57.1	0.0	119.53	120.87	1.1	68.31	69.06	1.1	0.1	0.1
W. South Central	61.2	59.4	(3.0)	119.13	120.01	0.7	72.93	71.24	(2.3)	0.8	2.2
Mountain	68.3	66.0	(3.4)	172.31	168.36	(2.3)	117.70	111.04	(5.7)	0.4	(3.0)
Pacific	68.1	68.1	0.0	197.14	198.45	0.7	134.29	135.23	0.7	0.4	0.5
Class											
Luxury	68.1 %	68.1 %	0.0 %	$383.15	$394.34	2.9 %	$261.07	$268.57	2.9 %	2.5 %	2.5 %
Upper-Upscale	68.7	68.1	(0.7)	223.07	225.52	1.1	153.15	153.68	0.3	0.7	(0.1)
Upscale	70.1	69.6	(0.8)	166.79	166.00	(0.5)	116.95	115.47	(1.3)	1.3	0.4
Upper-Midscale	66.9	66.1	(1.2)	136.14	135.84	(0.2)	91.02	89.74	(1.4)	1.7	0.5
Midscale	59.4	58.8	(0.9)	102.46	101.36	(1.1)	60.87	59.64	(2.0)	0.2	(0.7)
Economy	54.3	53.5	(1.6)	79.53	78.36	(1.5)	43.22	41.90	(3.1)	(0.9)	(2.5)
Location											
Urban	68.3 %	67.9 %	(0.5) %	$208.74	$212.74	1.9 %	$142.53	$144.52	1.4 %	1.2 %	0.7 %
Suburban	64.4	63.8	(1.0)	128.79	129.21	0.3	83.00	82.43	(0.7)	0.9	(0.2)
Airport	70.5	69.5	(1.4)	136.88	136.34	(0.4)	96.51	94.79	(1.8)	0.5	(0.9)
Interstate	58.0	57.8	(0.4)	109.24	110.02	0.7	63.40	63.58	0.3	0.8	0.4
Resort	69.4	68.0	(2.0)	241.27	243.57	1.0	167.48	165.68	(1.1)	(0.1)	(2.1)
Small Town	56.7	56.4	(0.4)	139.51	141.45	1.4	79.04	79.80	1.0	0.6	0.1
Chain Scale											
Luxury	68.3 %	68.3 %	0.0 %	$415.04	$435.41	4.9 %	$283.47	$297.26	4.9 %	4.7 %	4.7 %
Upper-Upscale	69.6	69.2	(0.6)	226.21	228.62	1.1	157.50	158.30	0.5	1.9	1.3
Upscale	70.6	70.0	(0.8)	164.52	164.51	0.0	116.10	115.11	(0.8)	1.4	0.6
Upper-Midscale	67.2	66.5	(1.1)	135.03	135.09	0.1	90.77	89.81	(1.0)	1.7	0.6
Midscale	59.7	59.4	(0.6)	97.62	97.39	(0.2)	58.33	57.85	(0.8)	2.6	2.0
Economy	55.1	54.4	(1.3)	72.49	71.69	(1.1)	39.96	39.03	(2.3)	(0.7)	(2.0)
Independents	59.8	58.9	(1.5)	165.05	165.41	0.2	98.70	97.45	(1.3)	(1.4)	(2.8)

Source: STR - September 2025 Lodging Review

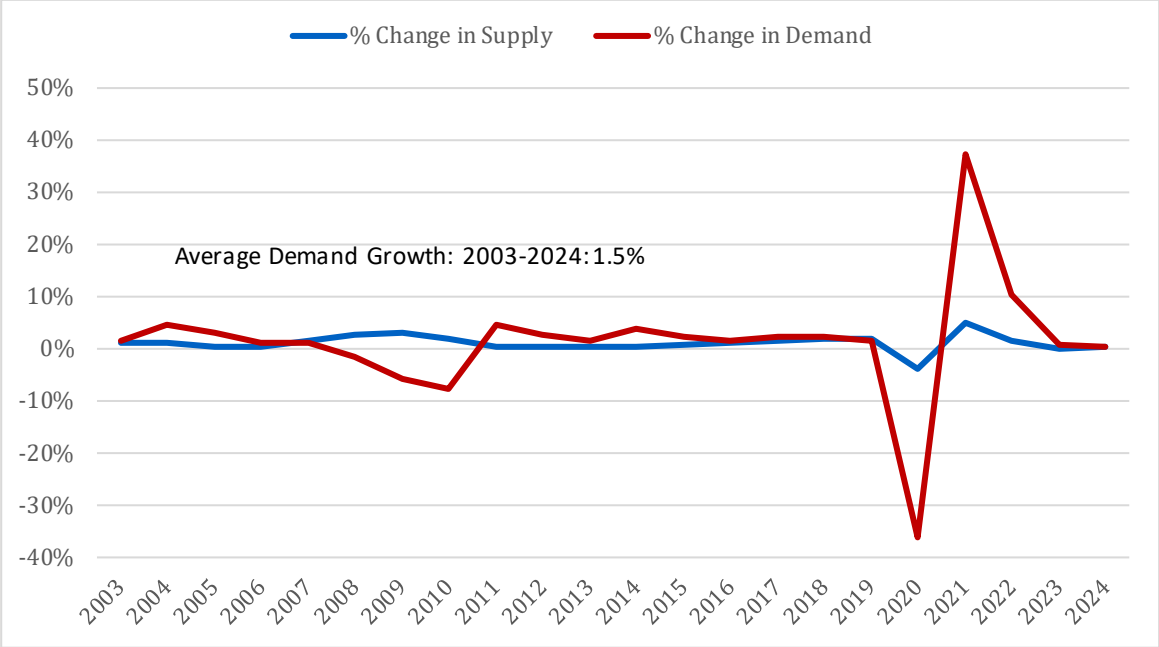
The following graph illustrates the performance of the U.S. lodging industry from 2019 through year-to-date 2025, expressed as a percentage of 2019 levels of occupancy, ADR and RevPAR, demonstrating the pace and pattern of the recovery.

FIGURE 5-4 NATIONAL PERFORMANCE COMPARED TO 2019 LEVELS



A lodging market's performance is influenced by changes in supply and demand levels. The following graph illustrates the percentage change in these two metrics for the U.S. lodging industry as a whole since 2003, as reported by STR.

FIGURE 5-5 HISTORICAL CHANGES IN SUPPLY AND DEMAND – U.S. LODGING INDUSTRY



Source: STR

Excluding fluctuations due to the Great Recession in 2008/09 and the pandemic from 2020 to 2022, supply growth ranged between 0.4% to 2.0%, averaging 1.1% in these years. The pace of supply growth slowed significantly in the two to three years following the downturns in 2001/02, 2008/09, and 2020/21, reflecting the decline in new project-starts during these periods. As the market moved out of these cycles, supply growth accelerated. The impact of the pandemic caused a decline in supply, as hotels temporarily suspended operations or closed, in many cases for conversion to alternate use. The reopening of the temporarily closed properties caused an artificial spike in supply growth. Supply growth in 2023 through early 2025 reflects the high cost of construction, as well as the limited availability of financing for new construction. Thus, the pace of supply growth is expected to remain muted through 2026.

The changes in demand, as measured by the number of occupied rooms, display similar patterns. The years following the noted recessionary periods reflect relatively strong growth, as the market recovered from these downturns. Excluding the years of downturn and recovery, demand growth ranged from 1.0% to 4.6%.

Historical Supply and Demand Data

STR is an independent research firm that compiles and publishes data on the lodging industry, routinely used by typical hotel buyers. HVS has ordered and analyzed an STR Trend Report of historical supply and demand data for a group of hotels considered applicable to this analysis for the proposed subject hotels. This information is presented in the following table, along with the market-wide occupancy, ADR, and RevPAR.

In response to the travel restrictions and the decline in demand associated with the COVID-19 pandemic, numerous hotels in markets across the nation temporarily suspended operations. During these suspensions, hotels were typically closed to the public, with the majority of staff furloughed, although key management and maintenance staff were retained to preserve the property and prepare for reopening. We note that ten hotels In the defined competitive set temporarily suspended operations because of the COVID-19 pandemic; however, all have since reopened. It is important to note that we have adjusted STR data to reflect the total available rooms in the market and true occupancy, regardless of suspended operations at competitive hotels.

The second chart presents the monthly data for 2020 through the year-to-date 2025 period, illustrating the fluctuations in occupancy and ADR. The impact of the pandemic and the timing and pace of the subsequent recovery are reflected in the data.

FIGURE 5-6 HISTORICAL SUPPLY AND DEMAND TRENDS

Year	Average Daily Room Count	Available Room Nights	Change	Occupied Room Nights	Change	Occupancy	Average Rate	Change	RevPAR	Change
2017	3,633	1,325,970	—	835,658	—	63.0 %	$335.91	—	$211.70	—
2018	3,726	1,359,856	2.6 %	830,218	(0.7) %	61.1	355.23	5.8 %	216.87	2.4 %
2019	3,794	1,384,878	1.8	847,478	2.1	61.2	363.01	2.2	222.15	2.4
2020	2,587	944,433	(31.8)	359,670	(57.6)	38.1	431.04	18.7	164.15	(26.1)
2021	3,867	1,411,531	49.5	610,580	69.8	43.3	496.33	15.1	214.69	30.8
2022	3,964	1,446,682	2.5	824,261	35.0	57.0	535.83	8.0	305.29	42.2
2023	3,987	1,455,177	0.6	846,856	2.7	58.2	529.02	(1.3)	307.87	0.8
2024	3,987	1,455,087	(0.0)	821,104	(3.0)	56.4	540.38	2.1	304.94	(1.0)
Year-to-Date Through May										
2024	3,965	598,659	—	365,560	—	61.1	$602.27	—	$367.76	—
2025	3,927	593,048	(0.9) %	414,208	13.3 %	69.8	606.36	0.7 %	423.51	15.2 %
Average Annual Compounded Change:										
2017 – 2019			2.2 %		0.7 %			4.0 %		2.4 %
2017 – 2024			1.3		(0.3)			7.0		5.4

Hotels Included in Sample	Class	Competitive Status	Number of Rooms	Year Affiliated	Year Opened
Hotel Jerome, Auberge Resorts Collection	Luxury Class	*Secondary*	99	Dec 2012	Jan 1900
La Quinta Resort & Club, Curio Collection by Hilton	Upper Upscale Class	*Primary*	783	Nov 2021	Jun 1926
Parker Palm Springs	Luxury Class	*Primary*	144	Feb 2021	Jun 1959
Grand Hyatt Indian Wells Resort & Spa	Luxury Class	*Primary*	531	Sep 2024	Dec 1986
JW Marriott Desert Springs Resort & Spa	Luxury Class	*Primary*	884	Sep 2020	Feb 1987
The Ritz-Carlton Rancho Mirage	Luxury Class	*Primary*	252	Aug 2020	Mar 1988
The Little Nell	Luxury Class	*Secondary*	92	Jun 2020	Jan 1990
Goldener Hirsch, Auberge Resorts Collection	Luxury Class	*Secondary*	66	Dec 2020	Dec 1990
The St. Regis Aspen Resort	Luxury Class	*Secondary*	179	Jun 2020	Oct 1992
Carneros Resort and Spa, an SLH Hotel	Luxury Class	*Secondary*	100	Nov 2003	Nov 2003
The Meritage Resort and Spa	Luxury Class	*Secondary*	467	Jul 2006	Jul 2006
Madeline Hotel & Residences, Auberge Resorts Collection	Luxury Class	*Secondary*	137	Jun 2020	Feb 2009
Andaz Napa	Luxury Class	*Secondary*	141	Jun 2020	Jul 2009
Stanly Ranch, Auberge Resorts Collection, Napa Valley	Luxury Class	*Secondary*	135	Apr 2022	Apr 2022
		Total	**4,010**		

Source: STR

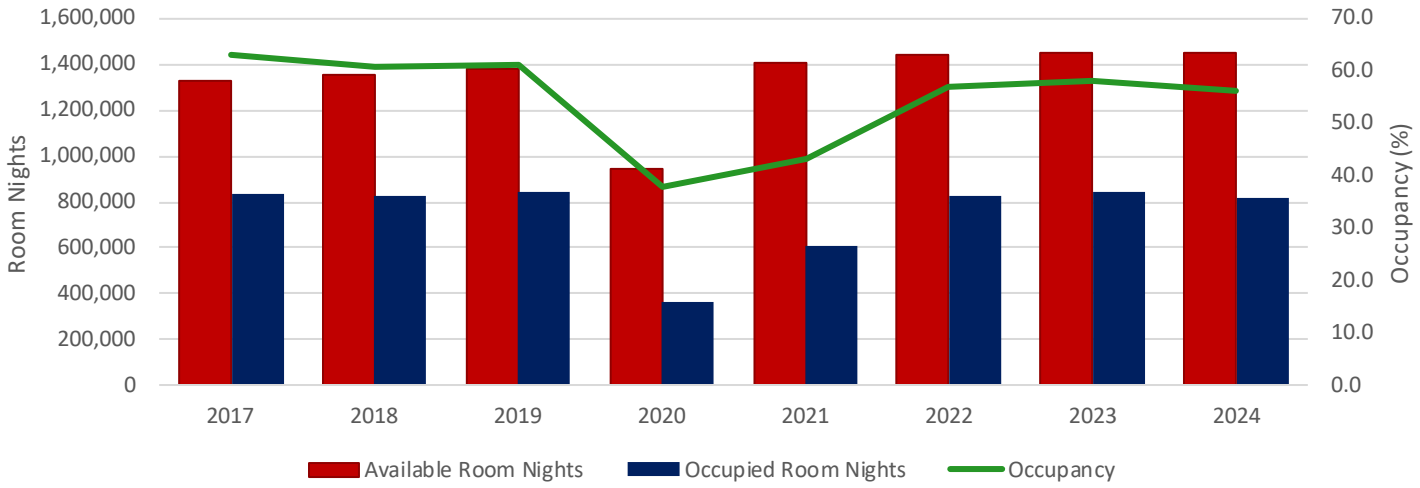
FIGURE 5-7 HISTORICAL SUPPLY AND DEMAND TRENDS (MONTHLY)

	2020		2021		2022		2023		2024		2025	
Month	**Occupancy**	**ADR**	**Occupancy**	**ADR**	**Occupancy**	**ADR**	**Occupancy**	**ADR**	**Occupancy**	**ADR**	**Occupancy**	**ADR**
January	65.0 %	$391.75	15.0 %	$504.84	44.3 %	$605.28	57.9 %	$573.24	53.7 %	$583.85	65.1 %	$599.47
February	73.8	434.77	32.5	467.82	66.2	638.69	70.9	619.57	63.4	663.99	71.7	653.20
March	27.2	424.67	45.2	536.29	77.0	648.76	74.5	668.49	70.0	712.67	75.6	704.64
April	0.0	N/A	45.7	435.65	66.1	575.39	64.1	570.80	62.0	566.36	69.7	579.49
May	0.0	N/A	39.2	426.01	56.6	452.44	57.0	441.52	56.4	454.19	66.9	470.33
June	21.6	496.53	45.3	444.40	54.4	456.41	61.2	435.48	54.7	460.20	—	—
July	42.4	642.70	49.5	534.52	53.4	509.31	52.0	499.83	50.6	505.43	—	—
August	35.3	527.30	41.9	520.19	46.0	486.47	46.3	477.57	48.2	522.17	—	—
September	29.4	410.28	46.1	510.97	56.9	484.38	52.6	483.94	50.7	477.06	—	—
October	32.6	352.53	56.2	473.27	56.0	457.97	58.7	454.27	58.2	438.11	—	—
November	28.7	368.30	52.9	435.72	55.9	425.17	53.4	413.16	55.0	411.91	—	—
December	18.3	553.27	48.3	649.58	52.6	645.89	50.9	637.04	54.9	623.25	—	—
Annual Averages	**38.1 %**	**$431.04**	**43.3 %**	**$496.33**	**57.0 %**	**$535.83**	**58.2 %**	**$529.02**	**56.4 %**	**$540.38**	—	—
Year-to-Date	**54.7 %**	**$415.44**	**35.7 %**	**$471.11**	**61.9 %**	**$587.63**	**64.8 %**	**$581.45**	**61.1 %**	**$602.27**	**69.8 %**	**$606.36**

Change from	2020		2021		2022		2023		2024		2025	
Prior Year	**Occupancy**	**ADR**	**Occupancy**	**ADR**	**Occupancy**	**ADR**	**Occupancy**	**ADR**	**Occupancy**	**ADR**	**Occupancy**	**ADR**
January	*4.1 pts*	*-3.9 %*	*-50.0 pts*	*28.9 %*	*29.3 pts*	*19.9 %*	*13.6 pts*	*-5.3 %*	*-4.2 pts*	*1.9 %*	*11.4 pts*	*2.7 %*
February	*4.6*	*5.2*	*-41.3*	*7.6*	*33.7*	*36.5*	*4.6*	*-3.0*	*-7.5*	*7.2*	*8.4*	*-1.6*
March	*-54.0*	*-6.0*	*18.0*	*26.3*	*31.8*	*21.0*	*-2.5*	*3.0*	*-4.5*	*6.6*	*5.7*	*-1.1*
April	*-66.9*	—	*45.7*	—	*20.4*	*32.1*	*-2.0*	*-0.8*	*-2.1*	*-0.8*	*7.7*	*2.3*
May	*-64.2*	—	*39.2*	—	*17.4*	*6.2*	*0.4*	*-2.4*	*-0.5*	*2.9*	*10.5*	*3.6*
June	*-37.0*	*62.6*	*23.7*	*-10.5*	*9.1*	*2.7*	*6.8*	*-4.6*	*-6.5*	*5.7*	—	—
July	*-14.7*	*93.2*	*7.2*	*-16.8*	*3.8*	*-4.7*	*-1.3*	*-1.9*	*-1.4*	*1.1*	—	—
August	*-15.4*	*54.2*	*6.6*	*-1.3*	*4.1*	*-6.5*	*0.3*	*-1.8*	*1.9*	*9.3*	—	—
September	*-25.9*	*30.4*	*16.6*	*24.5*	*10.8*	*-5.2*	*-4.3*	*-0.1*	*-1.9*	*-1.4*	—	—
October	*-26.4*	*13.9*	*23.5*	*34.2*	*-0.2*	*-3.2*	*2.7*	*-0.8*	*-0.5*	*-3.6*	—	—
November	*-27.6*	*22.7*	*24.2*	*18.3*	*3.0*	*-2.4*	*-2.4*	*-2.8*	*1.5*	*-0.3*	—	—
December	*-37.3*	*32.2*	*30.0*	*17.4*	*4.3*	*-0.6*	*-1.7*	*-1.4*	*4.0*	*-2.2*	—	—
Annual Change	***-23.1 pts***	***18.7 %***	***5.2 pts***	***15.1 %***	***13.7 pts***	***8.0 %***	***1.2 pts***	***-1.3 %***	***-1.8 pts***	***2.1 %***	—	—
Year-to-Date	***-13.8***	***4.0 %***	***-19.0***	***13.4 %***	***26.3***	***24.7***	***2.9***	***-1.1***	***-3.7***	***3.6***	***8.8 pts***	***0.7 %***

Source: STR

FIGURE 5-8 HISTORICAL SUPPLY AND DEMAND TRENDS (STR)



It is important to note some limitations of the STR data. Hotels are occasionally added to or removed from the sample; furthermore, not every property reports data in a consistent and timely manner. These factors can influence the overall quality of the information by skewing the results, and these inconsistencies may also cause the STR data to differ from the results of our competitive survey. Nonetheless, STR data provide the best indication of aggregate growth or decline in existing supply and demand; thus, these trends have been considered in our analysis. Opening dates, as available, are presented for each reporting hotel on the previous table.

The STR data for the competitive set reflect a market-wide occupancy level of 2024 in 56.4%, which compares to 58.2% for 2023. The STR data for the competitive set reflect a market-wide ADR level of $540.38 in 2024, which compares to $529.02 for 2023. These occupancy and ADR trends resulted in a RevPAR level of $304.94 in 2024.

The following table illustrates the monthly occupancy, ADR, and RevPAR for the competitive set measured as a percentage of 2019 levels.

FIGURE 5-9 OCCUPANCY, ADR, AND REVPAR AS A PERCENTAGE OF 2019 LEVELS

	2022			2023			2024			2025		
	Occupancy	ADR	RevPAR	Occupancy	ADR	RevPAR	Occupancy	ADR	RevPAR	Occupancy	ADR	RevPAR
January	*72.7 %*	*148.5 %*	*108.0 %*	*95.1 %*	*140.6 %*	*133.7 %*	*88.3 %*	*143.2 %*	*126.4 %*	*107.0 %*	*147.1 %*	*157.3 %*
February	*95.7*	*154.6*	*147.9*	*102.4*	*150.0*	*153.5*	*91.5*	*160.7*	*147.1*	*103.6*	*158.1*	*163.8*
March	*94.8*	*143.6*	*136.2*	*91.8*	*148.0*	*135.8*	*86.2*	*157.8*	*135.9*	*93.2*	*156.0*	*145.3*
April	*98.8*	*143.0*	*141.2*	*95.8*	*141.8*	*135.8*	*92.6*	*140.7*	*130.4*	*104.1*	*144.0*	*149.9*
May	*88.2*	*147.2*	*129.8*	*88.8*	*143.7*	*127.6*	*87.9*	*147.8*	*129.9*	*104.3*	*153.0*	*159.6*
June	*92.9*	*149.4*	*138.8*	*104.4*	*142.6*	*148.9*	*93.3*	*150.7*	*140.6*	—	—	—
July	*93.6*	*153.1*	*143.2*	*91.2*	*150.2*	*137.0*	*88.8*	*151.9*	*134.9*	—	—	—
August	*90.7*	*142.3*	*129.0*	*91.2*	*139.7*	*127.4*	*95.0*	*152.7*	*145.1*	—	—	—
September	*102.8*	*153.9*	*158.3*	*95.0*	*153.8*	*146.1*	*91.7*	*151.6*	*139.0*	—	—	—
October	*94.9*	*147.9*	*140.4*	*99.4*	*146.7*	*145.9*	*98.7*	*141.5*	*139.6*	—	—	—
November	*99.4*	*141.7*	*140.8*	*95.0*	*137.7*	*130.8*	*97.8*	*137.2*	*134.2*	—	—	—
December	*94.5*	*154.3*	*145.8*	*91.5*	*152.2*	*139.2*	*98.7*	*148.9*	*147.0*	—	—	—
Annual Averages	***93.1 %***	***147.6 %***	***137.4 %***	***95.1 %***	***145.7 %***	***138.6 %***	***92.2 %***	***148.9 %***	***137.3 %***	—	—	—
Year-to-Date	***90.4***	***147.1***	***133.0***	***94.6***	***145.5***	***137.7***	***89.1***	***150.7***	***134.4***	***102.0 %***	***151.8 %***	***154.8 %***

Source: STR

Seasonality

The market's seasonal trends are presented in the following table.

FIGURE 5-10 SEASONALITY

	2018	2019	2020	2021	2022	2023	2024	2025
High Season - February, March, April								
Occupancy	75.7 %	72.6 %	49.3 %	41.4 %	69.9 %	69.8 %	65.2 %	72.4 %
Average Rate	$415.89	$424.88	$431.84	$481.91	$621.87	$622.66	$651.52	$648.01
RevPAR	315.04	308.54	212.99	199.44	434.67	434.92	424.96	469.15
Shoulder Season - January, May, October, November, December								
Occupancy	57.8 %	59.2 %	36.1 %	42.4 %	53.1 %	55.6 %	55.7 %	— %
Average Rate	$347.47	$348.49	$399.36	$498.46	$512.15	$503.25	$501.68	—
RevPAR	200.89	206.23	144.26	211.34	271.88	279.77	279.21	—
Low Season - June, July, August, September								
Occupancy	54.7 %	55.4 %	31.7 %	45.7 %	52.6 %	53.0 %	51.0 %	— %
Average Rate	$306.13	$323.33	$497.91	$503.38	$484.16	$472.73	$490.60	—
RevPAR	167.51	179.11	157.75	230.00	254.76	250.31	250.39	—

Source: STR

The illustrated occupancy and ADR patterns reflect important seasonal characteristics. We have reviewed these trends in developing our forthcoming forecast of market-wide demand and average rate. The peak season for Coachella Valley typically extends from late January through April. In particular, the strongest months are March and April; during that time, the number of special events throughout the Coachella Valley usually spikes, drawing thousands of travelers to

the area. The months of May and the fall months represent shoulder periods but still attract significant levels of visitation given the favorable climate. The hot summer months and the cooler December through early January period are considered the area's off-season. During the off-season, weekend occupancies can still remain high; however, as hotel operators typically offer significant rate discounts and group incentives to attract travelers. We note that seasonality dynamics in this market have somewhat shifted in the wake of the COVID-19 pandemic as increased lifestyle flexibility, such as the ability to work from home, has resulted in demand during non-traditional periods.

Patterns of Demand

A review of the trends in occupancy and ADR by day of the week provides some insight into the impact that the current economic conditions have had on the competitive lodging market. The data, as provided by STR, are illustrated in the following tables.

FIGURE 5-11 OCCUPANCY BY DAY OF WEEK (TRAILING 12 MONTHS)

Month	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total Month
Jun - 24	42.3 %	45.9 %	46.2 %	48.2 %	55.8 %	69.0 %	73.7 %	54.7 %
Jul - 24	40.6	38.5	40.4	48.2	58.9	65.7	68.4	50.6
Aug - 24	37.9	37.1	37.5	36.6	46.0	62.8	70.7	48.2
Sep - 24	48.3	43.7	40.8	46.6	52.6	60.4	65.4	50.7
Oct - 24	47.5	56.3	58.0	53.6	54.2	67.4	72.6	58.2
Nov - 24	43.5	45.5	49.1	55.8	57.6	64.4	64.3	55.0
Dec - 24	46.8	50.1	53.5	49.0	54.3	61.9	72.6	54.9
Jan - 25	56.1	59.7	61.5	64.8	65.1	72.3	74.9	65.1
Feb - 25	62.2	69.0	75.2	70.9	70.4	75.5	79.0	71.7
Mar - 25	63.9	68.2	74.1	76.1	80.4	83.9	85.1	75.6
Apr - 25	64.3	60.2	65.0	68.1	72.2	78.4	81.1	69.7
May - 25	57.7	56.6	66.2	66.4	64.5	72.0	80.9	66.9
Average	**50.8 %**	**52.4 %**	**55.4 %**	**57.1 %**	**60.7 %**	**69.3 %**	**74.1 %**	**60.0 %**

Source: STR

FIGURE 5-12 ADR BY DAY OF WEEK (TRAILING 12 MONTHS)

Month	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total Month
Jun - 24	$463.04	$438.69	$431.79	$426.36	$448.11	$496.37	$481.45	$460.20
Jul - 24	478.73	487.33	483.00	504.35	510.02	539.73	514.65	505.43
Aug - 24	497.04	493.19	503.34	490.04	560.14	536.23	529.24	522.17
Sep - 24	470.97	438.93	446.98	439.30	481.81	521.55	515.28	477.06
Oct - 24	417.56	395.70	380.07	398.49	452.02	510.25	498.96	438.11
Nov - 24	369.01	333.43	354.80	393.73	442.86	472.67	444.07	411.91
Dec - 24	660.96	654.88	645.25	519.24	583.25	645.45	626.51	623.25
Jan - 25	581.36	509.40	510.67	610.65	632.52	653.86	644.04	599.47
Feb - 25	691.61	598.95	553.58	572.21	661.11	753.73	734.66	653.20
Mar - 25	673.44	641.43	660.74	672.62	716.81	778.51	764.73	704.64
Apr - 25	656.08	452.11	442.30	449.69	556.71	756.80	735.96	579.49
May - 25	495.16	399.27	411.59	426.51	447.09	515.30	541.66	470.33
Average	**$553.79**	**$501.00**	**$492.31**	**$500.40**	**$548.65**	**$602.91**	**$590.51**	**$545.79**

Source: STR

FIGURE 5-13 OCCUPANCY AND ADR BY DAY OF WEEK (TRAILING 12 MONTHS)

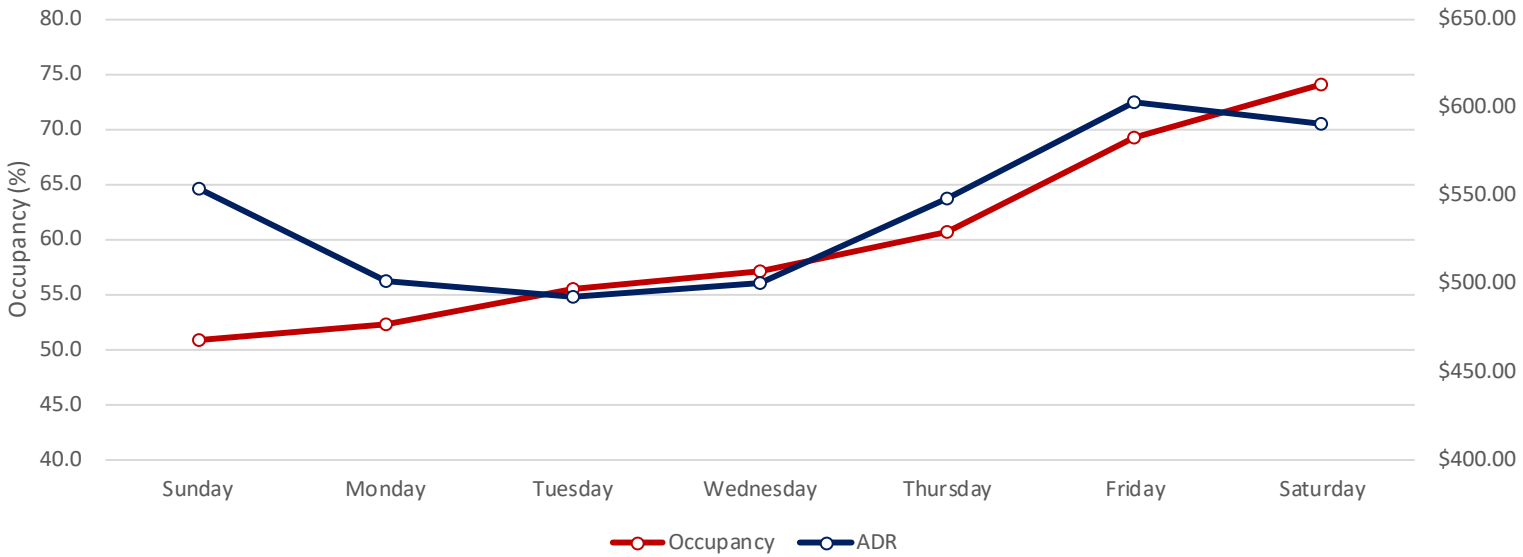


FIGURE 5-14 OCCUPANCY, ADR, AND REVPAR BY DAY OF WEEK (MULTIPLE YEARS)

Occupancy (%)	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total Year
Jun 22 - May 23	49.3 %	50.2 %	54.5 %	56.5 %	59.2 %	66.7 %	71.0 %	58.2 %
Jun 23 - May 24	48.7	47.5	51.8	53.9	57.3	65.9	71.3	56.6
Jun 24 - May 25	50.8	52.4	55.4	57.1	60.7	69.3	74.1	60.0
Change (Occupancy Points)								
FY 23 - FY 24	(0.7)	(2.7)	(2.7)	(2.6)	(1.9)	(0.8)	0.3	(1.5)
FY 24 - FY 25	2.2	4.9	3.6	3.2	3.4	3.4	2.8	3.4

ADR ($)	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total Year
Jun 22 - May 23	$548.39	$484.03	$469.28	$479.71	$534.91	$598.45	$594.43	$534.48
Jun 23 - May 24	554.76	500.02	479.28	493.32	528.64	587.11	582.54	536.73
Jun 24 - May 25	553.79	501.00	492.31	500.40	548.65	602.91	590.51	545.79
Change (Dollars)								
FY 23 - FY 24	$6.36	$15.99	$10.01	$13.61	($6.27)	($11.34)	($11.88)	$2.25
FY 24 - FY 25	(0.97)	0.98	13.03	7.08	20.01	15.80	7.96	9.07
Change (Percent)								
FY 23 - FY 24	1.2 %	3.3 %	2.1 %	2.8 %	(1.2) %	(1.9) %	(2.0) %	0.4 %
FY 24 - FY 25	(0.2)	0.2	2.7	1.4	3.8	2.7	1.4	1.7

RevPAR ($)	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total Year
Jun 22 - May 23	$270.62	$242.88	$255.96	$270.91	$316.46	$399.36	$421.78	$311.04
Jun 23 - May 24	270.06	237.28	248.39	266.01	302.71	387.06	415.11	304.04
Jun 24 - May 25	281.53	262.30	272.92	285.61	332.98	417.98	437.44	327.50
Change (Dollars)								
FY 23 - FY 24	($0.56)	($5.60)	($7.57)	($4.90)	($13.75)	($12.30)	($6.67)	($7.00)
FY 24 - FY 25	11.48	25.02	24.53	19.60	30.27	30.92	22.33	23.46
Change (Percent)								
FY 23 - FY 24	(0.2) %	(2.3) %	(3.0) %	(1.8) %	(4.3) %	(3.1) %	(1.6) %	(2.3) %
FY 24 - FY 25	4.2	10.5	9.9	7.4	10.0	8.0	5.4	7.7

Source: STR

Demand typically spikes in the Coachella Valley market on Friday and Saturday nights, primarily due to the leisure focus in the area. Demand levels typically drop off considerably on Monday, Tuesday, and Wednesday nights, Our research revealed that demand has increased on Thursday and Monday nights during and after the

pandemic as travelers extend their trips due to the more flexible working schedules in a remote working environment.

SUPPLY

Based on an evaluation of the occupancy, rate structure, market orientation, chain affiliation, location, facilities, amenities, reputation, and quality of each area hotel, as well as the comments of management representatives, we have identified properties that are expected to be competitive with the Proposed COVA Coachella.

Primary Competition

The following table summarizes the important operating characteristics of the future primary competitors and the aggregate secondary competitors. This information was compiled from personal interviews, inspections, online resources, and our in-house database of operating and hotel facility data. In cases where exact operating data for an individual property (or properties) were not available, we have used these resources, as well as the STR data, to estimate positioning within the market.

FIGURE 5-15 LOCATIONALLY RELEVANT COMPETITORS – OPERATING PERFORMANCE

		Est. Segmentation		Estimated 2023				Estimated 2024					
Property	Number of Rooms	Transient	Meeting and Group	Weighted Annual Room Count	Occ.	Average Rate	RevPAR	Weighted Annual Room Count	Occ.	Average Rate	RevPAR	Occupancy Penetration	Yield Penetration
Grand Hyatt Indian Wells Resort & Villas	531	55 %	45 %	530	45 - 50 %	$325 - $350	$160 - $170	531	50 - 55 %	$325 - $350	$170 - $180	90 - 95 %	60 - 65 %
JW Marriott Desert Springs Resort	884	55	45	884	60 - 65	300 - 325	190 - 200	884	60 - 65	300 - 325	190 - 200	110 - 120	65 - 70
La Quinta Resort & Club, Curio Collection by Hilton	783	60	40	783	55 - 60	375 - 400	220 - 230	783	50 - 55	375 - 400	200 - 210	90 - 95	70 - 75
Parker Palm Springs	144	80	20	144	45 - 50	675 - 700	325 - 350	144	45 - 50	675 - 700	325 - 350	80 - 85	110 - 120
Ritz-Carlton Rancho Mirage	252	70	30	244	55 - 60	550 - 575	300 - 325	252	55 - 60	575 - 600	325 - 350	100 - 110	110 - 120
Sub-Totals/Averages	**2,594**	**59 %**	**41 %**	**2,585**	**58.6 %**	**$376.75**	**$220.65**	**2,594**	**56.2 %**	**$384.36**	**$216**	**100 %**	**76.7 %**
Secondary Competitors	1,416	62 %	38 %	998	57.3 %	$784.65	$449.76	998	57.0 %	$792.98	$452	101 %	160.5 %
Totals/Averages	**4,010**	**60 %**	**40 %**	**3,583**	**58.2 %**	**$488.60**	**$284.46**	**3,592**	**56.4 %**	**$499.05**	**$281**	**100 %**	**100.0 %**

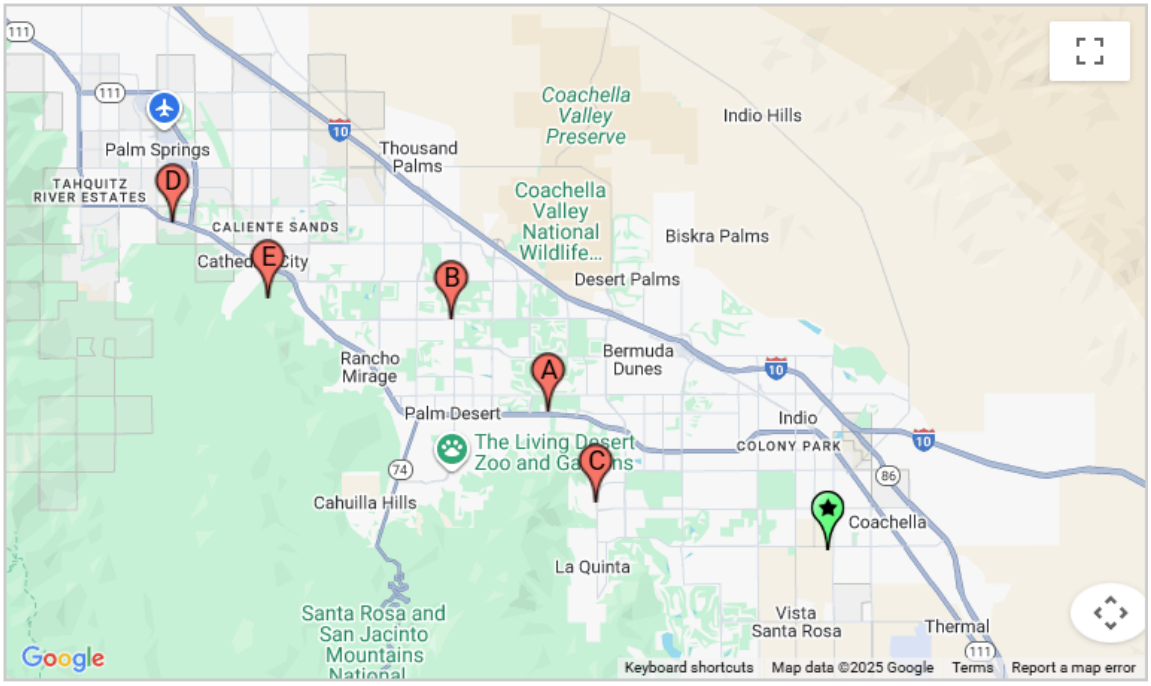
** Specific occupancy and average rate data were utilized in our analysis, but are presented in ranges in the above table for the purposes of confidentiality.*

FIGURE 5-16 LOCATIONALLY RELEVANT COMPETITORS – FACILITY PROFILES

Property	Number of Rooms	Year Opened	Approx. Miles To Subject Property	Food and Beverage Outlets	Indoor Meeting Space (SF)	Meeting Space per Room	Facilities & Amenities
Grand Hyatt Indian Wells Resort & Villas 44600 Indian Wells Lane	531	1986	6.6	Tia Carmen; Carmocha; Vista Square Kitchen; The WELL	38,453	72.4	Business Center; Guest Laundry Area; Gift Shop; Full-Service Spa; Outdoor Swimming Pool; Tennis Court(s); Fitness Center; Indoor Whirlpool; Water Park; Waterslide(s); Lazy River
JW Marriott Desert Springs Resort 74855 Country Club Drive	884	1987	9.5	Fisherman's Landing; Mikado Japanese Steakhouse; Rockwood Grill; T&T Innovation Kitchen; Lobby	58,126	65.8	Business Center; Guest Laundry Area; Concierge; Retail Outlet/Boutique; Room Service; Gift Shop; Golf Course(s); Full-Service Spa; Outdoor Swimming Pool; Tennis Court(s); Indoor Whirlpool; Game Room; Sauna
La Quinta Resort & Club, Curio Collection by Hilt 49-499 Eisenhower Drive	783	1926	5.8	Adobe Grill; Centre Court Cafe; Morgan's in The Desert; Twenty6; The Marketplace	43,600	55.7	Business Center; Retail Outlet/Boutique; Full-Service Spa; Outdoor Swimming Pool; Tennis Court(s); Fitness Center; Outdoor Whirlpool; Putting Green
Parker Palm Springs 4200 East Palm Canyon Drive	144	2003	17.3	Norma's; Mister Parker's; Mini Bar; Counter Reformation	7,013	48.7	Business Center; Guest Laundry Area; Concierge; Retail Outlet/Boutique; Room Service; Gift Shop; Full-Service Spa; Indoor Swimming Pool; Outdoor Swimming Pool; Tennis Court(s); Fitness Center; Indoor Whirlpool; Sauna
Ritz-Carlton Rancho Mirage 68900 Frank Sinatra Drive	252	1988	14.4	State Fare; The Edge Steakhouse; Pool Bar; Lobby Lounge;	15,048	59.7	Business Center; Gift Shop; Full-Service Spa; Outdoor Swimming Pool; Fitness Center; Outdoor Whirlpool

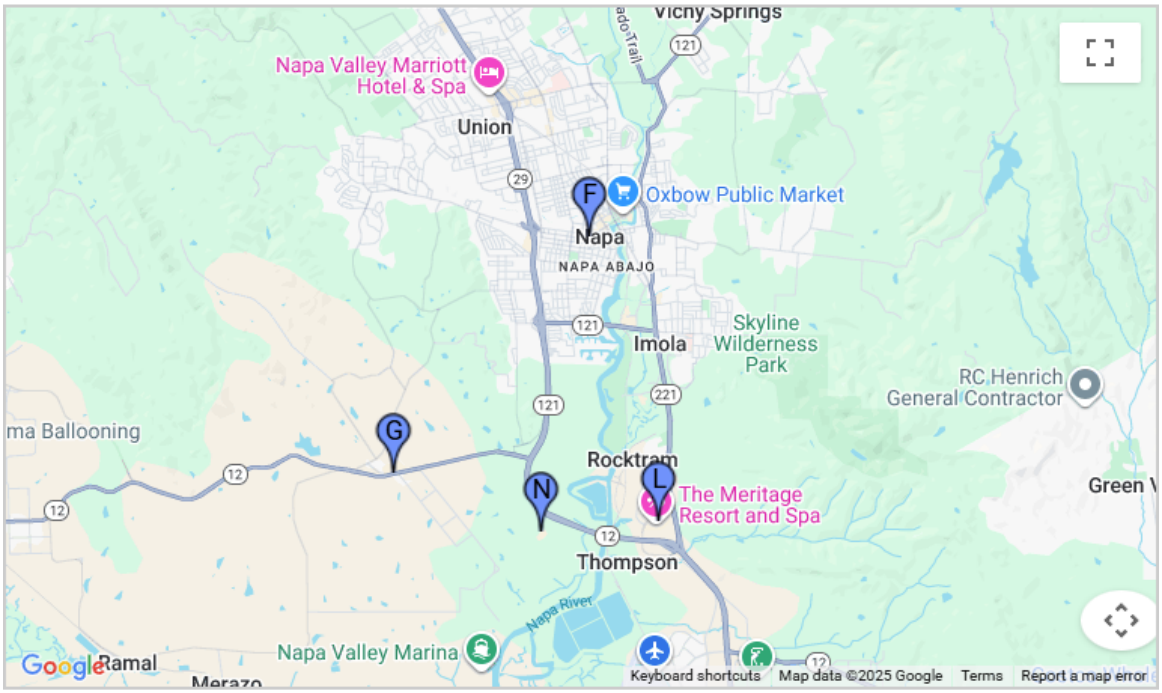
The following map illustrates the locations of the proposed subject property and its future competitors.

MAP OF COMPETITION IN COACHELLA VALLEY, CALIFORNIA



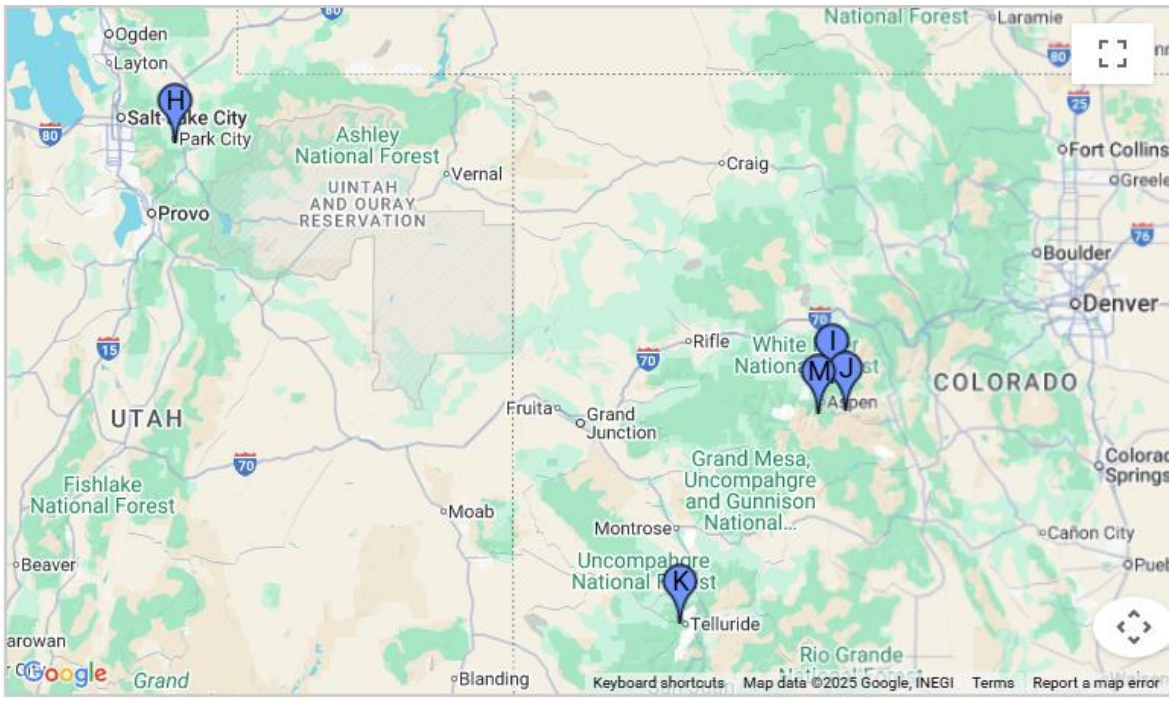
- Proposed COVA Coachella
- A — Grand Hyatt Indian Wells Resort & Villas (Primary)
- B — JW Marriott Desert Springs Resort (Primary)
- C — La Quinta Resort & Club, Curio Collection by Hilton (Primary)
- D — Parker Palm Springs (Primary)
- E — Ritz-Carlton Rancho Mirage (Primary)
- F — Andaz Napa (Secondary)
- G — Carneros Resort & Spa (Secondary)
- H — Goldener Hirsch, Auberge Resorts Collection (Secondary)
- I — Hotel Jerome An Auberge Resort (Secondary)
- J — Little Nell Hotel (Secondary)
- K — Madeline Hotel & Residences, Auberge Resorts Collection (Secondary)
- L — Meritage Resort at Napa (Secondary)
- M — St. Regis Aspen (Secondary)
- N — Stanly Ranch Napa Auberge Resorts Collection (Secondary)

MAP OF COMPETITION IN NAPA, CALIFORNIA



- Proposed COVA Coachella
- A — Grand Hyatt Indian Wells Resort & Villas (Primary)
- B — JW Marriott Desert Springs Resort (Primary)
- C — La Quinta Resort & Club, Curio Collection by Hilton (Primary)
- D — Parker Palm Springs (Primary)
- E — Ritz-Carlton Rancho Mirage (Primary)
- F — Andaz Napa (Secondary)
- G — Carneros Resort & Spa (Secondary)
- H — Goldener Hirsch, Auberge Resorts Collection (Secondary)
- I — Hotel Jerome An Auberge Resort (Secondary)
- J — Little Nell Hotel (Secondary)
- K — Madeline Hotel & Residences, Auberge Resorts Collection (Secondary)
- L — Meritage Resort at Napa (Secondary)
- M — St. Regis Aspen (Secondary)
- N — Stanly Ranch Napa Auberge Resorts Collection (Secondary)

MAP OF COMPETITION IN COLORADO AND UTAH



- Proposed COVA Coachella
- A — Grand Hyatt Indian Wells Resort & Villas (Primary)
- B — JW Marriott Desert Springs Resort (Primary)
- C — La Quinta Resort & Club, Curio Collection by Hilton (Primary)
- D — Parker Palm Springs (Primary)
- E — Ritz-Carlton Rancho Mirage (Primary)
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- M — St. Regis Aspen (Secondary)
- N — Stanly Ranch Napa Auberge Resorts Collection (Secondary)

COMPETITOR #1 - GRAND HYATT INDIAN WELLS RESORT & VILLAS



Grand Hyatt Indian Wells Resort & Villas
44600 Indian Wells Lane
Indian Wells, CA

FIGURE 5-17 ESTIMATED HISTORICAL OPERATING STATISTICS

Year	Wtd. Annual Room Count	Occupancy	Average Rate	RevPAR	Occupancy Penetration	Yield Penetration
Est. 2019	530	55 - 60 %	$220 - $230	$130 - $140	90 - 95 %	60 - 65 %
Est. 2021	530	40 - 45	325 - 350	130 - 140	95 - 100	65 - 70
Est. 2022	530	60 - 65	325 - 350	200 - 210	100 - 110	70 - 75
Est. 2023	530	45 - 50	325 - 350	160 - 170	85 - 90	55 - 60
Est. 2024	531	50 - 55	325 - 350	170 - 180	90 - 95	60 - 65

The Grand Hyatt Indian Wells Resort & Spa features a new waterpark with dueling slides, a lazy river, and a splash pad, as well as additional pools, five food and beverage outlets, a full-service spa and fitness center, and tennis facilities. This hotel benefits from its family friendly recreational amenities, recent renovations, and location near the Indian Wells Tennis Garden. Following its most recent sale in 2022, the hotel completed an extensive $50 million ($94,700 per room) renovation and was rebranded as a Grand Hyatt. Overall, the property was reported to be in very good condition. Its location is similar to that of the Proposed COVA Coachella.

COMPETITOR #2 - JW MARRIOTT DESERT SPRINGS RESORT



JW Marriott Desert Springs Resort
74855 Country Club Drive
Palm Desert, CA

FIGURE 5-18 ESTIMATED HISTORICAL OPERATING STATISTICS

Year	Wtd. Annual Room Count	Occupancy	Average Rate	RevPAR	Occupancy Penetration	Yield Penetration
Est. 2019	884	55 - 60 %	$220 - $230	$130 - $140	90 - 95 %	60 - 65 %
Est. 2021	884	35 - 40	180 - 190	65 - 70	85 - 90	30 - 35
Est. 2022	884	60 - 65	300 - 325	180 - 190	100 - 110	60 - 65
Est. 2023	884	60 - 65	300 - 325	190 - 200	110 - 120	65 - 70
Est. 2024	884	60 - 65	300 - 325	190 - 200	110 - 120	65 - 70

The JW Marriott Desert Springs Resort, which opened in 1987, features 884 rooms, four restaurants, three bars, a poolside bar, and a coffee shop, 58,126 square feet of meeting space, five outdoor pools, two outdoor whirlpools, two 18-hole golf courses, 20 tennis courts, a fitness center, a full-service spa, an entertainment zone, a business center, a rental car center, and leased retail outlets. This hotels benefits from its extensive meeting and recreational facilities. Overall, the property was reported to be in very good condition. Its location is similar to that of the Proposed COVA Coachella.

COMPETITOR #3 - LA QUINTA RESORT & CLUB, CURIO COLLECTION BY HILTON



La Quinta Resort & Club, Curio Collection by Hilton
49-499 Eisenhower Drive
La Quinta, CA

FIGURE 5-19 ESTIMATED HISTORICAL OPERATING STATISTICS

This historic

Year	Wtd. Annual Room Count	Occupancy	Average Rate	RevPAR	Occupancy Penetration	Yield Penetration
Est. 2019	785	60 - 65 %	$290 - $300	$180 - $190	100 - 110 %	85 - 90 %
Est. 2021	783	40 - 45	350 - 375	160 - 170	100 - 110	80 - 85
Est. 2022	785	55 - 60	400 - 425	220 - 230	90 - 95	75 - 80
Est. 2023	783	55 - 60	375 - 400	220 - 230	100 - 110	75 - 80
Est. 2024	783	50 - 55	375 - 400	200 - 210	90 - 95	70 - 75

This historic property opened in 1926 with 51 casitas and limited hotel facilities and quickly became a popular getaway for Hollywood stars, The La Quinta Resort is located among high-end residential developments and private golf clubs, thereby providing a sense of seclusion relative to the more developed Coachella Valley cities such as Palm Desert, Indian Wells, and Rancho Mirage. In November 2021, the resort was rebranded from Waldorf Astoria to Hilton's Curio Collection. The property is currently undergoing a multi=phase $70 million ($89,400 per room) guestroom renovation, which is expected to be completed by 2029. Overall, the property was reported to be in good condition. Its location is similar to that of the Proposed COVA Coachella.

COMPETITOR #4 - PARKER PALM SPRINGS



Parker Palm Springs
4200 East Palm Canyon Drive
Palm Springs, CA

FIGURE 5-20 ESTIMATED HISTORICAL OPERATING STATISTICS

Year	Wtd. Annual Room Count	Occupancy	Average Rate	RevPAR	Occupancy Penetration	Yield Penetration
Est. 2019	144	60 - 65 %	$400 - $425	$250 - $260	100 - 110 %	120 - 130 %
Est. 2021	144	35 - 40	675 - 700	260 - 270	85 - 90	130 - 140
Est. 2022	144	50 - 55	700 - 725	350 - 375	85 - 90	120 - 130
Est. 2023	144	45 - 50	675 - 700	325 - 350	80 - 85	110 - 120
Est. 2024	144	45 - 50	675 - 700	325 - 350	80 - 85	110 - 120

This hotel is known for its unique décor, manicured gardens, and popular food and beverage outlets. The hotel is decorated by renowned interior designer Jonathan Adler. The property's interior grounds are maintained exclusively for hotel guests, which adds to its luxury allure. The hotel's expansive spa was renovated in early 2019, and the hotel also offers a private residence and large villas; these larger rooms increase the overall average rate of this property. Overall, the property was reported to be in good condition. Its location is similar to that of the Proposed COVA Coachella.

COMPETITOR #5 - RITZ-CARLTON RANCHO MIRAGE



Ritz-Carlton Rancho Mirage
68900 Frank Sinatra Drive
Rancho Mirage, CA

FIGURE 5-21 ESTIMATED HISTORICAL OPERATING STATISTICS

Year	Wtd. Annual Room Count	Occupancy	Average Rate	RevPAR	Occupancy Penetration	Yield Penetration
Est. 2019	244	70 - 75 %	$375 - $400	$280 - $290	110 - 120 %	130 - 140 %
Est. 2021	244	45 - 50	650 - 675	300 - 325	100 - 110	150 - 160
Est. 2022	244	60 - 65	575 - 600	350 - 375	100 - 110	120 - 130
Est. 2023	244	55 - 60	550 - 575	300 - 325	95 - 100	110 - 120
Est. 2024	252	55 - 60	575 - 600	325 - 350	100 - 110	110 - 120

The property was closed in 2006 for a property-wide renovation, but the project was delayed given the Great Recession and the subsequent default of the previous owner; the hotel reopened in 2014 after a change in ownership and an extensive renovation. The Ritz-Carlton Rancho Mirage is the largest luxury property on the west end of the Coachella Valley and offers sweeping views owing to its mountainside configuration. The hotel benefits from a favorable reputation for attentive service and a very high standard for its food and beverage operation. Overall, the property was reported to be in good condition. Its location is similar to that of the Proposed COVA Coachella.

Secondary Competitors

We have also reviewed other hotels in separate markets for properties that share similar characteristics with the Proposed COVA Coachella as additional benchmarks, which were weighted on a secondary basis. The room count of each secondary competitor has been weighted based on its assumed degree of similarity with the proposed subject hotel. The following table sets forth the pertinent operating characteristics of the secondary competitors.

FIGURE 5-22 SECONDARY COMPETITORS – OPERATING PERFORMANCE

		Est. Segmentation			Estimated 2023				Estimated 2024			
Property	Number of Rooms	Transient	Meeting and Group	Total Competitive Level	Weighted Annual Room Count	Occ.	Average Rate	RevPAR	Weighted Annual Room Count	Occ.	Average Rate	RevPAR
Andaz Napa	141	85 %	15 %	75 %	106	65 - 70 %	$400 - $425	$280 - $290	106	65 - 70 %	$375 - $400	$260 - $270
Carneros Resort & Spa	100	75	25	75	75	45 - 50	875 - 900	400 - 425	75	45 - 50	925 - 950	450 - 475
Goldener Hirsch, Auberge Resorts Collection	66	90	10	65	43	45 - 50	1,225 - 1,250	600 - 625	43	50 - 55	1,300 - 1,325	650 - 675
Hotel Jerome An Auberge Resort	99	80	20	65	64	55 - 60	975 - 1,000	575 - 600	64	55 - 60	975 - 1,000	525 - 550
Little Nell Hotel	92	70	30	60	55	65 - 70	1,500 - 2,000	1,250 - 1,275	55	65 - 70	1,500 - 2,000	1,150 - 1,175
Madeline Hotel & Residences, Auberge Resorts Collection	137	75	25	65	89	35 - 40	1,125 - 1,150	450 - 475	89	35 - 40	1,075 - 1,100	425 - 450
Meritage Resort at Napa	467	40	60	75	350	55 - 60	350 - 375	210 - 220	350	55 - 60	350 - 375	210 - 220
St. Regis Aspen	179	65	35	60	107	60 - 65	1,000 - 1,025	650 - 675	107	60 - 65	1,150 - 1,175	700 - 725
Stanly Ranch Napa Auberge Resorts Collection	135	60	40	80	108	45 - 50	1,200 - 1,225	600 - 625	108	50 - 55	1,175 - 1,200	650 - 675
Totals/Averages	**1,416**	**62 %**	**38 %**	**70 %**	**998**	**57.3 %**	**$784.65**	**$449.76**	**998**	**57.0 %**	**$792.98**	**$451.80**

** Specific occupancy and average rate data was utilized in our analysis, but is presented in ranges in the above table for the purposes of confidentiality.*

Supply Changes

It is important to consider any new hotels that may have an impact on the proposed subject hotel's operating performance. Potentially competitive hotels that have recently opened, are under construction, or that may be in the early development stages are noted below. The list is categorized by the principal submarkets within the city.

FIGURE 5-23 POTENTIALLY COMPETITIVE HOTEL DEVELOPMENT ACTIVITY

Proposed Hotel Name	Estimated Number of Rooms	Hotel Product Tier	Development Stage
Coachella Valley, California			
Former Montage (rumored Four Seasons), La Quinta	154	Luxury	Speculative
Thompson Palm Springs, Palm Springs	168	Luxury	Recently Opened
Orchard Tree, an Auberge Resort, Palm Springs	64	Luxury	Development on Hold
Napa Area, California			
Calistoga Hills, a Rosewood Resort, Calistoga	110	Luxury	Site Work Underway
Six Senses Napa, Pope Valley	95	Luxury	Early Development
French Laundry Hotel, Yountville	TBD	Luxury	Development on Hold
Utah			
Grand Hyatt Deer Valley, Park City	387	Luxury	Recently Opened
Ameyalli Resort, Midway	80	Luxury	Under Construction
Spirit Mountain Resort, Orderville	40	Luxury	Site Work Underway

Of the hotels listed in the preceding table, we have identified the following new supply that is expected to have some degree of competitive interaction with the proposed subject hotel based on location, anticipated market orientation and price point, and/or operating profile.

FIGURE 5-24 NEW SUPPLY

Proposed Property	Number of Rooms	Total Competitive Level	Weighted Room Count	Estimated Opening Date	Development Stage
Proposed COVA Coachella	222	100 %	222	March 1, 2030	Early Development
Former Montage (rumored Four Seasons), La Quinta	154	50	77	January 1, 2028	Speculative
Totals/Averages	**376**		**299**		

The former Montage project in La Quinta was originally planned to be developed with a Montage Hotel and Residences; however, after numerous delays that put the developer, SilverRock Development Company in breach of contract with the city, the developer defaulted on the project and filed for bankruptcy on August 5, 2024. A motion to sell the raw and partially improved land to Turnbridge Equities was filed by the debtors on August 15, 2015. On October 21, 2025, a bankruptcy judge granted a motion for the sale to Turnbridge Equities allow the property to enter into escrow. The La Quinta City Council approved a reinstated and amended development agreement for the project under the new ownership, which is outlined as follows:

- One luxury hotel with approximately 154 guestrooms.
- 55,000-square-foot banquet/shared use facilities.
- 445 residences to include 29 branded residences north of the hotel with a private clubhouse, 70 condos and 293 homes east of the hotel, which can be short-term vacation rentals from which the city would receive TOT.
- 40,000-square-foot commercial area.
- 17,000-square-foot public golf clubhouse which will be moved closer to the entrance off of Avenue 52 and other public amenities for easier public access.
- 20,000-square-foot residential amenities building.

It is rumored but not yet confirmed that the project will be affiliated with Four Seasons Hotels and Resorts. Given the uncertainty of this project going forward, it has been weighted secondarily competitive in our analysis.

The subject units that will be available for rental will be developed in phases. It is important to note that the developer plans to retain ownership of 52 condo-hotel units that we assume will be developed in the first phase. All remaining units, exclusive of 61 units which will be sold for co-ownership use, will be sold to third parties who will be required to participate in a rental program. Based on the discussions with the developer, owner usage will range from 21 to 30 days. We have assumed an average of 25 days for owner usage in our analysis. To account for owner usage, we have reflected the average annual number of units that will be available for rental, as illustrated in the following table. Note that the rental availability factor is calculated by 340 annual rental days divided by 365 days (equals 93.15%).

FIGURE 5-25 SUBJECT UNIT CALCULATION

Phase	Total Units	Rental Availability Factor	Available Units for Rental	Rounded
Phase 1 - Developer Owned Units	52	100.00%	52.00	52
Phase 1 - Third-Party Owned Units	182	93.15%	169.53	170
Phase 1 - Total Units	234			222
Phase 2 - Third-Party Owned Units	78	93.15%	72.66	73
Phase 3 - Third-Party Owned Units	14	93.15%	13.04	13
Phase 4 - Third-Party Owned Units	15	93.15%	13.97	14
Total	**341**			**322**

The 222 units in Phase 1 are included in new supply in our analysis. The remaining phases are included as expansions in our analysis.

In response to the travel restrictions and the decline in demand associated with the COVID-19 pandemic, numerous hotels in markets across the nation temporarily suspended operations. During these suspensions, hotels were typically closed to the public, with the majority of staff furloughed, although key management and maintenance staff were retained to preserve the property and prepare for reopening. We note that ten hotels In the defined competitive set temporarily suspended operations because of the COVID-19 pandemic; however, all have since reopened. It is important to note that we have adjusted STR data to reflect the total available rooms in the market and true occupancy, regardless of suspended operations at competitive hotels.

While we have taken reasonable steps to investigate proposed hotel projects and their status, due to the nature of real estate development, it is impossible to determine with certainty every hotel that will be opened in the future or what their marketing strategies and effect on the market will be. Depending on the outcome of current and future projects, the operating potential of the proposed subject hotel may be affected. Future improvement in market conditions will raise the risk of increased competition. Our forthcoming forecast of stabilized occupancy and ADR is intended to reflect such risk.

Supply Conclusion

We have identified various properties that are expected to be competitive to some degree with the proposed subject hotel. We have also investigated potential increases in competitive supply. The Proposed COVA Coachella should enter a dynamic market of varying product types and price points. Next, we will present our forecast for demand change, using the historical supply data presented as a starting point.

DEMAND

The following table presents the most recent trends for the subject hotel market as tracked by HVS. These data pertain to the competitors discussed previously in this section; performance results are estimated, rounded for the competition, and weighted if there are secondary competitors present. In this respect, the information in the table differs from the previously presented STR data and is consistent with the supply-and-demand analysis developed for this report.

FIGURE 5-26 HISTORICAL MARKET TRENDS

Year	Accommodated Room Nights	% Change	Room Nights Available	% Change	Market Occupancy	Market ADR	% Change	Market RevPAR	% Change
Est. 2019	783,915	—	1,273,576	—	61.6 %	$338.74	—	$208.50	—
Est. 2020	361,963	(53.8) %	1,273,576	0.0 %	28.4	397.96	17.5 %	113.10	(45.8) %
Est. 2021	545,327	50.7	1,273,576	0.0	42.8	458.08	15.1	196.14	73.4
Est. 2022	766,899	40.6	1,298,769	2.0	59.0	489.25	6.8	288.89	47.3
Est. 2023	761,375	(0.7)	1,307,759	0.7	58.2	488.60	(0.1)	284.46	(1.5)
Est. 2024	739,373	(2.9)	1,311,044	0.3	56.4	499.05	2.1	281.44	(1.1)
Avg. Annual Compounded Chg., Est. 2019-Est. 2024:		(1.2) %		0.6 %			8.1 %		6.2 %

Although not shown in the preceding table, as a point of comparison, the year-to-date 2025 STR trend data indicates a market occupancy level of 69.8% versus 61.1% for the same period of time in 2024. Moreover, ADR registered $606.36 for the year-to-date 2025 period, reflecting a change of 0.7 % when compared with the ADR for the same period of time in 2024.

Demand Analysis Using Market Segmentation

For the purpose of demand analysis, the overall market is divided into individual segments based on the nature of travel. Based on our fieldwork, area analysis, and knowledge of the local lodging market, we estimate the 2024 distribution of accommodated-room-night demand as follows.

FIGURE 5-27 BASE-YEAR ACCOMMODATED-ROOM-NIGHT DEMAND

	2024 Marketwide	
Market Segment	Accommodated Demand	Percentage of Total
Transient	442,141	60 %
Meeting and Group	297,232	40
Total	**739,373**	**100 %**

In the base year, the market's demand mix comprised transient demand, with this segment representing roughly 60% of the accommodated room nights in this Coachella submarket. The meeting and group segment comprised 40% of the total.

Using the distribution of accommodated hotel demand as a starting point, we will analyze the characteristics of each market segment in an effort to determine future trends in room-night demand.

Transient Segment

Transient demand consists of individuals and families spending time in an area or passing through en route to other destinations; this segment represents travelers that are not associated with a group or room-night contract. Travel purposes include business, sightseeing, recreation, or visiting friends and relatives. Transient demand also includes room nights booked through Internet sites such as Expedia, Hotels.com, and Priceline; however, this demand may include group and convention attendees who use these channels to take advantage of any discounts that may be available on these sites. In resort destinations, transient demand is strongest Friday and Saturday nights, and all week during holiday periods and the summer months. In urban and suburban destinations, transient demand is typically strongest on Tuesday, Wednesday, and Thursday nights. The typical length of stay ranges from one to four days, depending on the destination and travel purpose. The rate of double occupancy typically ranges from 1.0 to 3.0 people per room, with higher double occupancy occurring in resort destinations. Price sensitivity tends to vary with product type. All-suite properties with inclusive food and beverage or luxury

destination properties tend to drive strong transient room rates, with discounted rates offered at older or value-oriented hotels with limited amenities. For destination locations, future transient demand is related to the overall economic health of the primary source cities for visitation; the overall economic health of the surrounding neighborhood is considered for urban and suburban locations.

The San Diego, Orange County, and Los Angeles metropolitan markets have consistently been the primary feeder markets for transient demand in the Coachella Valley, as visitors to the area typically travel by car. The area is also popular among Canadians and northern U.S. residents who typically visit the area during the winter months because of the warmer climate. Transient visitation to the Coachella Valley traditionally slows in the summer months given the extreme desert heat; however, summer demand has risen in recent years with the growth of day-club and music-event marketing. However, transient demand declined significantly in 2020 and early 2021 because of the COVID-19 pandemic. A notable rebound commenced in the spring of 2021 once restrictions had been lifted, with transient demand increasing through 2022 due to strong demand for drive-to destinations, such as Coachella Valley. Demand in this segment declined in 2023 as domestic leisure demand moderated following the easing of international travel restrictions. We expect transient demand to increase in 2025, which is supported by the year-to-date data in the STR report. Despite the headwinds impacting the hotel performance in general in 2025, performance strength remains in high-end chain scales (luxury tier), especially in the leisure transient segment, with international markets making up for the decline in travelers from the U.S. and Canada. Thereafter, moderate growth is forecast through the stabilized year, which should be supported by strengthening economic conditions, increase airlifts, and given the relatively recent opening of the Acrisure Arena.

Meeting and Group Segment

The meeting-and-group market includes meetings, seminars, conventions, trade association shows, and similar gatherings of ten or more people. Peak convention demand typically occurs in the spring and fall. Although there are numerous classifications within the meeting-and-group segment, the primary categories considered in this analysis are corporate groups, associations, and SMERFE (social, military, ethnic, religious, fraternal, and educational) groups. Corporate groups typically meet during the business week, most commonly in the spring and fall months. These groups tend to be the most profitable for hotels, as they typically pay higher rates and usually generate ancillary revenues including food and beverage and/or banquet revenue. SMERFE groups are typically price-sensitive and tend to meet on weekends and during the summer months or holiday season, when greater discounts are usually available; these groups generate limited ancillary revenues. Association demand is generally divided on a geographical basis, with national, regional, and state associations representing the most common sources. Professional associations and/or those supported by members' employers often

meet on weekdays, while other associations prefer to hold events on weekends. The profile and revenue potential of associations varies depending on the group and the purpose of the meeting or event.

The Coachella Valley competes with San Diego, coastal Orange County, Arizona cities (such as Phoenix, Scottsdale, and Tucson), and Las Vegas for group business. Increased airlift at Palm Springs International Airport and the general improvement in local hotel product have resulted in a significant strengthening of group business overall. Corporate retreats, social events, and SMERFE-related groups have increased along the growing popularity of the Coachella Valley. However, meeting and group demand was nearly non-existent in 2020 given the implications associated with the COVID-19 pandemic. Groups slowly returned to the market in late 2021, with more groups returning in 2022 through 2024. Moderate growth in the meeting and group segment is forecast through the stabilized year. The opening of subject property should induce demand given its brand-new high quality event facilities.

Base Demand Growth Rates

The purpose of segmenting the lodging market is to define each major type of demand, identify customer characteristics, and estimate future growth trends. Starting with an analysis of the local area, two segments were defined as representing the proposed subject hotel's lodging market. Various types of economic and demographic data were then evaluated to determine their propensity to reflect changes in hotel demand. Based on this procedure, we forecast the following average annual compounded market-segment growth rates.

FIGURE 5-28 AVERAGE ANNUAL COMPOUNDED MARKET-SEGMENT GROWTH RATES

	Annual Growth Rate									
Market Segment	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**
Transient	2.0 %	2.0 %	2.0 %	1.0 %	1.0 %	1.0 %	1.0 %	1.0 %	1.0 %	0.0 %
Meeting and Group	3.0	3.0	3.0	2.0	1.0	1.0	1.0	1.0	1.0	0.0
Base Demand Growth	**2.4 %**	**2.4 %**	**2.4 %**	**1.4 %**	**1.0 %**	**1.0 %**	**1.0 %**	**1.0 %**	**1.0 %**	**0.0 %**

Accommodated Demand and Market-wide Occupancy

Based upon a review of the market dynamics in the proposed subject hotel's competitive environment, we have forecast growth rates for each market segment. Using the calculated potential demand for the market, we have determined market-wide accommodated demand based on the inherent limitations of demand fluctuations and other factors in the market area.

The following table details our projection of lodging demand growth for the subject market, including the total number of occupied room nights and any residual unaccommodated demand in the market.

FIGURE 5-29 FORECAST OF MARKET OCCUPANCY

		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Transient											
Total Demand		442,141	450,984	460,003	469,203	473,896	478,634	483,421	488,255	493,138	498,069
Growth Rate			2.0 %	2.0 %	2.0 %	1.0 %	1.0 %	1.0 %	1.0 %	1.0 %	1.0 %
Meeting and Group											
Total Demand		297,232	306,149	315,333	324,793	331,289	334,602	337,948	341,327	344,741	348,188
Growth Rate			3.0 %	3.0 %	3.0 %	2.0 %	1.0 %	1.0 %	1.0 %	1.0 %	1.0 %
Totals											
Total Demand		739,373	757,133	775,337	793,997	805,185	813,236	821,369	829,583	837,878	846,257
less: Residual Demand		0	680	2,274	5,075	4,250	5,539	842	228	461	1,195
Total Accommodated Demand		739,373	756,453	773,062	788,922	800,935	807,697	820,527	829,355	837,417	845,062
Overall Demand Growth		(2.9) %	2.3 %	2.2 %	2.1 %	1.5 %	0.8 %	1.6 %	1.1 %	1.0 %	0.9 %
Market Mix											
Transient		59.8 %	59.6 %	59.3 %	59.1 %	58.9 %	58.9 %	58.9 %	58.9 %	58.9 %	58.9 %
Meeting and Group		40.2	40.4	40.7	40.9	41.1	41.1	41.1	41.1	41.1	41.1
Existing Hotel Supply		3,592	3,592	3,592	3,592	3,592	3,592	3,586	3,517	3,501	3,492
Proposed Hotels											
Proposed COVA Coachella	[1]							192	297	313	322
Former Montage (rumored Four Seasons), La Quinta	[2]					77	77	77	77	77	77
Change to Existing Hotels											
Proposed COVA Coachella	[A]							6	73	73	73
Proposed COVA Coachella	[B]								2	13	13
Proposed COVA Coachella	[C]									5	14
Available Room Nights per Year		1,311,044	1,311,044	1,311,044	1,311,044	1,339,149	1,339,149	1,409,344	1,447,617	1,453,277	1,456,679
Nights per Year		365	365	365	365	365	365	365	365	365	365
Total Supply		3,592	3,592	3,592	3,592	3,669	3,669	3,861	3,966	3,982	3,991
Rooms Supply Growth			0.0 %	0.0 %	0.0 %	2.1 %	0.0 %	5.2 %	2.7 %	0.4 %	0.2 %
Marketwide Occupancy		**56.4 %**	**57.7 %**	**59.0 %**	**60.2 %**	**59.8 %**	**60.3 %**	**58.2 %**	**57.3 %**	**57.6 %**	**58.0 %**

[1] Opening in March 2030 of the 100% competitive, 222-room Proposed COVA Coachella

[2] Opening in January 2028 of the 50% competitive, 154-room Former Montage (rumored Four Seasons), La Quinta

[A] Change of room count in December 2030 of the 100% competitive, Proposed COVA Coachella

[B] Change of room count in November 2031 of the 100% competitive, Proposed COVA Coachella

[C] Change of room count in September 2032 of the 100% competitive, Proposed COVA Coachella

The defined competitive market of hotels experienced a sharp occupancy decline in 2020 and early 2021 because of the severe downturn in travel associated with the COVID-19 pandemic. Year-to-date trends in 2025 reflect that improvement is occurring in the luxury tier. Projected growth through the stabilized year should be supported by the ongoing return of group events, the improved airlift, and the continued return of growth in the popularity of Coachella Valley as a resort destination.

6. Projection of Hotel Occupancy and Average Rate

Along with average rate results, the occupancy levels achieved by a hotel are the foundation of the property's financial performance. Most of a lodging facility's other revenue sources (such as food and beverage, other operated departments, and miscellaneous income) are driven by the number of guests, and many expense levels also vary with occupancy. To a certain degree, occupancy attainment can be manipulated by management. For example, hotel operators may choose to lower rates in an effort to maximize occupancy. Our forecasts reflect the operating strategy that we believe would be implemented by a typical, professional hotel management team to achieve an optimal mix of occupancy and average rate.

Penetration Rate Analysis

The proposed subject hotel's forecasted market share and occupancy levels are based upon its anticipated competitive position within the market, as quantified by its penetration rate. The penetration rate is the ratio of a hotel's market share to its fair share.

Base-Year Penetration Rates by Market Segment

In the following table, the penetration rates attained by the primary competitors and the aggregate secondary competitors are set forth for each segment for the base year.

FIGURE 6-1 HISTORICAL PENETRATION RATES

Property	Transient	Meeting and Group	Overall
Grand Hyatt Indian Wells Resort & Villas	84 %	102 %	91 %
JW Marriott Desert Springs Resort	103	126	112
La Quinta Resort & Club, Curio Collection by Hiltor	94	93	93
Parker Palm Springs	114	42	85
Ritz-Carlton Rancho Mirage	118	75	101
Secondary Competition	104	96	101

The Ritz-Carlton Rancho Mirage achieved the highest penetration rate within the transient segment. The highest penetration rate in the meeting and group segment was achieved by the JW Marriott Desert Springs Resort.

Forecast of Subject Property's Occupancy

Because the supply and demand balance for the competitive market is dynamic, there is a circular relationship between the penetration factors of each hotel in the market. The performance of individual new hotels has a direct effect upon the aggregate performance of the market and, consequently, upon the calculated penetration factor for each hotel in each market segment. The same is true when the performance of existing hotels changes, either positively (following a refurbishment, for example) or negatively (when a poorly maintained or marketed hotel loses market share).

A hotel's penetration factor is calculated as its achieved market share of demand divided by its fair share of demand. Thus, if one hotel's penetration performance increases, thereby increasing its achieved market share, this leaves less demand available in the market for the other hotels to capture, and the penetration performance of one or more of those other hotels consequently declines (other things remaining equal). This type of market share adjustment takes place every time there is a change in supply or a change in the relative penetration performance of one or more hotels in the competitive market. Our projections of penetration, demand capture, and occupancy performance for the proposed subject hotel account for these types of adjustments to market share within the defined competitive market.

The proposed subject hotel's occupancy forecast is set forth as follows, with the adjusted projected penetration rates used as a basis for calculating the amount of captured market demand.

FIGURE 6-2 FORECAST OF SUBJECT PROPERTY'S OCCUPANCY

Market Segment	2030	2031	2032	2033	2034
Transient					
Demand	483,421	488,255	493,138	498,069	498,069
Market Share	5.4 %	8.9 %	9.6 %	9.9 %	9.9 %
Capture	26,327	43,241	47,445	49,170	49,170
Penetration	109 %	118 %	123 %	123 %	123 %
Meeting and Group					
Demand	337,948	341,327	344,741	348,188	348,188
Market Share	4.7 %	7.9 %	8.9 %	9.2 %	9.2 %
Capture	16,046	26,798	30,810	31,937	31,937
Penetration	95 %	105 %	114 %	114 %	114 %
Total Room Nights Captured	**42,373**	**70,039**	**78,254**	**81,106**	**81,106**
Available Room Nights	70,195	108,468	114,114	117,530	117,530
Subject Occupancy	**60 %**	**65 %**	**69 %**	**69 %**	**69 %**
Market-wide Available Room Nights	1,409,344	1,447,617	1,453,277	1,456,679	1,456,679
Fair Share	**5 %**	**7 %**	**8 %**	**8 %**	**8 %**
Market-wide Occupied Room Nights	820,527	829,355	837,417	845,062	845,062
Market Share	**5 %**	**8 %**	**9 %**	**10 %**	**10 %**
Market-wide Occupancy	**58 %**	**57 %**	**58 %**	**58 %**	**58 %**
Total Penetration	**104 %**	**113 %**	**119 %**	**119 %**	**119 %**

The proposed subject hotel's transient penetration level is positioned at an above-market-average level, supported by its anticipated lifestyle hotel product focused on wellness in a highly amenitized resort setting. Furthermore, the proposed subject property should benefit from its planned luxury brand affiliation, Auberge, Rosewood, One and Only, One Hotels, Montage or similar, and its unique location with proximity to numerous private golf clubs, high-end residential developments, and special event venues. The proposed subject hotel's penetration in the meeting and group segment is also positioned at an above-market-average level given its planned offering of resort amenities and outdoor venues, which should allow it to become a popular destination for incentive groups, executive level meetings, and social events such as weddings.

These positioned segment penetration rates result in the following market segmentation forecast.

FIGURE 6-3 MARKET SEGMENTATION FORECAST – SUBJECT PROPERTY

	2030	2031	2032	2033	2034
Transient	62 %	62 %	61 %	61 %	61 %
Meeting and Group	38	38	39	39	39
Total	100 %	100 %	100 %	100 %	100 %

Based on our analysis of the proposed subject hotel and market area, we have selected a stabilized occupancy level of 69%. The stabilized occupancy is intended to reflect the anticipated results of the property over its remaining economic life given all changes in the life cycle of the hotel. Thus, the stabilized occupancy excludes from consideration any abnormal relationship between supply and demand, as well as any nonrecurring conditions that may result in unusually high or low occupancies. Although the proposed subject hotel may operate at occupancies above this stabilized level, we believe it equally possible for new competition and temporary economic downturns to force the occupancy below this selected point of stability.

Average Rate Analysis

One of the most important considerations in estimating the potential performance of a lodging facility is a supportable forecast of its attainable average rate (ADR), which is more formally defined as the average rate per occupied room; ADR can be calculated by dividing the total rooms revenue achieved during a specified period by the number of rooms sold during the same period. The projected ADR and the anticipated occupancy percentage are used to forecast rooms revenue, which in turn provides the basis for estimating most other income and expense categories.

Competitive Position

Although the ADR analysis presented here follows the occupancy projection, these two statistics are highly correlated; in reality, one cannot project occupancy without making specific assumptions regarding ADR. This relationship is best illustrated by revenue per available room (RevPAR), which reflects a property's ability to maximize rooms revenue. The following table summarizes the historical ADR and RevPAR levels of the proposed subject hotel's future primary competitors.

FIGURE 6-4 BASE-YEAR ADR AND REVPAR OF THE COMPETITORS

Property	Estimated 2024 Average Room Rate	Average Room Rate Penetration	Occupancy	Occupancy Penetration	Rooms Revenue Per Available Room (RevPAR)	RevPAR Penetration
Grand Hyatt Indian Wells Resort & Villas	$325 - $350	65 - 70 %	50 - 55 %	90 - 95 %	$170 - $180	60 - 65 %
JW Marriott Desert Springs Resort	300 - 325	60 - 65	60 - 65	110 - 120	190 - 200	65 - 70
La Quinta Resort & Club, Curio Collection by Hilton	375 - 400	75 - 80	50 - 55	90 - 95	200 - 210	70 - 75
Parker Palm Springs	675 - 700	130 - 140	45 - 50	80 - 85	325 - 350	110 - 120
Ritz-Carlton Rancho Mirage	575 - 600	110 - 120	55 - 60	100 - 110	325 - 350	110 - 120
Average - Primary Competitors	$384.36	77.0 %	56.2 %	99.6 %	$215.90	76.7 %
Average - Secondary Competitors	792.98	158.9	57.0	101.0	451.80	160.5
Overall Average	**$499.05**	100.0 %	56.4 %	100.0 %	**$281.44**	100.0 %
Subject As If Stabilized (In 2024 Dollars)	**$1,497.30**	**300.0 %**	**67.1 %**	**119.0 %**	**$1,004.47**	**356.9 %**

The Parker Palm Springs achieved the highest estimated average rate in the local competitive set, by a significant margin, because of their luxury product offering, popularity with-end clientele, and resort-style amenities.

It is important for the reader to understand that the average rate projection is inclusive of all units that will be included in the subject rental program, which will include the condo-hotel, villas, residences, sky villas, and estates. We have selected the rate position of $670, in base-year dollars (2024), for the proposed subject property's condo hotel rooms. We have positioned the condo-hotel room's ADR in the 2024 base year in consideration of its wellness-focused wellness facilities, new facility, large room units which will average 1,248 square feet, and its location. The ADR positioning of the villas, residences, sky villas, and estates was estimated based on considerations of the size of the units, and review of price premiums of similar units at selected Auberge and Four Seasons affiliated branded residences. The following table illustrates that the overall rate position, inclusive of the condo-hotel, villas, residences, sky villas, and estates is $1,490, in base-year dollars (2024).

FIGURE 6-5 BASE-YEAR ADR POSITIONING BY UNIT TYPE

Unit Types	Total Units	Rentable Units	Implied Stabilized Occupancy	Base Year ADR	Implied Occupied Rooms	Implied Rooms Revenue
Condo Hotel	240	228	70%	$670	58,254	$39,030,180
Villas	51	47	68%	3,150	11,665	36,746,010
Residences	39	36	66%	3,450	8,672	29,919,780
Sky Villas	5	5	50%	4,050	913	3,695,625
Estates	6	6	62%	8,150	1,358	11,066,070
Totals	**341**	**322**	**69%**	**$1,490**	**80,862**	**$120,457,665**

The following table presents the ADR forecast for the market and the proposed subject hotel on a calendar-year basis, as well as the resulting ADR penetration level. The proposed subject hotel's projected ADR (as if stabilized) is then fiscalized to correspond with the hotel's anticipated date of opening for each forecast year.

FIGURE 6-6 ADR FORECAST – LOCAL MARKET AND PROPOSED SUBJECT PROPERTY

	Historical								
Calendar Year	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**
Market ADR	$499.05	$501.54	$506.56	$516.69	$532.19	$548.15	$564.60	$581.54	$598.98
Projected Market ADR Growth Rate		0.5%	1.0%	2.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Proposed Subject Property ADR (As-If Stabilized)	**$1,490.00**	$1,497.45	$1,512.42	$1,550.24	$1,596.74	$1,644.64	$1,693.98	$1,744.80	$1,797.15
ADR Growth Rate		0.5%	1.0%	2.5%	3.0%	3.0%	3.0%	3.0%	3.0%
Proposed Subject Stabilized ADR Penetration	299%	299%	299%	300%	300%	300%	300%	300%	300%
Fiscal Year				**2027/28**	**2028/29**	**2029/30**	**2030/31**	**2031/32**	**2032/33**
Proposed Subject Property Average Rate				$1,557.75	$1,604.49	$1,652.62	$1,702.20	$1,753.26	$1,805.86
Opening Discount				0.0%	0.0%	0.0%	10.0%	0.0%	0.0%
Average Rate After Discount				**$1,557.75**	**$1,604.49**	**$1,652.62**	**$1,531.98**	**$1,753.26**	**$1,805.86**
Real Average Rate Growth				—	3.0%	3.0%	-7.3%	14.4%	3.0%
Market ADR				$519.19	$534.77	$550.81	$567.34	$584.36	$601.89
Proposed Subject ADR Penetration (After Discount)				300%	300%	300%	270%	300%	300%
ADR Expressed in Base-Year Dollars Deflated @ Inflation Rate				$1,418.56	$1,418.56	$1,418.56	$1,276.70	$1,418.56	$1,418.56

Market-wide rates generally trended up through 2022, with significant gains realized between 2020 and 2022 due to strong demand for resort destinations during the pandemic. Average rates corrected marginally in 2023 due to a pullback in domestic leisure transient demand and an increase in lower-rated meeting and group demand. As forecast, the competitive market's modest ADR forecast for 2025 reflect recent year-to-date trends. Thereafter, we expect rates to continue to increase through the stabilized year in consideration of strengthening economic conditions, increased airlift, and continued growth in the popularity of Coachella Valley as a resort destination.

The proposed subject hotel's ADR penetration level is forecast to reach approximately 300% by the stabilized period, consistent with our stabilized ADR positioning which is inclusive of all the product which will participate in the rental program. Based on our review of the proposed improvements and the anticipated profile of the hotel product and its operation, it is our opinion that the ADR penetration level should be achieved with appropriate management and marketing. The proposed hotel's positioned stabilized ADR is projected to increase at the same rate as the overall market's ADR, prior to consideration of any ADR discounting during the hotel's ramp-up period.

The following table sets forth our forecast of the proposed subject hotel's occupancy, ADR, and RevPAR, with corresponding penetration levels, for the first projection year through the stabilized year of operation. The competitive market's historical and projected occupancy, ADR, and RevPAR levels are presented for comparison.

FIGURE 6-7 COMPARISON OF HISTORICAL AND PROJECTED OCCUPANCY, ADR, AND REVPAR – PROPOSED SUBJECT PROPERTY AND LOCAL MARKET

	Calendar Year Projections Prior to Rate Discounting															
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Proposed COVA Coachella																
Occupancy							—	—	—	—	—	60.4 %	64.6 %	68.6 %	69.0 %	69.0 %
Change in Points							—	—	—	—	—	—	4.2	4.0	0.4	0.0
Occupancy Penetration							—	—	—	—	—	103.7 %	112.7 %	119.0 %	119.0 %	119.0 %
Average Rate						**$1,490.00**	$1,497.45	$1,512.42	$1,550.24	$1,596.74	$1,644.64	$1,693.98	$1,744.80	$1,797.15	$1,851.06	$1,906.59
Change							—	1.0 %	2.5 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %
Average Rate Penetration							298.6 %	298.6 %	300.0 %	300.0 %	300.0 %	300.0 %	300.0 %	300.0 %	300.0 %	300.0 %
RevPAR							—	—	—	—	—	$1,022.57	$1,126.64	$1,232.40	$1,277.40	$1,315.72
Change							—	—	—	—	—	—	10.2 %	9.4 %	3.7 %	3.0 %
RevPAR Penetration							—	—	—	—	—	311.1 %	338.2 %	357.1 %	356.9 %	356.9 %
	Historical						Projected									
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Competitive Set																
Occupancy	61.6 %	38.3 %	42.8 %	59.0 %	58.2 %	56.4 %	57.7 %	59.0 %	60.2 %	59.8 %	60.3 %	58.2 %	57.3 %	57.6 %	58.0 %	58.0 %
Change in Points	—	(23.2)	4.5	16.2	(0.8)	(1.8)	1.3	1.3	1.2	(0.4)	0.5	(2.1)	(0.9)	0.3	0.4	0.0
Average Rate	$338.74	$397.96	$458.08	$489.25	$488.60	$499.05	$501.54	$506.56	$516.69	$532.19	$548.15	$564.60	$581.54	$598.98	$616.95	$635.46
Change	—	17.5 %	15.1 %	6.8 %	(0.1) %	2.1 %	0.5 %	1.0 %	2.0 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %
RevPAR	$208.50	$152.52	$196.14	$288.89	$284.46	$281.44	$289.38	$298.69	$310.92	$318.30	$330.61	$328.71	$333.17	$345.15	$357.91	$368.65
Change	—	(26.8) %	28.6 %	47.3 %	(1.5) %	(1.1) %	2.8 %	3.2 %	4.1 %	2.4 %	3.9 %	(0.6) %	1.4 %	3.6 %	3.7 %	3.0 %

A discount of 10% has been applied to the stabilized room rates projected for the first two years of operation, as would be expected for a new property of this type as it builds its reputation and becomes established in the market. Note that our forecast of income and expense, which follows later in this report, assumes an underlying inflation rate of 3.0%.

The following occupancies and average rates will be used to project the proposed subject hotel's rooms revenue; this forecast reflects years beginning on March 1, 2030, which correspond with our financial projections.

FIGURE 6-8 FORECASTS OF OCCUPANCY, AVERAGE RATE, AND REVPAR

Year	Occupancy	Average Rate Before Discount	Discount	Average Rate After Discount	ADR % Change	RevPAR	RevPAR % Change
2030/31	61 %	$1,702.20	10.0 %	$1,531.98	-7.3	$934.51	—
2031/32	65	1,753.26	0.0	1,753.26	14.4	1,139.62	21.9
2032/33	69	1,805.86	0.0	1,805.86	3.0	1,246.05	9.3
2033/34	69	1,860.04	0.0	1,860.04	3.0	1,283.43	3.0

7. Projection of Hotel Income and Expense

In this chapter of our report, we have compiled a forecast of income and expense for the proposed subject hotel. This forecast is based on the facilities program set forth previously, as well as the occupancy and ADR forecast discussed previously.

The forecast of income and expense is expressed in current dollars for each year. The stabilized year is intended to reflect the anticipated operating results of the property over its remaining economic life given any or all applicable stages of build-up, plateau, and decline in the life cycle of the hotel. Thus, income and expense estimates from the stabilized year forward exclude from consideration any abnormal relationship between supply and demand, as well as any nonrecurring conditions that may result in unusual revenues or expenses. The ten-year period reflects the typical holding period of large real estate assets such as hotels. In addition, the ten-year period provides for the stabilization of income streams and comparison of yields with alternate types of real estate. The forecasted income streams reflect the future benefits of owning specific rights in income-producing real estate.

Comparable Operating Statements

In order to project future income and expense for the proposed subject hotel, we have included a sample of individual comparable operating statements from our database of hotel statistics. All financial data are presented according to the three most common measures of industry performance: ratio to sales (RTS), amounts per available room (PAR), and amounts per occupied room night (POR). These historical income and expense statements will be used as benchmarks in our forthcoming forecast of income and expense. The proposed subject hotel's stabilized statement of income and expense, deflated to 2024 dollars, is also presented.

FIGURE 7-1 COMPARABLE OPERATING STATEMENTS: RATIO TO SALES

	Comp 1	Comp 2	Comp 3	Comp 4	Comp 5	Subject
						Stabilized $
Year:	2021/22	2019	2019	2019	2023	2024
Number of Rooms:	120 to 160	90 to 110	210 to 270	690 to 860	420 to 520	318
Occupied Rooms:	27,012	24,408	64,390	175,835	100,992	80,088
Days Open:	365	365	365	365	365	365
Occupancy:	54%	67%	72%	62%	59%	69%
Average Rate:	$722	$805	$395	$289	$355	$1,419
RevPAR:	$390	$538	$286	$179	$210	$979
REVENUE						
Rooms	65.0 %	51.7 %	50.1 %	46.6 %	44.9 %	65.7 %
Food	24.3	37.1	29.0	26.3	35.6	27.9
Beverage	0.0	0.0	9.4	8.9	7.1	0.0
Food & Beverage	24.3	37.1	38.5	35.2	42.7	27.9
Other Operated Departments	9.4	5.9	9.2	17.2	10.9	5.9
Miscellaneous Income	1.3	5.3	2.2	1.0	1.5	0.5
Total	100.0	100.0	100.0	100.0	100.0	100.0
DEPARTMENTAL EXPENSES*						
Rooms	21.7	29.4	26.1	25.4	26.5	26.2
Food & Beverage	84.0	77.2	75.4	58.4	69.8	71.0
Other Operated Departments	44.7	88.6	60.7	71.9	39.5	42.6
Total	38.7	49.0	47.7	44.7	46.0	39.5
DEPARTMENTAL INCOME	61.3	51.0	52.3	55.3	54.0	60.5
UNDISTRIBUTED OPERATING EXPENSES						
Administrative & General	8.7	8.3	8.6	7.5	7.1	2.5
Info. and Telecom. Systems	1.3	1.2	1.3	0.9	1.6	0.4
Marketing	4.5	5.7	6.8	6.5	9.1	2.1
Franchise Fee	1.8	0.0	0.0	2.0	0.0	0.0
Property Operations & Maintenance	2.2	4.8	4.8	4.7	4.2	1.3
Utilities	1.6	3.6	2.7	2.0	2.7	0.7
Total	20.1	23.6	24.2	23.7	24.8	7.0
GROSS OPERATING PROFIT	41.2	27.4	28.1	31.6	29.2	53.5
Management Fee	2.0	1.0	2.9	3.1	3.0	3.0
INCOME BEFORE NON-OPER. INC. & EXP.	39.2	26.4	25.2	28.5	26.2	50.5

* Departmental expense ratios are expressed as a percentage of departmental revenues

FIGURE 7-2 COMPARABLE OPERATING STATEMENTS: AMOUNTS PER AVAILABLE ROOM

	Comp 1	Comp 2	Comp 3	Comp 4	Comp 5	Subject
						Stabilized $
Year:	2021/22	2019	2019	2019	2023	2024
Number of Rooms:	120 to 160	90 to 110	210 to 270	690 to 860	420 to 520	318
Occupied Rooms:	27,012	24,408	64,390	175,835	100,992	80,088
Days Open:	365	365	365	365	365	365
Occupancy:	54%	67%	72%	62%	59%	69%
Average Rate:	$722	$805	$395	$289	$355	$1,419
RevPAR:	$390	$538	$286	$179	$210	$979
REVENUE						
Rooms	$142,383	$196,387	$104,211	$65,495	$76,668	$357,264
Food	53,138	140,836	60,315	36,891	60,850	151,394
Beverage	0	0	19,619	12,522	12,055	0
Food & Beverage	53,138	140,836	79,935	49,413	72,906	151,394
Other Operated Departments	20,515	22,289	19,042	24,135	18,553	31,869
Miscellaneous Income	2,862	20,214	4,632	1,471	2,564	2,979
Total	218,897	379,725	207,819	140,514	170,691	543,507
DEPARTMENTAL EXPENSES						
Rooms	30,944	57,717	27,229	16,620	20,293	93,617
Food & Beverage	44,634	108,781	60,251	28,865	50,880	107,490
Other Operated Departments	9,171	19,743	11,553	17,355	7,331	13,567
Total	84,749	186,242	99,033	62,840	78,504	214,674
DEPARTMENTAL INCOME	134,148	193,484	108,786	77,674	92,188	328,833
UNDISTRIBUTED OPERATING EXPENSES						
Administrative & General	19,125	31,551	17,838	10,584	12,153	13,805
Info. and Telecom. Systems	2,751	4,543	2,655	1,291	2,686	2,330
Marketing	9,844	21,666	14,199	9,118	15,564	11,216
Franchise Fee	3,976	0	0	2,810	0	0
Property Operations & Maintenance	4,874	18,381	9,895	6,635	7,187	6,816
Utilities	3,476	13,571	5,711	2,876	4,672	3,710
Total	44,048	89,712	50,299	33,314	42,262	37,876
GROSS OPERATING PROFIT	90,100	103,772	58,487	44,360	49,926	290,957
Management Fee	4,381	3,706	6,034	4,370	5,133	16,305
INCOME BEFORE NON-OPER. INC. & EXP.	85,719	100,066	52,453	39,990	44,792	274,652

FIGURE 7-3 COMPARABLE OPERATING STATEMENTS: AMOUNTS PER OCCUPIED ROOM

	Comp 1	Comp 2	Comp 3	Comp 4	Comp 5	Subject
						Stabilized $
Year:	2021/22	2019	2019	2019	2023	2024
Number of Rooms:	120 to 160	90 to 110	210 to 270	690 to 860	420 to 520	318
Occupied Rooms:	27,012	24,408	64,390	175,835	100,992	80,088
Days Open:	365	365	365	365	365	365
Occupancy:	54%	67%	72%	62%	59%	69%
Average Rate:	$722	$805	$395	$289	$355	$1,419
RevPAR:	$390	$538	$286	$179	$210	$979
REVENUE						
Rooms	$722.14	$804.60	$394.90	$289.42	$354.52	$1,418.56
Food	269.50	577.01	228.56	163.02	281.38	601.13
Beverage	0.00	0.00	74.35	55.34	55.75	0.00
Food & Beverage	269.50	577.01	302.91	218.35	337.13	601.13
Other Operated Departments	104.05	91.32	72.16	106.65	85.79	126.54
Miscellaneous Income	14.51	82.82	17.55	6.50	11.86	11.83
Total	1,110.20	1,555.74	787.51	620.92	789.30	2,158.06
DEPARTMENTAL EXPENSES						
Rooms	156.94	236.47	103.18	73.44	93.84	371.72
Food & Beverage	226.37	445.68	228.32	127.55	235.28	426.80
Other Operated Departments	46.52	80.89	43.78	76.69	33.90	53.87
Total	429.83	763.03	375.28	277.68	363.01	852.39
DEPARTMENTAL INCOME	680.37	792.71	412.23	343.23	426.29	1,305.67
UNDISTRIBUTED OPERATING EXPENSES						
Administrative & General	97.00	129.26	67.60	46.77	56.20	54.81
Info. and Telecom. Systems	13.95	18.61	10.06	5.70	12.42	9.25
Marketing	49.93	88.77	53.81	40.29	71.97	44.54
Franchise Fee	20.17	0.00	0.00	12.42	0.00	0.00
Property Operations & Maintenance	24.72	75.31	37.50	29.32	33.23	27.06
Utilities	17.63	55.60	21.64	12.71	21.61	14.73
Total	223.40	367.55	190.60	147.21	195.43	150.39
GROSS OPERATING PROFIT	456.97	425.16	221.63	196.02	230.86	1,155.28
Management Fee	22.22	15.18	22.87	19.31	23.73	64.74
INCOME BEFORE NON-OPER. INC. & EXP.	434.75	409.97	198.77	176.71	207.13	1,090.54

The departmental income of the comparable properties ranged from 51.0% to 61.3% of total revenue. Our forecast anticipates that the proposed subject hotel's departmental income will stabilize at 60.7%. The comparable properties achieved a gross operating profit (GOP) ranging from 27.4% to 41.2% of total revenue. It is important to note the primary consideration was given to the ratio of sales given the subject property's higher rates for the larger unit types participating in the rental program, relative to the comparable properties. We will refer to the comparable operating data in our discussion of each line item, which follows later in this section of the report.

Fixed and Variable Component Analysis

HVS uses a fixed and variable component model to project a lodging facility's revenue and expense levels. This model is based on the premise that hotel revenues and expenses have one component that is fixed and another that varies directly with occupancy and facility usage. A projection can be made by taking a known level of revenue or expense and calculating its fixed and variable components. The fixed component is then increased in tandem with the underlying rate of inflation, while the variable component is adjusted for a specific measure of volume such as total revenue.

The actual forecast is derived by adjusting each year's revenue and expense by the amount fixed (the fixed expense multiplied by the inflated base-year amount) plus the variable amount (the variable expense multiplied by the inflated base-year amount) multiplied by the ratio of the projection year's occupancy to the base-year occupancy (in the case of departmental revenue and expense) or the ratio of the projection year's revenue to the base year's revenue (in the case of undistributed operating expenses). Fixed expenses remain fixed, increasing only with inflation. Our discussion of the revenue and expense forecast in this report is based upon the output derived from the fixed and variable model. This forecast of revenue and expense is accomplished through a systematic approach, following the format of the Uniform System of Accounts for the Lodging Industry (USALI). Each category of revenue and expense is estimated separately and combined at the end in the final statement of income and expense.

Inflation and Appreciation Assumptions

In consideration of the trends in the Consumer Price Index (CPI), inflation factors that directly influence lodging properties, projections set forth by economists surveyed, and the Federal Reserve's target inflation rate, we have applied a 3.0% underlying inflation rate in our analysis.

This annual rate of growth is applied to income and expenses after the stabilized year to reflect the longer-term expectation of asset appreciation by typical investors. This position is based on interviews with numerous market participants indicating a distinction in the expectations of near-term cost inflation (e.g., related to labor and supplies) versus long-term income growth that drives appreciation. Any exceptions to the application of the assumed underlying inflation and EBITDA Less Replacement Reserve growth rates are discussed in our write-ups of individual income and expense items.

Forecast of Revenue and Expense

Based on an analysis that will be detailed throughout this section, we have formulated a revenue-and-expense forecast through the fifth projection year, including amounts per available room and per occupied room, as illustrated in the following table. The second table illustrates our ten-year forecast of income and expense, presented with a lesser degree of detail. The forecasts pertain to years that begin on March 1, 2030, expressed in inflated dollars for each year (figures in the forecast year columns have been divided by 1,000 and reflect thousands of dollars).

FIGURE 7-4 DETAILED FORECAST OF INCOME AND EXPENSE

	2030/31 Begins March				2031/32				2032/33				Stabilized				2034/35			
Number of Rooms:	**239**				**295**				**311**				**318**				**318**			
Occupancy:	**61%**				**65%**				**69%**				**69%**				**69%**			
Average Rate:	**$1,531.98**				**$1,753.26**				**$1,805.86**				**$1,860.04**				**$1,915.84**			
RevPAR:	**$934.51**				**$1,139.62**				**$1,246.04**				**$1,283.43**				**$1,321.93**			
Days Open:	**365**				**365**				**365**				**365**				**365**			
Occupied Rooms:	**53,213**	**%Gross**	**PAR**	**POR**	**69,989**	**%Gross**	**PAR**	**POR**	**78,325**	**%Gross**	**PAR**	**POR**	**80,088**	**%Gross**	**PAR**	**POR**	**80,088**	**%Gross**	**PAR**	**POR**
OPERATING REVENUE																				
Rooms	$81,522	60.6 %	$341,095	$1,531.98	$122,709	67.9 %	$415,962	$1,753.26	$141,445	65.7 %	$454,806	$1,805.86	$148,967	65.7 %	$468,451	$1,860.04	$153,436	65.7 %	$482,504	$1,915.84
Food & Beverage	41,622	30.9	174,149	782.17	44,966	24.9	152,428	642.48	59,939	27.8	192,729	765.25	63,126	27.9	198,511	788.21	65,020	27.9	204,466	811.86
Other Operated Departments	5,620	4.2	23,515	105.61	6,317	3.5	21,415	90.26	6,778	3.1	21,793	86.53	7,040	3.1	22,138	87.90	7,251	3.1	22,802	90.54
Spa - Treatment Cabanas	2,946	2.2	12,327	55.37	3,501	1.9	11,868	50.02	3,845	1.8	12,363	49.09	4,012	1.8	12,617	50.10	4,133	1.8	12,996	51.60
Resort Fees	1,785	1.3	7,470	33.55	2,007	1.1	6,802	28.67	2,153	1.0	6,922	27.49	2,236	1.0	7,032	27.92	2,303	1.0	7,243	28.76
Miscellaneous Income	992	0.7	4,150	18.64	1,115	0.6	3,779	15.93	1,196	0.6	3,846	15.27	1,242	0.5	3,907	15.51	1,280	0.5	4,024	15.98
Total Operating Revenues	134,487	100.0	562,706	2,527.31	180,615	100.0	612,255	2,580.63	215,355	100.0	692,460	2,749.49	226,624	100.0	712,655	2,829.68	233,423	100.0	734,035	2,914.57
DEPARTMENTAL EXPENSES *																				
Rooms	29,867	36.6	124,967	561.27	34,528	28.1	117,043	493.33	37,491	26.5	120,549	478.65	39,035	26.2	122,752	487.40	40,206	26.2	126,434	502.02
Food & Beverage	30,800	74.0	128,871	578.80	32,376	72.0	109,748	462.59	42,556	71.0	136,838	543.33	44,820	71.0	140,943	559.63	46,164	71.0	145,171	576.42
Other Operated Departments	2,481	44.1	10,382	46.63	2,625	41.6	8,898	37.51	2,739	40.4	8,808	34.97	2,829	40.2	8,897	35.33	2,914	40.2	9,164	36.38
Spa - Treatment Cabanas	2,413	81.9	10,095	45.34	2,598	74.2	8,806	37.12	2,733	71.1	8,789	34.90	2,828	70.5	8,893	35.31	2,913	70.5	9,160	36.37
Total Expenses	65,561	48.7	274,314	1,232.04	72,126	39.9	244,496	1,030.54	85,520	39.7	274,983	1,091.85	89,512	39.5	281,484	1,117.66	92,197	39.5	289,928	1,151.19
DEPARTMENTAL INCOME	68,926	51.3	288,392	1,295.27	108,489	60.1	367,759	1,550.09	129,835	60.3	417,477	1,657.64	137,112	60.5	431,171	1,712.02	141,226	60.5	444,106	1,763.38
UNDISTRIBUTED OPERATING EXPENSES																				
Administrative & General	4,540	3.4	18,994	85.31	5,096	2.8	17,275	72.81	5,542	2.6	17,819	70.75	5,756	2.5	18,101	71.87	5,929	2.5	18,644	74.03
Info & Telecom Systems	766	0.6	3,205	14.40	860	0.5	2,915	12.29	935	0.4	3,007	11.94	971	0.4	3,054	12.13	1,000	0.4	3,146	12.49
Marketing	3,688	2.7	15,433	69.31	4,141	2.3	14,036	59.16	4,503	2.1	14,478	57.49	4,677	2.1	14,707	58.40	4,817	2.1	15,148	60.15
Prop. Operations & Maint.	2,241	1.7	9,378	42.12	2,516	1.4	8,529	35.95	2,736	1.3	8,798	34.93	2,842	1.3	8,937	35.49	2,927	1.3	9,205	36.55
Utilities	1,220	0.9	5,105	22.93	1,370	0.8	4,643	19.57	1,489	0.7	4,789	19.01	1,547	0.7	4,865	19.32	1,593	0.7	5,011	19.89
Total Expenses	12,455	9.3	52,115	234.07	13,982	7.8	47,398	199.78	15,205	7.1	48,891	194.13	15,793	7.0	49,664	197.20	16,267	7.0	51,154	203.11
GROSS OPERATING PROFIT	56,470	42.0	236,277	1,061.20	94,507	52.3	320,361	1,350.31	114,630	53.2	368,585	1,463.51	121,319	53.5	381,507	1,514.82	124,959	53.5	392,953	1,560.26
Management Fee	4,035	3.0	16,881	75.82	5,418	3.0	18,368	77.42	6,461	3.0	20,774	82.48	6,799	3.0	21,380	84.89	7,003	3.0	22,021	87.44
INCOME BEFORE NON-OPR. INC. & EXP.	52,436	39.0	219,396	985.38	89,088	49.3	301,993	1,272.89	108,169	50.2	347,811	1,381.03	114,521	50.5	360,128	1,429.93	117,956	50.5	370,932	1,472.83
NON-OPERATING INCOME & EXPENSE																				
Property Taxes	3,239	2.4	13,553	60.87	2,719	1.5	9,218	38.85	2,115	1.0	6,800	27.00	1,525	0.7	4,796	19.04	992	0.4	3,119	12.39
Insurance	453	0.3	1,895	8.51	466	0.3	1,581	6.66	480	0.2	1,545	6.13	495	0.2	1,556	6.18	510	0.2	1,603	6.36
RMP Revenue Distrubution	7,819	5.8	32,714	146.93	18,871	10.4	63,968	269.62	30,923	14.4	99,432	394.81	41,689	18.4	131,096	520.53	51,197	21.9	160,998	639.26
Total Expenses	11,511	8.5	48,162	216.31	22,056	12.2	74,768	315.14	33,519	15.6	107,777	427.94	43,709	19.3	137,448	545.76	52,699	22.5	165,720	658.01
EBITDA	40,925	30.5	171,234	769.07	67,032	37.1	227,226	957.75	74,651	34.6	240,034	953.08	70,812	31.2	222,679	884.17	65,257	28.0	205,212	814.82
Reserve for Replacement	2,690	2.0	11,254	50.55	5,418	3.0	18,368	77.42	8,614	4.0	27,698	109.98	9,065	4.0	28,506	113.19	9,337	4.0	29,361	116.58
EBITDA LESS RESERVE	$38,235	28.4 %	$159,980	$718.53	$61,613	34.1 %	$208,858	$880.33	$66,036	30.7 %	$212,336	$843.10	$61,747	27.2 %	$194,173	$770.99	$55,920	24.0 %	$175,850	$698.23

*Departmental expenses are expressed as a percentage of departmental revenues.

FIGURE 7-5 TEN-YEAR FORECAST OF INCOME AND EXPENSE

	2030/31		2031/32		2032/33		2033/34		2034/35		2035/36		2036/37		2037/38		2038/39		2039/40	
Number of Rooms:	**239**		**295**		**311**		**318**		**318**		**318**		**318**		**318**		**318**		**318**	
Occupied Rooms:	**53,213**		**69,989**		**78,325**		**80,088**		**80,088**		**80,088**		**80,088**		**80,088**		**80,088**		**80,088**	
Occupancy:	**61%**		**65%**		**69%**		**69%**		**69%**		**69%**		**69%**		**69%**		**69%**		**69%**	
Average Rate:	**$1,531.98**	**% of**	**$1,753.26**	**% of**	**$1,805.86**	**% of**	**$1,860.04**	**% of**	**$1,915.84**	**% of**	**$1,973.31**	**% of**	**$2,032.51**	**% of**	**$2,093.49**	**% of**	**$2,156.29**	**% of**	**$2,220.98**	**% of**
RevPAR:	**$934.51**	**Gross**	**$1,139.62**	**Gross**	**$1,246.04**	**Gross**	**$1,283.43**	**Gross**	**$1,321.93**	**Gross**	**$1,361.59**	**Gross**	**$1,402.43**	**Gross**	**$1,444.51**	**Gross**	**$1,487.84**	**Gross**	**$1,532.48**	**Gross**
OPERATING REVENUE																				
Rooms	$81,522	60.6 %	$122,709	67.9 %	$141,445	65.7 %	$148,967	65.7 %	$153,436	65.7 %	$158,039	65.7 %	$162,781	65.7 %	$167,664	65.7 %	$172,694	65.7 %	$177,875	65.7 %
Food & Beverage	41,622	30.9	44,966	24.9	59,939	27.8	63,126	27.9	65,020	27.9	66,971	27.9	68,980	27.9	71,049	27.9	73,181	27.9	75,376	27.9
Other Operated Departments	5,620	4.2	6,317	3.5	6,778	3.1	7,040	3.1	7,251	3.1	7,469	3.1	7,693	3.1	7,923	3.1	8,161	3.1	8,406	3.1
Spa - Treatment Cabanas	2,946	2.2	3,501	1.9	3,845	1.8	4,012	1.8	4,133	1.8	4,257	1.8	4,384	1.8	4,516	1.8	4,651	1.8	4,791	1.8
Resort Fees	1,785	1.3	2,007	1.1	2,153	1.0	2,236	1.0	2,303	1.0	2,372	1.0	2,444	1.0	2,517	1.0	2,592	1.0	2,670	1.0
Miscellaneous Income	992	0.7	1,115	0.6	1,196	0.6	1,242	0.5	1,280	0.5	1,318	0.5	1,358	0.5	1,398	0.5	1,440	0.5	1,483	0.5
Total Operating Revenues	134,487	100.0	180,615	100.0	215,355	100.0	226,624	100.0	233,423	100.0	240,426	100.0	247,639	100.0	255,068	100.0	262,720	100.0	270,601	100.0
DEPARTMENTAL EXPENSES *																				
Rooms	29,867	36.6	34,528	28.1	37,491	26.5	39,035	26.2	40,206	26.2	41,412	26.2	42,655	26.2	43,934	26.2	45,252	26.2	46,610	26.2
Food & Beverage	30,800	74.0	32,376	72.0	42,556	71.0	44,820	71.0	46,164	71.0	47,549	71.0	48,976	71.0	50,445	71.0	51,958	71.0	53,517	71.0
Other Operated Departments	2,481	44.1	2,625	41.6	2,739	40.4	2,829	40.2	2,914	40.2	3,001	40.2	3,091	40.2	3,184	40.2	3,280	40.2	3,378	40.2
Spa - Treatment Cabanas	2,413	81.9	2,598	74.2	2,733	71.1	2,828	70.5	2,913	70.5	3,000	70.5	3,090	70.5	3,183	70.5	3,278	70.5	3,377	70.5
Total Expenses	65,561	48.7	72,126	39.9	85,520	39.7	89,512	39.5	92,197	39.5	94,963	39.5	97,812	39.5	100,746	39.5	103,769	39.5	106,882	39.5
DEPARTMENTAL INCOME	68,926	51.3	108,489	60.1	129,835	60.3	137,112	60.5	141,226	60.5	145,463	60.5	149,827	60.5	154,321	60.5	158,951	60.5	163,719	60.5
UNDISTRIBUTED OPERATING EXPENSES																				
Administrative & General	4,540	3.4	5,096	2.8	5,542	2.6	5,756	2.5	5,929	2.5	6,107	2.5	6,290	2.5	6,478	2.5	6,673	2.5	6,873	2.5
Info & Telecom Systems	766	0.6	860	0.5	935	0.4	971	0.4	1,000	0.4	1,030	0.4	1,061	0.4	1,093	0.4	1,126	0.4	1,160	0.4
Marketing	3,688	2.7	4,141	2.3	4,503	2.1	4,677	2.1	4,817	2.1	4,962	2.1	5,110	2.1	5,264	2.1	5,422	2.1	5,584	2.1
Prop. Operations & Maint.	2,241	1.7	2,516	1.4	2,736	1.3	2,842	1.3	2,927	1.3	3,015	1.3	3,106	1.3	3,199	1.3	3,295	1.3	3,394	1.3
Utilities	1,220	0.9	1,370	0.8	1,489	0.7	1,547	0.7	1,593	0.7	1,641	0.7	1,690	0.7	1,741	0.7	1,793	0.7	1,847	0.7
Total Expenses	12,455	9.3	13,982	7.8	15,205	7.1	15,793	7.0	16,267	7.0	16,755	7.0	17,258	7.0	17,775	7.0	18,309	7.0	18,858	7.0
GROSS OPERATING PROFIT	56,470	42.0	94,507	52.3	114,630	53.2	121,319	53.5	124,959	53.5	128,708	53.5	132,569	53.5	136,546	53.5	140,642	53.5	144,862	53.5
Management Fee	4,035	3.0	5,418	3.0	6,461	3.0	6,799	3.0	7,003	3.0	7,213	3.0	7,429	3.0	7,652	3.0	7,882	3.0	8,118	3.0
INCOME BEFORE NON-OPR. INC. & EXP.	52,436	39.0	89,088	49.3	108,169	50.2	114,521	50.5	117,956	50.5	121,495	50.5	125,140	50.5	128,894	50.5	132,761	50.5	136,744	50.5
NON-OPERATING INCOME & EXPENSE																				
Property Taxes	3,239	2.4	2,719	1.5	2,115	1.0	1,525	0.7	992	0.4	740	0.3	755	0.3	770	0.3	786	0.3	802	0.3
Insurance	453	0.3	466	0.3	480	0.2	495	0.2	510	0.2	525	0.2	541	0.2	557	0.2	574	0.2	591	0.2
RMP Revenue Distrubution	7,819	5.8	18,871	10.4	30,923	14.4	41,689	18.4	51,197	21.9	56,752	23.6	58,454	23.6	60,208	23.6	62,014	23.6	63,874	23.6
Total Expenses	11,511	8.5	22,056	12.2	33,519	15.6	43,709	19.3	52,699	22.5	58,017	24.1	59,750	24.1	61,535	24.1	63,373	24.1	65,267	24.1
EBITDA	40,925	30.5	67,032	37.1	74,651	34.6	70,812	31.2	65,257	28.0	63,478	26.4	65,390	26.4	67,359	26.4	69,387	26.4	71,477	26.4
Reserve for Replacement	2,690	2.0	5,418	3.0	8,614	4.0	9,065	4.0	9,337	4.0	9,617	4.0	9,906	4.0	10,203	4.0	10,509	4.0	10,824	4.0
EBITDA LESS RESERVE	$38,235	28.4 %	$61,613	34.1 %	$66,036	30.7 %	$61,747	27.2 %	$55,920	24.0 %	$53,861	22.4 %	$55,484	22.4 %	$57,156	22.4 %	$58,879	22.4 %	$60,653	22.4 %

*Departmental expenses are expressed as a percentage of departmental revenues.

The following description sets forth the basis for the forecast of income and expense. We anticipate that it will take four years for the proposed subject hotel to reach a stabilized level of operation. Each revenue and expense item has been forecast based upon our review of the proposed subject hotel's operating budget and comparable income and expense statements. The forecast is based upon fiscal years beginning March 1, 2030, expressed in inflated dollars for each year.

Rooms Revenue

Rooms revenue is determined by two variables: occupancy and average rate (ADR). We projected occupancy and ADR in a previous section of this report. The proposed subject hotel is expected to stabilize at an occupancy level of 69% with an ADR of $1,860.04 in 2033/34. Following the stabilized year, the proposed subject hotel's ADR is projected to increase along with the underlying rate of growth assigned to EBITDA Less Replacement Reserve.

Food & Beverage Revenue

Food and beverage (F&B) revenue is generated by a hotel's restaurants, lounges, coffee shops, snack bars, banquet rooms, and room service. In addition to providing a source of revenue, these outlets serve as an amenity that assists in the sale of guestrooms. With the exception of properties with active lounges or banquet facilities that draw local residents, in-house guests generally represent a substantial percentage of a hotel's F&B patrons. In the case of the Proposed COVA Coachella, the F&B department will include nine food and beverage outs; moreover, the resort will feature extensive event space. The proposed subject hotel's food and beverage operation is expected to be an important component of the hotel. We have relied on food and beverage projections based on a comprehensive food and beverage market analysis completed by Julian H. King.

Although F&B revenue varies directly with changes in occupancy, the small portion generated by banquet sales and outside capture is relatively fixed.

FIGURE 7-6 FOOD & BEVERAGE REVENUE

	Comparable Operating Statements					Proposed Subject Property Forecast	
	#1	#2	#3	#4	#5	2030/31	Deflated Stabilized
Food & Beverage Revenue							
Percentage of Revenue	24.3 %	37.1 %	38.5 %	35.2 %	42.7 %	30.9 %	27.9 %
Per Available Room	$53,138	$140,836	$79,935	$49,413	$72,906	$174,149	$151,394
Per Occupied Room	$269.50	$577.01	$302.91	$218.35	$337.13	$782.17	$601.13

Other Operated Departments Revenue

According to the USALI, other operated departments include any major or minor operated department other than rooms and F&B. The proposed subject hotel's other operated departments revenue sources are expected to include items such as the hotel's parking operations, pool cabana rentals, the resort's gift shop, telephone charges, upgraded Internet charges, valet laundry, and dry cleaning fees, and other minor items. Based on our review of operations with a similar extent of offerings, we have positioned an appropriate revenue level for the proposed subject hotel.

FIGURE 7-7 OTHER OPERATED DEPARTMENTS REVENUE

	Comparable Operating Statements					Proposed Subject Property Forecast	
	#1	#2	#3	#4	#5	2030/31	Deflated Stabilized
Percentage of Revenue	9.4 %	5.9 %	9.2 %	17.2 %	10.9 %	4.2 %	3.1 %
Per Available Room	$20,515	$22,289	$19,042	$24,135	$18,553	$23,515	$16,883
Per Occupied Room	$104.05	$91.32	$72.16	$106.65	$85.79	$105.61	$67.04

Spa/Treatment Cabanas Income

The proposed subject property's spa/treatment cabanas are expected to be an important amenity for the resort given its wellness-focused design and amenities. Based on our review of comparable operating statements, we have positioned an appropriate revenue level given the resort's planned facility and price point. We forecast the proposed subject hotel's spa/treatment cabanas to stabilize at $27.61 per occupied room by the stabilized year, 2033/34.

FIGURE 7-8 SPA/TREATMENT CABANAS INCOME

Property	Year of Data	Number of Rooms	Occupancy	Average Daily Rate	Number of Treatment Rooms	% of Total Revenue	Revenue Per Occupied Room	Revenue Per Treatment Room	Spa Expense Ratio
Comp 1	2014/15	50	67.0 %	$1,189	5	7.3 %	$132.93	$326,313	64.6 %
Comp 2	2018/19	200	65.0	542	7	4.1	40.38	263,135	87.5
Comp 3	2015/16	62	80.0	726	4	4.5	46.66	211,700	63.8
Comp 4	2021	162	78.3	299	6	9.3	44.87	346,294	31.2
Comp 5	2022/23	285	59.9	742	8	2.3	26.89	209,413	89.8
Averages		**152**	**70.0 %**	**$700**	**6**	**5.5 %**	**$58.35**	**$271,371**	**67.4 %**
Proposed COVA Coachella									
Forecast Year 1		318	61.0 %	$1,532	5	2.2 %	$55.37	$58,924	81.9 %
Deflated Stabilized		318	69.0	1,419	5	1.8	38.21	61,200	70.5

Resort Fees

The hotel is anticipated to generate additional revenue through resort fees, which typically include the use of services and amenities such as Internet access, local telephone calls, and other complimentary or discounted services such as access to preferred tee times or similar services. We have positioned revenues in this line item based on our review of the local comparable competitive operations. We have forecast a 60.0% capture rate, which is supported by our understanding of the area comps. The following table illustrates resort fees within the competitive set.

FIGURE 7-9 LOCAL COMPETITIVE SET – RESORT FEES

Property	Resort Fee
Ritz-Carlton Rancho Mirage	$50.00
Parker Palm Springs	$49.00
La Quinta Resort & club, Curio Collection	$45.00
Grand Hyatt Indian Wells Resort & Spa	$45.00
JW Marriott Desert Springs Resort	$45.00
Proposed CAVA Coachella	$45.00
Assumed Capture Rate	60.0%
Projected Resort Fee (Base-Year)	**$27.00**

Miscellaneous Income

The miscellaneous income sources comprise those other than guestrooms, F&B, and the other operated departments. The proposed subject hotel's miscellaneous income revenues are expected to include attrition fees, cancellation charges, and other minor items. Based on our review of operations with a similar extent of offerings, we have positioned an appropriate revenue level for the proposed subject hotel. Changes in this revenue item through the projection period result from the application of the underlying inflation rate and projected changes in occupancy.

FIGURE 7-10 MISCELLANEOUS INCOME

	Comparable Operating Statements					Proposed Subject Property Forecast	
	#1	#2	#3	#4	#5	2030/31	Deflated Stabilized
Percentage of Revenue	1.3 %	5.3 %	2.2 %	1.0 %	1.5 %	0.7 %	0.5 %
Per Available Room	$2,862	$20,214	$4,632	$1,471	$2,564	$4,150	$2,979
Per Occupied Room	$14.51	$82.82	$17.55	$6.50	$11.86	$18.64	$11.83

Rooms Expense

Rooms expense consists of items related to the sale and upkeep of guestrooms and public space. Salaries, wages, and employee benefits account for a substantial portion of this category. Although payroll varies somewhat with occupancy, and managers can generally scale the level of service staff on hand to meet an expected occupancy level, much of a hotel's payroll is fixed. A base level of front desk personnel, housekeepers, and supervisors must be maintained at all times. As a result, salaries, wages, and employee benefits are only moderately sensitive to changes in occupancy.

Commissions and reservations are usually based on room sales and, thus, are highly sensitive to changes in occupancy and ADR. While guest supplies vary 100% with occupancy, linens and other operating expenses are only slightly affected by volume. The proposed subject hotel's rooms department expense has been positioned based upon our review of the comparable operating data and our understanding of the hotel's future service level and price point.

FIGURE 7-11 ROOMS EXPENSE

	Comparable Operating Statements					Proposed Subject Property Forecast	
	#1	#2	#3	#4	#5	2030/31	Deflated Stabilized
Percentage of Revenue	21.7 %	29.4 %	26.1 %	25.4 %	26.5 %	36.6 %	26.2 %
Per Available Room	$30,944	$57,717	$27,229	$16,620	$20,293	$124,967	$93,617
Per Occupied Room	$156.94	$236.47	$103.18	$73.44	$93.84	$561.27	$371.72

Food & Beverage Expense

Food expenses consist of items necessary for the primary operation of a hotel's food and banquet facilities. The costs associated with food sales and payroll are moderately to highly correlated to food revenues. Items such as dishware, linens, and uniforms are less dependent on volume. Although the other expense items are basically fixed, they represent a relatively insignificant factor. Beverage expenses consist of items necessary for the operation of a hotel's lounge and bar areas. The costs associated with beverage sales and payroll are moderately to highly correlated to beverage revenues. The proposed subject hotel's food and beverage operation is expected to be efficiently managed and operated at an expense level that is in line with other comparable operations.

FIGURE 7-12 FOOD & BEVERAGE EXPENSE

	Comparable Operating Statements					Proposed Subject Property Forecast	
	#1	#2	#3	#4	#5	2030/31	Deflated Stabilized
Percentage of Revenue	84.0 %	77.2 %	75.4 %	58.4 %	69.8 %	74.0 %	71.0 %
Per Available Room	$44,634	$108,781	$60,251	$28,865	$50,880	$128,871	$107,490
Per Occupied Room	$226.37	$445.68	$228.32	$127.55	$235.28	$578.80	$426.80

Other Operated Departments Expense

Other operated departments expense includes all expenses reflected in the summary statements for the divisions associated in these categories, as discussed previously in this chapter. The proposed subject hotel's other operated departments revenue sources are expected to include items such as the hotel's parking operations, pool cabana rentals, the resort's gift shop, telephone charges, upgraded Internet charges, valet laundry and dry cleaning fees, and other minor items. Based on our review of operations with a similar extent of offerings, we have positioned an appropriate revenue level for the proposed subject hotel.

FIGURE 7-13 OTHER OPERATED DEPARTMENTS EXPENSE

	Comparable Operating Statements					Proposed Subject Property Forecast	
	#1	#2	#3	#4	#5	2030/31	Deflated Stabilized
Percentage of Revenue	44.7 %	88.6 %	60.7 %	71.9 %	39.5 %	44.1 %	40.2 %
Per Available Room	$9,171	$19,743	$11,553	$17,355	$7,331	$10,382	$6,785
Per Occupied Room	$46.52	$80.89	$43.78	$76.69	$33.90	$46.63	$26.94

Spa/Treatment Cabanas Expense

The proposed subject property's spa/treatment cabanas is expected to be efficiently managed and operated at a market-appropriate level. We have projected a stabilized expense ratio of 70.0 in 2033/34.

Our projection of spa/treatment cabanas is presented in the following table.

FIGURE 7-14 SPA/TREATMENT CABANAS INCOME

Property	Year of Data	Number of Rooms	Occupancy	Average Daily Rate	Number of Treatment Rooms	% of Total Revenue	Revenue Per Occupied Room	Revenue Per Treatment Room	Spa Expense Ratio
Comp 1	2014/15	50	67.0 %	$1,189	5	7.3 %	$132.93	$326,313	64.6 %
Comp 2	2018/19	200	65.0	542	7	4.1	40.38	263,135	87.5
Comp 3	2015/16	62	80.0	726	4	4.5	46.66	211,700	63.8
Comp 4	2021	162	78.3	299	6	9.3	44.87	346,294	31.2
Comp 5	2022/23	285	59.9	742	8	2.3	26.89	209,413	89.8
Averages		**152**	**70.0 %**	**$700**	**6**	**5.5 %**	**$58.35**	**$271,371**	**67.4 %**
Proposed COVA Coachella									
Forecast Year 1		318	61.0 %	$1,532	5	2.2 %	$55.37	$58,924	81.9 %
Deflated Stabilized		318	69.0	1,419	5	1.8	38.21	61,200	70.5

Administrative & General Expense

Administrative and general expense includes the salaries and wages of all administrative personnel who are not directly associated with a particular department. Expense items related to the management and operation of the property are also allocated to this category.

Most administrative and general expenses are relatively fixed. The exceptions are cash overages and shortages; commissions on credit card charges; provision for doubtful accounts, which are moderately affected by the number of transactions or total revenue; and salaries, wages, and benefits, which are very slightly influenced by volume. Based upon our review of the comparable operating data and the expected scope of facility for the proposed subject hotel, we have positioned the administrative and general expense level at a market- and property-supported level.

FIGURE 7-15 ADMINISTRATIVE & GENERAL EXPENSE

	Comparable Operating Statements					Proposed Subject Property Forecast	
	#1	#2	#3	#4	#5	2030/31	Deflated Stabilized
Percentage of Revenue	8.7 %	8.3 %	8.6 %	7.5 %	7.1 %	3.4 %	2.5 %
Per Available Room	$19,125	$31,551	$17,838	$10,584	$12,153	$18,994	$13,805
Per Occupied Room	$97.00	$129.26	$67.60	$46.77	$56.20	$85.31	$54.81

Information & Telecommunications Systems Expense

Information and telecommunications systems expense consists of all costs associated with a hotel's technology infrastructure. This includes the costs of cell phones, administrative call and Internet services, and complimentary call and Internet services. Expenses in this category are typically organized by type of technology or the area benefiting from the technology solution. We expect the proposed subject hotel's information and telecommunications systems to be well managed. Expense levels should stabilize at a typical level for a property of this type.

FIGURE 7-16 INFORMATION & TELECOMMUNICATIONS SYSTEMS EXPENSE

	Comparable Operating Statements					Proposed Subject Property Forecast	
	#1	#2	#3	#4	#5	2030/31	Deflated Stabilized
Percentage of Revenue	1.3 %	1.2 %	1.3 %	0.9 %	1.6 %	0.6 %	0.4 %
Per Available Room	$2,751	$4,543	$2,655	$1,291	$2,686	$3,205	$2,330
Per Occupied Room	$13.95	$18.61	$10.06	$5.70	$12.42	$14.40	$9.25

Marketing Expense

Marketing expense consists of all costs associated with advertising, sales, and promotion; these activities are intended to attract and retain customers. Marketing can be used to create an image, develop customer awareness, and stimulate patronage of a property's various facilities.

The marketing category is unique in that all expense items, with the exception of fees and commissions, are totally controlled by management. Most hotel operators establish an annual marketing budget that sets forth all planned expenditures. If the budget is followed, total marketing expenses can be projected accurately.

Marketing expenditures are unusual because, although there is a lag period before results are realized, the benefits are often extended over a long period. Depending on the type and scope of the advertising and promotion program implemented, the lag time can be as short as a few weeks or as long as several years. However, the favorable results of an effective marketing campaign tend to linger, and a property often enjoys the benefits of concentrated sales efforts for many months. Based upon our review of the comparable operating data and the expected scope of facility for the proposed subject hotel, we have positioned the marketing expense level at a market- and property-supported level.

FIGURE 7-17 MARKETING EXPENSE

	Comparable Operating Statements					Proposed Subject Property Forecast	
	#1	#2	#3	#4	#5	2030/31	Deflated Stabilized
Percentage of Revenue	4.5 %	5.7 %	6.8 %	6.5 %	9.1 %	2.7 %	2.1 %
Per Available Room	$9,844	$21,666	$14,199	$9,118	$15,564	$15,433	$11,216
Per Occupied Room	$49.93	$88.77	$53.81	$40.29	$71.97	$69.31	$44.54

Franchise Fee

As previously discussed, the proposed subject property is expected to be operated by the brand; as such, there will be no franchise agreement, and no franchise fees are expected to be required throughout the ten-year forecast period.

Property Operations & Maintenance

Property operations and maintenance expense is another expense category that is largely controlled by management. Except for repairs that are necessary to keep the facility open and prevent damage (e.g., plumbing, heating, and electrical items), most maintenance can be deferred for varying lengths of time.

Maintenance is an accumulating expense. If management elects to postpone performing a required repair, the expenditure has not been eliminated, only deferred until a later date. A lodging facility that operates with a lower-than-normal maintenance budget is likely to accumulate a considerable amount of deferred maintenance.

The age of a lodging facility has a strong influence on the required level of maintenance. A new or thoroughly renovated property is protected for several years by modern equipment and manufacturers' warranties. However, as a hostelry grows older, maintenance expenses escalate. A well-organized preventive maintenance system often helps delay deterioration, but most facilities face higher property operations and maintenance costs each year, regardless of the occupancy trend. The quality of initial construction can also have a direct impact on future maintenance requirements. The use of high-quality building materials and construction methods generally reduces the need for maintenance expenditures over the long term.

We expect the proposed subject hotel's maintenance operation to be well managed. Expense levels should stabilize at a typical level for a property of this type. Changes in this expense item through the projection period result from the application of the underlying inflation rate and projected changes in occupancy.

FIGURE 7-18 PROPERTY OPERATIONS & MAINTENANCE EXPENSE

	Comparable Operating Statements					Proposed Subject Property Forecast	
	#1	#2	#3	#4	#5	2030/31	Deflated Stabilized
Percentage of Revenue	2.2 %	4.8 %	4.8 %	4.7 %	4.2 %	1.7 %	1.3 %
Per Available Room	$4,874	$18,381	$9,895	$6,635	$7,187	$9,378	$6,816
Per Occupied Room	$24.72	$75.31	$37.50	$29.32	$33.23	$42.12	$27.06

Utilities Expense

The utilities consumption of a lodging facility takes several forms, including water and space heating, air conditioning, lighting, cooking fuel, and other miscellaneous power requirements. The most common sources of hotel utilities are electricity, natural gas, fuel oil, and steam. This category also includes the cost of water service.

Total energy cost depends on the source and quantity of fuel used. Electricity tends to be the most expensive source, followed by oil and gas. Although all hotels consume a sizable amount of electricity, many properties supplement their utility requirements with less expensive sources, such as gas and oil, for heating and cooking. The changes in this utilities line item through the projection period are a result of the application of the underlying inflation rate and projected changes in occupancy.

FIGURE 7-19 UTILITIES EXPENSE

	Comparable Operating Statements					Proposed Subject Property Forecast	
	#1	#2	#3	#4	#5	2030/31	Deflated Stabilized
Percentage of Revenue	1.6 %	3.6 %	2.7 %	2.0 %	2.7 %	0.9 %	0.7 %
Per Available Room	$3,476	$13,571	$5,711	$2,876	$4,672	$5,105	$3,710
Per Occupied Room	$17.63	$55.60	$21.64	$12.71	$21.61	$22.93	$14.73

Management Fee

Management expense consists of the fees paid to the managing agent contracted to operate the property. Some companies provide management services and a brand-name affiliation (first-tier management company), while others provide management services alone (second-tier management company). Some management contracts specify only a base fee (usually a percentage of total revenue), while others call for both a base fee and an incentive fee (usually a percentage of defined profit). Basic hotel management fees are often based on a percentage of total revenue, which means they have no fixed component. While base fees typically range from 2.0% to 4.0% of total revenue, incentive fees are deal specific and often are calculated as a percentage of income available after debt

service and, in some cases, after a preferred return on equity. Total management fees for the proposed subject hotel have been forecast at 3.0% of total revenue.

Property Taxes

Real estate in the state of California is assessed at 100% of market value upon the sale, expansion, or new construction of a property. Once established, the assessed value of a property can increase by no more than 2.0% per year, according to state law. A reassessment is triggered by the sale, expansion, or improvement of a property. For purposes of this analysis, we have calculated the first year's property tax burden based on the estimated market value of the subject property determined by our analysis. Real and personal property are taxed at the same rate.

In most states, the comparison of a hotel's assessed value with that of comparable hotels is the same taxing jurisdiction can provide insight into whether or not the property is fairly assessed. The assessed value of the land and improvements is divided by the hotel's number of rooms to provide a unit of comparison with other hotels. This is a useful tool in most states, where properties are periodically reassessed to market value. However, in California, the comparison of assessed values is generally irrelevant due to Proposition 13, enacted in 1978, which removed the relationship between a property's assessed value and its market value. Under Proposition 13, a property is reassessed upon sale to market value, which generally presumed to be the sales price; therefore, the assessed value is increased at a maximum of 2.0% per year. Trends in appreciation and depreciation caused by market fluctuations are not reflected in a property's assessed value in California, unless there is a sales transaction. Thus, comparable hotels in California can have markedly different assessed values, depending upon when the last sales transaction occurred.

Tax rates are based on the city and county budgets, which change annually. The most recent tax rate in this jurisdiction was reported at 0.8200%.

Based on state law and the current tax rate, the proposed subject property's projected property tax expenses levels are calculated as follows.

FIGURE 7-20 PROPOSED SUBJECT PROPERTY'S TAX CALCULATION

Estimated Market Value		Tax Rate	First Year's Tax Burden
$508,000,000	x	0.82%	$4,165,600

It is our understanding that the third-party owners will be responsible for property taxes. An adjustment to property taxes based on sales projection of the units that will participate in the rental program on a prorated basis based on the percent of

units owned by the developer. Please see Chapter 8 for detail on the projected sales pace of unit sales. The following table illustrates the projected developer's share on annual property taxes. Beginning in 2035/36 and thereafter, the residential units are projected to be sold out and the developer's property tax burden will be the proportional property tax for 52 developer-owned units.

FIGURE 7-21 INSURANCE EXPENSE - DEVELOPER

	Estimated Property Tax	Developer Owned Units	Developer's Share of Property Tax
2030/31	$4,165,600	77.8%	$3,239,171
2031/32	4,248,912	64.0%	2,719,304
2032/33	4,333,890	48.8%	2,114,938
2033/34	4,420,568	34.5%	1,525,096
2034/35	4,508,979	22.0%	991,975
2035/36	4,599,159	16.1%	740,465
2036/37	4,691,142	16.1%	755,274
2037/38	4,784,965	16.1%	770,379
2038/39	4,880,664	16.1%	785,787
2040/41	4,978,278	16.1%	801,503

Insurance Expense

The insurance expense category consists of the cost of insuring the hotel and its contents against damage or destruction by fire, weather, sprinkler leakage, boiler explosion, plate glass breakage, and so forth. General insurance costs also include premiums relating to liability, fidelity, and theft coverage.

Insurance rates are based on many factors, including building design and construction, fire detection and extinguishing equipment, fire district, distance from the firehouse, and the area's fire experience. Insurance expenses do not vary with occupancy.

FIGURE 7-22 INSURANCE EXPENSE

	Comparable Operating Statements					Proposed Subject Property Forecast	
	#1	#2	#3	#4	#5	2030/31	Deflated Stabilized
Percentage of Revenue	0.5 %	0.2 %	0.7 %	1.7 %	1.2 %	0.3 %	0.2 %
Per Available Room	$1,197	$935	$1,477	$2,394	$2,106	$1,895	$1,187
Per Occupied Room	$6.07	$3.83	$5.60	$10.58	$9.74	$8.51	$4.71

RMP Revenue Distribution

The rental management program (RMP) revenue distribution to third-party owners is included as a fixed expense and is equal to 50.0% of rooms revenue, after a 12.0% service charge. An adjustment was made for the sales projection for sales of the units that will be participating in the rental management program. Please Chapter 8 in this report for detail regarding the projected sales pace of unit sales.

The owner revenue distribution calculation is presented in the following table.

FIGURE 7-23 FORECAST OF THIRD-PARTY OWNER REVENUE DISTRIBUTION

	2030/31	2031/32	2032/33	2033/34	2034/35
Gross Room Revenue	$81,521,710	$122,708,780	$141,444,800	$148,967,300	$153,436,310
% of Inventory Sold	22.4%	36.0%	51.2%	65.5%	78.0%
Room Revenue to Distribute	$18,260,863	$44,175,161	$72,419,738	$97,573,582	$119,680,322
LESS 12% Service Charge	(2,623,657)	(6,433,825)	(10,573,074)	(14,196,297)	(17,285,707)
Net Revenue	15,637,206	37,741,336	61,846,664	83,377,285	102,394,615
50% Revenue Split	**$7,818,603**	**$18,870,668**	**$30,923,332**	**$41,688,642**	**$51,197,307**

	2035/36	2036/37	2037/38	2038/39	2039/40
Gross Room Revenue	$158,039,400	$162,780,590	$167,664,000	$172,693,920	$177,874,740
% of Inventory Sold	83.9%	83.9%	83.9%	83.9%	83.9%
Room Revenue to Distribute	$132,595,057	$136,572,915	$140,670,096	$144,890,199	$149,236,907
LESS 12% Service Charge	(19,092,008)	(19,664,768)	(20,254,712)	(20,862,353)	(21,488,224)
Net Revenue	113,503,049	116,908,147	120,415,384	124,027,846	127,748,683
50% Revenue Split	**$56,751,524**	**$58,454,074**	**$60,207,692**	**$62,013,923**	**$63,874,341**

Reserve for Replacement

Furniture, fixtures, and equipment (FF&E) are essential to the operation of a lodging facility, and their quality often influences a property's class. This category includes all non-real estate items that are capitalized, rather than expensed. The FF&E of a hotel are exposed to heavy use and must be replaced at regular intervals. The useful life of these items is determined by their quality, durability, and the amount of guest traffic and use.

Periodic replacement of FF&E is essential to maintain the quality, image, and income-producing potential of a lodging facility. Because capitalized expenditures are not included in the operating statement but affect an owner's cash flow, a forecast of income and expense should reflect these expenses in the form of an appropriate reserve for replacement.

The International Society of Hospitality Consultants (ISHC) oversees a major industry-sponsored study of the capital expenditure requirements for full-service/luxury, select-service, and extended-stay hotels. The most recent study was published in 2023.[6] Historical capital expenditures of well-maintained hotels were investigated through the compilation of data provided by most of the major hotel companies in the United States. A prospective analysis of future capital expenditure requirements was also performed based upon the cost to replace short- and long-lived building components over a hotel's economic life. The study showed that the capital expenditure requirements for hotels vary significantly from year to year and depend upon both the actual and effective ages of a property. The results of this study showed that hotel lenders and investors are requiring reserves for replacement ranging from 4.0% to 5.0% of total revenue.

Based on the results of our analysis and on our review of the proposed subject asset and comparable lodging facilities, as well as on our industry expertise, we estimate that a reserve for replacement of 4.0% of total revenues is sufficient to provide for the timely and periodic replacement of the subject property's FF&E. This amount has been ramped up during the initial projection period.

Forecast of Revenue and Expense Conclusion

Projected total revenue, gross operating profit, and EBITDA Less Replacement Reserve are set forth in the following table.

[6] The International Society of Hotel Consultants, *CapEx 2023, A Study of Capital Expenditures in the U.S. Hotel Industry*.

FIGURE 7-24 FORECAST OF REVENUE AND EXPENSE CONCLUSION

		Total Revenue		Gross Operating Profit		House Profit Ratio	EBITDA Less Replacement Reserve		
	Year	Total	% Change	Total	% Change		Total	% Change	As a % of Ttl Rev
Projected	2030/31	$134,487,000	—	$56,470,000	—	42.0 %	$38,235,000	—	28.4 %
	2031/32	180,615,000	34.3 %	94,507,000	67.4 %	52.3	61,613,000	61.1 %	34.1
	2032/33	215,355,000	19.2	114,630,000	21.3	53.2	66,036,000	7.2	30.7
	2033/34	226,624,000	5.2	121,319,000	5.8	53.5	61,747,000	(6.5)	27.2
	2034/35	233,423,000	3.0	124,959,000	3.0	53.5	55,920,000	(9.4)	24.0

8. Residential Prices and Sales Pace

Whole Ownership Component Overview

The planned condominium unit mix and average square feet per unit type, is detailed in the following table.

PLANNED WHOLE OWNERSHIP UNIT MIX

Unit Types	Number of Units	Avg. SF per Unit	Total SF
Condo-Hotel Townhomes	188	1,248	234,624
Three/Four Bedroom Villas	51	2,600	132,600
Sky Villas	5	4,629	23,145
Four/Five Bedroom Residences	39	4,598	179,307
Eight Bedroom Estates	6	6,740	40,440
Total	**289**	**2,111**	**610,116**

In addition, the proposed subject property will offer 61 units which will be structured as co-ownership product, which 1/4th and 1/8th share ownership. The co-ownership product will be described separately in the following report section.

The proposed COVA Coachella will feature a variety of unit types, ranging from a condo-hotel one-bedroom unit, to three and four-bedroom villas, up to a vacation home which will offer from four to eight bedrooms (to be marketed as Residences and Estates).

All whole ownership products will have access to the resort's amenities, facilities, and services. The concept of the proposed subject property will be focused on wellness and is designed to be the premier destination for wellness in the Coachella Valley, featuring wellness focused facilities such as an on-site longevity clinic, two-story fitness center, luxury spa, immersive outdoor onsen, 25-meter lap pool, and an island dedicated to yoga and meditation. In addition, the resort will feature a ten-acre swimmable lagoon in the center of the site which will offer sandy beaches, nine food & beverage outlets, sports center, surf machine, club membership program, beach club and live music venue, library, event spaces, outdoor amphitheater, kid's club, kid's pool, splash pad, and working barn.

Each townhome, villa, and home will be designed with modern, rustic luxury to merge indoor and outdoor living. The whole ownership units are positioned for privacy, views, and water access.

The proposed subject property is expected to managed by the brand. As previously discussed, the brand affiliation has not been selected yet. The preliminary brands under consideration include Auberge, Rosewood, One and Only, One Hotels, and Montage. We assume the brand will be one of the preliminary brands or a similar brand within the luxury hotel tier. The third-party owners will be required to participate in a rental program, which will provide the owner with potential revenue to offset their purchase. Based on our conversation with the developer, the terms of the agreement will be 21 to 30 days annual usage and revenue generated by the rental program will be split between the unit owners and property ownership (50.0%/50.0%) after a 12.0% service charge.

The following renderings illustrate view of the subject whole ownership units.

RENDERING OF ARRIVAL VIEW OF A RESIDENCE



RENDERING OF LAGOON VIEW OF A RESIDENCE



RENDERING OF ARRIVAL VIEW OF AN ESTATE HOME



RENDERING OF LAGOON VIEW OF AN ESTATE HOME



RENDERING OF ARRIVAL VIEW OF A VILLA



RENDERING OF LAGOON VIEW OF A VILLA



RENDERING OF ARRIVAL VIEW OF CONDO HOTEL COMPLEX



Buyer Profile

Market participants indicated that the majority of the potential buyers in Coachella Valley are those living in other parts of California, especially from the San Diego, Orange County, and Los Angeles metropolitan markets, as well as those with a primary home in Seattle, Portland, or other colder climate cities, such as New York and Chicago. Typically, buyers are in search of a third or fourth home and intend to spend a week or several weeks in both the spring and fall months. Visitation to the Coachella Valley traditionally slows in the summer months given the extreme desert heat; however, summer demand has risen in recent years with the growth of day club and music event marketing. We expect that the buyers will also be seeking an investment property and are looking to offset expenses through participation in a rental management program.

Luxury Residences Market Overview

The vacation/second-home industry in the United States enjoyed significant prosperity early in the last decade, slowed during the Great Recession, and resurged in recent years. The National Association of Realtors (NAR) defines second-home owners as those who own one or more residential properties in addition to a primary residence and who use their second home for either vacation or investment purposes. Investment properties and vacation residences share similar real estate attributes; vacation homes are properties primarily owned for recreational use by an owner, family, and friends, while investment properties are owned primarily to rent to others. The overall market experienced an increase from 2019 through early 2022. A modest correction is ongoing given the increased cost of debt; the ongoing correction is less at the higher price point as many buyers are all-cash buyers not influenced by interest rates. Per conversations with brokers and developers, the influence on the overall luxury market has been somewhat muted given the high prevalence of all-cash buyers and/or the high net worth of the buyers.

Demand increases for global ultra-luxury residences in the future will be driven by the growth of global wealth. Oxford Economics forecasts that the highest growth in terms of number of high-income households over the next five years is projected in the Americas, Asia Pacific, the Middle East, and European regions.

High-End Luxury Demographics

The increasing number of high-net-worth (HNW) individuals and ultra-high-net-worth (UHNW) individuals globally has fueled consumer demand for luxury and ultra-luxury lodging and residences, particularly in resort locations. These savvy travelers are looking for new experiences on their trips, driving the demand for ultra-luxury experiential resort accommodations. Operators have been able to increase the pricing of their product aggressively, with little consumer resistance, which in turn has led to outsized increases in the profitability of high-end luxury lodging assets. Profitability gains are driving increased interest in the development of new luxury product to serve this market. The long lead time and high cost to develop these properties and the depth of demand will help insulate these assets from competitive pressure.

Demographics around the world, and particularly in the United States, provide a strong underpinning for the ultra-luxury sector. At year-end 2023, North America continued to occupy the top spot of the wealth pyramid, with over 160,000 UHNW individuals (wealth above $30 million USD).

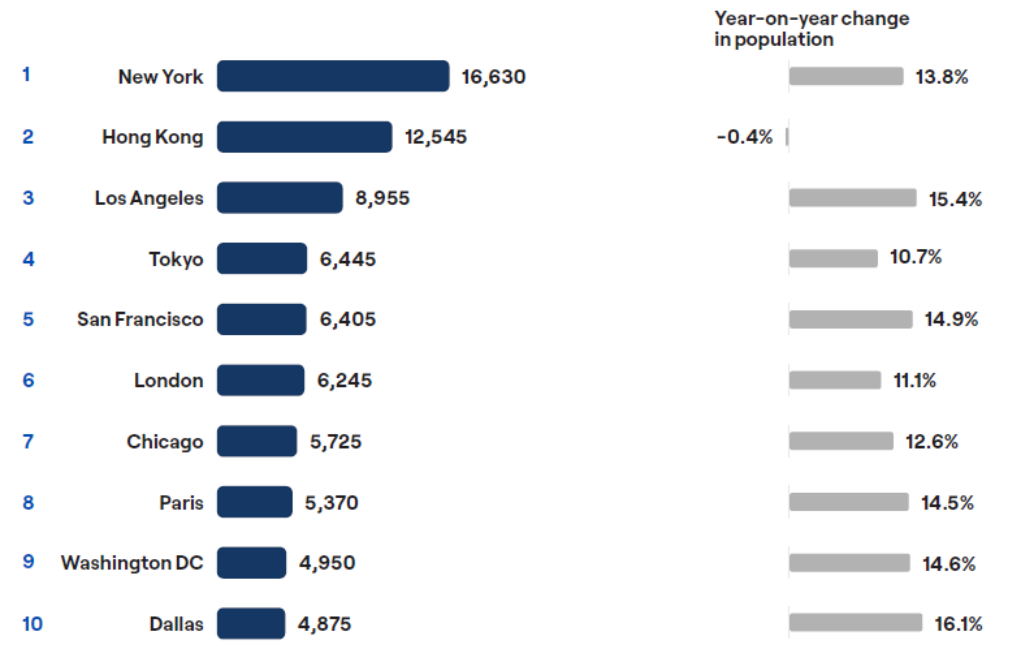
UHNW INDIVIDUALS IN 2023 (SOURCE: WEALTH-X, AN ALTRATA COMPANY)



The United States added the most household wealth in 2023, followed by China, Canada, India, and Australia. The most recent World Ultra Wealth Report, published by Altrata, indicated 12.0% in North America for UHNW numbers in 2023, with continued growth expected over the next five years.

According to Altrata, growth in North America in 2023 was largely driven by equity returns from tech stocks. Wealth growth was notable in New York, Los Angeles, San Francisco, Chicago, Washington DC, and Dallas, as indicated below.

TOP CITIES FOR UHNW POPULATION IN 2023 (SOURCE: WEALTH-X, AN ALTRATA COMPANY)



In conclusion, the U.S. and global demand for luxury and ultra-luxury resorts and resort residential products has been growing at a rapid pace in recent years given the strong growth in the number and net worth of the HNW and UHNW population. Despite near-term concerns regarding economic growth, this trend is anticipated to continue, providing a significant base of demand for luxury residential products.

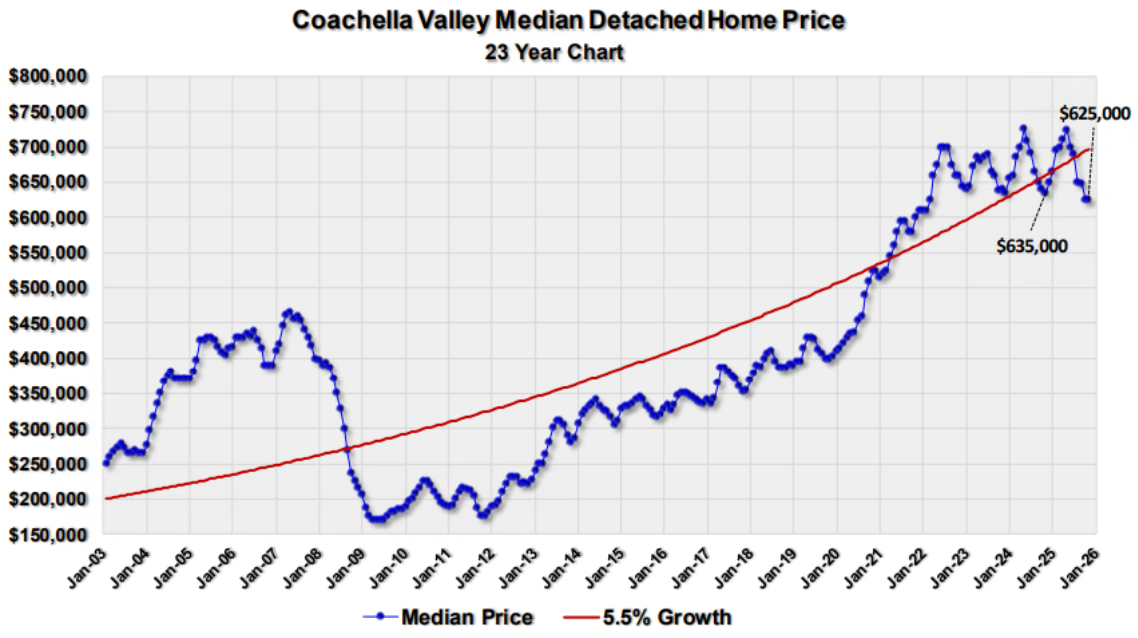
Coachella Valley Market Overview

Due to high interest rates and lower-than-normal inventory, the residential market in the Coachella Valley began to cool down in 2023. However, in early 2025, inventory reached its highest point since before the pandemic in 2019. Since the beginning of the year, inventory has been improving, and the inventory is now comparable to before the pandemic. Nevertheless, our conversations with market participants indicate that the popularity of Coachella Valley has grown tremendously over the last decade, which further intensified following the onset of the pandemic due to buyers seeking homes in a scenic environment with easy access to outdoor recreational activities. The primary homebuyers in the Coachella Valley are those living in other parts of California, as well as those with a primary home in Seattle, Portland, or other colder climate cities, such as New York and Chicago.

The Palm Springs Regional Association of Realtors and the California Desert Association of Realtors publish monthly trends on the status of the current residential market, which we have reviewed to assist in estimating estimated pricing for the proposed subject property.

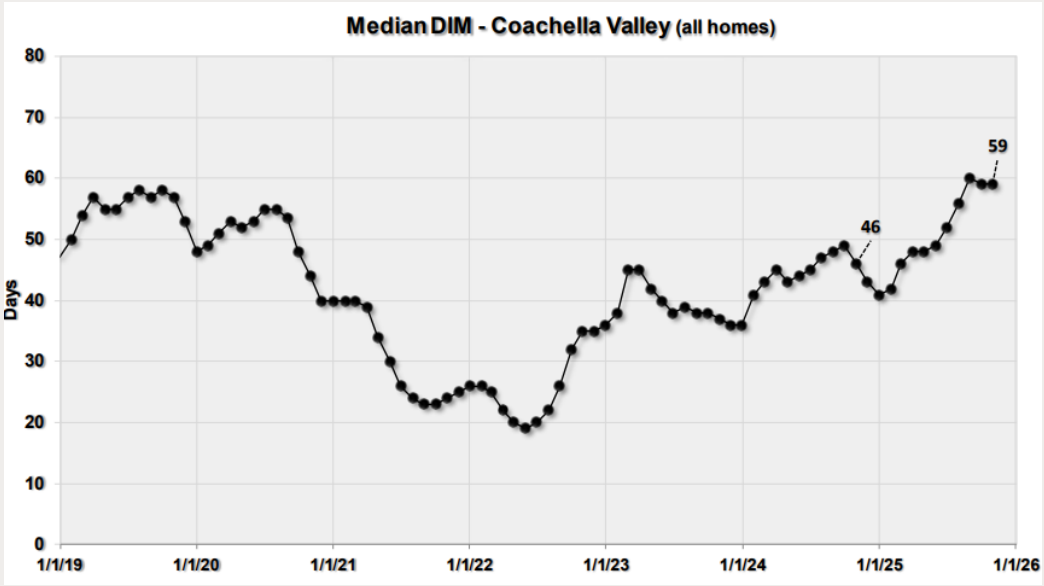
The following chart reflects the median detached price for homes throughout the Coachella Valley. As noted below, prices did not exceed pre-2008 recession levels until 2021. The latest data as of October 2025 ended the month at $625,000, which is difference of -1.6% from last year. The median price usually hits its seasonal low in the fall and its high in the spring. The table clearly shows that detached homes in the Coachella Valley have generally maintained the price gains they made after the pandemic.

COACHELLA VALLEY MEDIAN DETACHED PRICE – SOURCE: THE DESERT HOUSING REPORT, OCT. 2025



At the end of October 2025, the median number of "days in the market" in the Coachella Valley was 59 days, which is 13 days higher than last year. The median selling time in the region has generally been running between 40 and 55 days over the last two years,

COACHELLA VALLEY DAYS ON MARKET – SOURCE: THE DESERT HOUSING AUTHORITY, OCT. 2025



Coachella Valley Luxury Home Market

The Coachella Valley is home to some of the most exclusive private residential communities in Southern California. The majority of the high-end luxury residential communities are located in Indian Wells, Rancho Mirage, and La Quinta, including the Madison Club, the Hideaway, and the Bighorn. It is important to note that the subject site has an address in Coachella; however, it is within the outer southwestern most boundary of Coachella, and it situated within a few blocks of the most affluent developments in the Coachella Valley. Our interviews with market participants indicated that the luxury home market is not typically influenced by high interest rates but greater economic uncertainty has impacted sales pace, which prompted more incentives offered by sellers. Moreover, luxury home sales in the Coachella Valley are also somewhat challenged by the lack of newer inventory. Many of the luxury homes were built before 2009, which provides an opportunity for the proposed subject property.

In conclusion, our research shows the Coachella Valley, especially the luxury segment, has been moderately impacted by the high interest rate environment and economic uncertainty, which is reflected in the comparatively high levels of

inventory. However, pricing remains near record high levels with little to no declines in some submarkets. Overall, the outlook for the market remains positive given the strong population base in the Los Angeles basin and the growing popularity of the Coachella Valley among homebuyers from colder climates.

Comparable Regional Branded Properties

The proposed subject whole ownership component is expected to appeal to a unique set of buyers who are attracted to the location, brand, and product (i.e., a whole ownership product with a rental program). Given the overlapping buyer profiles throughout the region for similar product types, we have reviewed recent sales of other branded residences throughout the greater California market.

The Residences at Stanly Ranch

The Residences at Stanly Ranch comprise of 70 three- to six-bedroom single-family homes ("Vineyard Homes") and 40 two-bedroom, turnkey furnished resort residences ("Villas"). These residences are situated within Stanly Ranch's 712 heirloom acres of rolling California vineyards, eucalyptus trees, and walking and biking trails. The Vineyard Homes feature eleven floor plans which include single-level, two-level, and three-level layouts which range from 2,300 to 5,600 square feet of indoor living space. All homes feature private, heated pools, lush, covered courtyards, gourmet kitchens, covered loggias, and offer optional upgrades for outdoor fire pits and outdoor kitchens, and two interior design color palette selections owners may choose from. Each open-layout great room is highlighted by vaulted ceilings and an exquisite marble fireplace set between connections to outdoor lounge venues, ideal for entertaining guests. The primary suites feature a spa-inspired bath, outdoor shower, fireplace, and walk-in closet. Owners of the Vineyard Homes also have the option to join the Stanly Ranch Club; membership of the club offers residents access to facilities and amenities at the nearby 130-room Stanly Ranch, an Auberge Resort.

The Villas feature two floor plans, both of which offer roughly 1,780 square feet of indoor living space. Vaulted ceilings and full-height glass doors open to a covered, outdoor venue overlooking vineyards and inspired contemporary architecture. The villas are fully furnished and include dual temperature-controlled wine columns, spa-inspired bath with heated floors, and multiple stone fireplaces. Exterior spaces include an outdoor lounge and built-in outdoor kitchen. These condominium-style Villas are also supported by a rental management program.

The first phase of Stanly Ranch's residential development was completed in September 2024, which includes 24 Vineyard Homes and 20 Villas. The publicly available sales prices of the 3 Vineyard Homes and 1 Villas that were sold in 2024 averaged $1,950 per square feet.

Four Seasons Private Residences Napa Valley

The Four Seasons Private Residences Napa Valley comprise 20 one- and two-story villas that offer between 2,500 to 3,460 square feet of interior living space. All twenty Residences feature two full master bedrooms with five-fixture bathrooms, walk-in closets, an owner's wine cellar, luxuriously appointed dining and entertaining spaces, and generous covered outdoor terraces for relaxing with family and friends in a vineyard setting. Each Residence also includes a full two-car garage and spacious closets and storage for full-time residence. Owners of these residences also have the option of participating in a rental management program operated by the adjacent Four Seasons Resort Napa Valley.

The publicly available sales prices of the 19 residences that were sold between 2021 and 2024 averaged approximately $1,715 per square feet.

Montage Residences Healdsburg

The Montage Residences Healdsburg comprise 25 turnkey Harvest Homes and 15 custom Estate Homesites, all of which are eligible to participate in a rental management program. The Harvest Homes feature two-level, four-bedroom layouts offering 3,132 square feet of indoor living space and include amenities such as a private plunge pool, a dedicated garage with convenient golf cart access, and a lock-off secondary primary bedroom suite.

The Estate Homesites are set across two enclaves—the northern enclave can be sited for custom homes, while the southern homesites offer site-specific home designs. Each homesite sits amidst shady groves of carefully preserved native trees and provides a generous canvas upon which to build a distinct wine country estate.

The publicly available sales prices of the 17 residences that were sold between 2022 and 2024 averaged approximately $1,870 per square feet.

Sales of the three comparable branded residences indicate a pricing range of $1,714 to $1,985 per square feet. However, it is important to note that as the effective date of this report, Stanly Ranch was still in the early stages of selling its first phase of residential development.

The pricing of various brand residential comparables from throughout California are illustrated in the following table.

These data are summarized in the following table.

COMPARABLE BRANDED RESIDENCES IN CALIFORNIA - SALES SUMMARY

Comparable	Notes	Total # of Units	Year Built	Period Analyzed	# Units Sold	Avg. SF/Unit Sold	Avg. Sale Price/Unit	Avg. Price/SF
Mandarin Oriental Residences, Beverly Hills	Residential Only	54	2022	2022 to 2024	10	2,166	$6,966,001	$3,216
The Residences at Stanly Ranch - Vineyard Homes	Hotel & Residences	70	2022	2024	3	3,150	6,251,667	1,985
The Residences at Stanly Ranch - Villas	Hotel & Residences	40	2022	2024	1	1,790	3,200,000	1,788
Four Seasons Private Residences Los Angeles	Residential Only	58	2021	2021 to 2024	32	2,428	4,900,297	2,018
Four Seasons Private Residences at 706 Mission, San Franc	Residential Only	146	2021	2021 to 2024	10	2,947	6,007,500	2,039
Four Seasons Private Residences Napa Valley	Hotel & Residences	20	2021	2021 to 2024	19	2,670	4,575,789	1,714
Montage Residences Healdsburg	Hotel & Residences	40	2020	2022 to 2024	17	3,132	5,853,335	1,869
Pendry Residences West Hollywood	Hotel & Residences	40	2020	2019 to 2023	10	2,509	7,202,500	2,871
Residences at West Hollywood EDITION	Hotel & Residences	20	2018	2021 to 2024	12	3,150	8,929,083	2,835
Ritz-Carlton Residences Los Angeles	Hotel & Residences	224	2010	2019 to 2024	52	1,861	1,774,330	953
Ritz-Carlton Residences Tahoe	Hotel & Residences	23	2009	2013 to 2023	24	2,172	2,778,500	1,280
Westin Verasa Napa	Condominium Hotel	160	2008	2008 to 2024	26	656	535,313	817
Fairmont Heritage Place, Ghirardelli Square	Fractional & Whole-Ownership	53	2008	2013 to 2024	6	1,302	2,231,333	1,714
Ritz-Carlton Residences San Francisco	Fractional & Whole-Ownership	76	2006	2010 to 2024	52	1,609	1,720,460	1,069
St. Regis Residences San Francisco	Hotel & Residences	101	2005	2005 to 2024	65	2,162	3,543,655	1,639
Four Seasons Private Residences San Francisco	Hotel & Residences	142	2001	2002 to 2024	78	2,007	3,037,346	1,514

Source: MLS & HVS Database

The regional branded residences sales comparables indicated a range of $817 to $3,216 per square foot, with an overall average sales price of $1,832 per square foot, or a median sales price of $1,751 per square foot.

Local Residential Comps

The Madison Club

The Madison Club is located less than two miles west of the subject site. It the highest-rated private residential community in the subject neighborhood. The Madison Club is highly exclusive, with an initiation fee of $250,000 and annual dues exceeding $45,000. During the period reviewed from 2023 through year-to-date 2025, ten residences within the Madison Club have been sold at prices ranging from $5,153,750 to $31,750,000. The average price per square foot was $1,591, and the median price per square foot was $1,556. Recent residential sales within the Madison Club are shown in the following table.

THE MADISON CLUB – SALES DATA 2023 THROUGH YEAR-TO-DATE 2025

Date of Sale	Address	Sale Price	SF	Price per SF	Beds	Baths	Lot	Year Built
7/01/2025	81413 Columbus Way	$12,100,000	7,638	$1,584	5	6	0.64	2014
4/25/2025	52395 Ross Ave	25,000,000	12,833	1,948	8	13	0.80	2024
12/19/2024	53821 Ross Ave	21,350,000	17,398	1,227	8	13	1.10	2023
12/05/2024	53205 Humboldt Blvd	12,690,000	7,526	1,686	5	6	0.76	2019
;5/31/2024	53765 Humboldt Blvd	18,000,000	11,790	1,527	7	9	0.80	2024
3/13/2024	52705 Humboldt Blvd	5,153,750	4,859	1,061	5	6	0.06	2012
3/01/2024	53675 Pike Pl	10,300,000	6,169	1,670	4	5	0.47	2022
6/01/2023	53804 Ross Ave	31,750,000	15,847	2,004	6	11	0.98	2022
5/31/2023	81418 Amundsen Ave	10,500,000	6,968	1,507	4	6	0.98	2014
4/24/2023	81127 Columbus Way	10,800,000	8,085	1,336	5	6	0.85	2017
AVERAGES		**$15,764,375**	**9,911**	**$1,591**	**5.7**	**8.1**	**0.74**	**2019**

The Hideaway Club

The Hideaway Club is located adjacent to, and directly to the west of the Madison Club. The Hideaway Club is also a highly rated private residential community; however, it is not as exclusive as The Madison Club. We reviewed sales within the Hideaway Club from 2023 through year-to-date 2025. During this time frame the average price per square foot was $1,078, and the median price per square foot was $1,092. Recent residential sales within the Hideaway Club are presented in the following table.

THE HIDEAWAY CLUB – SALES DATA 2024 THROUGH YEAR-TO-DATE 2025

Date of Sale	Address	Sale Price	SF	Price per SF	Beds	Baths	Lot	Year Built
8/25/2025	53603 Via Mallorca	$6,900,000	6,320	$1,092	5	6	0.38	2025
8/11/2025	80758 Via Pessaro	5,700,000	4,940	1,154	4	6	0.59	2017
7/31/2025	80675 Via Portofino	5,300,000	5,585	949	5	6	0.36	2008
6/26/2025	53400 Via Strada	8,500,000	7,834	1,085	6	8	0.56	2023
6/04/2025	53739 Via Palacio	7,825,000	6,144	1,274	6	7	0.54	2023
3/31/2025	53667 Via Mallorca	6,400,000	5,100	1,255	4	5	0.31	2023
3/08/2025	53293 Via Bellagio	7,250,000	6,628	1,094	5	6	0.57	2025
1/28/2025	53488 Via Strada	7,250,000	6,298	1,151	5	7	0.41	2020
1/13/2025	80350 Via Capri	5,250,000	4,705	1,116	4	5	0.42	2013
1/10/2025	80670 Via Montecito	5,475,000	6,534	838	5	8	0.44	2020
1/02/2025	53699 Via Mallorca	6,900,000	5,764	1,197	4	5	0.33	2014
11/13/2024	80075 Via Pessaro	6,250,000	5,318	1,175	4	5	0.32	2008
10/15/2024	53090 Via Chante	5,695,000	4,815	1,183	5	6	0.38	2023
8/15/2024	53607 Via Palacio	5,450,000	5,349	1,019	4	5	0.52	2014
8/14/2024	52939 Via Dona	5,100,000	4,903	1,040	5	6	0.43	2008
5/06/2024	80725 Via Montecito	6,200,000	5,139	1,206	4	6	0.44	2010
3/11/2024	80637 Via Pessaro	5,175,000	5,280	980	4	6	0.34	2006
3/11/2024	80215 Via Mirasol	5,000,000	5,643	886	5	6	0.43	2010
1/22/2024	52455 Via Savona	6,700,000	6,890	972	5	9	0.50	2013
1/22/2024	53747 Via Strada	8,700,000	8,410	1,034	6	8	0.53	2021
1/12/2024	53110 Via Dona	5,175,000	5,082	1,018	5	6	0.35	2023
AVERAGES		**$6,295,000**	**5,842**	**$1,078**	**4.8**	**6.3**	**0.44**	**2017**

In addition, the following table illustrates selected recent luxury residential sales from within or near PGA West, a popular golf community and private club community in the subject neighborhood. PGA West features nine golf course designed by renown golfers such as Jack Nicklaus, Arnold Palmer and Greg Norman. This resort is marketed as the "Western Home of Golf in America." The selected sales represented transactions that occurred from January through October 2025. The average price per square foot in 2025 was $948, and the median price per square foot was $944. The selected sales from 2025 within or near PGA West are listed in the following table.

SELECTED SALES WITHIN OR NEAR PGA WEST - 2025

Date of Sale	Address	Sale Price	SF	Price per SF	Beds	Baths	Lot	Year Built
10/23/2025	81860 Andalusia, La Quinta	3,100,000	3,560	871	4	5	0.31	2021
10/20/2025	84160 Lovely Sage Ct, Thermal	1,800,000	1,216	1,480	1	4	5.04	2016
10/09/2025	81621 Ronda, La Quinta	3,700,000	4,184	884	4	5	0.37	2023
10/02/2025	58791 Jerez, La Quinta	4,150,000	4,126	1,006	4	5	0.38	2014
9/30/2025	79242 Tom Fazio Ln, La Quinta	3,000,000	3,513	854	4	5	0.59	2025
9/15/2025	59627 Almeria, La Quinta	4,250,000	4,426	960	4	4	0.45	2024
4/30/2025	81594 Ronda, La Quinta	2,890,000	3,560	812	4	5	0.36	2023
4/17/2025	81965 Andalusia, La Quinta	4,500,000	4,345	1,036	4	5	0.33	2014
4/14/2025	79640 Tom Fazio Ln N, La Quinta	2,883,500	2,850	1,012	3	4	0.31	2020
4/09/2025	59535 Seville, La Quinta	4,100,000	4,126	994	4	5	0.38	2016
4/07/2025	58857 Jerez, La Quinta	4,900,000	5,193	944	4	5	0.45	2015
4/07/2025	58785 Quarry Ranch Rd, La Quinta	3,350,000	3,820	877	3	4	0.44	2019
4/01/2025	81759 Andalusia, La Quinta	2,850,000	3,253	876	4	5	0.26	2015
3/20/2025	57240 Peninsula Ln, La Quinta	3,800,000	4,519	841	4	5	0.54	2006
3/07/2025	59185 Marbella, La Quinta	5,700,000	5,356	1,064	5	6	0.37	2024
1/15//2025	81880 Andalusia, La Quinta	3,100,000	3,612	858	4	5	0.32	2021
1/07/2025	58200 Almonte Dr, La Quinta	1,300,000	966	1,346	2	1	2.24	1959
AVERAGE		**3,492,559**	**3,684**	**948**	**3.6**	**4.6**	**0.77**	**2015**

It is important to note that the local residential sales data represents resale homes (versus new construction) and does not benefit from a brand affiliation or private club setting.

As a last benchmark, we reviewed the presales from the former Proposed Montage Resort in La Quinta. After numerous delays, the developer was in breach of contract with the city and subsequently defaulted on the project and filed for bankruptcy in August 2024. Ten presales were made prior to the bankruptcy for five two-bedroom residences, four three-bedroom residences, and one four-bedroom residence. In our opinion, although these presales did not become confirmed sales, they are relevant benchmarks since the presales were made in the market. The average prices for the presales at the former Proposed Montage Resort are illustrated in the following table.

PRESALE SALES FOR MONTAGE BRANDED RESIDENCES - PRESALES

Unit Type	Square Feet	Average Sales Price	Average Price per SF
2BR	1,787	$2,655,899	$1,486
3BR	2,113	3,085,899	1,460
4BR	3,520	4,255,899	1,209

Subject Sales Prices and Sales Pace Projection

A summary of the whole ownership comparables and our reconciled price positioning of the subject's whole ownership component are illustrated in the following table.

COMPARABLES SUMMARY AND SUBJECT PRICE POSITIONING (BASE YEAR)

	Avg. SF/ Unit Sold	Average Sale Price	Average Price per SF
Regional Branded Residences	2,232	$4,344,194	$1,832
The Madison Club	9,911	15,764,375	1,591
The Hideaway Club	5,842	6,295,000	1,078
Within or Near PGA West	3,684	3,492,559	948
Former Proposed Montage Resort	2,473	3,332,566	1,385
Proposed COVA Coachella	**1,980**	**$2,574,000**	**$1,300**

We have positioned the subject's whole ownership price points below the regional branded residences and the Madison Club and above the Hideaway Club and other local comps within or near PGA West. A majority of the regional branded residence clubs are located in urban areas of San Francisco or Los Angeles which represents higher priced real estate and the Madison Club represents the highest luxury residential development in the market, with exclusivity with high security and the prestige of being home to several well-known celebrities. It is our opinion that the subject property's whole ownership price points should be higher than the Hideaway Club and other local comp prices given the subject's new construction, as well as consideration of the planned high-quality food and beverage outlets, wellness-focused facilities, recreation amenities and nine-acre lagoon within the resort. While the subject's reconciled price point is positioned below the pre-sale prices of the former Montage Resort, we also note that it was a failed project and the pre-sales that were sold were a small number. We believe that the reconciled price positioning of $1,300 will allow for an efficient sales pace which is important given

the large amount of whole ownership inventory that will be sold. Furthermore, the reconciled price point can be marketed as a value proposition, especially when also considering that the owner will participate in a rental program which will offset the investment. In addition, this price positioning will allow for somewhat aggressive price increases as project sales gains momentum.

The reconciled price points, in 2025 dollars, based on our analysis of the market, is shown in the following table.

RECONCILED MARKET-BASED PRICES (BASE YEAR)

Unit Types	Avg. SF per Unit	Price Per SF	Price Per Unit
Condo-Hotel Townhomes	1,248	$1,300	$1,622,400
Three/Four Bedroom Villas	2,600	1,300	3,380,000
Sky Villas	4,629	1,300	6,017,700
Four/Five Bedroom Residences	4,598	1,300	5,977,400
Eight Bedroom Estates	6,740	1,300	8,762,000

We have made the following assumption for the whole ownership sellout.

- Pre-sales will begin on March 1, 2028, two years before the opening date of the property on March 1, 2030.
- We estimate 66 whole ownership units, or roughly 20% of the inventory, will be sold during the pre-sales period.
- The base price positioning will be assumed during the pre-sales period, then will increase 5.0% annually beginning on the first projection year, 2030/31.
- The total sellout period, exclusive of pre-sales, will be five years, resulting in a sellout of the subject whole ownership units in 2034/35.

The whole ownership sellout is illustrated in the following table.

WHOLE OWNERSHIP SALES PROJECTION

	Units Sold	Total SF Sold	Avg. Sales Price per SF	Sales Volume
2028/30 [A]	56	96,808	$1,300	$125,851,000
2030/31 [B]	41	82,052	1,365	112,001,400
2031/32 [C]	52	118,819	1,433	170,297,222
2032/33 [D]	54	136,521	1,505	205,452,044
2033/34 [E]	45	91,130	1,580	143,999,324
2034/35 [F]	41	84,786	1,659	140,673,541
	289	**610,116**	**$1,472**	**$898,274,529**

A - Pre-sales, 45 condo hotel units, 4 residences, 2 Sky Villas, and 5 Villas

B - 30 condo hotel units, 7 residences, 1 Sky Villa, and 3 Villas

C - 30 condo hotel units, 1 Estate, 8 residences, 2 Sky Villas, and 11 Villas

D - 30 condo hotel units, 5 Estates, 8 residences, and 11 Villas

E - 28 condo hotel units, 6 residences, and 11 Villas

F - 25 condo hotel units, 6 residences, and 10 Villas

Cost of Sales

The cost of sales pertains to direct costs incurred in selling the subject whole ownership such as broker commissions, sales and marketing costs, and closing fees. Broker commissions pertain to fees to be paid to listing and selling brokers. Sales and marketing costs pertain to costs incurred in the marketing to potential buyers. Costs included under this category are advertising, promotion, direct marketing, administrative costs, research, and other overhead costs. Closing fees refer to the costs associated with producing the necessary closing documents, title work, legal work, and recording fees. We have assumed a 12.50% expense ratio in our projection, as presented in the following table.

COST OF SALES

Component	% Cost
Branded License Fee	5.00%
Broker's Commission	5.00%
Legal, Escrow, and Closing Costs	1.00%
Sales and Marketing	1.50%
Total Cost of Sales	**12.50%**

Whole Ownership Cash Flow Forecast

Based on the above discussed parameters, we have compiled an annual cash flow forecast for the proposed subject property's whole ownership component. Our annual cash flow forecast covers the estimated sellout period from March 1, 2030 through February 28, 2035, exclusive of pre-sales (from March 1, 2028 through February 28, 2030.

WHOLE OWNERSHIP COMPONENT, PROPOSED COVA COACHELLA – CASH FLOW FORECAST

	2028/30 Presales	2030/31	2031/32	2032/33	2033/34	2034/35	Totals
Sales:							
Square Feet Sold	96,808	82,052	118,819	136,521	91,130	84,786	**610,116**
Price per SF	$1,300	$1,365	$1,433	$1,505	$1,580	$1,659	**$8,842**
Total Revenue	**$125,851,000**	**$112,001,400**	**$170,297,222**	**$205,452,044**	**$143,999,324**	**$140,673,541**	**$898,274,529**
Cost of Sales (12.5%)	$15,731,375	$14,000,175	$21,287,153	$25,681,505	$17,999,915	$17,584,193	**$112,284,316**
Net Sale Proceeds	**$110,119,625**	**$98,001,225**	**$149,010,069**	**$179,770,538**	**$125,999,408**	**$123,089,348**	**$785,990,213**

9. Co-Ownership Interest Share Prices and Sales Pace

This chapter begins with a shared ownership/co-ownership industry overview.

Shared Ownership/ Co-Ownership Industry Overview

This section presents an overview of the shared-ownership resort real estate industry to provide the reader with an understanding of the current state of the industry, as well as the characteristics of the industry's target markets. A brief regional overview follows the overview of the shared ownership industry.

It is important for the reader to understand the co-ownership interest is historically referred to fractional ownership and is identified within the Ragatz report (described below) as fractional interest projects or private residence clubs. The proposed subject property intends to market the "private residence club" as co-ownership interest ownership. For clarity the references to fractional interests in the industry overview are the same interest as will be sold at the proposed subject property as co-ownership interest ownership.

The information presented within this section was obtained from *The Shared-Ownership Resort Real Estate Industry in North America: 2025*, a detailed survey of the industry in 2024 in North America (including the United States, Canada, the Caribbean and Mexico). This survey was conducted in 2024 by Ragatz Associates, an internationally recognized consulting and market research firm focused on the industry.

The 2025 industry report, as prepared by Ragatz Associates, represents the 25th annual survey conducted since 1999. Findings from this report are based on telephone interviews with developers, resort managers, marketing and sales directors, and/or other appropriate contacts at all identified fractional projects that were closing sales or conducting pre-sales activity during 2024.

Some 336 fractional interest projects and private residence clubs were identified in the survey. Of the 336 developments, 26 were in active sales at the time of this report, including eight fractional interest projects and 18 private residence clubs. The 26 active projects represent the same number as in 2023, and 1257less than the 153 in the industry's peak year of 2007. During 2024, three new projects started, and three existing resorts stopped sales prior to reaching sell-out.

For the purposes of this section, it is important to distinguish the two major components of the overall fractional industry:

(1) fractional interest projects

(2) private residence clubs

The two components are similar, in that both typically sell deeded ownership in shares of vacation homes, ranging from a 1/21 share with two weeks of annual use to a 1/4 share with three months of annual use. However, the two components vary in terms of price, quality of product, and degree of service and amenities. Given these distinctions, Ragatz Associates simply assumes that product selling for less than $1,000 per square foot falls into the fractional interest category, and product selling for more than $1,000 per square foot falls into the private residence club category. Private residence clubs also are typically characterized by having a more prime site, as well as more services, amenities, and owner benefits.

The following table illustrates the fractional ownership resorts currently in the regional market, according to Ragatz.

FRACTIONAL OWNERSHIP RESORTS IN THE REGIONAL MARKET, ACCORDING TO RAGATZ

ARIZONA		
Club At Hidden Meadow Ranch	Greer, AZ	East AZ Mountains
Quality Hill Resort Villas	Pinetop, AZ	East AZ Mountains
Rancho Manana Private Residence Club & Spa	Cave Creek, AZ	Phoenix Area
Rocks Luxury Residence Club	Scottsdale, AZ	Phoenix Area
Scottsdale Club Villas	Scottsdale, AZ	Phoenix Area
Villas at Seven Canyons	Sedona, AZ	Sedona

CALIFORNIA		
Residence Club at PGA West	La Quinta, CA	Coachella Valley
4 Seasons at Desert Breezes	Palm Desert, CA	Coachella Valley
Dunes Club	Palm Springs, CA	Coachella Valley
Villas of Gold Mountain	Clio, CA	Lake Tahoe Area
The Mountain Club	Kirkwood, CA	Lake Tahoe Area
Sentinals Private Ownership Club	Kirkwood, CA	Lake Tahoe Area
Northstar Club	Northstar, CA	Lake Tahoe Area
Marriott Grand Residences Club	South Lake Tahoe, CA	Lake Tahoe Area
Sierra Shores	South Lake Tahoe, CA	Lake Tahoe Area
Tonopalo Private Residence Club	Tahoe Vista, CA	Lake Tahoe Area
Old Greenwood	Truckee, CA	Lake Tahoe Area
Northstar Lodge A Hyatt Residence Club	Truckee, CA	Lake Tahoe Area
Club at Big Bear Lake	Big Bear Lake, CA	Los Angeles Area
Villas at The Grand Del Mar	Carmel Valley, CA	Monterey Area
Calistoga Ranch	Calistoga, CA	Napa Wine Country
Orchard at The Carneros Inn	Napa, CA	Napa Wine Country
Mayacama	Santa Rosa, CA	Napa Wine Country
Residence Club at Nakoma Golf Resort	Clio, CA	Northern CA
Villas at Rancho Valencia	La Jolla, CA	San Diego Area
Residence Club on Mission Beach	San Diego, CA	San Diego Area
Fairmont Heritage Place Ghirardelli Square	San Francisco, CA	San Francisco Area
Pacaso	San Francisco, CA	San Francisco Area
80/50 Mammoth	Mammoth Lakes, CA	Yosemite Nat. Park
Obsidian	Mammoth Lakes, CA	Yosemite Nat. Park

NEVADA		
Residence Club at Southshore	Zephr Cove, NV	Lake Tahoe Area

Unit Characteristics

At this point in the evolution of the shared-ownership industry, developments remain fairly small in size. For the 26 active developments, the average number units currently built is 26. This average is 33 units for fractional interest projects and 23 units for private residence clubs. When including under-construction and additionally planned units, the overall average increases to 30. This includes 38 units for fractional interest projects and 27 for private residence clubs. The Proposed COCA Coachella is planned to contain 61 units to be sold as co-ownership interest shares, with 248 1/8th shares from 31 units and 120 1/4th co-ownership shares to be sold from 30 units. Thus, the number of planned co-ownership units in the proposed subject property is significantly higher than the average unit count for the industry.

Unit Types

The most popular size of units in the shared-ownership industry are two- and three-bedroom units in fractional interest projects and three- and four-bedroom units in private residence clubs. The following table illustrates the industry-average (as a percentage), and the planned unit mix for the proposed subject property (as a percentage). The proposed subject property intends to sell co-ownership interest from three- and four-bedroom villa units. The final number of three- and four-bedrooms has not yet been determined; however, the planned unit mix for the subject property is aligned with the most popular unit types in the industry.

UNIT MIX

	Private Residence Club Projects	COVA Coachella
Studio Units	0.0%	0.0%
One-Bedroom Units	6.6%	0.0%
Two-Bedroom Units	23.8%	0.0%
Three-Bedroom Units	32.4%	100.0%
Four-Bedroom Units	37.1%	100.0%

Unit Size

The overall weighted average unit size of private residence clubs was 2,000 square feet in 2024. The weighted average unit sizes of private residence clubs (in 2022) and the average unit size planned for the subject inventory are summarized in the following table.

WEIGHTED AVERAGE SIZE OF UNITS

	Private Residence Club Projects	COVA Coachella
Studio Units	n/a	n/a
One-Bedroom Units	$830	n/a
Two-Bedroom Units	1,370	n/a
Three-Bedroom Units	1,980	$2600 *
Four-Bedroom Units	4,025	2600 *
AVERAGE	$2,115	$2,600

* Unit size for three- and four-bedrooms units has not yet been determined

The final decisions for the unit mix and unit size for the proposed subject property's three- and four-bedroom units have not yet been determined. Nonetheless, the planned overall size of the subject three/four-bedroom units appear to be aligned with the industry.

Size of Shares

There is a wide diversity with regard to size of share, i.e., the ratio of owners-per-unit. Some nine sizes of shares are found, ranging from a 1/21 to 1/4, inclusive of fractional interest projects and private residence clubs. According to the survey, the size of shares for private residence clubs ranges from less than 1/12 to 1/8. Some sizes are significantly more frequent, and variations exist between different projects.

The proposed subject property will offer the following use options, as follows.

- 1/8th co-ownership shares, 31 units, or 50.8% of the units
- 1/4th co-ownership share, 30 units, or 49.2% of the units

SIZE OF SHARE

Size of Share	Private Residence Clubs	COVA Coachella
less than 1/12	5.6%	0.0%
1/12	5.6%	0.0%
1/10 or 1/9	27.8%	0.0%
1/8	33.3%	50.8%
1/7, 1/6 or 1/5	16.7%	0.0%
1/4	11.1%	49.2%
Total	100.0%	100.0%

Among private residence clubs, 61.1% offer either a 1/10th or 1/9th share (27.8%), or a 1/8th share (33.3%. Only 27.8% offer more than a 1/8th share.

Fractional interest projects will typically offer larger share sizes. One of the reasons for variations in sizes of shares between the two components is because private residence clubs are typically in communities where land costs and construction costs are very high, and there is a scarcity of available developable land, which results in high real estate prices. Application of high prices to larger shares, such as a 1/4th share, provides a challenge for concept of a "value proposition." Conversely, fractional interest projects are typically in locations with lower real estate prices; thus, application of lower prices (per SF) to larger shares results in fractional share prices that can still be marketed as a "value proposition" relative to alternative second-home options.

In the case of the proposed subject property, approximately 51% of the units will offer a 1/8th share, and approximately 49% of the units will offer a 1/4th share. In our opinion, the planned use plan is reasonable and market-supported, given that, combined with the whole ownership product, it will provide a range of price points that will fit to wide spectrum of potential buyers. As discussed above, typically private residence clubs do not offer a 1/4th share size because the application of a high price (on a per SF basis) results in a fractional share price that is not a value proposition relative to alternative second-home options. However, Coachella Valley, and the subject neighborhood in particular, are unique because the alternative second homes in the neighborhood are very high, typically ranging from $3 million to $15 million or higher. The very high real estate prices in the neighborhood should provide an opportunity to provide quarter shares (1/4th shares) as an option for longer use, while still providing a lower fractional price relative to alternatives in the market.

Use Plans/Reservation Systems

As with sizes of shares, there is a wide variety in use plans/reservation systems in the shared-ownership industry. Some are simple, providing a high degree of certainty regarding the times of the year when owners can use their vacation home, but limited flexibility. Others are complicated, providing a high degree of flexibility, but less certainty.

Three basic types can be summarized as follows:

1) a '**set calendar**' whereby owners have access to the exact same time every year.

2) a '**rotating calendar**' whereby an owner's use rotates forward on a pre-determined schedule every year (e.g., for a 1/12 share owner, the first week of each quarter in the first year of ownership, the second week of each quarter in the second year, and so forth).

3) a '**rotating priority**' whereby all owners have the opportunity to reserve some of their time (usually the high seasons) six to 12 months ahead of use, with duplicate reservations being addressed by a rotating priority system (e.g., owner one in year one receives their first choice, while owner two receives their first choice in year two, and owner one drops to the bottom of the pecking order, and so forth). Non-high demand time is often placed in a space-available pool for all owners to equally access.

These three basic plans vary between private residence clubs. The "set calendar" system is used at 14.5% of private residence clubs. The "rotating calendar" system is also used by 14.5% of private residence clubs and the "rotating priority" system is used by 56.3% of private residence clubs. Lastly, a hybrid/other reservation system is used by 14.7% of private residence clubs.

USE PLAN/RESERVATION SYSTEM

Use Plan/ Reservation System	Private Residence Clubs
"set calendar"	14.5%
"rotating calendar"	14.5%
"rotating priority"	56.3%
hybrid/other total	14.7%
Total	100.0%

We recommend that the proposed subject property utilize a "rotating priority" reservation system.

On-site amenities are extensive in the shared-ownership industry. The following table illustrates the availability of selected amenities at private residence clubs as well as planned at the proposed subject property.

AMENITIES

Amenity	Private Residence Club	Subject Property
Swimming Pool	78.9%	X
Exercise Facility	93.0%	X
Whirlpool Spa	63.1%	X
Restaurant	68.4%	X
Private Storage Lockers	84.2%	
Spa/Spa Treatments	71.9%	X
Tennis	33.3%	X
Golf Course	22.8%	
Fishing	14.0%	
Ski-In/Out	34.9%	
Beach	30.1%	X

As illustrated in the table above, the proposed subject property will benefit from an extensive wellness focused amenity base that will include the most popular amenities within the industry.

PRICES

At least three approaches can be used to analyze pricing structures in the shared ownership industry, including:

- Price per share.
- Price per week.
- Price per square foot.

As previously discussed, the subject property will offer approximately 51% of the inventory as a 1/8th fractional share, and approximately 49% as a 1/4th share (quarter share). Given that the 1/12th fractional share will be the primary product, for purposes of comparison with the Ragatz survey, we have focused on the subject's

1/12th fractional product. The detailed methodology for reconciling to the subject fractional price points is detailed later in this report.

Price per Share

Price per share is considered the least useful approach to compare pricing because of confusion created by mixing together different sizes of shares, ranging from a 1/15 to a 1/4. The average price per share typically increases with the number of bedrooms, as shown below.

PRICE PER SHARE

Bedrooms	Private Residence Club Projects	1/8th Share COVA Coachella	1/4th Share COVA Coachella
Studio	n/a	n/a	n/a
One	$146,250	n/a	n/a
Two	168,800	n/a	n/a
Three	440,800	$490,000	$980,000
Four	816,750	490,000	980,000
Average	**$519,050**	**$490,000**	**$980,000**

As previously mentioned above, the price per share analysis is the least useful approach to compare pricing because of confusion created by mixing together different sizes of shares. However, we note that the overall average share price for private resident club projects is $519,050 which falls between the projected price for the subject property's 1/4th and 1/8th shares.

Price per Week

A second way of analyzing pricing is on a per week basis as this approach equalizes the sizes of shares. This figure is arrived at by dividing the price of the share by the number of usage weeks. As shown below, the overall average per week price for private residence clubs was $90,175 in 2024.

PRICE PER WEEK

Bedrooms	Private Residence Club Projects	COVA Coachella
Studio	n/a	n/a
One	$23,625	n/a
Two	35,150	n/a
Three	85,800	$81,667
Four	130,700	81,667
Average	**$90,175**	**$81,667**

Per week prices also vary according to the number of bedrooms and size of share. Note that we have assumed that the subject's owners will have six and twelve usage weeks annually for the 1/8th and 1/4th share, respectively. The subject's usage results in the same price per week for the two share sizes.

Price per Square Foot

Generally, the most useful approach in analyzing share prices in the shared-ownership industry is on a per square foot basis. This figure is calculated by dividing the forecast gross sellout per unit (for a given unit type) by the total interior square feet in the unit.

Average per square foot prices also vary in accord with the number of bedrooms, as shown below.

PRICE PER SQUARE FOOT

Bedrooms	Private Residence Club Projects	COVA Coachella
Studio	n/a	n/a
One	$1,650	n/a
Two	1,600	n/a
Three	2,050	$1,508
Four	1,600	1,508
Average	**$1,650**	**$1,508**

From our review of the Ragatz survey, given that 38.9% of private residence clubs have an average price per square foot of $2,000 or more (as shown in the following table), it appears that some projects in very high real estate markets have weighted the average price for the industry higher relative to the average project. This likely explains why the subject's price per square foot is marginally lower than the weighted average price per square foot for the industry.

The following table illustrates the distribution of prices per square foot at the private residence clubs who participated in the Ragatz survey.

DISTRIBUTION OF AVERAGE PRICE PER SQUARE FOOT

Average Price Per Square Foot	Private Residence Clubs
$1,000 to $1,499	50.0%
$1,500 to $1,999	11.1%
$2,000 or more	38.9%
Total	100.0%

Overall, the industry average price provides support for the proposed COVA Coachella's planned pricing as being reasonable.

Co-Ownership Ownership Overview – Coachella Valley

We have researched co-ownership resorts in the Coachella Valley. Based on our research there are two co-ownership resorts in the market that are in active, first-generation fractional sales, as follows.

- PGA West Residence Club, La Quinta
- Picaso – 46 individual homes located in Palm Springs (33), Cathedral (9), Palm Desert (8), Indian Wells (8), and La Quinta (8)

In addition, there are two older legacy co-ownership resorts, 4 Seasons at Desert Breezes (Palm Desert) and Dunes Club (Palm Springs), that have been sold out of first-generation co-ownership interest inventory for several years.

PGA West Residence Club is considered a significantly lower quality product compared to the proposed subject property, with very limited amenities. PGA West Residence Club offered two share sizes, 1/9th ($120,000) and 1/4th ($250,000). The lower share prices reflect the lower quality level.

The Picaso co-ownership product comprises 46 individual homes with a varying level of quality, but it is important to note that there are no amenities or support facilities associated with the Picaso co-ownership product.

The Picaso business model is to acquire high-end real estate in popular vacation markets. These are purchased under newly created limited liability companies, or LLCs, which serve as the financial vehicles for the Picaso transaction. Picaso typically targets luxury homes worth between two to four times the median cost of housing in an area. After any renovations, remodeling, and furnishings that Picaso finds necessary, the company divides the LLCs that own its homes into 1/8th shares, which are marketed to potential investors by local real estate agents. To calculate the price of the shares, Picaso adds the home preparation expenses at-cost to the acquisition price of the home and divides it by eight. Picaso then adds a service fee to each of the shares, which is how the company makes money on the initial transaction.

As an example of how the model works in the Coachella Valley, at one home in Palm Springs, which Picaso has named "Amber" (the company names all of its properties), this formula translated into 1/8th shares which sell for $569,000 each, for a total home "value" of $4,552,000. Property records indicate that Picaso purchased the home in February 2023 for $3,350,000. Thus, the total renovation costs, inclusive of the Picaso service fee (profit), equated to $1,202,000.

After all the shares in a home are sold, Picaso transitions to a property management role. It arranges service and maintenance on the property and coordinates co-owners' use of the home through a digital scheduling platform. Picaso charges a per-share monthly fee for these services, which serves as a secondary source of revenue for the company.

Owners of the 1/8th shares are allowed to reserve use of the home for up to 44 days annually. Each share entitles owners to use one "special date" per year, which includes peak-demand periods such as Christmas.

Currently, Picaso offers a variety of price points for a 1/8th share in the Coachella Valley, ranging from $115,000 to $695,000, depending on the quality level of the home, as well as the locational attributes.

Pricing Conclusion

It is our opinion that there are no true comparable co-ownership resorts in the Coachella Valley. The proposed subject property will be a luxury level, wellness focused resort with a wide range of amenities and facilities that will represent a new standard for this market. We have placed primary weight for our pricing conclusion on our review of the whole ownership comparables that were detailed in the previous report chapter, *Residential Prices and Sales Prices*. We believe this is a

reasonable approach given that the villas that will contain the co-ownership units, will also be sold as whole ownership units. Furthermore, since co-ownership interest is an alternative to a second-home purchase, the methodology for whole ownership is considered a reasonable approach.

As detailed in the previous chapter, we concluded to a base price of $1,300 per square foot for whole ownership. The co-ownership units will average 2,600 square feet, the application of $1,300 per square foot results in a whole ownership value of $3,380,000 for the co-ownership villas.

Methodology for Premium Relative to Whole Ownership

The methodology of applying a 1.5 to 2.0 multiplier to the whole ownership value to arrive at the gross sellout potential of the unit on a co-ownership basis is the standard pricing methodology in the co-ownership industry. The multiplier of 1.5 is the most commonly used, with the higher end of the scale reserved for projects of extreme luxury and quality.

Other factors the influence a higher multiplier are locations considered "first tier" nationally or internationally recognized resort locations, scarcity of the destination attraction (such as a limited ski season, etc.), high barriers to entry for new real estate development, and acceptance of the product in the market.

The proposed subject property is expected to be developed at an above average luxury and quality level. However, we note that the sales comparables included homes that represent generally an equal level of luxury and quality levels. The other factors for mark-up consideration, including scarcity of the destination and barriers to entry, are considered average for the industry. Based on consideration of each of these factors, we concluded that a multiplier of 1.5 is appropriate for the proposed subject property.

The mark up calculation utilizing a 1.5 factor to calculate the subject share prices, is illustrated in the following table,

MARK UP CALCULATION OF THE SUBJECT CO-OWNERSHIP SHARE PRICES

	Three/Four-Bedroom
Square Feet	2,600
Price Per SF	$1,300
Whole Ownership Market Value Per Unit	**$3,380,000**
Mark-Up	1.5
Adjusted Market Value Per Unit (Annual)	**$5,070,000**
1/8th Share	$633,750
1/8th Share (Rounded)	**$634,000**
1/4th Share	$1,267,500
1/4th Share (Rounded)	**$1,267,500**

Sales Pace

The total number of co-ownership interests are summarized in the following table.

SUMMARY OF SUBJECT CO-OWNERSHIP INTERESTS

	Units	Total Shares	Price Per Share
1/8th Co-Ownership Shares	31	248	$634,000
1/4th Co-Ownership Shares	30	120	$1,267,500
Total/Average	**61**	**368**	**$840,576**

The sales pace for the co-ownership sellout is projected with a similar proportional sales pace as the subject's whole ownership, given that the co-ownership interests will be sold as an alternative option for prospective buyers.

We have made the following assumption for the co-ownership interests sellout.

- Pre-sales will begin on March 1, 2028, two years before the opening date of the property on March 1, 2030.
- We estimate 27 co-ownership interests, or roughly 9.5% of the inventory, will be sold during the pre-sales period.

- The base price positioning will be assumed during the pre-sales period, then will increase 5.0% annually beginning on the first projection year, 2030/31.

- The total sellout period, exclusive of pre-sales, will be five years, resulting in a sellout of the subject co-ownership interests in 2034/35.

The co-ownership interest sellout is illustrated in the following table.

CO-OWNERSHIP INTEREST SALES PROJECTION

	1/8th Shares Sold	1/4th Shares Sold	1/8th Share Price	1/4th Share Price	Total Sales Volume
2028/30 *	20	15	$634,000	$1,267,500	$31,692,500
2030/31	35	22	665,700	1,330,875	52,578,750
2031/32	43	22	698,985	1,397,419	60,799,568
2032/33	50	21	733,934	1,467,290	67,509,796
2033/34	50	20	770,631	1,540,654	69,344,632
2034/35	50	20	809,163	1,617,687	72,811,863
	248	**120**	**$11,920**	**$2,956,143**	**$354,737,108**

* Pre-sales, March 1, 2028 through February 28, 2030

Sales and Marketing Expenses

Sales and marketing costs include payroll and related expenses, commissions, advertising, marketing lead generation program costs, and overhead expenses related to the sales and marketing function.

Overall industrywide sales and marketing expenses averages, as percentage of gross sales, for co-ownership resorts range from 12% to 22% with most falling in the 15% to 22% range. For the subject's co-ownership product, we utilized a sales and marketing expense ratio of 16% in the first projection year, stabilizing at 15% in the second projection year, and thereafter throughout the sellout period.

Co-Ownership Interest Cash Flow Forecast

Based on the above parameters discussed above, we have compiled an annual cash flow forecast for the proposed subject property's co-ownership interest component. Our annual cash flow forecast covers the estimated sellout period from March 1, 2030 through February 28, 2035, exclusive of pre-sales (from March 1, 2028 through February 28, 2030.

CO-OWNERSHIP INTEREST COMPONENT, PROPOSED COVA COACHELLA – CASH FLOW FORECAST

	2028/30 Presales	2030/31	2031/32	2032/33	2033/34	2034/35	Totals
Sales:							
1/8th Shares Sold	20	35	43	50	50	50	**248**
1/8th Share Sales Price	$634,000	$665,700	$698,985	$733,934	$770,631	$809,163	
1/8th Shares Sales Revenue	$12,680,000	$23,299,500	$30,056,355	$36,696,713	$38,531,548	$40,458,126	**$181,722,241**
1/4th Shares Sold	15	22	22	21	20	20	**120**
1/4th Share Sales Price	$1,267,500	$1,330,875	$1,397,419	$1,467,290	$1,540,654	$1,617,687	
1/4th Shares Sales Revenue	$19,012,500	$29,279,250	$30,743,213	$30,813,083	$30,813,083	$32,353,738	**$173,014,867**
Total Revenue	**$31,692,500**	**$52,578,750**	**$60,799,568**	**$67,509,796**	**$69,344,632**	**$72,811,863**	**$354,737,108**
Sales & Marketing	$5,070,800	$8,412,600	$9,119,935	$10,126,469	$10,401,695	$10,921,779	**$54,053,279**
Net Sale Proceeds	**$26,621,700**	**$44,166,150**	**$51,679,632**	**$57,383,327**	**$58,942,937**	**$61,890,084**	**$300,683,829**

10. Club Membership Program

The private members' club sector is experiencing growth driven by exclusivity and premium amenities. A significant development in the sector has been the emergence of private members' clubs within branded residential developments. One transformative trend reshaping the private member's club sector is the integration of comprehensive health and longevity services. The wealthy are not just seeking exclusivity anymore, they are seeking longevity, and some clubs are positioning themselves as partners in this pursuit by providing access to wellness facilities and programs.

The growing trend for longevity and wellness provides an opportunity for the proposed subject property to attract memberships from the high-income neighborhoods which are located within close proximity to the resort who have interest in longevity and wellness.

The concept of the proposed subject property will be focused on wellness and was designed to be the premier destination for wellness in the Coachella Valley, featuring wellness focused facilities such as an on-site longevity clinic, two-story fitness center, luxury spa, immersive outdoor onsen, 25-meter lap pool, and an island dedicated to yoga and meditation. The subject property's planned membership club is designed to blend a sense of community, sports, wellness, longevity, along with access to the resort's food and beverage outlets and their own private beach in the desert.

The benefits of the proposed subject property's club membership will include, but not be limited to, the following amenities and facilities.

- Access to all food and beverage outlets, including featured restaurants at the Clubhouse, waterfront dining, and specialty restaurants within the private gates.
- Access to sports facilities, including tennis, pickleball, padel, pickleball, fitness center, and beach volleyball.
- Access to state-of-the-art wellness and longevity programing.
- Access to all lagoon-based amenities and activities, including paddle boarding, kayaking, beach cabanas, surf machine, kid's area, and over an over the water zip line.

- Private entry to the Cova Beach Club, including free access to the public beach club for all music and entertainment venues.

Profiles and summaries of membership club comparables are illustrated in the following table.

MEMBERSHIP CLUB COMPARABLES

The Battery, San Francisco, CA
Members: 5,000
F&B and Event Spaces, Fitness Center, Spa, Member Events
Initiation Fees: $1,000 (non-refundable)
Annual Dues: $2,700

Rosewood Miramar Club, Montecito, CA (Santa Barbara)
Members: Approximately 200
Beach Cabanas, Fitness Center, Spa, Fine Dining, Beach Butler Service
Initiation Fees: $200,000
Annual Dues: $25,000

Auberge Stanly Ranch Club, Napa, CA
Members: Approximately 50
Fitness Studios and Classes, Spa, Private Pool, Fine Dining, Programmed Events
Initiation Fees: $100,000 (included in home purchase price)
Annual Dues: 2BR - $2,500 / 3BR - $3,000 / 4BR - $3,500 / 5BR - $4,000

Soho House, 44 Locations Worldwide
Members: Over 190,000 Members Worldwide
Varies by Location but Typically includes Finess Center, Spa, Culinary Offerings and Private Dining
Initiation Fees: $460 to $1,080 based on age and access
Annual Dues: $1,350 to $4,899 based on age and access

San Vincente Bungalows, West Hollywood, CA (also club locations in Santa Monica, CA and New York City)
Members: Over 750 (highly selective, requires nomination by a member, but does not confer acceptance)
Grand Dining Room (restaurant and bars), Private Dining, Terrace, Pool
Initiation Fees: $7,500
Annual Dues: $4,200

The net operating revenue from the proposed subject property's membership club component has been forecast based on a ramp up in membership to the cap of 2,000. The cap is expected to be in place to maintain the exclusivity of the membership club program, as well as to maintain the resort's capacity level to provide a high service level. Our forecast assumes that the cap will be reached in the second projection year. Based on our review of various membership clubs, we forecast an initiation fee of $250 and annual dues of $2.500 in the first projection year. The initiation fees and dues are expected to increase annually at the underlying rate of inflation (3.0%). A member turnover rate of 5.0% has also been forecast. Membership expenses are anticipated to include payroll for a membership concierge manager. Additional expenses would include membership invitation costs, marketing, welcome kits, member-specific programs, and other minor item. We have projected an expense ratio of 5.0% of total membership revenue.

MEMBERSHIP CLUB SALES PROJECTION

Membership	2030/31	2031/32	2032/33	2033/34	2034/35
New Members	1,000	1,050	100	100	100
Members Turnover (5%)		(50)	(100)	(100)	(100)
Total Members	**1,000**	**2,000**	**2,000**	**2,000**	**2,000**
Membership - Initiation Rate	$250	$258	$265	$273	$281
Membership - Annual Rate	$2,500	$2,575	$2,652	$2,732	$2,814
Membership - Initiation Fees	$250,000	$270,375	$26,523	$27,318	$28,138
Membership - Annual Dues	$2,500,000	$5,150,000	$5,304,500	$5,463,635	$5,627,544
Total Membership Revenue	**$2,750,000**	**$5,420,375**	**$5,331,023**	**$5,490,953**	**$5,655,682**
Less Membership Expense (5%)	$137,500	$271,019	$266,551	$274,548	$282,784
Net Membership Revenue	**$2,612,500**	**$5,149,356**	**$5,064,471**	**$5,216,406**	**$5,372,898**

11. Statement of Assumptions and Limiting Conditions

1. This report is set forth as a market study of the proposed subject hotel; this is not an appraisal report.
2. This report is to be used in whole and not in part; furthermore, all statements of assumptions and limiting conditions apply to the entire report, including any additional forms or addenda items presented.
3. No responsibility is assumed for matters of a legal nature, nor do we render any opinion as to title, which is assumed marketable and free of any deed restrictions and easements; the property is evaluated as free and clear unless otherwise stated.
4. We assume that there are no hidden or unapparent conditions of the sub-soil or structures, such as underground storage tanks, that would affect the property's development potential. No responsibility is assumed for these conditions or for any engineering that may be required to discover them.
5. We have not considered the presence of potentially hazardous materials or any form of toxic waste on the project site. We are not qualified to detect hazardous substances and urge the client to retain an expert in this field if desired.
6. The Americans with Disabilities Act (ADA) became effective on January 26, 1992. We have assumed the proposed hotel would be designed and constructed to be in full compliance with the ADA.
7. We have made no survey of the site, and we assume no responsibility in connection with such matters. Sketches, photographs, maps, and other exhibits are included to assist the reader in visualizing the property. It is assumed that the use of the described real estate will be within the boundaries of the property described, and that no encroachment will exist.
8. All information, financial operating statements, estimates, and opinions obtained from parties not employed by HVS Consulting & Valuation, are assumed true and correct. We can assume no liability resulting from misinformation.
9. Unless noted, we assume that there are no encroachments, zoning violations, or building violations encumbering the subject site.
10. The property is assumed to be in full compliance with all applicable federal, state, local, and private codes, laws, consents, licenses, and regulations (including the appropriate liquor license if applicable), and that all licenses,

permits, certificates, franchises, and so forth can be freely renewed or transferred to a purchaser.

11. All mortgages, liens, encumbrances, leases, and servitudes have been disregarded unless specified otherwise.

12. None of this material may be reproduced in any form without our written permission, and the report cannot be disseminated to the public through advertising, public relations, news, sales, or other media.

13. We are not required to give testimony or attendance in court because of this analysis without previous arrangements and shall do so only when our standard per-diem fees and travel costs have been paid prior to the appearance.

14. If the reader is making a fiduciary or individual investment decision and has any questions concerning the material presented in this report, it is recommended that the reader contact us.

15. We take no responsibility for any events or circumstances that take place subsequent to the date of our field inspection.

16. The quality of a lodging facility's onsite management has a direct effect on a property's economic viability. The financial forecasts presented in this analysis assume responsible ownership and competent management. Any departure from this assumption may have a significant impact on the projected operating results.

17. The financial analysis presented in this report is based upon assumptions, estimates, and evaluations of the market conditions in the local and national economy, which may be subject to sharp rises and declines. Over the projection period considered in our analysis, wages and other operating expenses may increase or decrease because of market volatility and economic forces outside the control of the hotel's management. We assume that the price of hotel rooms, food, beverages, and other sources of revenue to the hotel will be adjusted to offset any increases or decreases in related costs. We do not guarantee that our estimates will be attained, but they have been developed based upon information obtained during the course of our market research and are intended to reflect the expectations of a typical hotel investor as of the stated date of the report.

18. This analysis assumes continuation of all Internal Revenue Service tax code provisions as stated or interpreted on either the date of this analysis or the date of our field inspection, whichever occurs first.

19. Many of the figures presented in this report were generated using sophisticated computer models that make calculations based on numbers carried out internally to many decimal places. In the interest of simplicity,

most numbers have been rounded to the nearest tenth of a percent; thus, these figures may be subject to small rounding errors.

20. It is agreed that our liability to the client is limited to the amount of the fee paid as liquidated damages. Our responsibility is limited to the client; the use of this report by third parties shall be solely at the risk of the client and/or third parties. The use of this report is also subject to the terms and conditions set forth in our engagement letter with the client.

21. Evaluating and comprising financial forecasts for hotels is both a science and an art. Although this analysis employs various mathematical calculations to provide projections, the final forecasts are subjective and may be influenced by our experience and other factors not specifically set forth in this report.

22. This study was prepared by HVS Consulting & Valuation. All opinions, recommendations, and conclusions expressed during the course of this assignment are rendered by our staff as company employees, rather than as individuals.

Gary L. Johnson

Employment

2015	HVS CONSULTING & VALUATION Vice President Miami, Florida
2004 to 2014	HVS CONSULTIING & VALUATION Senior Consultant Miami, Florida
2002 to 2004	HCI-HOTEL CONSULTING INTERNATIONAL Consulting and Valuation Analyst Miami, Florida
1992 to 2002	LUXBURY HOTELS Operations Assistant Cincinnati, Ohio

Education

Southern University
Bachelor of Science – Business Administration
Collegedale, Tennessee

Professional Affiliations

Certified General Appraiser #RZ-3512
(Florida)

Partial List of Properties Evaluated:

UNITED STATES

California

-The Club at Big Bear Village, Big Bear Lake
-Hilton Grand Vacations Club @ MarBrisa, Carlsbad
-Laguna Cliff Marriott, Dana Point
-Welk Mountain Villas, Escondido
-Proposed Vina Bello Resort, Napa
-Proposed Palazzo Lido, Newport Beach
-Inn at the Park, San Diego
-Proposed eSuites, San Jose
-Hyatt Residence Club, Truckee

Colorado

-Grand Lodge on Peak 7, Breckenridge
-Hotel Monaco, Denver
-Best Western Rio Grande, Durango
-Proposed Hyatt Place, Durango
-Wyndham, Steamboat Springs
-Proposed Four Seasons, Vail

Florida

-Tidemark Beach Resort, Anna Maria Island
-Turnbury Isle Resort, Aventura
-Marriott, Boca Raton
-Proposed Cedar Key Village, Cedar Key
-Mona Lisa Suites Hotel, Celebration
-Sandpearl Resort, Clearwater Beach
-Summer Bay Resort, Clermont
-Proposed Harbor Club, Cocoa Beach
-Doubletree, Coconut Grove
-Residence Inn, Coconut Grove
-Plantation Inn, Crystal River
-Wyndham Airport, Dania Beach
-Holiday Inn Express, Davenport
-Comfort Suites, Davie
-Perry's Ocean Edge Resort, Daytona Beach
-Plaza Resort & Spa, Daytona Beach
-Hampton Inn, Daytona Beach Shores
-Holiday Inn Express, Daytona Beach Shores
-Hilton, Deerfield Beach
-Hampton Inn & Suites, Estero
-Seaside Amelia Inn, Fernandina Beach
-Holiday Motel, Florida City
-AmeriSuites, Fort Lauderdale
-Best Western Inn, Fort Lauderdale
-Best Western Oakland Park Inn, Fort Lauderdale
-Best Western Rolling Hills, Fort Lauderdale
-Holiday Inn Commercial Ave, Fort Lauderdale
-Proposed Hyatt Centric, Fort Lauderdale
-Proposed Orion Resort, Fort Lauderdale
-Proposed Trump Hotel, Fort Lauderdale
-Westin Beach Resort & Spa, Fort Lauderdale
-Radisson Sanibel Gateway, Fort Myers
-Best Western Beach Resort, Fort Myers Beach
-Diamondhead Island Beach Resort, Fort Myers Beach
-Comfort Inn, Fort Pierce
-Hampton Inn, Fort Walton Beach
-Gainesville Hotel & Conference Center, Gainesville
-SpringHill Suites, Gainesville
-Proposed Runway Resort, Hollywood
-Days Inn South, Jacksonville
-Proposed eSuites, Jacksonville
-Courtyard by Marriott, Jensen Beach
-Sheraton, Key Largo
-Days Inn, Key West
-Proposed PRC, Key West
-Best Western Maingate East, Kissimmee
-Howard Johnson West, Kissimmee
-Mystic Dunes Resort, Kissimmee
-Proposed Oakwater Resort, Kissimmee
-Villas at Old Town, Kissimmee
-Westgate Town Center, Kissimmee
-Best Western, Lake Buena Vista
-Royal Plaza Hotel, Lake Buena Vista
-Wyndham, Lake Buena Vista
-Super 8, Lantana
-Hilton, Longboat Key
-Sheraton Orlando North, Maitland
-Proposed b2 Hotel, Miami
-Best Western Airport West, Miami
-Proposed Courtyard Dolphin Mall, Miami
-Proposed Design District Hotel, Miami
-Fairfield Inn & Suites, Miami
-Hampton Inn Blue Lagoon, Miami

-Proposed Hilton Garden Inn Airport, Miami
-Proposed Homewood Suites Airport, Miami
-Hotel Vila, Miami
-Proposed Le Meridien, Miami
-Mandarin Oriental, Miami
-Proposed Microtel Airport, Miami
-Proposed Shangri-La, Miami
-Sheraton Miami Airport, Miami
-Proposed Westin Airport, Miami
-Proposed Cabana on Collins, Miami Beach
-Claridge Hotel, Miami Beach
-Clevelander Hotel, Miami Beach
-Crowne Plaza Z Ocean Hotel, Miami Beach
-Hotel Eva, Miami Beach
-Wyndham, Miami Beach
-Courtyard by Marriott, Miramar
-Residence Inn, Miramar
-Hilton, Naples
-Holiday Inn, New Smyrna Beach
-Adam's Mark, Orlando
-Proposed Bella Vista Hotel, Orlando
-Proposed Floridan Hotel, Orlando
-Orlando Vista Hotel, Orlando
-StaySky Resorts (4 locations), Orlando
-Westgate Lakes Resort, Orlando
-Westgate Palace, Orlando
-Westin Universal Blvd, Orlando
-Days Inn / Scottish Inn, Ormond Beach
-Bay Point Marriott, Panama City Beach
-Proposed Pensacola Beach Resort, Pensacola Beach
-Renaissance, Plantation
-Residence Inn, Plantation
-Best Western, Port St Lucie
-Best Western Spanish Quarters, St Augustine
-Holiday Inn, St Augustine
-Ocean Sands, St Augustine
-Best Western Ocean Inn, St Augustine Beach
-Tradewinds Resort Complex, St Pete Beach
-Proposed Zamora Hotel, St Pete Beach
-Proposed Hyatt Place, St Petersburg
-Best Western Beach Resort, Sanibel Island
-AmericInn, Sarasota
-Proposed Embassy Suites, Sarasota
-Holiday Inn Lido Beach, Sarasota
-Proposed Westin, Sarasota
-Crowne Plaza, Singer Island
-Hampton Inn Ybor City, Tampa
-Mainsail Conference Center, Tampa
-Ramada, Titusville
-Liki Tiki Village, Winter Garden

Georgia

-Jekyll Island Resort, Jekyll Island

Illinois

-Hotel Monaco, Chicago

Hawaii

-Hilton Hawaiian Village, Honolulu
-Shell Vacations Club Waikiki, Honolulu
-Proposed Hyatt Vacation Club, Kapaa, Kauai
-Hilton Kings Land Resort, Kona
-Proposed Hyatt Vacation Club, Lahaina, Maui

Kentucky

-Extended Stay America (2 locations), Lexington
-Extended Stay America (3 locations), Louisville
-Homestead Studio Suites, Louisville

Louisiana

-Bluegreen Club La Pension, New Orleans
-Frenchman Orleans, New Orleans
-Sheraton, New Orleans

Missouri

-Colonnade Resort, Branson
-Grand Crowne Resorts, Branson
-Grand Regency Resort, Branson
-Stormy Point Village, Branson
-Westgate Woods Resort, Branson
-Bluegreen Paradise Point, Hollister

Montana

-St Marys Lodge, St Marys

Nevada

-Desert Rose Resort, Las Vegas
-Elara, A Hilton Grand Vacation Club, Las Vegas
-Hilton Grand Vacation Club, Las Vegas
-Westgate Planet Hollywood, Las Vegas

New Hampshire

-Proposed Riverwalk at Loon Mountain, Lincoln

New Jersey

-Legends Resort, McAfee

New Mexico

-Proposed eSuites, Albuquerque

New York

-Gurney's Inn, Montauk
-Villa Roma, Callicoon

North Carolina

-Quality Inn, Burlington
-Best Western, Cary
-Proposed eSuites, Charlotte
-Hyatt Place, Charlotte
-Proposed Embassy Suites, Winston-Salem
-Holiday Inn Select, Winston-Salem
-Proposed Marriott, Winston-Salem

Rhode Island

-Vanderbilt Hall Hotel, Newport

South Carolina

-Hilton, Hilton Head Island
-Hampton Inn & Suites, Mount Pleasant
-Proposed Hilton Ocean 16, Myrtle Beach
-Westgate Oceanside Resort, Myrtle Beach

Tennessee

-Marriott, Chattanooga
-Westgate Smoky Mountain Resort, Gatlinburg
-Baymont Inn, Goodlettsville
-Extended Stay America (2 locations), Knoxville
-Fairfield Inn, Memphis
-Proposed boutique hotel, Nashville
-Blackberry Farm Resort, Walland

Texas

-Proposed Staybridge Suites, Austin
-Flying L Guest Ranch, Bandera
-Proposed Hotel and Conference Center, Mercedes
-The Falls Resort, New Ulm
-Salado Creek Villas, San Antonio
-Proposed Timeshare Resort, South Padre Island

Utah

-Sunrise Lodge, Hilton Grand Vacations, Park City
-Westgate Resort & Spa, Park City
-Hotel Monaco, Salt Lake City

Virginia

-Proposed Hotel, Bowling Green
-Bluegreen Patrick Henry Inn, Williamsburg
-Colonial Crossings, Williamsburg

Wisconsin

-Bluegreen Odyssey Dells, Wisconsin Dells

CANADA

British Colombia

-Mountainside Lodge, Whistler

CARIBBEAN

Antigua

-Proposed Hotel, Crump Peninsula

Bahamas

-Abaco Beach Resort, Abaco
-Proposed Papillon Resort, Exuma

Bermuda

-Coral Beach & Tennis Club, Paget
-The Reefs Resort & Club, Southampton

Haiti

-Amiga Island Proposed Resort, Amiga Island
-Cormier Plage Resort, Cap Haitien
-Habitation Joussant, Cap Haitien
-Mont Joli Hotel, Cap Haitien

Puerto Rico

-Aquarius Vacation Club, Dorado

St Barthelemy

-Isle de France

St John

-Proposed Pond Bay Club

St Kitts

-Proposed Mandarin Oriental

St Maarten

-Oyster Bay Beach Resort, Dawn Beach
-Proposed Embassy Suites, Philipsburg

CENTRAL AMERICA

Costa Rica

-Proposed Canyon Ranch Resort, Guanacaste
-Proposed Crowne Plaza, Playa Hermosa

Panama

-Proposed Buenaventura Resort, Playa Blanca
-Proposed Lazur Hotel, Naos Island

SOUTH AMERICA

Columbia

-Proposed Hyatt Regency, Cartagena

OTHER INTERNATIONAL

Dubai

-Proposed Timeshare Resort, Dubailand

City of Coachella
Development Services Departme
53990 Enterprise Way
Coachella, CA 92236
(760) 398-3502
(760) 398-3102

CEQA Guidelines Section 15183 Exemption Checklist
COVA Project
Coachella, California

Project Title: COVA

Case No: Environmental Assessment 25-03
Tentative Tract Number – TTM No. 39330
Conditional Use Permit – CUP 396, C
Architectural Review – AR 25-07
Development Agreement DA 25-01
Zoning Code Amendment ZOA 26-02 – Regional Commercial Zoning Text Amendment
STR Ordinance Amendment ZOA 26-03 – STR Ordinance Text Amendment

Lead Agency Name and Address: City of Coachella
Development Services Department
53990 Enterprise Way
Coachella, CA 92236

Property Owner/ Developer: Relevant Coachella Owner, LLC.
c/o Mr. Grant King
6417 Selma Avenue
Hollywood, CA 90028

Applicant: Relevant Coachella Owner, LLC.
c/o Mr. Grant King
6417 Selma Avenue
Hollywood, CA 90028

Prepared By: MSA Consulting, Inc.
34200 Bob Hope Drive, Rancho Mirage, CA 92270 (760) 320-9811

Contact Person and Phone Number: Kendra Reif, Community Development Director
Development Services Department
(760) 398-3502

Project Location: Southwest corner of Avenue 52 and Van Buren Street, Coachella
APN: 780-060-001, -002, 780-040-001, -003

Zoning: Existing – Regional Commercial (R-C)
Proposed – Regional Commercial (R-C)

General Plan Designations: Existing – Regional Retail District
Proposed – Regional Retail District

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CHAPTER 1: Project Description

1.1 Project Site, Location, and Existing Conditions

The COVA project is proposing the development of a luxury lifestyle resort on approximately 87 acres in the City of Coachella (City). The site is formed by four contiguous parcels (APNs 780-040-001, 780-040-003, 780-060-001, and 780-060-002) south of Avenue 52, west of Van Buren Street and east of Calhoun Street. The project site is located in the southwest portion of the City of Coachella and currently includes agricultural fields with date palm trees and grape vines. The project site also contains an irrigation pond in the central-northern area of the site, with nearby pump housing and approximately three existing support structures. These are dilapidated and uninhabitable structures with a combined estimated building footprint of approximately 6,143 square feet, and they appear to have been used in connection with past agricultural operations.

1.2 General Plan Land Use and Zoning Designations

The existing General Plan Land Use designation for the project site is Regional Retail District. The Regional Retail District land use designation allows for a wide range of retail, lodging, entertainment, and residential uses, with a focus on connectivity between these allowed uses throughout the project area. Residential uses are allowed at a density of 10 – 15 dwelling units per acre, and commercial densities are allowed at a density of 0.35 – 2.0 floor area ratio (FAR). Heights are generally one- and two-story buildings but may be up to four stories for mixed use projects, with further increased heights permitted in special circumstances such as hotels and iconic buildings or structures. The existing zoning designation is Regional Commercial (RC), which is consistent with the Regional Retail District, except that single-family residential uses are not an expressly allowed use in this zone. Accordingly, the project analyzed in this document includes an application by the Developer to amend the City's Zoning Code to allow single-family residential uses in the Regional Commercial zone to bring the zone into full consistency with the General Plan land use designation. With that minor revision to the City's Zoning Code, the project is consistent with the existing land use and zoning designations, as explained in more detail below.

1.3 Surrounding Uses

The project is surrounded by existing agricultural uses, vacant land, and scattered residential homes. Avenue 52 delineates the project's northern boundary, Van Buren Street delineates the project's eastern boundary, and Calhoun Street delineates a portion of the eastern boundary. The northern and eastern properties are located within the City of Coachella's jurisdiction, while the western and southern properties are located within Riverside County's jurisdiction.

The land use and zoning designations for the surrounding areas are depicted in the table below.

Table 1 Surrounding Uses - Land Use and Zoning Designations

Property	Jurisdiction	Use	Land Use	Zoning
Site	City of Coachella	Agriculture, with Three Abandoned Structures	Regional Retail District	Regional Commercial (RC)
North	City of Coachella	Vacant Lot, Scattered Residential Homes, Agriculture	Regional Retail District	Regional Commercial (RC)
South	Unincorporated,	Residential Homes,	Agriculture	A-1-10, A-1-20

	Riverside County	Agriculture, Vacant Lot		
East	City of Coachella	Agriculture	Regional Retail District, General Neighborhood	Regional Commercial (RC), General Neighborhood (GN)
West	Unincorporated, Riverside County	Agriculture, Vacant Lot	Agriculture and Estate Density Residential	A-1-10, A-1-20

1.4 Project Description

The Applicant is proposing a hospitality focused, mixed-use development on the 87-acre site. The project will feature two primary components: a private sector and public sector. The private sector will consist of 240 condo hotel cottages and 162 single-family residential units comprised of estate lots, zero lot line lots, bungalow condominiums, and VIP suites. These units will operate under fractional ownership, timeshare, second homes, and/or short-term and long-term rental models that will function together as an integrated hospitality-oriented resort community organized around a central lagoon. These accommodations will be complemented by on-site resort amenities (i.e., recreation center, courts, spa/pool, beaches, bar and entertainment, library, restaurant), which will be used by guests/owners of this sector. The public sector will consist of an 11,950-square-foot beach club, 7,690-square-foot restaurant, and a 6,048-square-foot sports bar. These sub-areas are anticipated to operate with an assumed typical weekday capacity of 500 persons and an assumed weekend capacity of 1,500.

Development of the project would also include landscaping, street improvements, drive aisles, and parking. Access to the project will be provided from two access points on Avenue 52, two access points on Calhoun Street, and two access points on Van Buren Street. The project proposes 951 parking spaces and 193 cart spaces onsite.

The project proposes a mixed-use development, consisting of a total of 402 units on approximately 28 acres (14.4 du/acre), which is consistent with the General Plan residential density range of 10 – 15 dwelling units per acre. The private sector also includes complimentary resort features, including water amenities, club amenities, health and wellness spaces, sports and recreational amenities, additional areas for events and restaurants, roadways, and open space on the remainder of the site.

The private sector will consist of:

- 162 single-family residential units comprised of estate lots, zero lot line lots, bungalow lots, and VIP suites
- 240 condo hotel cottages
- On-site resort amenities: recreational courts, spa/pool, lagoon and water features, bar and entertainment, library, restaurant

The public sector is situated on approximately six acres in the northwest corner of the site and will consist of a:

- 11,950-square-foot beach club
- 28,800-square-foot beach club lounging area
- 7,690-square-foot restaurant
- 6,048-square-foot sports bar
- 11,907-square-foot back-of-house area
- 103,297-square-foot parking garage

The public sector uses have a combined FAR of approximately 0.65 and will require a future City-approved Conditional Use Permit (CUP) and Entertainment Permit, which will be sought once the plans and details for these uses are further defined during project implementation.

To facilitate the intended hospitality focus, the proposed single-family residential units and condo hotel units will operate under fractional ownership, timeshare, second homes, and/or short-term and long-term rental models. The on-site resort amenities (i.e., recreational courts, spa/pool, lagoon and water features, bar and entertainment, library, restaurant) will be used by guests/owners of the private sector. Exhibit 4 shows the illustrative site plan and Exhibits 5 through 7 illustrate the general areas of the resort, residential and beach club uses. To avoid any conflicts with the City's short-term rental ordinance, the Developer is seeking an amendment to that ordinance to provide that projects with an approved Development Agreement are exempt from the provisions of that ordinance limiting the number of units that can be owned by one owner and limiting the percent of units that can be permitted for short-term rentals, as well as any other provisions of the ordinance specifically modified in the approved Development Agreement.

The project proposes a 9.4-acre main lagoon ("Hotel Lagoon"), which will provide waterfront properties and beach uses shared between the single-family residential and resort uses. A 2.5-acre lake will be situated in the southern portion of the site. The lake will act as a detention basin and collect onsite runoff. No water contact sports (i.e., swimming, etc.) will be permitted in the lake. A 0.4-acre lagoon is proposed in the public sector ("Beach Club Lagoon") and, similar to the Hotel Lagoon, will allow swimming and recreational uses. The table below indicates the proposed sizes of the water amenities.

Table 2 Water Amenities

	Acres
Hotel Lagoon	9.4
Lake (no contact)	2.5
Beach Club Lagoon	0.4
Total	*12.3*

As discussed above and indicated in Table 2, the project proposes the 9.4-acre Hotel Lagoon and the 0.4-acre Beach Club Lagoon. The proposed lagoons will be developed with Crystal Lagoon® technology. Crystal Lagoon technology maintains water quality by utilizing a patented solution consisting of the application of controlled pulses of small amounts of oxidants/microbicides, such as chlorine, into water in specific patterns and cycles. The application cycles are determined by the system's algorithms according to the growth cycles of algae and bacteria, as well as ambient conditions and the weather. This technology avoids the need to maintain a significant residual chemical level in the water. The application of additives is coordinated remotely by sensors and injectors/nozzles strategically located throughout the Hotel Lagoon and Beach Club Lagoon. The applied additives comply with National Sanitation Foundation (NSF) 60 Standards for drinking water treatment.[1] NSF 60 Standards establish minimum health-effects requirements to ensure that chemicals used in drinking water treatment do not introduce contaminants or impurities that could pose a risk to public health. The pulse-based disinfectants in the water achieve consistent quality and avoid water contamination from external agents, such as swimmers.

Development of the site would also include landscaping, street improvements, drive aisles, and parking.

Circulation

Access to the project will be provided from two access points on Avenue 52, two access points on Calhoun

1 Water and Wastewater Standards, NSF Standards, website: https://www.nsf.org/nsf-standards/standards-portfolio/water-wastewater-standards.

Street, and two access points on Van Buren Street. The project includes three full access driveways on Calhoun Street (1), Avenue 52 (1), and Van Buren Street (1). In addition, Calhoun Street will have a right-in/right-out driveway and Avenue 52 will have a right-in/right-out exit only driveway. Public sector access is available exclusively off Calhoun Street; private sector access can be made via Avenue 52 or Van Buren Street, as well as through the Calhoun Street driveway. Exhibit 8 illustrates the project circulation plan.

Access to the resort and residential portions of the site will be gated. A manned gated access point and remote access will be located on Avenue 52, and a service gate and remote entry gates will occur along Van Buren Street. The public Beach Club area will not include gated access points from Avenue 52 and Calhoun Street. See Exhibit 9 for the site security plan.

Moreover, street frontages will be constructed with curb and gutter improvements, sidewalks, and landscaping. The project proposes 951 parking spaces and 193 cart spaces onsite, as indicated in the table below. The parking spaces provided for the project will be consistent with Section 17.54.010, Parking Requirements, of the Coachella Municipal Code (CMC).

Table 3 Parking Provided*

Use	Units	Car Spaces	Parking Ratio	Cart Spaces
Single-Family Residential				
Grand Estate Lots	6 Grand Estate Lots	12	2.0 spaces/unit	12
Estate Lots	27 Estate Lots	54	2.0 spaces/unit	27
Zero Lot Line Lots	12 Residence	24	2.0 spaces/unit	-
Bungalows (Vehicular Access)	112 Bungalows	51	1.0 spaces/unit	
Bungalows (Cart Access)		61	1.0 spaces/unit	104
Beach Club (2-Level Parking Garage)	5 VIP Villas	321	-	-
Single-Family Residential Total	*162 Units*	*523*		*143*
Condo Hotel				
Hotel (2-Level Basement Parking Garage)	240 Hotel Cottages	360	-	50
Hotel (Surface Parking at Grove)		50	-	-
Hotel (Surface Parking at BOH)		18	-	-
Condo Hotel Total	*240 Units*	*428*		*50*
Project Total	**402 Units**	**951**	**-**	**193**

*Compliant with Section 17.54.010, Parking Requirements, of the Coachella Municipal Code.

Landscape

The project proposes multiple landscape themes throughout the project. Each theme will include native and drought-tolerant trees and plants, which will be approved by the City and water district. The various themes are summarized below and illustrated in Exhibit 10.

- Desert Native: The project frontages will consist of the Desert Native landscape theme. This landscape theme will include date palms, various trees (acacia, willow, ironwood, palo verde, mesquite), cactus and accent plants (aloe, saguaro, green desert spoon, gopher plant, ocotillo, organ pipe cactus, yucca), and shrubs and grasses to blend the existing desert environment with the project frontage.
- Agrarian Heritage: The internal primary street will consist of the Agrarian Heritage landscape theme. This landscape theme will include date palms, various trees (acacia, willow, olive, palo

verde, mesquite), cactus and accent plants (aloe, agave, green desert spoon, gopher plant, yucca), and shrubs and grasses.

- Beach: The Beach Club Lagoon and Hotel Lagoon frontages, and an island will incorporate a Beach landscape theme. This landscape theme will include various palms (date, Mediterranean fan, Mexican fan), trees (acacia, willow Tashkentensis, olive, ironwood, mesquite), cactus and accent plants (century plant, aloe, yucca), and shrubs and grasses to contribute to the casual and coastal feel of this area.
- The Grove: The primary resort entry and the sports center and some condo hotel units will consist of the Grove landscape theme. This landscape theme will include date palms, various trees (acacia, willow, olive, Tashkentensis, ironwood, palo verde, mesquite), cactus and accents (aloe, agave, saguaro, green desert spoon, gopher plant, yucca), and various shrubs and grasses to generate a structured landscape.
- Desert Oasis: The resort core and estate lots across from the resort beach (separated by the Hotel Lagoon) will consist of the Desert Oasis landscape theme. This landscape theme will include various palms (sago, Mediterranean fan, date, Canary Island date, and California fan), trees (acacia, desert willow, olive, citrus, ironwood, palo verde, mesquite), cactus and accent plantings (agave, aloe vera, aloe, yucca), and various shrubs and grasses that will contribute to a desert oasis environment with lush refuge, vertical drama, and shade.
- Desert Lush: The residential use and some of the resort units will consist of the Desert Lush landscape theme. This landscape theme will include various palms (date, Mediterranean fan, California), trees (acacia, willow Tashkentensis, olive, ironwood, palo verde, mesquite), cactus and accent plants (aloe, agave, gopher plant, yucca), and shrubs and grasses to generate residential comfort, seasonal color, and layered texture throughout this area.
- Spa Water Garden: The resort spa will consist of the Spa Water Garden landscape theme. This landscape theme will include various palms (Mediterranean fan, date), trees (acacia, willow, jacaranda, ironwood, crape myrtle), and shrubs and grasses to create a naturalistic, low maintenance, and habitat-friendly environment at the resort spa.

In addition to the proposed landscaping, the project also proposes 8-foot privacy walls along the northern, eastern, southern, and portions of the western property boundaries (see Exhibit 9, Site Security Plan).

Utilities

Areas surrounding the project site are served by electricity, natural gas, water, and sewer facilities. The proposed project will be required to connect to existing facilities, as summarized below.

The site is served by natural gas uses by Southern California Gas Company (SoCalGas). Overhead power lines occur north of the project (along Avenue 52), east of the project (along Van Buren Street), and west of the project (along Calhoun Street). The proposed project has received a will-serve letter from the Imperial Irrigation District (IID) that is conditioned on an additional substation and distribution facilities being constructed in the general project area. The project has designated a potential site for a substation, but based on current electrical infrastructure planning in the area, it is expected that the new substation will be constructed off-site in the area with new distribution conduits (if required) to be constructed in existing road rights-of-way to serve the project. The future IID substation is expected to serve multiple projects in the area, both within and outside the City of Coachella, and as an independent project, it will be subject to its own environmental review under the California Environmental Quality Act (CEQA) once the substation project and location have been determined. The project would also incorporate solar generation and battery storage systems to help offset electricity demand from the regional grid. These systems would reduce reliance on off-site energy sources and support overall energy efficiency. In the future, the project may consider implementing a microgrid or geothermal system to further offset demand

on the grid; however, these features are not part of the current project proposal and are not evaluated as a component of the project at this time. See the Energy Resources and Utilities and Service Systems discussions of this document for further analysis.

The project will connect to existing water and sewer mains. Existing water mains occur on Van Buren Street, approximately 0.26 miles north of the project, and Avenue 52, approximately 0.26 miles east of the project. The project will connect to these mains and extend 12-inch public lines 0.26 miles south from the existing Van Buren Street main, and 0.26 miles west from the existing Avenue 52 main. The project will extend a total of approximately 2,760 feet of 12-inch public water lines to the project. Public 12-inch water lines will occur within the public beach and resort main streets. Public 8-inch water lines will occur throughout the project within the residential areas. See the Utilities and Service Systems discussion of this document for further analysis.

Existing sewer lines within proximity to the proposed project are located at the Avenue 52 and Van Buren Street intersection, the Fredrick Street and Avenue 53 intersection, and Avenue 64. The project will connect to the existing 12-inch sewer main at the Avenue 52 and Van Buren Street intersection and extend approximately 174 feet of 12-inch public sewer lines to the project. The proposed public sewer line will connect to a private sewer force main, which will connect to private 8-inch sewer mains throughout the site.

Drainage
The site's topography is generally flat and gradually slopes to the southeast. Project stormwater drainage is designed to collect onsite runoff and convey them to onsite facilities via street flow to localized low points where they will be conveyed via underground storm drain lines to the irrigation pond (i.e., the 2.5-acre lake) located in the southern portion of the site.

Demolition and Construction
As previously stated, the project currently operates as a date palm grove. The project site also contains an irrigation pond in the central-northern area of the site, with nearby pump hosing and approximately three existing structures. The combined estimated building footprint of the structures is approximately 6,143 square feet. These existing structures will require demolition and off-site removal as part of the proposed project construction activities. The date palm grove will also be cleared as a part of the site preparation phase.

The site is proposed to be developed over four phases. Phase 1 will include the water features, public beach club, and resort uses. Phase 1 covers the majority of the site. Phase 2 will develop the residential uses south of the Hotel Lagoon and surrounding the proposed lake. Phase 3 will include the residential estate lots south of Phase 2. Finally, Phase 4 will develop the residential estate lots south and west of Phases 2 and 3. The grading design for the project site balances, avoiding the need to import or export dirt in connection with mass grading the site.

Operation
The resort characteristics of the project are unique, designed to function as an internal destination with resort home dwelling units, dining experiences, on-site resort amenities, outdoor and recreational spaces, and entertainment areas. This is projected to result in locally serving options for the City of Coachella and regionally for the Coachella Valley, attracting those already in the area to vacation or visit for local events.

The project would be affected by typical seasonality trends observed within the Coachella Valley and further confirmed through market research conducted by the developer. Time of year use distribution will

be concentrated between mid-February through May, with the lowest demand generally occurring mid-July through the end of September and the first half of December.

The resort and residential project will accommodate many of the needs of the guests onsite. Many of guests' daily needs would be accommodated by the resort lodging, recreation, dining, and entertainment options without leaving the property. A significant share of the public facing restaurant, beach club, and event space are anticipated to be used by onsite guests.

Entitlements

A Tentative Tract Map (TTM No. 39330) will identify the various proposed lots for subdivision and condominium purposes, specifically splitting the site into single family residential, condominium, public beach club, back of house, amenity, street, and open space lots. The project will also undergo evaluation in Architectural Review and CUP Review. Approval of these entitlements will render the project in full compliance with City regulations.

A Development Agreement is being prepared for the project. The Development Agreement will vest the applicant's right to develop the COVA project area pursuant to the entitlements described above, address short-term rentals within the project area, ensure that the project has a net positive fiscal impact on the City, and ensure the timely completion of infrastructure to serve the project and surrounding area. The Development Agreement will also ensure that all uniformly applied development policies or standards previously adopted by the City and applicable to the Project, and all mitigation measures identified in the General Plan Update and this CEQA Section 15183 Exemption Checklist, are enforceable by the City as project requirements.

As noted above, the project also includes two accompanying applications to (1) amend the City's Zoning Code for the Regional Commercial zone to allow single-family residential use and bring it into conformity with the General Plan land use designation for the site (Regional Retail District), and (2) amend the City's Short-Term Rental Ordinance to exempt projects with an approved Development Agreement from the provisions of that ordinance limiting the number of units that can be owned by a single owner and limiting the percent of units that can be permitted for short-term rentals, as well as any other provisions of the ordinance specifically modified in the approved Development Agreement.

Other public agencies whose approval is required:

- Regional Water Quality Control Board (RWQCB)
- Coachella Water Authority (CWA)
- State Water Resources Control Board (SWRCB)
- South Coast Air Quality Management District (SCAQMD)

Exhibit 1 Regional Location Map

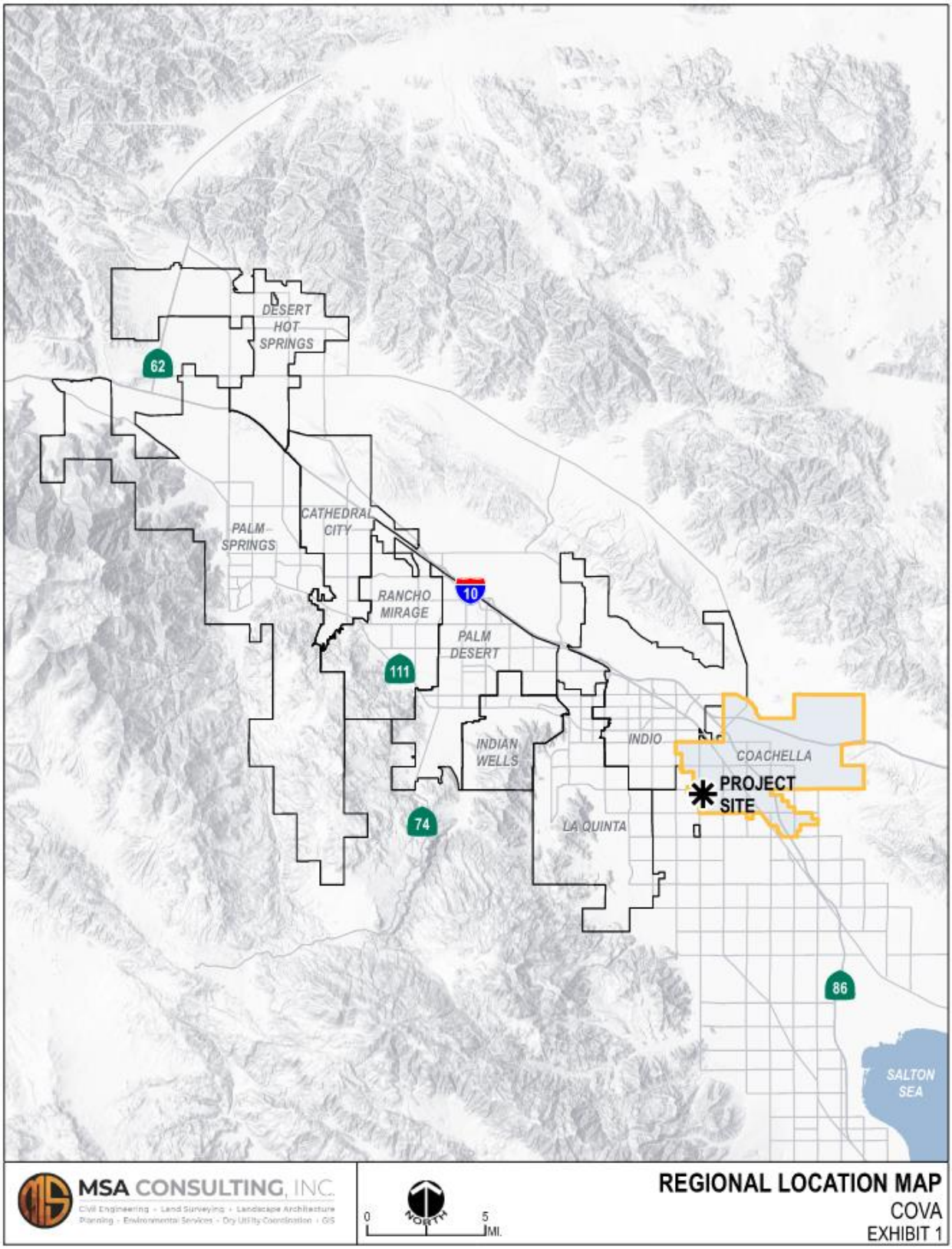


Exhibit 2 Vicinity Map

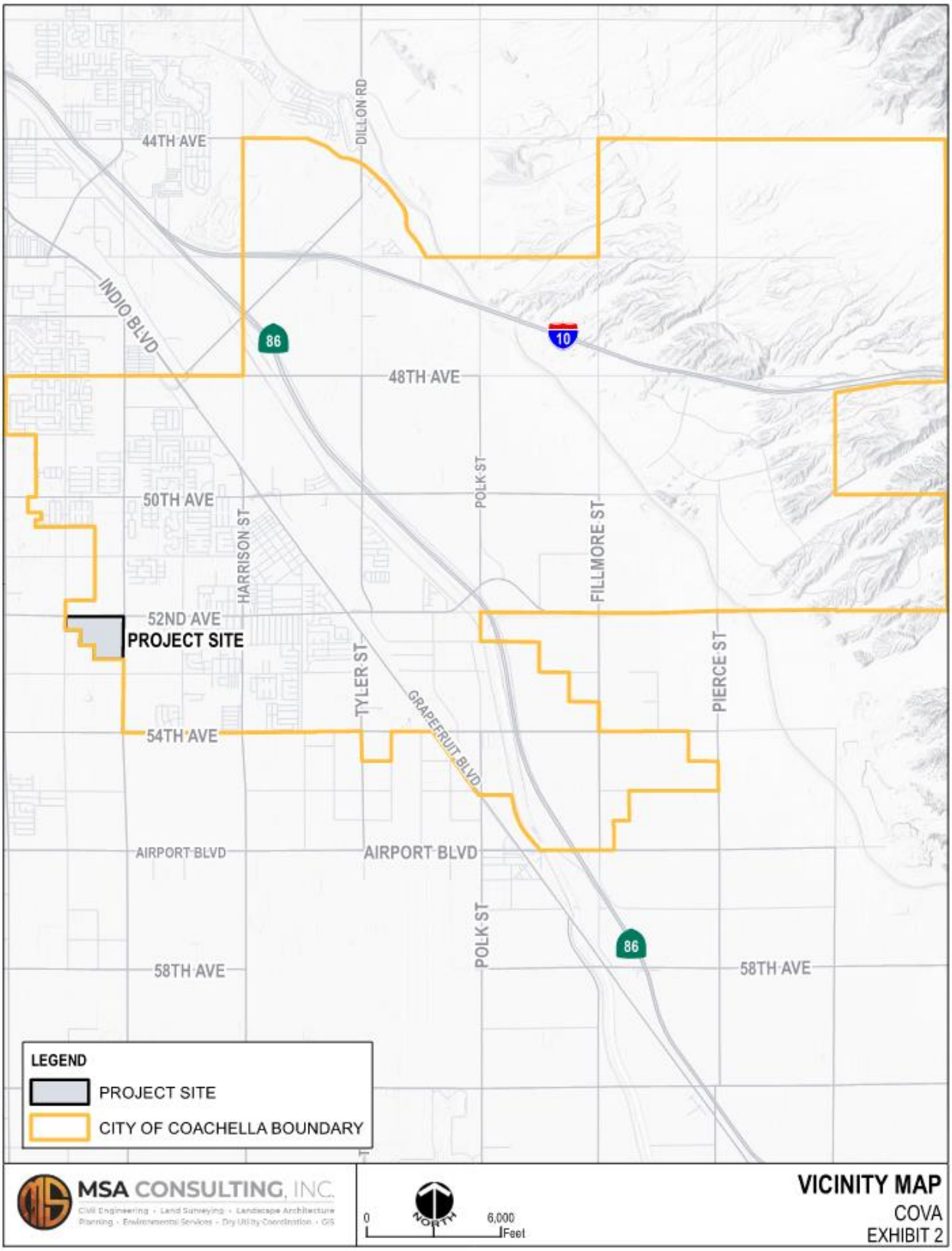


Exhibit 3 Aerial Photograph

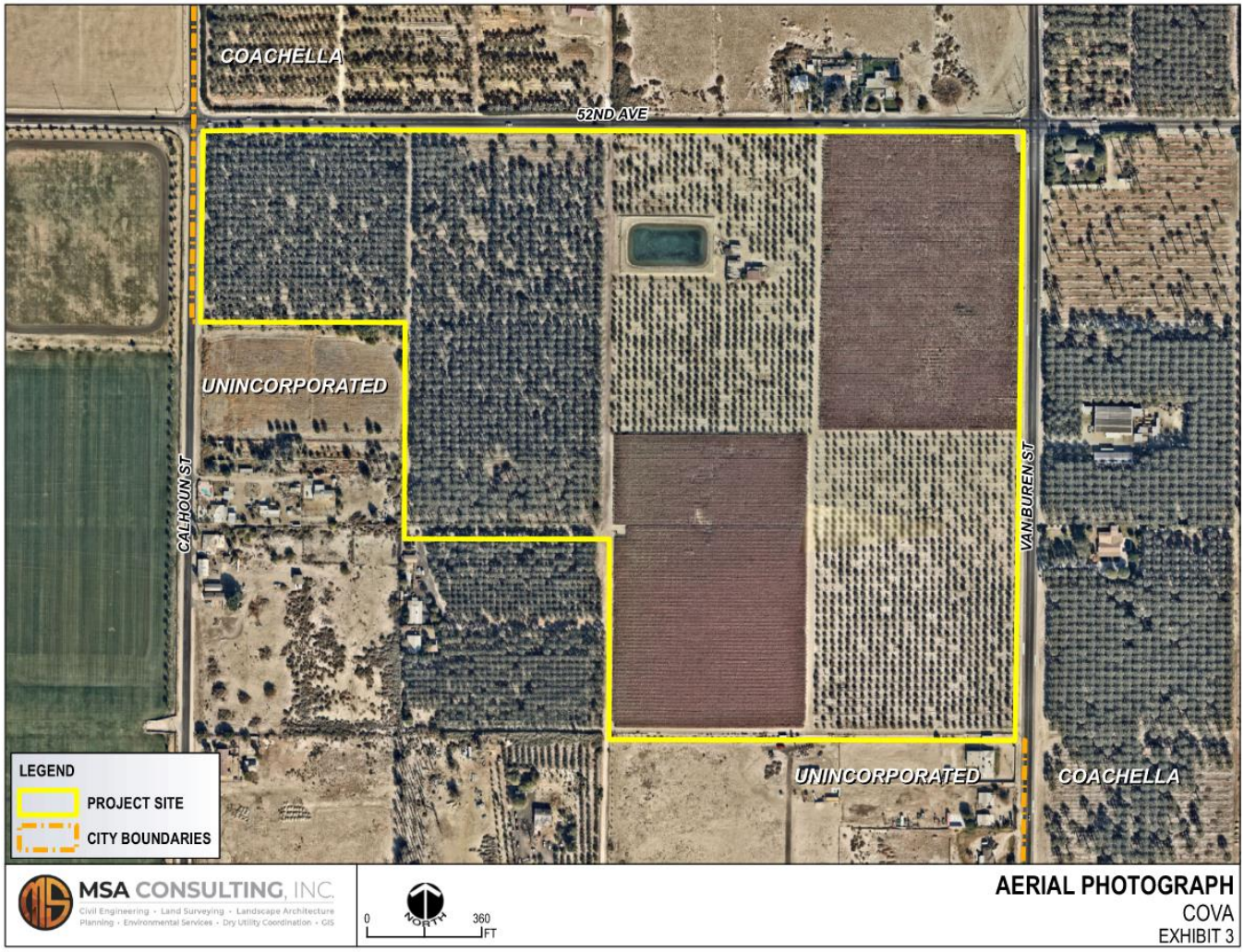


Exhibit 4 Site Plan

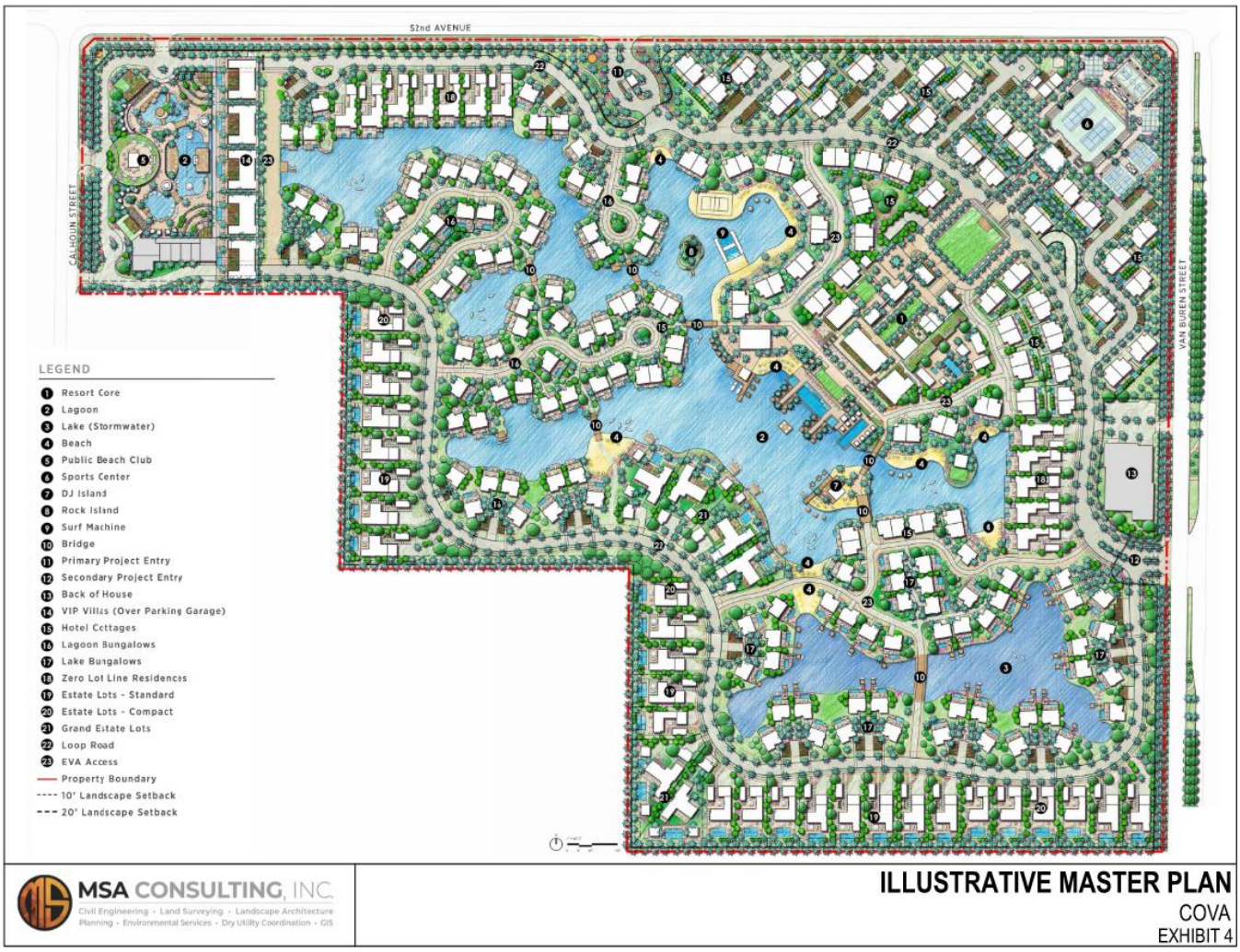


Exhibit 5 Site Plan – Hotel

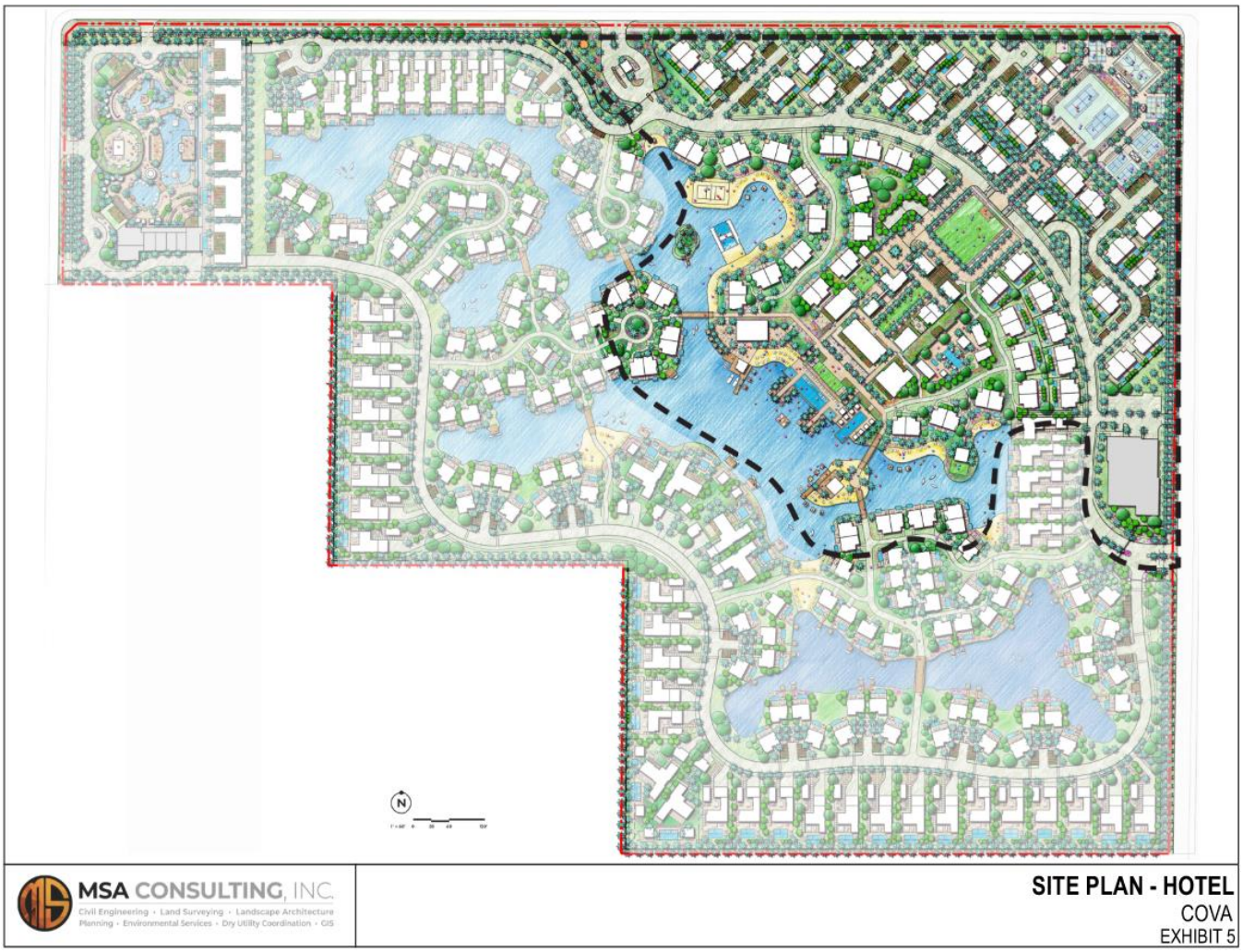


Exhibit 6 Site Plan – Public Beach Club

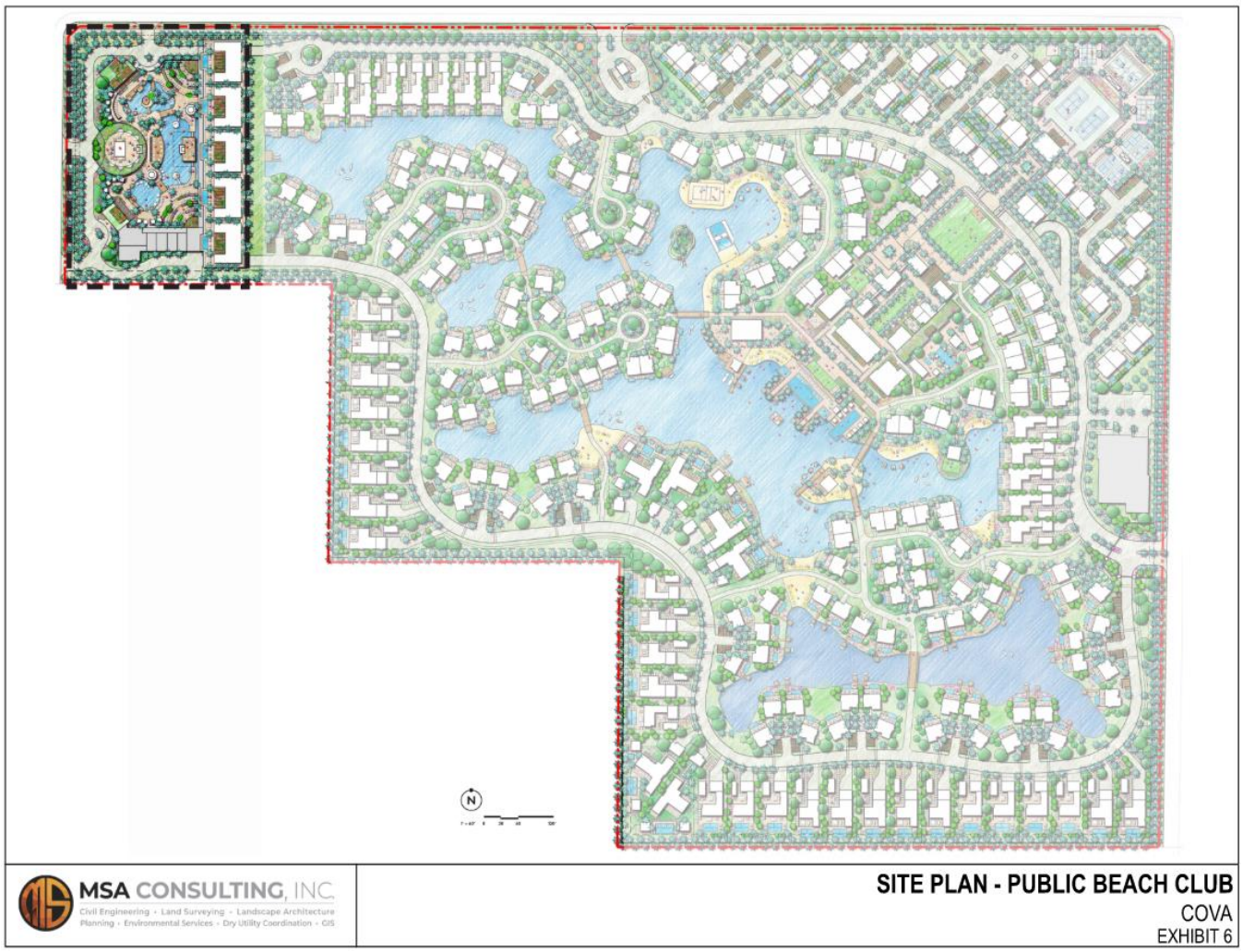


Exhibit 7 Site Plan – Residential

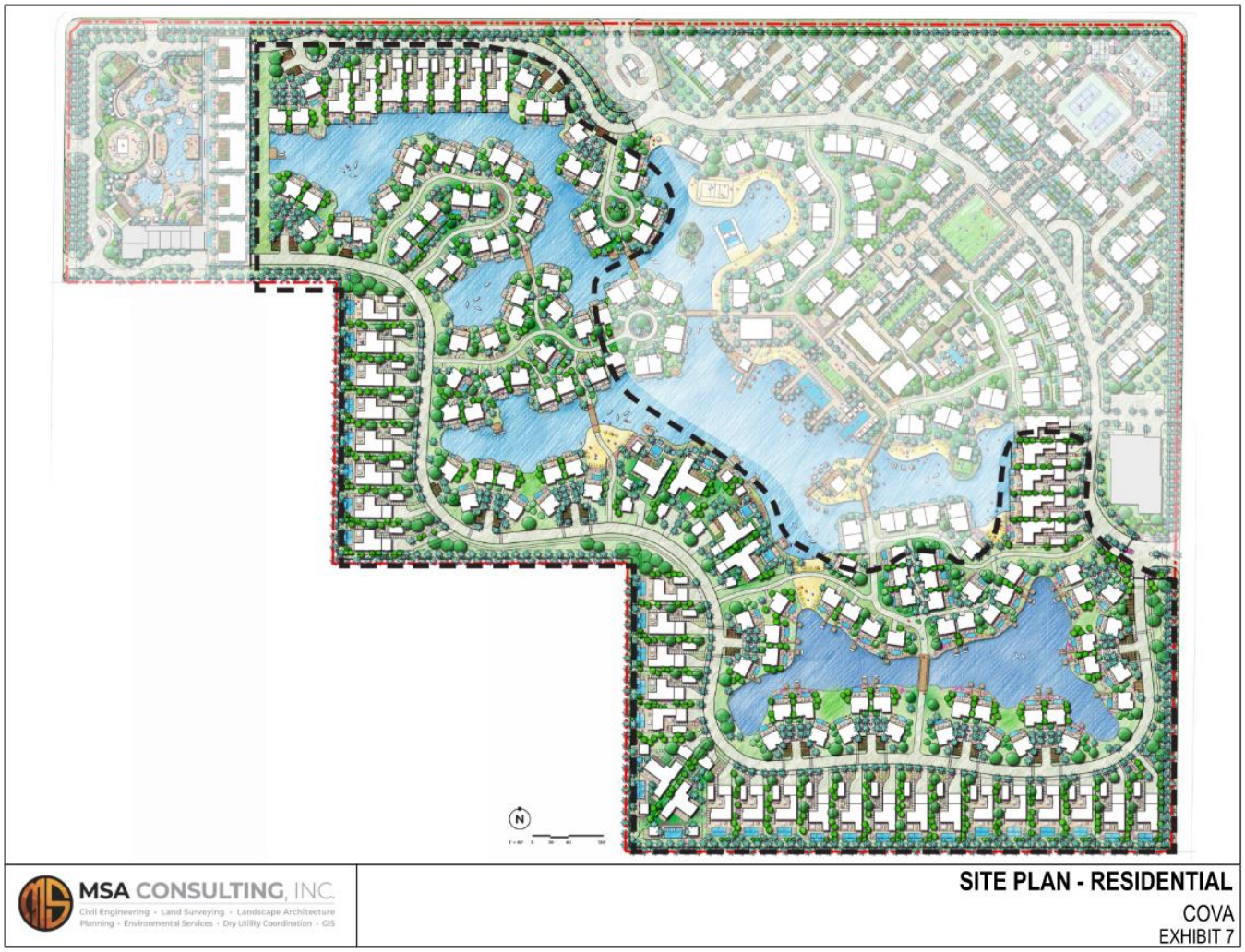


Exhibit 8 Circulation Plan

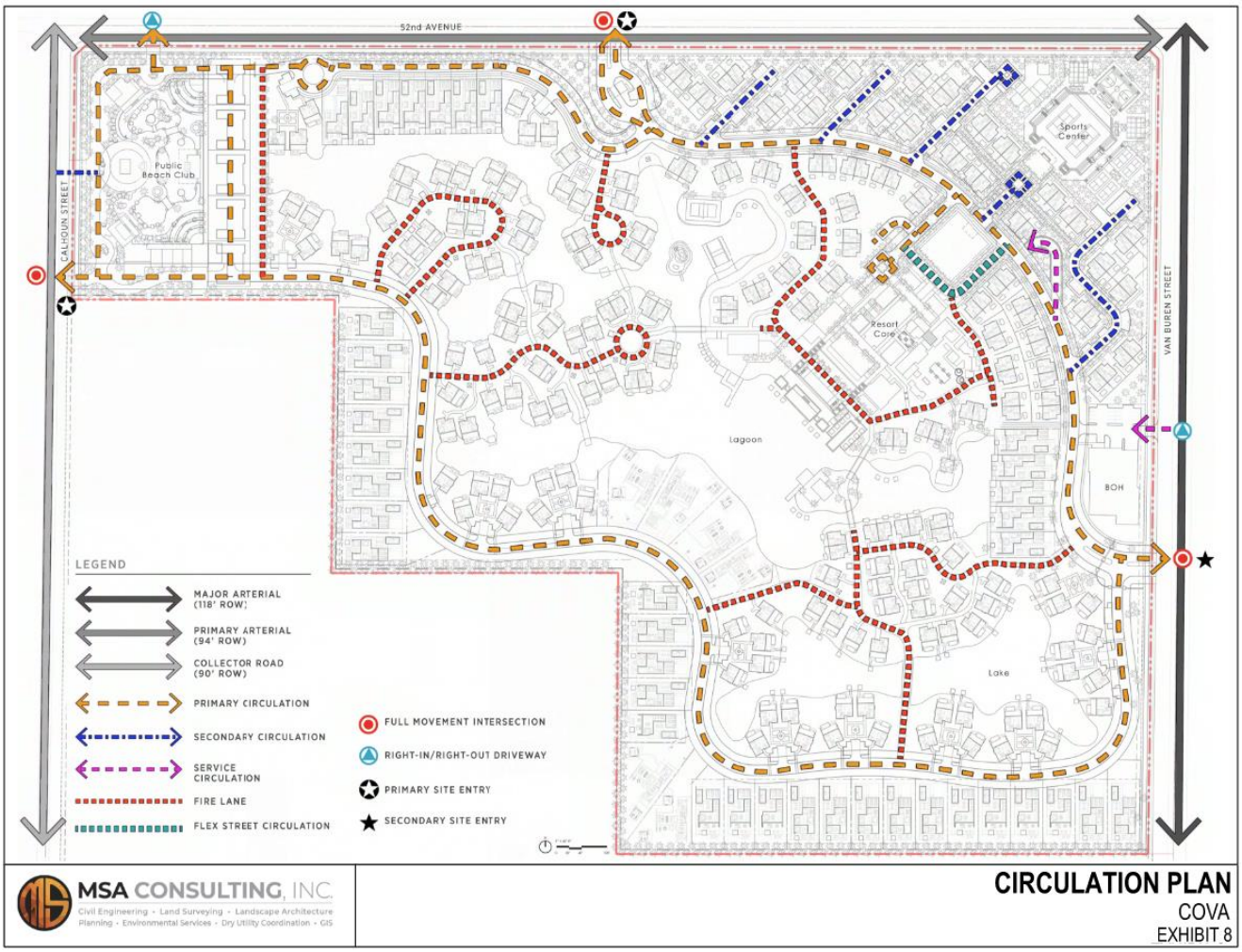


Exhibit 9 Site Security Plan

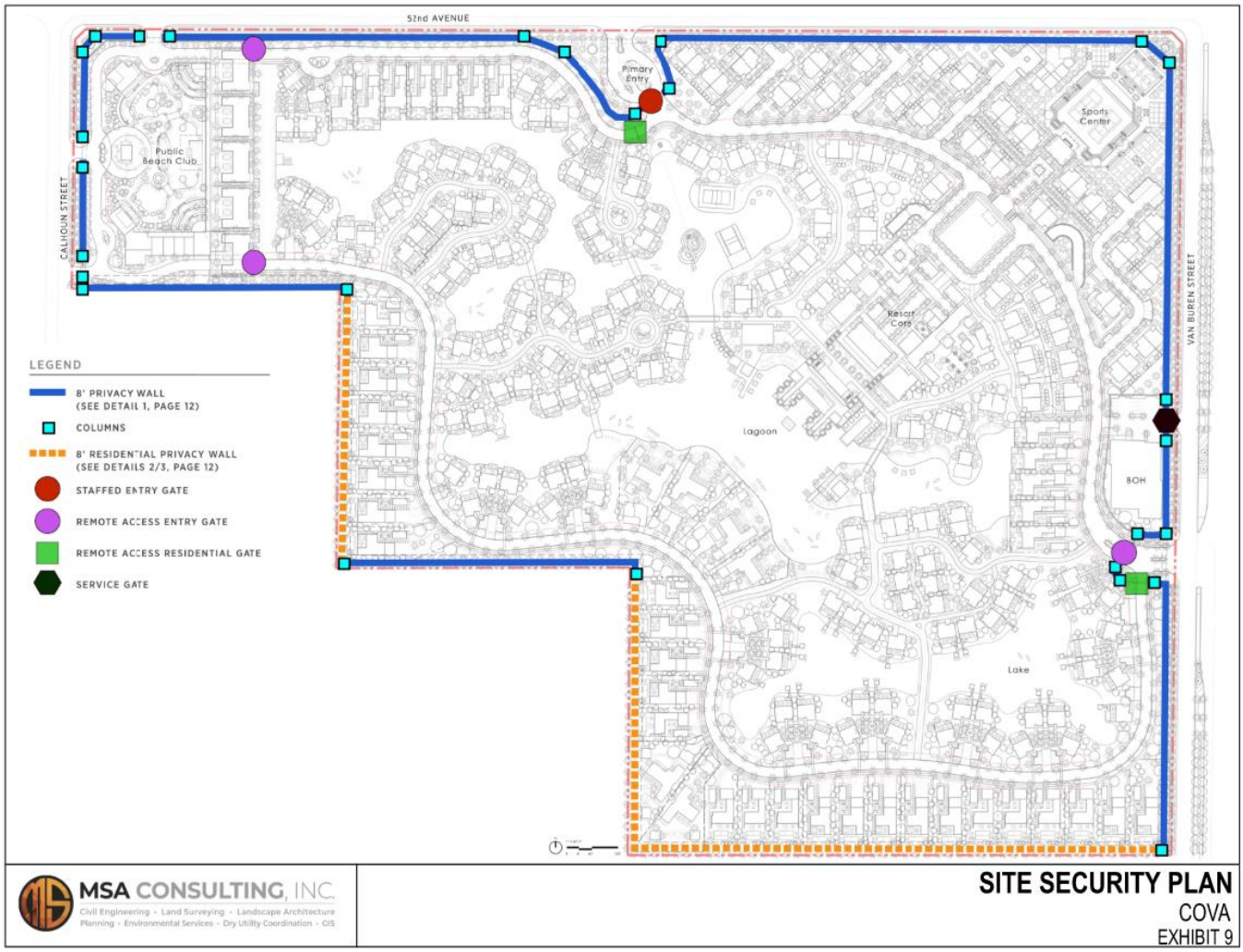


Exhibit 10 Landscape Zone Key Map

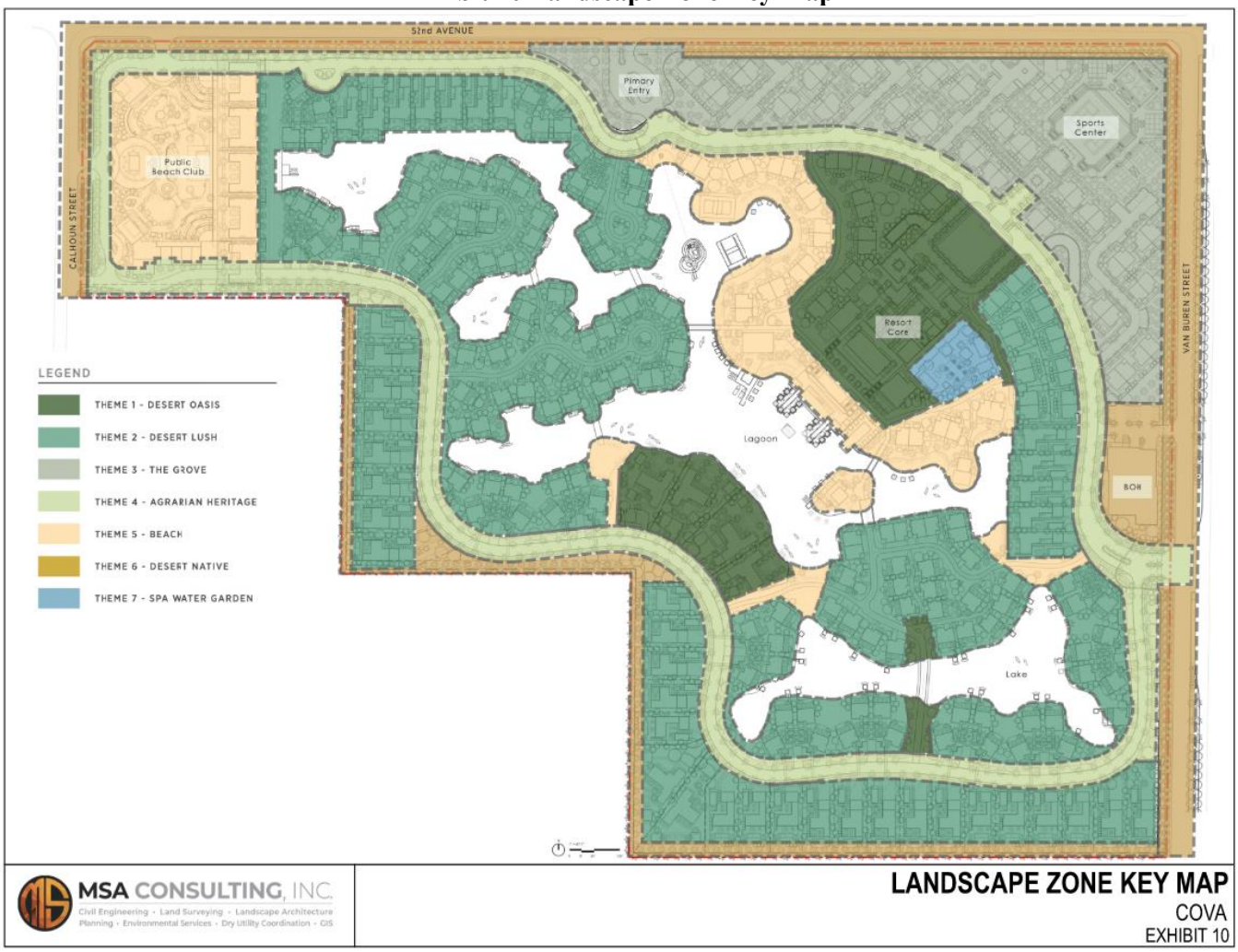


Exhibit 11 Landscape Plan

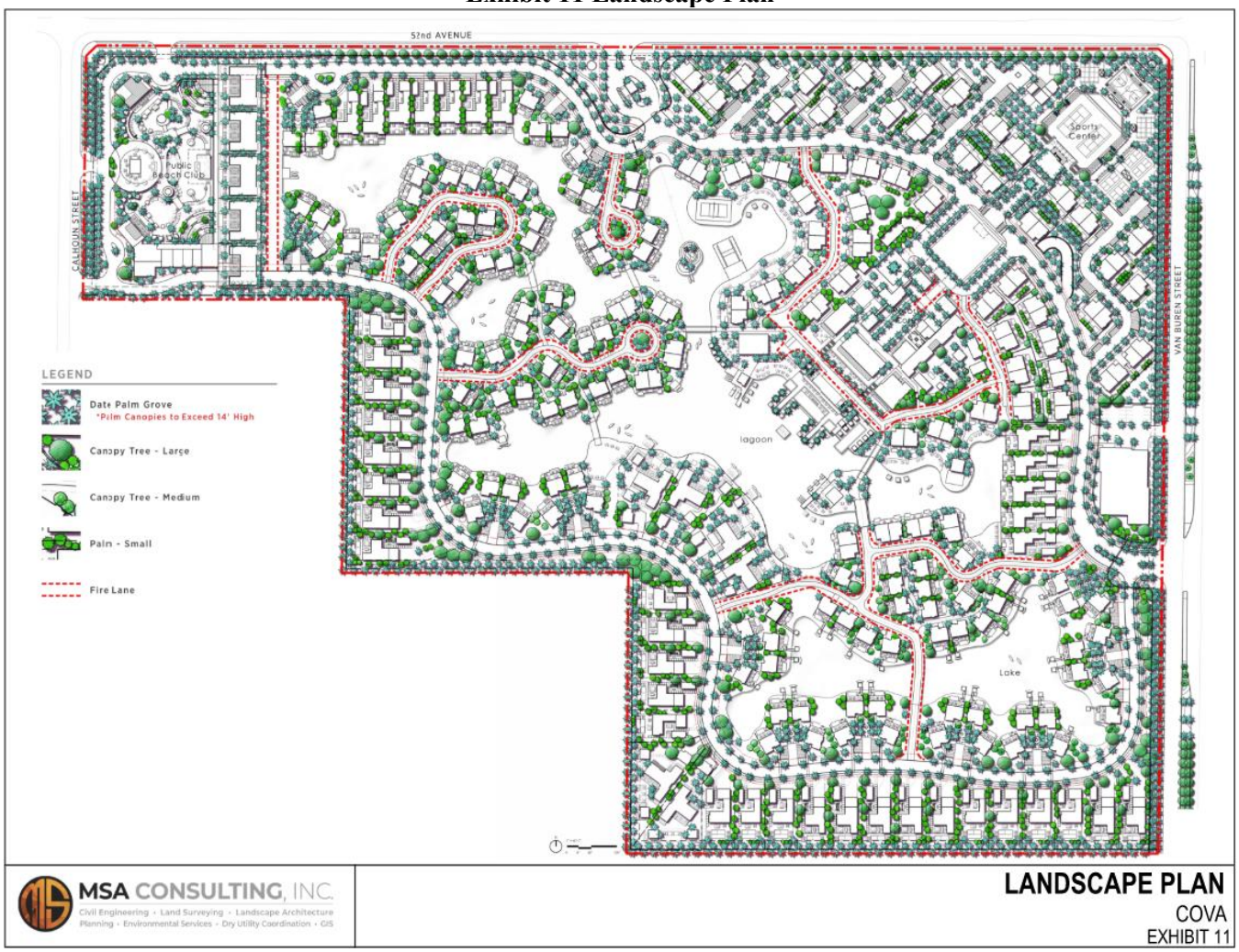
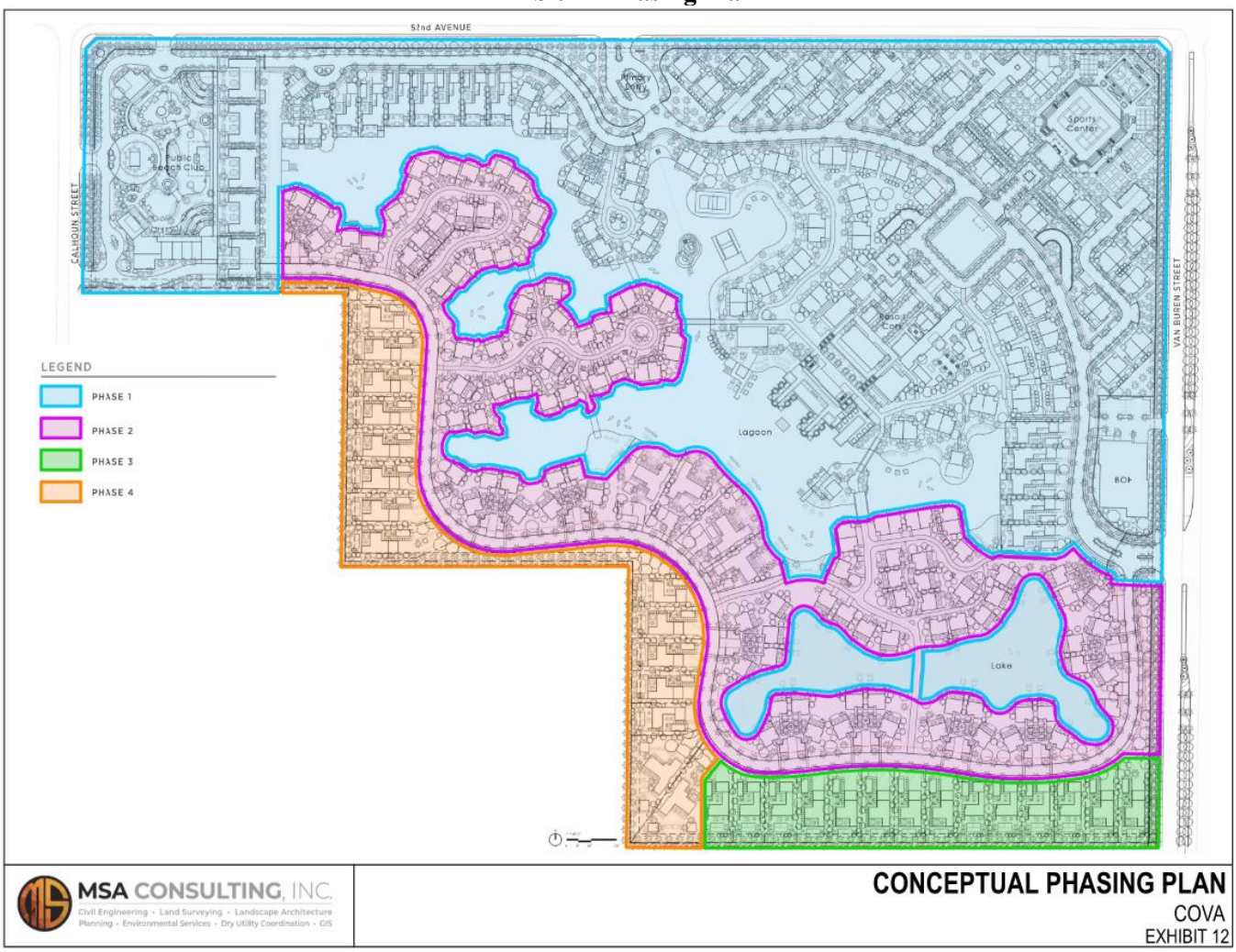


Exhibit 12 Phasing Plan



CHAPTER 2: Statement of Reasons for Exemption from Additional Environmental Review and 15183 Checklist (Pursuant to CEQA Guidelines §15183)

2.1 Overview of 15183 Checklist

California Public Resources Code Section 21083.3 and California Code of Regulations, Title 14 (CEQA Guidelines) Section 15183 provide an exemption from additional environmental review for projects that are consistent with the development density established by existing zoning, community plan or general plan policies for which an Environmental Impact Report (EIR) was certified, except as might be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site. Section 15183 of the CEQA Guidelines specifies that examination of environmental effects shall be limited to those effects that: (1) are peculiar to the project or the parcel on which the project would be located, and were not analyzed as significant effects in a prior EIR on the zoning action, general plan, or community plan, with which the project is consistent; (2) are potentially significant off-site impacts and cumulative impacts which were not discussed in the prior EIR prepared for the general plan, community plan or zoning action; or (3) are previously identified significant effects which, as a result of substantial new information which was not known at the time the EIR was certified, are determined to have a more severe adverse impact than discussed in the prior EIR. Section 15183, subdivision (c) of the CEQA Guidelines further specifies that if an impact is not peculiar to the parcel or to the proposed project, has been addressed as a significant effect in the prior EIR, or can be substantially mitigated by the imposition of uniformly applied development policies or standards, then an additional EIR need not be prepared for that project solely on the basis of that impact.

2.2 General Plan Update Program Environmental Impact Report

The General Plan is a state-mandated document that outlines goals, policies, and programs that provide the framework for future development in the City and its Sphere of Influence (SOI). The City of Coachella General Plan Update 2035 (GPU) provides the City with a long-term plan intended to guide development within the City while assisting decision-making in the City. The GPU was adopted on April 22, 2015 and has a horizon year of 2035.[2] The City Council of the City of Coachella approved amendments to GPU on July 26, 2023 and September 13, 2023. The GPU addresses land use, all modes of transportation, housing, and safety; includes a comprehensive update to the City's General Plan; and addresses the development of a Climate Action Plan (CAP). Through the GPU, the City's General Plan was reorganized into eight elements (Land Use and Community Character, Mobility, Community Health and Wellness, Sustainability and the Natural Environment, Safety, Infrastructure and Public Services, Noise, and Housing). The GPU's General Plan Land Use Designations map includes 15 land use designations.[3] Each use provides direction on use, intensity/density, form, and character. The analysis contained in the GPU Program EIR focuses on both the GPU and the CAP, addressed together as the GPU. In addition, the City adopted a new Housing Element on September 13, 2023 and a revised Land Use and Community Character Element on June 28, 2023.

The passage of Assembly Bill 32 (AB 32), the California Global Warming Solutions Act, in 2006 prompted cities and counties to develop plans to reduce greenhouse gas (GHG) emissions by 2020 and beyond. To demonstrate that the City is doing its part to meet the requirements of AB 32, the GPU was required to provide measures to mitigate its GHG emissions impacts. Thus, the purpose of developing a CAP for the City is to align the City's General Plan with the state's GHG emissions reduction efforts. The CAP is a blueprint for reducing GHG emissions associated with GPU buildout and meeting mandated GHG reduction targets. The CAP addresses climate change at the local level by focusing on the major sources of GHG emissions in the City; establishing a detailed long-term strategy to achieve GHG emissions reduction targets; and providing a framework for compliance with federal, state, and local regulations. Ultimately, the CAP identifies reasonable and effective GHG reduction measures and informs mitigation strategies for the GPU EIR.

The GPU EIR was certified in conjunction with adoption of the GPU on April 22, 2015. The GPU EIR comprehensively evaluated environmental impacts that would result from implementation of the GPU, including information related to existing site conditions, analyses of the types and magnitude of project-level and cumulative environmental impacts, and feasible mitigation measures that could reduce or avoid environmental impacts.

2 City of Coachella, General Plan 2035 (Apr. 22, 2015), https://www.coachella.org/home/showpublisheddocument/10698/638906775782700000.
3 City of Coachella, General Plan 2035, General Plan Land Use Designations, pg. 04-59 (Apr. 22, 2015).

2.3 Summary of Findings

The project is consistent with the analysis performed for the GPU EIR. Further, the GPU EIR adequately anticipated and described the impacts of the project, identified applicable mitigation measures necessary to reduce project specific impacts, and the project implements these mitigation measures (see Table 1.0-1, Impacts Overview Matrix, of the GPU EIR for complete list of GPU Mitigation Measures).

A comprehensive environmental evaluation has been completed for the project as documented in the attached §15183 Exemption Checklist. This evaluation concludes that the project qualifies for an exemption from additional environmental review because it is consistent with the development density and use characteristics established by the City General Plan, as analyzed by the City GPU EIR (SCH #2009021007), and all required findings can be made.

In accordance with CEQA Guidelines §15183, the project qualifies for an exemption because the following findings can be made:

1. **The project is consistent with the development density established by existing zoning, community plan or general plan policies for which an EIR was certified.**

   The project is located within the City's General Plan Regional Retail District, and Regional Commercial (R-C) zoning designation. Regional Retail Districts and R-C zones allow 10 – 15 dwelling units per acre and a floor area ratio (FAR) of 0.35 – 2.0. The project would be consistent with the Regional Retail District land use designation identified for the site in the GPU. Similarly, the project would be consistent with the Regional Commercial (R-C) zoning designation for the site in the Zoning Map once the application to amend the City's Zoning Code is approved, as discussed above. The project proposes 14.4 dwelling units per acre and 0.65 FAR, which is consistent with the Regional Retail Districts and R-C zone.

2. **There are no project specific effects which are peculiar to the project or its site, and which the GPU EIR failed to analyze as significant effects.**

   The subject property currently operates as a combination of an active date palm grove and grape vines that have been allowed to go fallow. The site is surrounded by agricultural uses, vacant land, and scattered residential properties. Currently, the subject property operates similarly to the surrounding uses. The project proposes to develop a hospitality project with resort, residential, and recreational uses. The project is consistent with the City's Regional Retail District land use designation and Regional Commercial zoning designation. The project does not propose project-specific effects which are peculiar to the project or its site. The project site does not contain any unique or peculiar environmental features that would result in environmental effects beyond those previously identified and analyzed.

   In addition, as explained further in the §15183 Exemption Checklist below, all project impacts were adequately analyzed by the GPU EIR. Applicable mitigation measures specified within the GPU EIR have been applied to the project.

3. **There are no potentially significant off-site and/or cumulative impacts which the GPU EIR failed to evaluate.**

   Preparation of the §15183 Exemption Checklist did not identify any significant off-site and/or cumulative impacts which the GPU EIR failed to evaluate.

4. **There is no substantial new information which results in more severe impacts than anticipated by the GPU EIR.**

   As explained in the §15183 Exemption Checklist below, no new information has been identified which would result in a determination of a more severe impact than what had been anticipated by the GPU EIR.

5. **The project will undertake feasible mitigation measures specified in the GPU EIR.**

   As explained in the §15183 Exemption Checklist below, the project will undertake feasible mitigation measures specified in the GPU EIR. These GPU EIR mitigation measures will be undertaken through project design, compliance with regulations and ordinances, or through the project's conditions of approval.

Signature	Date
Printed Name	Title

CHAPTER 3: CEQA Guidelines §15183 Exemption Checklist

3.1 Overview

This checklist provides an analysis of potential environmental impacts resulting from the project. Following the format of CEQA Guidelines Appendix G, environmental effects are evaluated to determine if the project would result in a potentially significant impact triggering additional review under CEQA Guidelines §15183.

- Items checked "Peculiar Impact that is not Substantially Mitigated" indicate that the project could result in a peculiar impact, including a physical change that belongs exclusively or especially to the project or that is a distinctive characteristic of the project or the project site and that peculiar impact is not substantially mitigated by the imposition of uniformly applied development policies or standards. (CEQA Guidelines §15183(b)(1), (f).)
- Items checked "Impact not Analyzed as Significant Effect in the General Plan EIR" indicate that the project could result in a significant effect that was not analyzed as significant in the February 2015 GPU EIR (SCH No. 2009021007). Such a project impact is not significant if it can be substantially mitigated by the imposition of uniformly applied development policies or standards. (CEQA Guidelines §15183(b)(2), (c), (f).)
- Items checked "Potentially Significant Offsite or Cumulative Impact Not Discussed in the GPU EIR" indicate the project could result in a significant offsite or cumulative impact that was not discussed in the General Plan EIR. Such an offsite or cumulative project impact is not significant if it can be substantially mitigated by the imposition of uniformly applied development policies or standards. (CEQA Guidelines §15183(b)(3), (c), (f).)
- Items checked "Adverse Impact More Severe Based on Substantial New Information" indicate that there is new information that leads to a determination that the project impact is more severe than discussed in the GPU EIR. Such an impact is not more severe if it can be substantially mitigated by the imposition of uniformly applied development policies or standards. (CEQA Guidelines §15183(b)(4), (c), (f).)
- Items checked "No New Impact" indicate that potential impacts from the Project have been adequately analyzed in the GPU EIR.

A project does not qualify for a §15183 exemption if it is determined that it would result in the following: 1) a peculiar impact that was not identified as a significant impact under the GPU PEIR; 2) a more severe impact due to new information; or 3) a potentially significant off-site impact or cumulative impact not discussed in the GPU EIR.

A summary of each potential environmental effect is provided below the checklist for each subject area. A list of references, significance guidelines, and technical studies used to support the analysis is attached in the Appendices. The Appendix contains a list of GPU EIR mitigation measures.

3.2 Checklist Analysis

1. AESTHETICS -- Would the project**:**	Project Peculiar Impact that is not Substantially Mitigated by Uniformly Applied Policies	Significant Impact not Analyzed as Significant in the GP EIR	Potentially Significant Offsite or Cumulative Impact not Discussed in the GP EIR	Adverse Impact More Severe based on Substantial New Information	No New Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☐	☒
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning or other regulations governing scenic quality?	☐	☐	☐	☐	☒
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☐	☐	☐	☐	☒

Sources: "California Scenic Highway Mapping System," 2019; 2035 Coachella General Plan Update, 2015; Coachella Municipal Code

Setting

The topography in the City of Coachella, and surrounding cities, is defined as a low and relatively flat desert basin bounded by mountainous terrain as a result of past seismic activity.[4] The most notable surrounding mountain ranges are the Santa Rosa Mountains to the south and southwest, the San Jacinto Mountains and San Gorgonio Mountains to the northwest, the Little San Bernardino Mountains and the Indio Hills to the north and northeast, and the Mecca Hills to the east. The topographic variety in the Coachella Valley includes elevations from over 10,000 feet at the Mount San Jacinto peak, 1,000 feet in the Mecca Hills, to approximately 160 feet below sea level south of Thermal.[5] Although the elevation varies widely, the City of Coachella is relatively flat, with a gentle slope from northwest to southeast. The project site is located in the southwestern portion of the City. The 87-acre site operates as date palm groves and grape vineyards. Historical imagery indicates that the project site operated as agricultural uses since at least 1984.[6] The date palms and grape trellises align the project frontages, and three small, dilapidated structures are found in the center of the project. It should be noted that agricultural uses are not currently a compatible use with the existing land use designation (Regional Retail District) and zoning designation (Regional Commercial) (CMC Section 17.28.020 – Permitted uses). Therefore, this is a legal non-conforming use.

Properties surrounding the proposed project include existing residential homes, vacant land, and agricultural land (see Exhibit 3, Aerial Map, above). Avenue 52 delineates the project's northern boundary, Van Buren Street

4 City of Coachella, General Plan 2035: Existing Conditions, at 3-24 (Apr. 22, 2015).
5 Ibid.
6 Phase I Environmental Site Assessment, Sladden Engineering (Appendix F.1).

delineates the project's eastern boundary, and Calhoun Street delineates a portion of the project's western boundary. The surrounding rights-of-way are paved.

Proposed Project

The project proposes the construction of a residential and resort community. The project will consist of 162 single family residential units and 240 condo hotel cottages for a total of 402 units. The project also proposes water amenities, club amenities, health and wellness spaces, sports and recreational amenities, and additional areas for events and restaurants. The project will improve the existing street frontages with a perimeter wall and landscaping complementing the desert environment. The buildings will also have modern architecture with a neutral color palate consisting of browns, greys, and various earth tones. See discussion c, below, for conceptual renderings of the project.

General Plan

The City of Coachella categorizes the different land uses into six specific designations. These six different designations include: Ranchos, Neighborhoods, Centers, Districts, Specific Plans, and Public.[7] The project is in the City's District Designation, which provides primary retail and entertainment areas, and provides jobs and economic development opportunities. District Designations include four subareas: Suburban Retail, Regional Retail, Industrial, and Resort.[8] The project is in the Regional Retail District of the City which provides opportunities for a wide range of shopping and entertainment in a variety of urban and suburban formats.[9] These include regional shopping centers, mixed designation centers or similar uses. The intended physical character for Regional Retail Districts is organized in blocks by a combination of public and private streets that provide access and parking for them. The blocks of this District may be the largest for the City, with buildings, landscape, and signage similarly scaled up in size, but not neglecting the importance of creating a comfortable and attractive pedestrian environment for shoppers. Development intensities for Regional Retail Districts vary from 10 to 15 dwelling units per acre, with a commercial floor area ratio (FAR) 0.35 to 2.0.[10] The proposed project is consistent with the Regional Retail District land use designation.

Zoning

The zoning designation for the site is Regional Commercial (RC). RC zones are intended to provide for and encourage a wide range of shopping and entertainment in a variety of urban and suburban formats.[11] These include regional shopping centers, mixed destination centers, or similar uses. The uses allowed in this zone will cater to regional clientele and provide a unique amenity to all residents of the Coachella Valley and an important revenue source for the City. The primary purpose of this zone is to provide commercial opportunities with residential uses supporting the retail environment. The project is consistent with the existing zoning designation once the application to amend the Zoning Code is approved, as discussed above.

a) **Less than Significant Impact.** The GPU EIR concluded this impact to be less than significant.[12] The GPU lists Policies 6.1 (view corridor preservation) and 10.8 (preservation of natural land features) in the Sustainability and Natural Environment Element to ensure the protection of scenic vistas in the City. No mitigation is required. Scenic vistas provide valuable aesthetic resources, including expansive landscape views of the Coachella Valley, to the residents and patrons of the City and SOI (i.e., "Planning Area"). Scenic vistas within the Planning Area include views of the Mecca Hills in the eastern portion of the of the Planning Area. Additional scenic vistas that are not within the Planning Area (but can be seen from within the Planning Area) include the Santa Rosa and San Jacinto Mountains, which can be viewed to the west and southwest of the Planning Area, and the

7 City of Coachella, General Plan 2035: Land Use & Community Character, at 04-6 (Apr. 22, 2015).
8 *Id.*, at 04-34 – 04-46.
9 *Id.*, at 04-38 – 04-41.
10 *Id.*, at 04-38.
11 Zoning Code Section 17.28.010.
12 City of Coachella, General Plan 2035 Update: Draft Environmental Impact Report (GPU Draft EIR), Aesthetic Resources, at 4.1-5 (October 2014), available at https://cityofcoachellageneralplanupdate.weebly.com/uploads/1/2/1/2/12129446/4.1_-_aesthetic_resources.pdf.

Little San Bernardino Mountains, which can be viewed to the north and northwest of the Planning Area. According to the GPU, the natural topography of the hills, the existing agricultural uses, and the views of the surrounding mountains should be maintained and preserved for their scenic quality.[13] The value of scenery can be highly subjective due to personal preferences and opinions. Scenic value is generally affected by the presence and intensity of neighboring man-made improvements, such as structures, overhead utilities, and landscaping. Certain man-made features can either add to or obstruct from a scenic vista.

The project site is located in the southwestern corner of Coachella, in the General Plan's Regional Retail District land use designation and RC zoning designation. The 87-acre project property is surrounded by existing, scattered residential homes, vacant land, and agricultural land. Avenue 52 delineates the project's northern boundary, Van Buren Street delineates the project's eastern boundary, and Calhoun Street delineates a portion of the project's western boundary. The surrounding rights-of-way are paved.

The project will consist of 162 single family residential units and 240 condo hotel cottages, for a total of 402 units. The project also proposes water amenities, club amenities, health and wellness spaces, sports and recreational amenities, and additional areas for events and restaurants. The buildings will vary from one to two stories. Ingress and egress from the project will be provided by two access points on Calhoun Street, two access points on Van Buren Street, and two access points on Avenue 52. Street improvements include curb and gutter improvements and perimeter landscaping as part of project development.

According to the GPU, hillsides and mountains in the Coachella Valley create scenic vistas around the City.[14] From the project site, views of the San Jacinto Mountains to the west, Santa Rosa Mountains to the south, and Little San Bernardino Mountains to the north and northeast are distant. The surrounding mountains are largely observed by motorists and pedestrians travelling along the rights-of-way, and the private properties north, south, east, and west of the project. Due to the distance of the mountain vistas, baseline and some midrange views are obstructed; however, peak views are visible from the roadways adjacent to the proposed project. Depending on viewpoint location, the views of these mountain ranges are partially or fully obstructed by existing manmade structures (i.e., buildings), infrastructure (i.e., utility poles), agricultural properties (i.e., trees from surrounding groves), and landscaping. The following discussion analyzes the project's impact on scenic vistas from the surrounding rights-of-way and the surrounding properties.

Analysis from Van Buren Street (East)

Van Buren Street is a north-south trending roadway that delineates the project's eastern boundary. From the segment of Van Buren Street along the project's frontage, views of the Little San Bernardino Mountains to the north, the Santa Rosa Mountains to the south and southwest, and the San Jacinto Mountains to the northwest, are distant. Existing structures, agriculture/vegetation, and manmade facilities obstruct the baseline views of the mountains from Van Buren Street. However, mid-range and peak views are visible. Views of the Mecca Hills to the east are obstructed by existing agriculture/vegetation.

As previously stated, the San Jacinto Mountains are northwest of the project and distant (approximately 19 miles from Van Buren Street). Currently, baseline and mid-range views of the San Jacinto Mountains are obstructed by the existing vineyards onsite. Development of the proposed project would result in the brief obstruction of the San Jacinto Mountains (to the northwest) and Santa Rosa Mountains (to the southwest) from motorists and pedestrians traveling along Van Buren Street.

The project proposes the resort hotel facility at the northeast corner of the site and residences along the central, southern, and southeastern portion of the site. The buildings proposed along the eastern side of the site will include condo hotels, and residences. These buildings will be two-stories in height and set back from the roadway, compliant with the zoning code, to allow for reduced impacts of the views of the San Jacinto Mountains. Additionally, the proposed building's roof types and rooflines will vary from simple and flat roof forms with slopes. The proposed building height and rooflines are typical of those throughout the City and

13 City of Coachella, General Plan 2035: Land Use & Community Character, at 04-3 (Apr. 22, 2015).
14 *Id.*, at 02-13.

existing residential and commercial buildings. Moreover, building height variations and breaks in-between buildings allow for visual relief and views of San Jacinto Mountains from motorists and pedestrians traveling along Van Buren Street. Building obstructions will also be brief until the motorist passes the buildings. The project will be developed in compliance with the CMC.

Due to the direction of traffic being north-south along Van Buren Street, the primary scenic vistas observed from the right-of-way includes the Little San Bernardino Mountains to the north and Santa Rosa Mountains to the south. Thus, due to the project's location west of Van Buren Street, the project will not impact the views of the Santa Rosa Mountains to the south or the Little San Bernardino Mountains to the north.

Overall, impacts to the scenic vistas when viewed from Van Buren Street would be less than significant.

Analysis from Avenue 52 and Existing Properties (North)

As previously stated, Avenue 52 is the east-west right-of-way that delineates the project's northern boundary. North of Avenue 52 includes vacant lots, agricultural properties, and single-family residences. From Avenue 52 and the existing residential structures, views of the Little San Bernardino Mountains to the north and east, the Santa Rosa Mountains to the south and southwest, and the San Jacinto Mountains to the northwest, are distant. Existing structures, landscaping/vegetation, and manmade facilities (i.e., utility posts, etc.) obstruct the baseline views of the mountains. However, mid-range and peak views are visible depending on viewpoint location.

Development of the proposed project would result in the partial obstruction of the Santa Rosa Mountains to the south. The buildings proposed along the northern side of the site will include condo hotels and residences. These buildings will be two-stories in height and set back from the roadway, compliant with Section 17.28.030 of the CMC, to allow for reduced impacts of the views of the Santa Rosa Mountains. The project proposes building heights up to 30 feet, with chimneys reaching 34 feet. According to Section 17.28.030, the maximum heights in R-C zones shall be two stories or thirty-five (35) feet, whichever is less. Maximum heights allowed for hotels can be eighty-five (85) feet. Additionally, the proposed building's roof types and rooflines will vary from simple and flat roof forms with slopes. The proposed building height and rooflines are typical of those throughout the City and existing residential and commercial buildings. Moreover, building height variations and breaks in-between buildings allow for visual relief and views of Santa Rosa Mountains. Buildings will be set back greater than 30 feet from the Avenue 52 right-of-way. Per the CMC, the minimum perimeter setback for residential or hotel projects without frontage of buildings along perimeter street shall equal at minimum 10 feet at any point and have an average perimeter landscape setback of 20 feet for the entire frontage. An equestrian trail is also proposed along the project frontages, including along Avenue 52. The project will be developed in compliance with the CMC. The proposed setbacks, rooflines, and building height restrictions ensure that the scenic views of the hills and mountains are protected, consistent with GPU Policies 6.1 and 10.8.

Additionally, per Section 17.28.030(L) of the CMC, all development in the RC zone is subject to Architectural Review as set forth in CMC Section 17.72.010. In accordance with the CMC, Architectural Review will provide flexibility in the placement and interrelationship of structures and uses subject to Architectural Review; provide for the implementation of sound site plan design concepts while maintaining the overall intensity of land use and density of population; review the site plan of those uses which are not intrinsically objectionable to the predominant use category of the district, but which have inherent characteristics which, if not properly handled, have potentials for becoming detrimental to the health, safety, or general welfare of the public, or to neighboring land uses; determine whether or not a proposed development will properly comply with the architectural guidelines of the city and the provisions and development standards required by this chapter or as prescribed by the planning director, or other authorized agent; and improve the quality of development and to provide a mechanism whereby the city can insure well-designed development.

Due to the direction of traffic being east-west along Avenue 52, the primary scenic vistas observed from the right-of-way include the Santa Rosa Mountains to the south and the Mecca Hills to the east. Because of the project's location south of Avenue 52, the project will not obstruct existing primary views observed along Avenue 52.

The project will not impact the views of the San Jacinto Mountains to the northwest or the Little San Bernardino Mountains to the north. Overall, the project would result in less than significant impacts to scenic vistas when viewed from the properties north of the project.

Analysis from Existing Properties (South)

The property south of the project consists of residential structures, agricultural fields, and vacant lots. The closest residential structure is located approximately 50 feet from the project's southeastern boundary. From the existing structure, views of the Little San Bernardino Mountains to the north, the Santa Rosa Mountains to the south, and the San Jacinto Mountains to the northwest are distant. Existing structures, landscaping/vegetation, and manmade facilities obstruct the baseline views of the mountains. However, mid-range and peak views are partially visible depending on viewpoint location.

Development of the proposed project would result in the obstruction of the Little San Bernardino Mountains to the north. The buildings proposed along the southern side of the site will include residences and 8-foot privacy walls for security purposes. These buildings will be two-stories in height and set back from the southern boundary, compliant with the zoning code, to allow for reduced impacts of the views of the Little San Bernardino Mountains. Additionally, the proposed building's roof types and rooflines will vary from simple and flat roof forms with slopes. The proposed building height and rooflines are typical of those throughout the City and existing residential buildings. The project will be developed in compliance with the CMC.

Moreover, the project will not impact the southern property's view of the Santa Rosa Mountain to the south or the Mecca Hills to the east because the project is located north of the property. Additionally, due to the distance of the San Jacinto Mountain to the northwest, views of the mountain would not be impacted. Therefore, the project would result in less than significant impacts to scenic vistas when viewed from the developed property south of the project.

Analysis from Calhoun Street and Existing Properties (West)

As previously stated, Calhoun Street is a north-south trending right-of-way that delineates a portion of the project's western boundary. The remainder of the project's western boundary is delineated by existing residences and agricultural properties. West of Calhoun Street includes agricultural lots. From Calhoun Street, views of the Little San Bernardino Mountains to the north, Santa Rosa Mountains to the south, and San Jacinto Mountains to the northwest are distant. Existing structures, agriculture/vegetation, and manmade facilities (i.e., utility posts, etc.) obstruct the baseline views of the mountains. However, mid-range and peak views are partially visible depending on viewpoint location. From the existing residences southwest of the project, views of the San Jacinto Mountains to the northwest and Santa Rosa Mountains to the southwest are distant, and baseline views are partially obstructed by existing vegetation and manmade facilities. Views of the Little San Bernardino Mountains to the north and Santa Rosa Mountains to the south are obstructed by existing vegetation, structures, and manmade facilities. Views of the Mecca Hills are obstructed by existing agriculture/vegetation.

Development of the proposed project would not result in obstructions to the Little San Bernardino Mountains because views of the Mountain are currently obstructed by existing vegetation/agriculture. Moreover, the project will not impact the western properties views of the San Jacinto Mountains to the northwest or Santa Rosa Mountains to the south and southwest due to the project's location east of these properties. Overall, the project would result in less than significant impacts to scenic vistas when viewed from the developed properties west of the project.

Construction activities associated with the proposed project would be temporary and would include site clearing and installation of construction fencing along the perimeter of the site. Although construction activities and fencing may temporarily alter views of the project site, they would not substantially obstruct or adversely affect views of the surrounding scenic vistas from public rights-of-way. Construction fencing would be removed as development progresses, and views of the surrounding scenic vistas discussed above would remain available from public rights-of-way, depending on viewpoint location.

Conclusion

The project proposes the development of a residential and resort community and will be developed consistent with the Regional Retail District land use designation and Regional Commercial zoning designation. The proposed project buildings along the property boundaries will be two stories and set back from the property line to reduce impacts to the surrounding viewsheds. The project will also be surrounded by an 8-foot privacy wall along the southern, eastern, northern property boundaries, and portions of the western property boundaries, typical of resort properties or residential communities in the City.

Overall, the proposed project is not anticipated to adversely alter the existing viewshed on any scenic vistas, and less than significant impacts are expected.

As previously stated, the GPU EIR concluded that impacts to scenic vistas would be less than significant. As the project would have a less than significant impact for the reasons detailed above, the project would not increase impacts identified within the GPU EIR, and there is no new information of substantial importance than what was identified within the GPU EIR.

b) **Less than Significant Impact.** The State Scenic Highway Program was established to preserve and enhance the natural beauty of California.[15] It not only adds to the pleasure of the residents but also encourages the growth of recreation and tourism in the State. The Department of Transportation (Caltrans) manages the State Scenic Highway Program. To be listed as a scenic highway, the road must traverse an area of outstanding scenic quality, containing striking views, flora, geology, or other unique natural attributes.[16] There are three officially designated state scenic highways in Riverside County. They include Highway 273, 62, and the closest, Highway 74, which is approximately 11 miles northwest of the project site. The northern section Highway 111 (Palm Springs to Palm Desert) and the southern section (Mecca to the Salton Sea) is categorized as an eligible state scenic highway, but it is not officially designated. The southern section is the closest eligible state scenic highway and is located approximately 7.75 miles southeast of the project.

The GPU EIR concluded that the GPU would not result in impacts to scenic resources within a State scenic highway.[17] According to the GPU, the Policies 6.2 (restricting new billboards on scenic roadways), 10.9 (encouraging the preservation of agricultural and other lands), and 13.16 (encouraging parks and trails to be designed to conserve scenic and natural features) in the Sustainability and Natural Environment Element to ensure the protection of scenic resources in the City. No mitigation is required. The GPU EIR states that there are no designated, or eligible, State scenic highways within the Planning Area. However, major historic highways within the Planning Area include Old Highway 99 (now Dillon Road between Grapefruit Boulevard and Interstate 10), Old Highway 86 (Harrison Street south of Grapefruit Boulevard), and Old Highway 111 (Grapefruit Boulevard), and Highway 86-S Expressway south of Interstate 10. These historic highways represent visual corridors and serve as an aesthetic resource for the City.[18] Although there are no designated State scenic highways, the GPU provides policies that minimize aesthetic obstruction along these highways. The project lies two miles west of the closest City designated visual corridor, Grapefruit Boulevard, thus, development of the project will not impact the aesthetic resource. Moreover, the property does not contain any landmarks or scenic resources, such as trees, rock outcroppings, or historic buildings that may be altered or damaged by utilization of the site.

The proposed project is not located within close proximity to any designated County or State scenic highway, as identified by Caltrans. Therefore, development of the proposed project would not result in adverse impacts to scenic resources adjacent to or near a State scenic highway. No impacts are expected.

As previously stated, the GPU EIR concluded that impacts to scenic resources within a state scenic highway

15 Cal. Streets & Highways Code § 260 (West 2025).
16 Caltrans, *Scenic Highway Guidelines* § II (Apr. 12, 2012), available at https://www.cahighways.org/caltrans-resources/scenic/120412-scenic_highway_guidelines.pdf.
17 City of Coachella, General Plan 2035 Update: Draft Environmental Impact Report (GPU Draft EIR), Aesthetic Resources, at 4.1-6 (October 2014), available at https://cityofcoachellageneralplanupdate.weebly.com/uploads/1/2/1/2/12129446/4.1_-_aesthetic_resources.pdf.
18 *Id.*, at 4.1-8.

would be less than significant. As the project would have a less than significant impact for the reasons detailed above, the project would not increase impacts identified within the GPU EIR.

c) **Less than Significant Impact.** According to the City's GPU, the preservation of the natural beauty and scenic quality of the City is a community goal.[19] The Planning Area has a unique visual characteristic in its scenic geographical location, agricultural and rancho history, and quality architecture of historic buildings. The expected growth under the GPU will turn Coachella into a medium-sized city with many more amenities and services to offer visitors and residents. The physical development under the GPU could change the existing visual characteristic of the City, thus resulting in significant and unavoidable impacts.[20] Although the alteration of the existing landscape is unavoidable due to future development, the views of the mountains and the rural, agricultural character should be respected, maintained, and preserved.[21] The GPU outlines various land uses throughout the City. The GPU provides detailed guidance on the type of buildings that should be constructed in each land use in order to create the form and character sought by the GPU. The GPU also lists various policies to help preserve the existing visual character of the City where it is deemed valuable, or direct future development to either enhance the existing visual character of the City or create a new complementary visual character.[22] The policies focus on the City's character and identity (Policy 2.2), urban design as identity (Policy 2.3), natural context (i.e., topography, farmlands, waterway corridors) (Policy 2.4), and high-quality construction and architecture (Policy 2.5). With the implementation of the policies, design guidelines and development strategies presented in the GPU, impacts to visual character are reduced. However, based on the overall scale of growth under the GPU, there is potential for significant impacts to the visual character of the City.

The project site is located in a developed area of the City, where agricultural properties and vacant lots are within the immediate vicinity, but residential and commercial uses are a mile east. The project site is currently characterized by agricultural land, specifically date palm groves and grape vineyards, similar to the surrounding properties.

As previously stated, the project site is within Regional Retail District land use designation. The intended physical character for Regional Retail Districts is to be developed into blocks by a combination of public and private streets that provide addresses for the businesses and organize access and parking for them. The blocks of this District may be the largest in Coachella with buildings, landscape, and signage similarly scaled up in size, but not neglecting the importance of creating a comfortable and attractive pedestrian environment for shoppers.

Urban form guidelines for Regional Retail Districts are established in the Coachella GPU.[23] Per the guidelines, building heights for this District are generally one or two stories, but may be up to four stories, particularly for mixed use projects, and exceptions are allowed in special circumstances. The Regional Retail District (including its streets, buildings, parking fields, and signage) should be designed for the comfort and wayfinding of shoppers within the District, while projecting a unique and compelling image from the adjoining highways.[24] The project is consistent with the Regional Retail District land use designation and guidelines associated with this designation.

The zoning designation for the project site is Regional Commercial ("RC"). The Coachella GPU and Municipal Code Chapter 17.28 provides guidance on permitted uses and building types that should be constructed to create the form and character envisioned by the City. All developments in the RC zone are subject to Architectural Review.[25] The project will comply with the City's standards for projects in RC zones, except that building heights will exceed the one-story height specified in the zoning code (but will be substantially below the heights

19 City of Coachella, General Plan 2035: Land Use & Community Character, at 04-3 (Apr. 22, 2015).
20 City of Coachella, GPU Draft EIR: Aesthetics, at 4.1-7.
21 City of Coachella, General Plan 2035: Land Use & Community Character, at 04-3 (Apr. 22, 2015)..
22 City of Coachella, GPU Draft EIR, Aesthetics, at 4.1-8.
23 City of Coachella, General Plan 2035: Land Use & Community Character, at 04-38 – 04-41 (Apr. 22, 2015).
24 *Id.*, at 04-39.
25 CMC § 17.72.010.

permitted under the GPU and analyzed in the GPU EIR. The table below lists the development standards for RC Zones.

Table I-1 RC Zone Development Standards

Development Standards	RC Zone Development Standards
Lot Requirements	
Minimum Lot Size	20,000 sf for commercial uses
Minimum Lot Width	None
Minimum Lot Depth	None
Maximum Lot Coverage	None
Yard Requirements	
Front Yard	15 ft in depth, except where one or both adjoining zones are residential, in which case the required yard shall be increased to equal the average of the required front yards of the adjoining zones.
Side Yard	No side yard requirement except where a RC zone adjoins a street or a residential zone, in which case there shall be a side yard of not less than 10 feet on the side or sides adjoining said street or residential zones. In the case of a reversed corner lot, the side lot adjoining the street shall be not less than the required front yard of the adjoining key lot to the rear.
Rear Yard	No rear yard requirement except where the RC zone adjoins a residential zone, in which case there shall be a rear yard of not less than 10 feet adjoining that residential zone.
Permitted Encroachments in Required Yards	The yards required for front/rear/side yards (above) may be used as part of an automobile parking area, provided however that a minimum 3-ft wide screen planting strip shall be maintained adjacent to the planned highway right-of-way line.
Height Limits	
Height Limits	Within 150-ft of any RS, single family residential zone, or any agricultural zone, shall be 1 story or 20 ft, whichever is less. - Maximum height of all other buildings shall be 2 stories or 35 feet, whichever is less, except that hotels shall have a maximum height of 85 ft.
Additional Requirements	
Distance Between Buildings	No requirements, except that buildings not actually adjoining shall be determined through site plan review.
Off Street Parking and Loading	Off-street parking and loading facilities shall be provided in accordance with the provisions of Section 17.54.010.
Screening	Where the RC zone abuts upon a residential zone, there shall be provided screening not less than 6 ft, or more than 8 ft in height on the zone boundary line. Said screening shall be reduced to 42 inches in height within a required yard adjacent to a street or highway.
Architectural Review	All development in RC zone is subject to Architectural Review set forth in Section 17.72.010 of this title.

Source: Section 17.28.030, RC Property Development Standards, Coachella Municipal Code.

The project proposes residential units and resort cottages that will vary from one- to two-stories. Currently, there is a residential structure south of the project site and agricultural uses south of the project site. The project proposes residential units consisting of two-story buildings along the southern portion of the site. The proposed residential structures will be setback from the southern project boundary by approximately 45 feet and separated by the southern property by a 8-foot tall perimeter wall. The perimeter wall will separate the project from the southern properties. Accordingly, the two story buildings will not cause any significant visual character compatibility impacts and will be consistent with the height and visual character of the development analyzed in the GPU EIR.

The project proposes a mixed-use community on approximately 87 acres of agricultural land south of Avenue 52 and west of Van Buren Street. The project is designed to have modern architecture, with natural wood facades that will complement the desert landscape and the existing surroundings. The architectural features will create texture and wall breaks, and natural finishes. Project landscaping will include a mix of various trees, shrubs and ground coverings to provide shade for pedestrians, and vertical variation and interest.

The project is designed to be an attractive resort property with high-end and unique amenities including multiple water features. The images below illustrate building elevations, visual simulations, and color and materials.

Exhibit I-1 Project Hotel Rendering



Exhibit I-2 Project Condo Hotel Rendering



Exhibit I-3 Project Residential Elevations

ALTERNATIVE 1

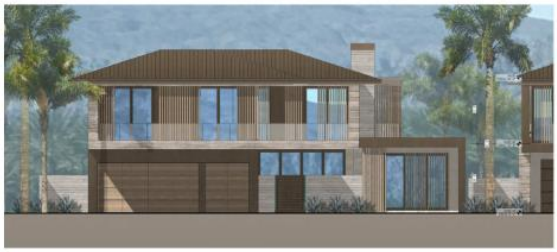


FRONT ELEVATION



REAR ELEVATION

ALTERNATIVE 2



FRONT ELEVATION



REAR ELEVATION

Exhibit I-4 Project Inspiration – Residential





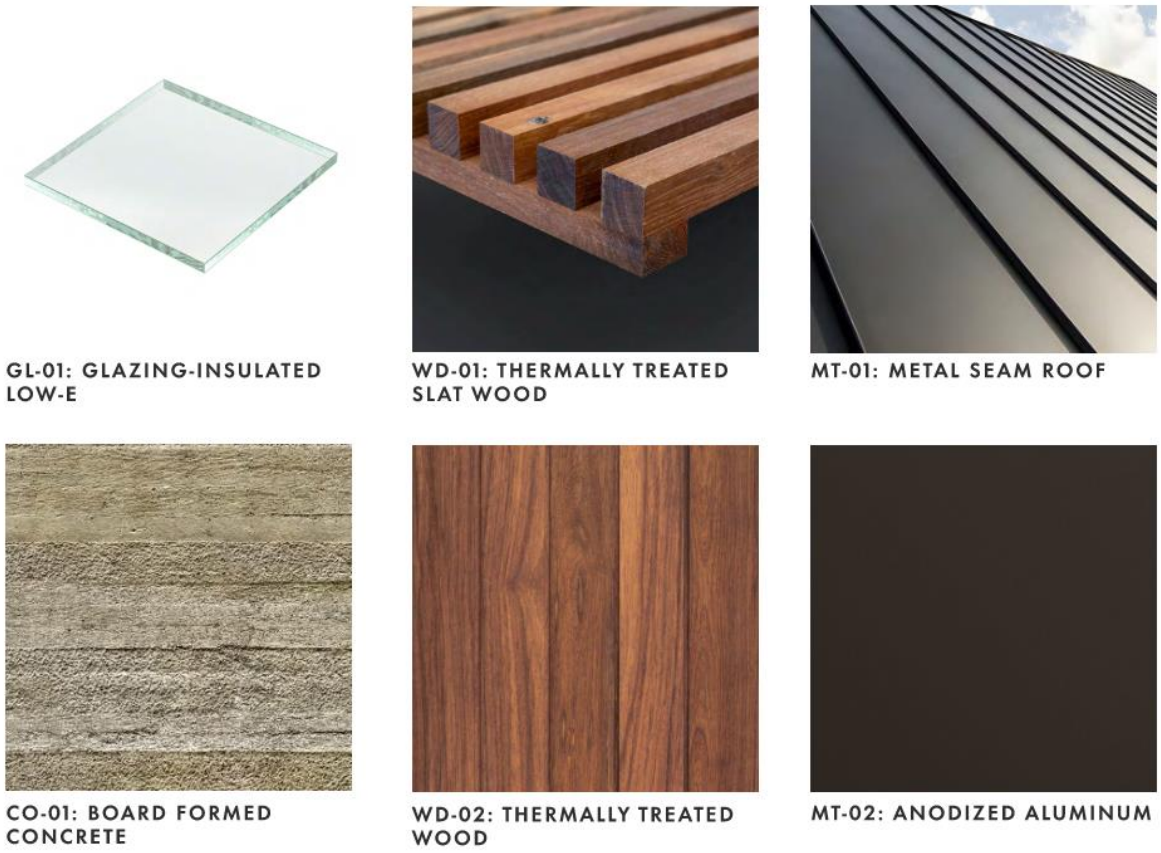








Exhibit I-7 Project Materials Board



Additionally, the project is required to go through Architectural Review. The objectives of Architectural Review are to provide flexibility in the placement and interrelationship of the proposed structures and uses; to provide for the implementation of sound site plan design concepts while maintaining the overall intensity of land use and density of population; to review the site plan of those uses which are not intrinsically objectionable to the predominant use category of the district, but have inherent characteristics which, if not properly handled, have potentials for becoming detrimental to the health, safety, or general welfare of the public, or to neighboring land uses; to determine whether or not a proposed development will properly comply with the architectural guidelines of the city and the provisions and development standards required by this chapter or as prescribed by the planning director, or other authorized agent; to improve the quality of development and to provide a mechanism whereby the city can insure well-designed development.[26]

Moreover, the project will comply with Policies 2.3 and 2.5 of the GPU. Policy 2.3 recognizes that the City can differentiate itself from other Coachella Valley cities through urban design practices such as the development of complete neighborhoods, preservation of agriculture and open space, pedestrian-oriented design and sustainable development practice, and Policy 2.5, requires high-quality and long-lasting building materials on all new development projects in the City. The project will develop a complete neighborhood and provide sidewalk and street improvements to allow for pedestrian use. The project also proposes high-quality building materials to develop a desirable residential and resort community in the City.

With the proposed enhancements, the modern architecture, and Architectural Review, the project is not expected to conflict with applicable zoning and other regulations governing scenic quality. Thus, less than significant impacts are expected.

As previously stated, the GPU EIR concluded that impacts to the visual character of the City would be

26 CMC § 17.72.010.

significant and unavoidable due to the anticipated total amount of growth in the City.[27] However, the project would not have any new or more severe impacts than previously analyzed in the General Plan and would not have any impacts peculiar to the site for the reasons detailed above, including that the scale and intensity of development would be substantially below what is permitted in the General Plan's Regional Commercial District. Therefore, the project would be consistent with the GPU EIR and would not increase impacts identified within the GPU EIR and there is no new information of substantial importance than identified within the GPU EIR.

d) **Less than Significant Impact.** The GPU EIR concluded that impacts to light and glare would be less than significant.[28] GPU Policy 6.5 requires light pollution from outdoor sources to be limited, especially in rural, hillside and mountain areas, and open spaces, to maintain darkness for night time viewing. Currently, nighttime glare exists in the western portion of the City where dense neighborhoods are a source of nighttime lights. This lighting affects nighttime views and sometimes creates a glare for exterior land that is less developed and has fewer nighttime light sources. Nighttime glare and light intrusion are minimized through the selection of appropriate lighting and light shields that limit light spill from individual properties.

The GPU EIR states that as development occurs under the GPU, additional sources of light will also be created, especially as agricultural lands are converted into urban uses to accommodate the anticipated growing population. New development would introduce new light sources that are typical of urban development projects. The new urban uses would include light sources such as street and parking lot lighting, landscape lighting, illuminated signs, exterior lighting on lamps and buildings, security lighting, and automobile lighting (i.e., headlights).[29]

As explained previously, the project site is located in the Regional Retail District land use designation in the City of Coachella. The project site currently operates as date palm tree groves and grape vineyards. Existing sources of onsite lighting may include the supporting structure in the center of the site. However, due to the agricultural uses currently onsite, the site does not contribute to daytime or nighttime glare.

The properties surrounding the project site include agricultural properties, residential homes, and vacant lots. Therefore, sources of fixed nighttime lighting can be attributed to the existing homes in the vicinity to the project site. Home lighting typically consists of low-intensity, wall-mounted, downward-oriented fixtures in the patio, side and front yards of homes. The rights-of-way adjacent to the project site do not include streetlights. Non-fixed sources of daytime or nighttime lighting are attributed to vehicular traffic in the surrounding area.

The proposed project can be expected to generate increased levels of light and glare from interior and exterior building lighting, safety and security lighting, landscape and signage lighting and vehicles accessing the site. However, the project will be required to adhere to the lighting standards established in the CMC. Chapter 17.54.010(K) (Off-Street Parking and Loading: Lighting) of the CMC states that parking area lighting is not always required; however, if lit parking areas are required, parking lighting fixtures shall include hoods provided and adjusted, so as to preclude the direct glare of the light from shining onto property or streets. The project shall comply with Chapter 17.54.010(K) in order to provide lighting for cars and pedestrians without generating excess light and spillage.

Pertaining to glare, the project would not introduce buildings with large reflective surfaces that would generate substantial glare, nor would the project involve new sources of high-intensity lighting that would be deemed incompatible with the surrounding existing properties. As illustrated in Exhibit I-7, above, the project materials will consist of concrete, wood, and anodized aluminum. The concrete and wood are natural, non-reflective materials. The anodized aluminum is coated to reduce reflectivity. The proposed structures are expected to have light finishes (including white) combined with earth-tones that do not have highly reflective properties or other conditions that would cause substantial daytime or nighttime glare. Less than significant impacts are expected.

27 City of Coachella, GPU Draft EIR, Aesthetics, at 4.1-7.
28 City of Coachella, GPU Draft EIR, Aesthetics, at 4.1-9.
29 *Ibid.*

As previously stated, the GPU EIR concluded that impacts to light and glare would be less than significant. As the project would have a less than significant impact for the reasons detailed above, the project would not increase impacts identified within the GPU EIR, and there is no new information of substantial importance than identified within the GPU EIR.

Conclusion:

With regards to the issue area of Aesthetics, the following findings can be made:

1. No peculiar impacts to the project or its site have been identified. The project would not negatively affect a scenic vista, scenic resources within a state scenic highway, or the existing visual character. Additionally, the project will not create a new source of substantial light or glare.
2. There are no potentially significant off-site and/or cumulative impacts which were not discussed by the GPU EIR. The EIR adequately addressed the potential for impacts to aesthetic resources related to the buildout of the City.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the GPU EIR.
4. No mitigation measures are required within the GPU EIR. Compliance with Sections 17.28.030, 17.72.101, 17.54.010 of the CMC, and General Plan Policies 2.3 and 2.5 from the Land Use and Community Form Element, and Policies 6.1 and 10.8 from the Sustainability and Natural Environmental Element ensure that potential impacts to aesthetic resources would remain less than significant.

2. AGRICULTURAL RESOURCES – Would the project:	Project Peculiar Impact that is not Substantially Mitigated by Uniformly Applied Policies	Significant Impact not Analyzed as Significant in the GP EIR	Potentially Significant Offsite or Cumulative Impact not Discussed in the GP EIR	Adverse Impact More Severe based on Substantial New Information	No New Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☐	☒
c) Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland, to non-agricultural uses?	☐	☐	☐	☐	☒

Sources: *California Farmland Mapping and Monitoring Program*, California Department of Conservation, 2022; California Williamson Act Enrollment Finder, 2024; City of Coachella 2035 General Plan Update, 2015; City of Coachella Official Zoning Map, April 2023.

a) **Significant and Unavoidable Impacts.** The GPU states that implementation of the General Plan would convert 9,862 acres of farmland to urbanized use. The GPU EIR determined this would result in significant and unavoidable impacts[30]. To combat the impacts of farmland conversion, the City divided the planning area into 17 subareas and placed every parcel in the City in one of these subareas.[31] The purpose of the subareas is to define an overall vision and specific policy direction that supplements the General Plan Designations and the Citywide goals and policies. The General Plan includes numerous goals and policies to minimize impacts to agricultural resources. Most notably, the implementation of the 17 subareas is meant to focus development in a direction that is reflective of the growing city population, while also preserving certain subareas for agricultural use. For example, Subarea 1 contains existing residential developments and is envisioned to serve as an infill development of new neighborhoods in the future, whereas Subarea 15 and Subarea 16 will highly prioritize farmland conservation.[32]

To manage the urbanization of land throughout the City with consideration to agricultural uses, Policy 2.14 in the General Plan reserves Subareas 13, 15, and 16 to maintain their current land or agriculture use until the identified High Priority Development Areas and Growth Expansion Areas are at least 60 percent developed with urban uses or preserved open spaces.[33] The City's approach to development as proposed by the General Plan (described in Policies 2.12, 2.13, and 2.14) would help reduce the impact to agricultural resources by focusing new development in High Priority Development Areas and Growth Expansion Areas and prohibiting or limiting development of land in Subareas 13, 15, and 16. These subareas are in the northeastern and southeastern part of the City. If the General Plan is implemented as proposed, all the growth anticipated to occur in Coachella by 2035 could be accommodated without any development in Subarea 16.

The project site is located within Subarea 3, the "Van Buren Corridor."[34] The vision of Subarea 3 is that it will transform into a major sub-regional retail destination that will provide a wide variety of goods and services for

30 City of Coachella, 2035 GPU Draft EIR, Agricultural Resources, at 4.2-10.
31 City of Coachella, General Plan 2035 Update: Land Use & Community Character, at 04-2 (Apr. 22, 2015).
32 *Id.*, at 04-66 – 04-67, 04-82 – 04-83.
33 *Id.*, at 04.86 – 0.4-87.
34 *Id.*, at 04-68.

Coachella residents, as well as neighboring communities. Subarea 3 does not contain plans to preserve agricultural land[35]; therefore, based on the vision for Subarea 3 within the General Plan, the project site is expected to be developed in the future. Due to the project's location in Subarea 3, it is not designated as an area intended to reserve its current agriculture uses, per Policies 2.12, 2.13, and 2.14. The proposed project will consist of a mixed-use development with residential and commercial components.

According to the Farmland Mapping and Monitoring Program (FMMP) by the California Department of Conservation[36], the property is designated as Prime Farmland. Prime Farmland is defined by the Department of Conservation as irrigated land with the best combination of physical and chemical features able to sustain long term production of agricultural crops.[37] This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Although the project site is designated as Prime Farmland, the project is consistent with the GPU and the direction for Subarea 3, for which the impacts to agricultural land have already been considered in the GPU EIR. The properties on all sides of the project are classified as Prime Farmland and Farmland of Local Importance and are encompassed within Subarea 3.

As previously stated, the GPU EIR determined impacts to Prime Farmland, Unique Farmland, or Farmland of Statewide Importance would be significant and unavoidable. To minimize the impacts to agricultural resources, the GPU divides the City into 17 Subareas to channel development in a way that supported the planning area's growing population while preserving existing agricultural land. Because the proposed project is consistent with the City's land use designation and the City's vision for Subarea 3, the project would be consistent with the analysis within the GPU EIR. The project would not create new impacts or increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

b) **Significant and Unavoidable Impacts**. As previously discussed, implementation of the General Plan would convert farmland to urbanized use, and the GPU EIR determined that impacts would be significant and unavoidable.[38] Through the implementation of Subareas, the GPU identifies land use types to support agricultural production, and agricultural activities are to be highly prioritized for conservation within Subarea 15 and Subarea 16. The project site is located within Subarea 3, the "Van Buren Corridor." The vision of Subarea 3 is that it will transform into a major sub-regional retail destination that will provide a wide variety of goods and services for Coachella residents, as well as neighboring communities. Subarea 3 does not contain plans to preserve agricultural land. Based on the GPU EIR, the project site, in its current state, will likely be converted to non-agricultural uses based on the vision of the City for Subarea 3.

Furthermore, the land use designation for the proposed project site is Regional Retail District, which does not allow for agricultural use. According to the 2024 California Williamson Act Enrollment Finder, no portion of land within the proposed project site is recognized as being under a Williamson Act Contract. Because the proposed project is consistent with the City's land use designation, is consistent with the City's vision for Subarea 3, and is not subject to any Williamson Act Contracts, the project is consistent with the analysis within the GPU EIR. The project would not create new impacts or increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

c) **Less than Significant Impacts**. The GPU EIR determined impacts to be less than significant.[39] As outlined in the General Plan, the City plans on accommodating a population growth of over 94,000 residents within the next two decades. Moreover, the broader Coachella Valley region is projected to grow by nearly 500,000 new residents. The City of Coachella does not have the financial means or political support to purchase all the threatened agricultural land in Coachella to prevent conversion to urban uses. Additionally, the City cannot accommodate this growth and avoid impacts to agriculture land simply because there is not enough non-agriculture land in the City. Instead, the General Plan presents a strategy of managing the transition from

35 *Ibid.*
36 *See* Gov. Code § 65570.
37 California Department of Conservation, *Important Farmland Categories – Farmland Mapping & Monitoring Program*, Prime Farmland definition (2025), https://www.conservation.ca.gov/dlrp/fmmp/Pages/Important-Farmland-Categories.aspx.
38 City of Coachella, 2035 GPU Draft EIR, Agricultural Resources, at 4.2-15.
39 City of Coachella, 2035 GPU Draft EIR, Agricultural Resources, at 4.2-16.

agricultural to urban uses through focused growth areas, market support, and land use controls with the intent of preventing the premature conversion of agricultural lands.[40] Implementation of the GPU EIR would result in the development of urban uses adjacent to farmland throughout the City, of which impacts could be considered potentially significant.

To manage the urbanization of land throughout the City with consideration to agricultural land, Policy 2.14 in the General Plan reserves Subareas 13, 15, and 16 to maintain their current land or agriculture use until the identified High Priority Development Areas and Growth Expansion Areas are at least 60 percent developed with urban uses or preserved open spaces.[41] The City's approach to development as proposed by the General Plan (described in Policies 2.12, 2.13, and 2.14) would help reduce the impact to agricultural resources by focusing new development in High Priority Development Areas and Growth Expansion Areas and prohibiting or limiting development of land in Subareas 13, 15, and 16. These subareas are in the northeastern and southeastern part of the City. If the General Plan is implemented as proposed, all the growth anticipated to occur in Coachella by 2035 could be accommodated without any development in Subarea 16. Furthermore, the implementation of policies 10.8 and 10.9 in the Sustainability and Natural Resource Element would provide provisions of buffers and right-to-farm policies that protect nearby agricultural operations.[42]

The proposed project's adherence to Policies 2.12, 2.13, 2.14, 10.8, and 10.9 would limit the project's impact on neighboring farmland and is consistent with the analysis within the GPU EIR. All land surrounding the project is anticipated to be converted to non-agricultural uses through the buildout of the General Plan. The proposed project would not create new impacts or increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

Additional current CEQA Agriculture resources thresholds not included in the GPU EIR include potential impacts relating to forest land and timberland. Discussion is provided for informational purposes. The Planning Area of the City of Coachella does not have any forest land or timberland. As a result, no areas are zoned as forest land in the City of Coachella and there would be no loss of forest land or conversion of forest land to non-forest use. No impacts are anticipated.

Conclusion:

With regards to the issue area of Agricultural and Forestry Resources, the following findings can be made:

1. No peculiar impacts to the project or its site have been identified.
2. There are no potentially significant off-site and/or cumulative impacts which were not discussed in the City of Coachella General Plan 2035 Program EIR. The Program EIR adequately addressed the impact to agricultural resources.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the City of Coachella General Plan 2035 Program EIR..
4. No mitigation measures are required within the GPU EIR for agricultural resources. Compliance with General Plan Policies 2.12, 2.13, 2.14, 10.8, and 10.9 ensures that potential impacts to agricultural resources would occur such that they are accounted for within the GPU EIR.

40 City of Coachella, General Plan 2035 Draft EIR, Agricultural Resources, 4.2-14.
41 City of Coachella, General Plan 2035 Update: Land Use & Community Character, at 04.86 – 0.4-87 (Apr. 22, 2015).
42 City of Coachella, General Plan 2035 Update: Sustainability & Natural Environment, at 07.10 (Apr. 22, 2015).

3. AIR QUALITY – Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:	Project Peculiar Impact that is not Substantially Mitigated by Uniformly Applied Policies	Significant Impact not Analyzed as Significant in the GP EIR	Potentially Significant Offsite or Cumulative Impact not Discussed in the GP EIR	Adverse Impact More Severe based on Substantial New Information	No New Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation or result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	☐	☒
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☐	☒
d) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☐	☒

Sources: The City of Coachella 2035 General Plan, 2015; City of Coachella Climate Action Plan, 2014; Air Quality Impact Analysis, Urban Crossroads, Inc. November 2025 (Appendix A); *Final 2022 Air Quality Management Plan* (AQMP), by SCAQMD, December 2022; *Final 2003 Coachella Valley PM10 State Implementation Plan* (CVSIP), by SCAQMD, August 2003; *Analysis of the Coachella Valley PM10 Redesignation Request and Maintenance Plan*, by the California Air Resources Board, February 2010; South Coast AQMD Rule Book.

a) **Less than Significant Impact.** The GPU EIR determined that the GPU would not conflict with or obstruct implementation of the applicable air quality plan, and therefore the impact would be less than significant.43 The GPU was found to be consistent with regional growth forecasts, applicable AQMP control measures, and California Air Resources Board (CARB) siting recommendations. The GPU's population projections were found to generally align with the Southern California Association of Government's (SCAG) growth forecasts, which form the basis of the AQMP's land use and transportation assumptions. Because AQMP growth assumptions are based on SCAG forecasts, the GPU's growth trajectory was deemed consistent with the AQMP.

The GPU included numerous policies that would reduce per capita emissions through land use design, walkability, and multimodal transportation. These policies, such as enhanced pedestrian connectivity, bicycle infrastructure, and compact development, are consistent with research showing that infill and compact development reduce VMT and associated emissions compared to greenfield development. The GPU was found to align with SCAQMD control measures applicable to the Coachella Valley, including those addressing PM_{10} emissions from construction, disturbed lands, unpaved surfaces, and agricultural activities. Policies in the Sustainability + Natural Environment Element support dust control, minimize new pollutant sources, and establish buffers near agricultural uses.

Since the GPU was found to be consistent with SCAG growth forecasts, applicable AQMP control measures, and CARB siting guidance, the GPU EIR concluded that the GPU would not conflict with or obstruct implementation of the applicable air quality plan. Accordingly, the impact was found to be less than significant.

43 City of Coachella, GPU Draft EIR, Air Quality, 4.11-12.

Current AQMP Framework

The project site and Coachella Valley are situated within the Riverside County portion of the Salton Sea Air Basin (SSAB), under jurisdiction of the SCAQMD and the adopted 2022 Air Quality Management Plan (2022 AQMP), superseding the 2016 AQMP and the 2012 AQMP that were in effect during the GPU EIR analysis. The 2022 AQMP provides updated strategies for air quality attainment while recognizing the challenges from experiencing the worst levels of ground-level ozone (smog) and among the highest levels of fine particulate matter (PM2.5) in the nation, despite the progress in air pollution reduction.[44] The 2022 AQMP also recognizes the Coachella Valley's necessity to meet federal ozone standards due to transport of pollution from the upwind South Coast Air Basin. As a result, the updated strategies focus on reducing emissions of nitrogen oxides (NOx), the key pollutant that creates ozone, by 67 percent more than is required by adopted rules and regulations in 2037.[45] This is to be achieved in part through the deployment and regulation of zero emission technologies across all stationary and mobile sources, combined with additional controls over stationary sources that currently account for approximately 20 percent of NOx emissions. The 2022 AQMP recognizes that the overwhelming majority of NOx emissions are from heavy-duty trucks, ships, and other State and federally regulated mobile sources that are mostly beyond the SCAQMD's control; therefore, State and federal regulatory action will help meet the AQMP goals. The 2022 AQMP does not involve numeric revisions to the SCAQMD Air Quality Significance Thresholds, nor is it understood to implement land use and land development restrictions. The Air Quality Significance Thresholds are uniformly applied to the governed region, including the Coachella Valley.[46] The 2022 AQMP accounts for information and assumptions from the 2020 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) to support the integration of land use and transportation toward meeting the federal Clean Air Act requirements.[47] Local air quality is measured at three established Coachella Valley monitoring stations that are part of the SCAQMD 2025 Annual Air Quality Monitoring Network Plan: Palm Springs (AQS ID 060655001), Indio (AQS ID 060652007), and Mecca (Saul Martinez - AQS ID 060652005).[48]

The 2022 AQMP provides guidance for the State Implementation Plans (SIP) for attainment of the applicable ambient air quality standards. The Coachella Valley region is in non-attainment for Particulate Matter (PM10) and Ozone (O3),[49] which are described below.

Particulate Matter (PM10):

PM10 is a criteria air pollutant consisting of particulate matter (airborne particles) with an aerodynamic diameter of up to 10 microns.[50] In terms of health effects, elevated levels of ambient particulate matter are linked to increases in respiratory infections, number and severity of asthma attacks, the number of hospital admissions, and mortality rates. As indicated in the 2022 AQMP, the Coachella Valley is currently designated as a serious nonattainment area for PM10.

PM10 levels in the Coachella Valley are largely attributed to sources of fugitive dust (e.g., construction activities, re-entrained dust from paved and unpaved road travel, and natural wind-blown sources). The Coachella Valley is subject to frequent high winds that generate wind-blown sand and dust, leading to high episodic PM10 concentrations, especially from disturbed soil and natural desert blow sand areas.

44 South Coast Air Quality Management District, *2022 Air Quality Management Plan (AQMP): Executive Summary*, ES-1 to ES-3 (Dec. 2022).
45 *Id*., at ES-2.
46 SCAQMD Air Quality Significance Thresholds website: https://www.aqmd.gov/docs/default-source/ceqa/handbook/south-coast-aqmd-air-quality-significance-thresholds.pdf?sfvrsn=f7601d61_25.
47 South Coast Air Quality Management District, 2022 Air Quality Management Plan – Appendix IV-C: SCAG's Regional Transportation Plan/Sustainable Communities Strategy and Transportation Control Measures (Dec. 2, 2022).
48 SCAQMD Air Quality Monitoring Network Plan – July 1, 2026, Page 6, Table 1.
49 SCAQMD Clean Air Plans website: https://www.aqmd.gov/home/air-quality/clean-air-plans.
50 U.S. Env't Prot. Agency, *Particulate Matter (PM) Basics* (May 2026), https://www.epa.gov/pm-pollution/particulate-matter-pm-basics.

The Final 2003 Coachella Valley PM10 State Implementation Plan (CVSIP) was approved by the U.S. Environmental Protection Agency (EPA) on December 14, 2005.[51] It incorporated updated planning assumptions, fugitive dust source emissions estimates, mobile source emissions estimates, and attainment modeling with control strategies and measure commitments. Some of those measures are reflected in SCAQMD Rules 403 and 403.1, which are enacted to reduce or prevent man-made fugitive dust sources with their associated PM10 emissions.

Rule 403.1 recognizes blowsand as a form of larger particulate matter that can contribute to the production of the smaller PM10 (Particulate Matter with a diameter of 10 micrometers or smaller) particles in two ways: (1) by direct particle erosion and fragmentation as natural PM10, and (2) by secondary effects, as sand deposits on road surfaces. SCAQMD has defined a Coachella Valley Blowsand Zone as the corridor of land extending two miles on either side of the Interstate 10 (I-10) Freeway, beginning at the SR-111/I-10 junction and continuing southeast to the I-10/ Jefferson Street interchange in Indio. The project site is located in the City of Coachella and therefore is outside of the Coachella Valley Blowsand Zone.

Ozone and Ozone Precursors:

Ozone (O3) is a photochemical oxidant formed through chemical reactions of nitrogen oxides (NOx), volatile organic compounds (VOCs), and oxygen in the presence of sunlight.[52] In terms of health effects, individuals exercising outdoors, children, and people with preexisting lung disease, such as asthma and chronic pulmonary lung disease, are the most susceptible sub-groups for the effects of ozone.

The Coachella Valley portion of the SSAB is deemed to be in nonattainment for the 1997 8-hour ozone standard.[53] The Coachella Valley is unique in its geography due to its location downwind from the South Coast Air Basin (SCAB). As such, when high levels of ozone are formed in the SCAB upstream, they are transported to the Coachella Valley. Similarly, when ozone precursors such as NOx and VOCs are emitted from mobile and stationary sources located in the SCAB, they are also transported to the Coachella Valley. The 2022 AQMP has found and established that the Coachella Valley does not have large sources of smog-forming emissions and therefore, local sources of air pollution have a limited impact on ozone levels compared to the transport of ozone precursors generated upwind in SCAB.[54] Based on the 2022 AQMP, the attainment date for the said ozone standard is August 2033.[55] In accordance with AB 1318 Mitigation Fees Fund, SCAQMD continues to reduce ozone and improve air quality in the Coachella Valley, in part by providing more than $50 million in grant funding towards paving dirt roads and parking lots, clean energy projects and cleaner vehicles.56 Future emission reductions anticipated to occur in the South Coast Air Basin associated with current and planned regulations on mobile and stationary sources are expected to contribute to improvements in ozone air quality in the Coachella Valley and lead to attainment of the standard.

Eastern Coachella Valley Community Emissions Reduction Plan:

The project site is situated within the Eastern Coachella Valley (ECV) Community Emissions Reduction Plan (CERP) area, which was approved in July 2021 as part of the implementation of Assembly Bill 617 (AB 617).[57] AB 617 was signed into law in 2017 to address the disproportionate impacts of air pollution on environmental

51 U.S. Env't Prot. Agency, Approval and Promulgation of State Implementation Plans; California — South Coast and Coachella Valley; PM-10, 70 Fed. Reg. 69,081 (Nov. 14, 2005).
52 U.S. Env't Prot. Agency, *What is Ozone?* (May 2026), https://www.epa.gov/ozone-pollution-and-your-patients-health/what-ozone.
53 SCAQMD, Request for Reclassification of Coachella Valley for the 1997 8-Hour Ozone Standard, (undated), fact-sheet-for-coachella-valley-ozone-reclassification-request-english.pdf.
54 South Coast Air Quality Management District, 2022 Air Quality Management Plan – Chapter 7: Current & Future Air Quality – Desert Nonattainment Areas SIP (Coachella Valley), at 7-10 (Dec. 2022).
55 South Coast Air Quality Management District, 2022 Air Quality Management Plan – Chapter 1: Introduction, at 1-14 (Dec. 2022) (showing the attainment deadline for the 2015 8-Hour Ozone NAAQS in the Coachella Valley as August 3, 2033).
56 Update on AB 1318 Emission Mitigation Projects, SCAQMD Administrative Committee, Background, Agenda: https://www.aqmd.gov/docs/default-source/Agendas/Admin-Cmte/ac-agenda-1-12-18.pdf.
57 California Air Resources Board, *Eastern Coachella Valley Community Emissions Reduction Program (CERP) Staff Report* , at 1 (Aug. 13, 2021), https://ww2.arb.ca.gov/sites/default/files/2021-08/ECV%20CERP%20Staff%20Report_FINAL_acc.pdf.

justice communities.[58] The ECV boundary under AB 617 includes the incorporated and unincorporated portions of the Eastern Coachella Valley and City of Coachella. The CERP was developed to achieve air pollution emission and exposure reductions within the ECV community and address this community's air quality priorities. The plan describes the community outreach conducted to develop the CERP and provides emissions and exposure reduction actions, an implementation schedule, and an enforcement plan. The CERP finds that the primary sources of air pollution emissions in the ECV community are on-road vehicles, farming equipment, trains, off-road equipment, and certain industrial activities. The ECV is also deemed to be highly impacted by the declining Salton Sea levels, resulting in increasing dust emissions from the Salton Sea playa.

To protect public health, the CERP has identified efforts for improved monitoring, collaboration, and enforcement activities to be undertaken by the various responsible agencies across the ECV. Both CARB and SCAQMD enforcement staff have had a presence in the community of ECV for many years. From 2017 through 2019, CARB conducted over 1,500 inspections and South Coast AQMD responded to approximately 370 complaints and conducted over 300 inspections within the Eastern Coachella Valley community. CERP indicates that both CARB and South Coast AQMD will continue to coordinate their enforcement programs to address air pollution sources effectively within their respective jurisdictions. The most relevant topics and concerns of the CERP applicable to the project are 1) pesticides, 2) fugitive road dust and off-roading, and 3) open burning/illegal dumping.

Regional Significance Threshold Criteria:

SCAQMD considers air quality impacts significant when a project has the potential to cause or contribute to regional or localized exceedances of federal or state ambient air quality standards, such as the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS). To support lead agencies in making significance determinations, SCAQMD has established quantitative thresholds for short-term construction emissions and long-term operational emissions, covering both direct and indirect sources. Table III-1 presents the SCAQMD Air Quality Significance Thresholds, published in March 2023, which were used to evaluate the project's emissions.

Table III-1 SCAQMD's Air Quality Significance Thresholds (Pounds/Day)

Emission Source	CO	VOC	NOx	SOx	PM10	PM2.5
Construction	550	75	100	150	150	55
Operation	550	55	55	150	150	55

Source: Air Quality Analysis Guidance Handbook and SCAQMD Air Quality Significance Thresholds, March 2023

Localized Significance Threshold Criteria:

The SCAQMD developed the Final Localized Significance Threshold (LST) Methodology to identify potential localized air quality impacts that could contribute to, or cause, exceedances of federal or state ambient air quality standards.[59] The methodology was created in response to environmental justice and community health concerns regarding exposure to criteria pollutants. LST analysis evaluates whether a project may generate significant localized impacts at the nearest sensitive receptors, including schools, churches, residences, hospitals, day care centers, and elderly care facilities. The methodology establishes separation distances between project sites and sensitive receptors, ranging from 25 meters (82 feet) to 500 meters (1,640 feet). LST thresholds represent the maximum emissions a project can generate without exceeding the most stringent applicable ambient air quality standard at the nearest receptor, accounting for ambient concentrations in each source receptor area, project size, and receptor distance. Meeting the lowest allowable emissions thresholds ensures compliance with the most protective standards for the project area.

58 Cal. Health & Safety Code § 39607.1 (West 2025).
59 SCAQMD, Localized Significance Thresholds, http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/localized-significance-thresholds.

SCAQMD divides its jurisdiction into 37 source receptor areas (SRAs) for applying LSTs. The proposed development is located in SRA 30, which covers the Coachella Valley and the City of Coachella.[60] LSTs apply only to certain criteria pollutants, including carbon monoxide (CO), oxides of nitrogen (NOx), particulate matter 10 microns or smaller (PM10), and particulate matter 2.5 microns or smaller (PM2.5).

Methodology:

The current analysis and findings are based on the results of the project-specific *COVA Air Quality Impact Analysis* (AQIA), completed in November of 2025[61] to evaluate the potential impacts to air quality associated with construction and operation of the project and identify measures to mitigate impacts considered potentially significant in comparison to thresholds established by the SCAQMD. The AQIA relied on the most current version of the California Emissions Estimator Model™ (CalEEMod) Version 2022[62] which is the adopted software from the California Air Pollution Control Officers Association (CAPCOA) to quantify construction emissions and operational emissions from land development projects. The software is designed to calculate criteria pollutants and greenhouse gas emissions using widely accepted methodologies from project-specific and accepted default data inputs. Sources of these methodologies and default data include, but are not limited to, the United States Environmental Protection Agency (USEPA) AP-42 emission factors, CARB vehicle emission models, studies commissioned by California agencies such as the California Energy Commission (CEC) and CalRecycle.

The AQIA modeled the criteria air emissions from the proposed project land uses and dimensions consisting of 409 units: 165 two-story single-family residences (SFR) and 244 condo hotel units.[63] The development factors also included a crystal lagoon, and other residential amenities including restaurants, a beach club, event space, pop-up shops, outdoor amphitheater, pools, recreation areas and kids play spaces. The factors and reasoning for calculating construction and operational emissions are summarized below and fully described in Appendix A.

Construction Emission Factors

Demolition Activities: The AQIA observed that the project site contains approximately three existing structures. The combined estimated building footprint of these structures is approximately 6,143 square feet. These existing structures will require demolition and off-site removal as part of the proposed project construction activities.

Construction Emission Factors: The AQIA utilized a construction duration from August of 2026 through December of 2030 for activities involving demolition, site preparation, grading, building construction, paving and architectural coating. This construction time frame represents a "conservative" analysis scenario. If construction begins after the above-indicated dates, the associated emission factors will be lower, as regulatory standards become more stringent over time and the analysis year advances. The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per the CEQA Guidelines. Consistent with industry standards and typical construction practices, each piece of construction equipment factored into the construction scenario is assumed to operate up to a total of eight (8) hours per day, or more than two-thirds of the period during which construction activities are allowed pursuant to the City code.

Operational Emission Factors

60 SCAQMD, SRA City Table, http://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.aqmd.gov%2Fdocs%2Fdefault-source%2Fceqa%2Fhandbook%2Flocalized-significance-thresholds%2Fsra-city-table.xls%3Fsfvrsn%3D94641d61_2&wdOrigin=BROWSELINK.
61 COVA Air Quality Impact Analysis (AQIA), Urban Crossroads, November 2025 (Appendix A).
62 CalEEMod Version 2022.1 (User Guide) (California Air Pollution Control Officers Association, Apr. 2022).
63 Note: The AQIA analysis was prepared using an earlier project description with 409 units. The currently proposed Project includes 402 units, representing a reduction in development intensity relative to the analyzed scenario.

The AQIA factored operational activities consisting of mobile, area, and energy sources as subsequently described.

Operational Mobile Source Emissions: The operational air quality emissions derive primarily from vehicle trips generated by the project, including employee and visitor/attendee trips associated with the proposed use. Trip characteristics available from the COVA Traffic Impact Analysis were utilized in the AQIA.

Fugitive Dust Related to Vehicular Travel: Vehicles traveling on paved roads would be a source of fugitive emissions due to the generation of road dust inclusive of brake and tire wear particulates. The emissions estimate for travel on paved roads was calculated using CalEEMod.

Operational Area Source Emission Factors

Architectural Coatings: Over a period of time the buildings that are part of this Project would require maintenance and would therefore produce emissions resulting from the evaporation of solvents contained in paints, varnishes, primers, and other surface coatings. The emissions associated with architectural coatings were calculated using CalEEMod.

Consumer Products: Consumer products include, but are not limited to, detergents, cleaning compounds, polishes, personal care products, and lawn and garden products. Many of these products contain organic compounds which when released in the atmosphere can react to form ozone and other photochemically reactive pollutants. The emissions associated with use of consumer products were calculated based on defaults provided within CalEEMod.

Landscape Maintenance Equipment: Landscape maintenance equipment generates emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shedders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the Project. It should be noted that on October 9, 2021, Governor Gavin Newsom signed AB 1346.[64] The bill aims to ban the sale of new gasoline-powered equipment under 25 gross horsepower (known as small off-road engines [SOREs]) by January 1, 2024, which is now in effect. However, for purposes of analysis, the emissions associated with landscape maintenance equipment were calculated based on assumptions provided in CalEEMod, and do not incorporate the emissions reductions that would be realized from implementation of AB 1346.

Operational Energy Source Emission Factors

Combustion Emissions Associated with Electricity and Natural Gas: Electricity and natural gas are used by almost every project. Criteria pollutant emissions are emitted through the generation of electricity. However, because electrical generating facilities for the project area are located either outside the region (state) or offset through the use of pollution credits (RECLAIM) for generation within the SSAB, criteria pollutant emissions from offsite generation of electricity are excluded from the evaluation of significance. Natural gas and electricity usage associated with the project were calculated by CalEEMod using default parameters.

This analysis also incorporates the fugitive dust control measures required during construction under the City's Dust Control Ordinance and SCAQMD Rules 403 and 403.1. The measures of temporary soil stabilization required under this local regulatory framework are designed to prevent sediment track-out onto public roads, prevent visible dust emissions from exceeding a 20-percent opacity, and prevent visible dust emissions from extending more than 100 feet (vertically or horizontally from the origin of a source) or crossing any property line. Being a requirement in the Coachella Valley, the dust control practices are not considered mitigation.

Table III-2 demonstrates that the construction-related activities consisting of demolition, site preparation, grading, utilities/building construction, paving, and architectural coating associated with the proposed project

64 Cal. Legis. Info., Assembly Bill 1346 (Berman & Gonzalez) – Chapter 753, Statutes of 2021 (approved by Governor Oct. 9, 2021).

will not exceed the applicable SCAQMD Air Quality Significance Thresholds for criteria pollutants, including PM10 and Ozone precursors. As a standard requirement, dust control measures will be implemented during construction as part of a City-approved fugitive dust control plan in accordance with SCAQMD Rule 403/403.1 and the City of Coachella dust control requirements per Chapter 8.20 (Fugitive Dust Control) of the Municipal Code. The requirements apply to construction-related work practices, construction and demolition activities, performance standards, and reporting/recordkeeping. Project operators required to submit a fugitive dust control plan must ensure that visible fugitive dust does not exceed 20 percent opacity, travel more than 100 feet from its source, or cross a property line. By fully implementing and maintaining all required control measures, keeping complete and accurate records, and documenting any high wind conditions on the affected day, operators can demonstrate compliance and avoid violations during high wind episodes, even if visible emissions temporarily increase. Thus, a less than significant impact would occur for the construction-related emissions in relation to the applicable South Coast AQMD Air Quality Significance Thresholds.

Table III-2 Summary of Construction Emissions (Unmitigated) (Pounds/Day)

Construction Emissions						
Year	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Summer						
2026	3.40	30.20	29.00	0.05	1.63	1.23
2027	4.39	37.20	55.90	0.09	6.06	2.66
2028	3.54	21.30	53.90	0.06	5.99	1.87
2029	18.20	21.70	58.50	0.07	6.90	2.06
2030	18.80	27.40	67.40	0.08	7.28	2.28
Winter						
2026	5.11	45.60	41.70	0.07	10.10	5.77
2027	4.86	43.20	43.00	0.09	9.95	5.60
2028	3.29	21.70	41.70	0.07	5.99	1.87
2029	17.80	22.00	45.10	0.07	6.90	2.06
2030	18.50	27.70	54.30	0.08	7.28	2.28
Maximum Daily Emissions	18.80	45.60	67.40	0.09	10.10	5.77
SCAQMD Regional Thresholds	75	100	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

Source: COVA Air Quality Impact Analysis, 3.4.5 Construction Emissions Summary, Urban Crossroads, Inc. November 2025 (Appendix A).

The AQIA analysis also calculated the long-term operational air pollutant emissions that would occur during the life of the project. These operations include area, energy, and mobile sources. As shown in Table III-3 below, the project-related operational emissions of criteria pollutants are also not expected to exceed the SCAQMD Air Quality Significance Thresholds. Therefore, a less than significant impact is expected for operational emissions from the project.

Table III-3 Summary of Operational Emissions (Unmitigated) (Pounds/Day)

Operational Emissions						
Source	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Summer						
Mobile	6.42	4.00	99.30	0.23	23.20	5.89
Area	24.80	0.33	36.30	0.00	0.03	0.03
Energy	0.17	3.05	2.56	0.02	0.23	0.23
Maximum Daily Emissions	31.39	7.38	138.16	0.25	23.46	6.15
SCAQMD Regional Thresholds	55	55	550	150	150	55

Threshold Exceeded?	NO	NO	NO	NO	NO	NO
Winter						
Mobile	5.47	4.44	63.30	0.20	23.20	5.89
Area	20.60	0.00	0.00	0.00	0.00	0.00
Energy	0.17	3.05	2.56	0.02	0.23	0.23
Maximum Daily Emissions	26.24	7.49	65.86	0.22	23.43	6.12
SCAQMD Regional Thresholds	55	55	550	150	150	55
Threshold Exceeded?	NO	NO	NO	NO	NO	NO

Source: COVA Air Quality Impact Analysis, 3.5.4 Operational Emissions Summary, Urban Crossroads, Inc. November 2025 (Appendix A).

As introduced previously, the 2022 AQMP continues to evaluate current integrated strategies and control measures to meet the NAAQS, as well as explore new and innovative methods to reach its goals. Some of these approaches include utilizing incentive programs, recognizing existing co-benefit programs from other sectors, and developing a strategy with fair-share reductions at the federal, state, and local levels. Similar to the 2016 AQMP, the 2022 AQMP incorporates scientific and technological information and planning assumptions, including the 2020-2045 RTP/SCS, a planning document that supports the integration of land use and transportation to help the region meet the federal Clean Air Act (CAA) requirements. The project's consistency with the AQMP will be determined using the 2022 AQMP as discussed below.

SCAG adopted the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (2020-2045 RTP/SCS), a planning document that supports the integration of land use and transportation to help the region meet the federal metropolitan planning organization (MPO) requirements under the Sustainable communities and Climate Protection Act. It should be noted that although the 2024-2050 RTP was released after approval of the 2022 AQMP, the 2022 AQMP is reliant in part upon the general plan land use designations.

AQMP consistency was evaluated using the criteria provided in Chapter 12 of South Coast AQMD's 1993 CEQA Air Quality Handbook. The evaluation considers whether the project is consistent with regional growth forecasts and whether project emissions could impede implementation of the AQMP's attainment strategies. The relevant consistency indicators are discussed below. (21).

Consistency Criterion No. 1

Potential to result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

The violations that Consistency Criterion No. 1 refer to are the CAAQS and NAAQS. CAAQS and NAAQS violations would occur if regional or localized significance thresholds were exceeded.

Construction Impacts – Consistency Criterion 1

As evaluated, the project's localized and regional construction-source emissions would not exceed applicable regional significance threshold and LST thresholds. As such, a less than significant impact is expected.

Operational Impacts – Consistency Criterion 1

As evaluated, the project's localized and regional operation-source emissions would not exceed applicable regional significance threshold and LST thresholds. As such, a less than significant impact is expected.

On the basis of the preceding discussion, the project is determined to be consistent with the first criterion.

Consistency Criterion No. 2

Potential to exceed the assumptions in the AQMP based on the years of project build-out phase. The 2022 AQMP demonstrates that the applicable ambient air quality standards can be achieved within the timeframes required under federal law. Growth projections from local general plans adopted by cities in the district are provided to the SCAG, which develops regional growth forecasts, which are then used to develop future air quality forecasts for the AQMP. As discussed above, development consistent with the growth projections in City of Coachella General Plan is considered to be consistent with the AQMP.

Construction Impacts – Consistency Criterion 2

Peak day emissions generated by construction activities are largely independent of land use assignments but rather are a function of development scope and maximum area of disturbance. Irrespective of the site's land use designation, development of the site to its maximum potential would likely occur, with disturbance of the entire site occurring during construction activities. As such, when considering that no emissions thresholds will be exceeded, a less than significant impact would result.

Operational Impacts – Consistency Criterion 2

The proposed project consists of 402 units: 162 two-story SFR and 240 condo hotel units, two crystal lagoons, a non-contact recreational lake, and other residential amenities including restaurants, a beach club, event space, pop-up shops, outdoor amphitheater, pools, recreation areas, and kids play spaces. These uses are consistent with the City of Coachella General Plan designates the Project site as "Regional Retail District" land uses and "Regional Commercial" zoning uses.

The Regional Retail District designation provides opportunities for a wide range of shopping and entertainment in a variety of urban and suburban formats. These include regional shopping centers, mixed destination centers, or similar uses. The uses allowed in this designation will cater to regional clientele and provide a unique amenity to all residents of the Coachella Valley and an important revenue source for the City. The primary purpose of the District is to provide for commercial opportunities, with residential uses supporting the retail environment.

The Regional Commercial Zoning Designation is intended to provide for and encourage a wide range of shopping and entertainment in a variety of urban and suburban formats. These include regional shopping centers, mixed destination centers or similar uses. The uses allowed in this zone will cater to regional clientele and provide a unique amenity to all residents of the Coachella Valley and an important revenue source for the City. Implementing the Regional Retail land use designation in the General Plan, the zone's primary purpose is to provide for commercial opportunities, with residential uses supporting the retail environment.

In conclusion, the proposed Project is consistent with the City's development intensities allowed under the existing designations. Additionally, the project on an individual basis does not have an impact and, as such, the proposed project would not conflict with the goals and objectives of the AQMP. Furthermore, the project, as evaluated herein would not exceed the regional or localized air quality significance thresholds.

On the basis of the preceding discussion, the project is determined to be consistent with the second criterion.

Eastern Coachella Valley Community Emissions Reduction Plan: As previously introduced, the project is located within the ECV CERP, approved by SCAQMD in July 2021. The CERP was developed to achieve air pollution emission and exposure reductions within the ECV community and address this community's air quality priorities. CERP calls for coordination with various agencies, including CARB and SCAQMD, to improve air monitoring, collaboration, and enforcement across various sectors. The CERP finds that the primary sources of air pollution emissions in the ECV community are on-road vehicles, farming equipment, trains, off-road equipment, and certain industrial activities. The ECV is also deemed to be highly impacted by the declining Salton Sea levels, resulting in increasing dust emissions from the Salton Sea playa. The most relevant topics of

the CERP applicable to the project are 1) pesticides, 2) fugitive road dust and off-roading, and 3) open burning/illegal dumping and the Greenleaf Desert View Power Plant (DVP) facility.

Pesticides: The ECV community includes a large amount of agricultural activity with associated use of pesticides that has raised concerns over the adverse health effects. The CERP recognizes that CARB, SCAQMD, Department of Pesticide Regulation (DPR), and Office of Environmental Health Hazard Assessment (OEHHA) are to be responsible for undertaking continued research and air monitoring to identify exposure reductions. The project will convert existing agricultural uses (date palm orchards and grape vines) into a residential and resort community. The existing use of pesticides associated with date palm and grape cultivation will be discontinued and reduced to the site landscaping needs. Thus, the proposed development will not constitute a new source of agricultural pesticide application and would not interfere with the measures undertaken by the responsible agencies.

Fugitive Road Dust and Off-Roading: The CERP identifies a concern over inhalable particulate matter (PM10) emitted from unpaved and paved roadways and from dust resuspended by off-road vehicles. To address community concerns about emissions from fugitive road dust and off-roading in ECV, the CERP has identified additional agency monitoring and enforcement efforts, combined with the pursuit of opportunities to implement paving to reduced unpaved travel.

The project will include the appropriate street and driveway improvements (paving) at its property frontage on 52nd Street, Calhoun Street, and Van Buren Street, thus eliminating the unpaved shoulder condition that would otherwise contribute to fugitive dust. During construction, fugitive dust will be regulated by an approved dust control plan under SCAQMD Rule 403/403.1 and under the City's Dust Control Ordinance (Chapter 8.20). Therefore, project implementation would not interfere with or impede CERP implementation on this community concern.

Open Burning and Illegal Dumping: The CERP identified as concern over agricultural burning, particularly associated with grapes, dates, citrus, and other crops. To address community concerns about open burning and illegal dumping emissions and exposures, the CERP has identified additional agency monitoring and enforcement efforts, combined with the pursuit of opportunities to work with agricultural operators for reduced open burning activities. The proposed project would not involve new potential sources of open burning or illegal activity. Therefore, project implementation would not interfere or impede CERP implementation on this community concern.

Greenleaf Desert View Power Plant (DVP): The DVP facility has previously been identified as a community concern for air quality in the ECV study area under this plan. This facility has been in operation since 1992. Since this facility is located on tribal land, it is regulated by Region 9 of the U.S. EPA. The CERP acknowledges the concerns raised about air pollutant emissions from this facility and has established various actions under the SCAQMD responsibility to compile further information about the facility emissions, including monitoring and air quality measurements, and implement reduction measures as necessary. On April 30, 2024, the operator of DVP announced an indefinite idling of operations. The proposed development would not interfere or impede CERP implementation on this community concern involving the closed DVP facility.

In summary, the project would not have the potential to result in or cause NAAQS or CAAQS violations. The project would not exceed the regional or localized construction and operational thresholds, and the project's development intensity is consistent with the development intensities evaluated with the GPU EIR. As such, the project is therefore considered to be consistent with the AQMP as determined for the GPU implementation. Pertaining to the obstruction of an applicable air quality plan, less than significant impacts are anticipated. Therefore, the project would be consistent with the analysis within the GPU EIR because it would not create new impacts, increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

b) **Less than Significant Impact.** The GPU EIR evaluated whether its implementation would violate any air quality standard or contribute substantially to an existing or projected air quality violation, and impacts were

determined to be less than significant.65 The GPU EIR estimated Citywide emissions for 2035 with SCAQMD's CalEEMod model, reported in tons per year, for comparison to regional emissions. The EIR estimated the long-term emissions taking into account the implementation of GPU policies that increased density, improved walkability, and expanded transit access. Coachella's estimated emissions were compared to District-wide emissions projected for 2030 in the effective AQMP for VOC, NOx, CO, SOx, and PM2.5. Coachella's future operational emissions were found to represent less than one percent of total regional emissions. This comparison was considered conservative because regional emissions were expected to increase between 2030 and 2035. In addition, the GPU's transportation and land use policies were expected to reduce per-capita emissions by improving multimodal travel options. Based on the EIR analysis, the City's long-term emissions were not expected to exceed regional levels or represent a disproportionate share and were found to be consistent with regional forecasts; therefore, impacts were less than significant.

The GPU EIR also found that the potential to create CO "hotspots" at congested intersections from GPU implementation would be less than significant. CO hotspot analysis represents the standard method for evaluating localized air quality impacts from traffic related emissions, as CO is the most likely to exhibit intersection level concentration increases under congested conditions. Although CO concentrations could increase near intersections with severe congestion, the Coachella Valley had been in attainment of state and federal CO standards for nearly 30 years, with long-term monitoring data showing a steady decline in CO levels due to cleaner vehicles, improved fuels, and inspection programs. The highest recent 8-hour CO concentration (0.6 ppm in 2011) remained far below the 9.0 ppm standard.66

Screening criteria indicated that CO hotspot analysis would be warranted only at intersections operating at loss of service (LOS) E or F where project traffic would significantly increase congestion. However, the GPU included roadway improvements and circulation policies that would increase capacity, reduce vehicle use, and support alternative transportation. With these measures in place, traffic operations would not deteriorate to levels that would cause exceedances of the 1-hour or 8-hour CO standards.

Accordingly, even with increased vehicle trips under the GPU, localized CO concentrations would remain below ambient air quality standards. Localized air quality impacts related to CO hotspots were determined to be less than significant, and no additional mitigation was required. The GPU EIR did not identify or evaluate any other types of localized pollutant exceedances, and no evidence has since emerged indicating that other localized exceedances have occurred or would reasonably be expected to occur under GPU implementation.

The GPU recognized that ozone exceedances in the Coachella Valley were primarily driven by emissions transported from the SCAB rather than by local sources. The EIR noted that SCAQMD had not imposed region-specific ozone control measures for this reason, and regional modeling in the 2012 AQMP projected attainment of federal ozone standards even with substantial population growth in Coachella Valley. Although construction and operational activities associated with GPU implementation would generate ozone precursors, the City's contribution to regional emissions was minimal, and implementation of GPU land use, mobility, and sustainability policies would further reduce local precursor emissions. As a result, growth under the GPU was not expected to impede regional progress toward ozone attainment.

As discussed previously, the Coachella Valley portion of the SSAB is in nonattainment for the 1997 8-hour ozone standard.[67] Under the 2022 AQMP, the target attainment date for this standard is August 2033.[68] SCAQMD has established that the Coachella Valley does not have large sources of smog-forming emissions and, therefore, local sources of air pollution have a limited impact on ozone levels compared to the transport of ozone precursors generated upwind in SCAB. As demonstrated in Tables III-2 and III-3, short-term construction and long-term operational emissions associated with the residential land use component of the Specific Plan

65 City of Coachella, *General Plan Update Draft EIR*, Air Quality Section (Section 4.11), pg. 4.11-12.
66 City of Coachella, *General Plan Update Draft EIR*, Air Quality Section (Section 4.11), pg. 4.11-21.
67 Request for Reclassification of Coachella Valley for the 1997 8-Hour Ozone Standard, S. C. A. Q. M. D. (undated) at ES-1.
68 2022 Air Quality Management Plan for the South Coast Air Quality Management District, *Chapter 1 – Introduction*, at 1-1, 1-9 (Dec. 2022).

would not exceed the SCAQMD Air Quality Significance Thresholds for ozone precursors, such as NOx and Reactive Organic Gas (ROG)/VOC. Therefore, pertaining to the ozone nonattainment status, the proposed project would not result in an exceedance to the applicable threshold or result in a cumulatively considerable net increase in the precursors of this criteria pollutant.

As recognized in the GPU EIR, the Coachella Valley is designated as a serious nonattainment area for PM10 and is under the EPA-approved Coachella Valley PM10 State Implementation Plan with an attainment strategy for meeting the PM10 standard.[69] Some of the existing measures include the requirement of detailed fugitive dust control plans from builders that specify the use of more aggressive and frequent watering, soil stabilization, wind screens, and phased development to minimize fugitive dust. Appropriate air quality measures to prevent fugitive dust are required by the City's Fugitive Dust Control ordinance and plan implementation requirements, which are consistent with SCAQMD Rules 403 and 403.1 that apply to the Coachella Valley strategy for reducing fugitive dust emissions. Under the City's dust control regulations per Chapter 8.20 (Fugitive Dust Control) of the Municipal Code, a Fugitive Dust Control Plan must be prepared and approved prior to any grading, earth-moving, demolition, or building operation with a disturbed surface area of more than five thousand (5,000) square feet. Consistent with SCAQMD Rules 403 and 403.1, implementation of the Fugitive Dust Control Plan is required to occur under the supervision of an individual with training on Dust Control in the Coachella Valley. The plan will include methods to prevent sediment track-out onto public roads, prevent visible dust emissions from exceeding a 20-percent opacity, and prevent visible dust emissions from extending more than 100 feet (vertically or horizontally from the origin of a source) or crossing any property line. The most widely used measures include proper construction phasing, proper maintenance/cleaning of construction equipment, soil stabilization, installation of track-out prevention devices, and wind fencing. As shown in Tables III-2 and III-3, project-related short-term construction and long-term operational emissions that factor in the required soil stabilization measures are expected to not exceed the applicable SCAQMD Air Quality Significance Thresholds for PM10.

Pertaining to the attainment efforts of PM10, ozone precursors, and other criteria pollutants, the proposed project would not result in an exceedance to the applicable thresholds or result in a cumulatively considerable net increase. Less than significant impacts are anticipated. The project would be consistent with the analysis within the GPU EIR because it would not create new impacts, increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

c) **Less than Significant Impact.** The GPU EIR concluded under Impact 4.11-2 that construction-related emissions would result in a less-than-significant impact to local air quality because implementation of the General Plan Update would not generate substantial emissions of air pollutants in areas near sensitive receptors. Construction activities associated with future development under the proposed CGPU were anticipated to generate temporary emissions from construction equipment, truck trips, soil disturbance, worker vehicles, and architectural coatings; however, these emissions were not expected to result in adverse air quality effects at nearby sensitive receptor locations.70 These activities would emit ozone precursors (NOx and CO) and fugitive dust (PM10), and demolition activities posed the potential to release asbestos or other toxic air contaminants. Because detailed information on future development was not available at the programmatic level, the analysis relied on a qualitative assessment. GPU policies, such as maintaining buffers from sensitive receptors (Policy 11.3) and requiring construction practices that limited emissions and dust (Policy 11.8), were found to reduce overall impacts. Compliance with SCAQMD Rules 402, 403, and 403.1 would further minimize emissions by requiring best available dust control measures and fugitive dust control plans for construction sites. With adherence to GPU policies and SCAQMD rules, construction-related air quality impacts were reduced to less than significant, and no mitigation measures were required.

69 South Coast Air Quality Management District, Coachella Valley PM10 Plan – Final 2002 CVSIP (2002).
California Air Resources Board, Coachella Valley PM10 Redesignation Request & Maintenance Plan ES-1 (Feb. 2010).
70 City of Coachella, *General Plan Update Draft EIR*, Air Quality Section (Section 4.11), pg. 4.11-28.

A sensitive receptor is a person or group in the population particularly susceptible (i.e. more susceptible than the population at large) to health effects due to exposure to an air contaminant. Sensitive receptors and the facilities that house them are of particular concern if they are located in close proximity to localized sources of CO, toxic air contaminants, or odors. Residences, long-term health care facilities, schools, rehabilitation centers, playgrounds, convalescent centers, childcare centers, retirement homes, and athletic facilities are generally considered sensitive receptors.

The AQIA has evaluated the project settings to identify potential sensitive receptors. Localized air quality impacts were evaluated at sensitive receptor land uses nearest the project site. All distances were measured from the project site boundary to the outdoor living areas (e.g., backyards) or at the building façade, whichever is closer to the project site. These receptor locations are located as follows:

R1: Location R1 represents the existing residence at 83890 52nd Avenue, approximately 104 feet north of the project site. Receptor R1 is placed at the building façade facing the project site.

R2: Location R2 represents the existing residence at 84045 52nd Venue, approximately 130 feet east of the project site Receptor R2 is placed in the private outdoor living area (backyard) facing the project site.

R3: Location R3 represents the existing residence at 52815 Van Buren Street, approximately 59 feet south of the project site. Receptor R3 is placed in the private outdoor living area (backyard) facing the project site.

R4: Location R4 represents the existing residence, approximately 56 feet southwest of the project site. Receptor R4 is placed at the building façade facing the project site.

R5: Location R5 represents the existing residence at 53465 52nd Avenue, approximately 834 feet west of the project site. Receptor R5 is placed at the building façade facing the project site.

SCAQMD recommends that the nearest sensitive receptor be considered when determining a project's impact. The nearest land use where an individual could remain for 24 hours to the project site has been used to determine localized construction and operational air quality impacts for emissions of PM10 and PM2.5 (since PM10 and PM2.5 thresholds are based on a 24-hour averaging time). Consistent with LST Methodology, the nearest industrial/commercial use to the project site is used to determine construction and operational LST air impacts for emissions of NOX and CO as the averaging periods for these pollutants are shorter (8 hours or less) and it is reasonable to assumed that an individual could be present at these sites for periods of one to 8 hours.

As displayed in Table III-4, emissions during the peak construction activity will not exceed the SCAQMD's localized significance thresholds at the maximally exposed receptor location. All other modeled locations in the study area would experience lower concentrations, resulting in a reduced impact. As such, the project's localized impacts during construction activity would be less than significant.

Table III-4 Summary of Localized Construction Emissions (In Pounds/Day)

Peak Construction	CO		NO_2	PM_{10}	$PM_{2.5}$
	Averaging Time				
	1-Hour	8-Hours	1-Hour	24-Hours	24-Hours
Peak Day Localized Emissions	0.02	0.01	0.02	1.81	0.99
Background Concentration [A]	1.10	0.80	0.038		
Total Concentration	1.12	0.81	0.05	1.81	0.99
SCAQMD Localized Significance Threshold	20	9	0.18	10.4	10.4
Threshold Exceeded?	NO	NO	NO	NO	NO

Source: COVA Air Quality Impact Analysis, 3.6.7 Construction-Source Localized Emissions, Urban Crossroads, Inc. November 2025 (Appendix A).

Pertaining to operational-source localized emissions, the total development of the project is to consist of 162 two-story SFR and 240 condo hotel units. The development includes two lagoons, and other residential amenities including restaurants, a beach club, event space, pop-up shops, outdoor amphitheater, pools, recreation areas, and kids play spaces. According to SCAQMD LST methodology, LSTs would apply to the operational phase of a proposed project, if the project includes stationary sources, or attracts mobile sources that may spend long periods queuing and idling at the site (e.g., transfer facilities and warehouse buildings). The proposed project does not include such uses, and thus, due to the lack of significant stationary source emissions, no long-term localized significance threshold analysis is needed. Moreover, project-related traffic at any intersections in the vicinity of the project would not cause or contribute to a CO hotspot since the background concentrations are low and any contribution from project traffic would be negligible.

The potential impact of project-generated air pollutant emissions at sensitive receptors has also been considered. Results of the LST analysis in the AQIA indicate that the project would not exceed the SCAQMD localized significance thresholds during construction. Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations during project construction.

Additionally, the project would not exceed the SCAQMD localized significance thresholds during operational activity. Further Project traffic would not create or result in a CO "hotspot." Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations as the result of Project operations.

Friant Ranch Case: In December 2018, in the case of *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, the California Supreme Court held that an EIR's air quality analysis must meaningfully connect the identified air quality impacts to the human health consequences of those impacts, or meaningfully explain why that analysis cannot be provided.

Most local agencies, including the City of Coachella, have not conducted their own assessment of potential health impacts from criteria air pollutant emissions, as would be required to establish customized, locally-specific thresholds of significance based on potential health impacts from an individual development project. The use of national or "generic" data to fill the gap of missing local data would not yield accurate results because such data does not capture local air patterns, local background conditions, or local population characteristics, all of which play a role in how a population experiences air pollution. Because it is impracticable to accurately isolate the exact cause of a human disease (for example, the role a particular air pollutant plays compared to the role of other allergens and genetics in causing asthma), existing scientific tools cannot accurately estimate health impacts of the project's air emissions without undue speculation. Instead, readers are directed to the project's air quality impact analysis above, which provides extensive information concerning the quantifiable and non-quantifiable health risks related to the Project's construction and long-term operation.

Notwithstanding, the project-specific AQIA evaluated the proposed project's localized impact to air quality for emissions of CO, NOx, PM10, and PM2.5 by comparing the proposed project's on-site emissions to the SCAQMD's applicable LST thresholds. The LST analysis above determined that the project would not result in emissions exceeding SCAQMD's LSTs. Therefore, the proposed project would not be expected to exceed the most stringent applicable federal or state ambient air quality standards for emissions of CO, NOx, PM10, and PM2.5. As the project's emissions would comply with federal, state, and local air quality standards, the proposed project's emissions are not sufficiently high enough to use a regional modeling program to correlate health effects on a basin-wide level and would not provide a reliable indicator of health effects if modeled.

The project would not result in emissions capable of exposing sensitive receptors to localized substantial pollutant concentrations. Moreover, the proposed project would not situate new housing in a location known to be exposed to existing or planned sources of substantial emissions. Less than significant impacts are anticipated. Therefore, the project would be consistent with the analysis within the GPU EIR because it would not create new impacts, increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

d) **Less than Significant Impact.** The GPU EIR found that long-term emissions associated with future development under the GPU would be less than significant.71 While individual projects could exceed SCAQMD project-level thresholds, such projects would undergo separate CEQA review and incorporate feasible mitigation as needed. At the programmatic level, long-term emissions were evaluated by comparing GPU buildout to SCAG regional growth forecasts and to future regional emissions in the 2012 AQMP. The GPU EIR assessed that SCAQMD rules 402 (Nuisance) and 410 (Odors from Transfer Stations and Material Recovery Facilities) would help address offensive odor concerns within the GPU planning area, as these rules have mechanisms for citizen complaints to local governments and the SCAQMD that can lead to enforcement on facilities.

Overall growth under the GPU would remain generally consistent with regional planning assumptions. GPU policies promoting higher density, walkability, mixed-use development, and multimodal transportation would reduce per-capita vehicle miles traveled and support applicable SCAQMD and CARB control measures.

CalEEMod modeling for 2035 showed that Coachella's future operational emissions would represent less than one percent of total regional emissions across all criteria pollutants. This comparison is conservative because regional emissions would increase between 2030 and 2035. With GPU policies reducing reliance on automobiles and improving transportation efficiency, long-term emissions would remain consistent with regional forecasts. Therefore, impacts were determined to be less than significant.

Pertaining to odors, the GPU EIR assessed that SCAQMD rules 402 (Nuisance) and 410 (Odors from Transfer Stations and Material Recovery Facilities) would help address offensive odor concerns within the GPU planning area, as these rules have mechanisms for citizen complaints to local governments and the SCAQMD that can lead to enforcement on facilities.

Objectionable odors can be associated with toxic or non-toxic emissions. While odors seldom cause physical harm, they can be unpleasant and lead to considerable annoyance and distress among the public. Examples of facilities commonly known to generate considerable odors include agricultural operations such as livestock and farming, wastewater treatment plants, food processing facilities, chemical plants, composting operations, refineries, landfills, dairies, and fiberglass molding facilities.

Per the ECV CERP, the project area is exposed to odor concerns associated with elevated levels of hydrogen sulfide (H2S) that occur from natural processes in the Salton Sea. H2S odor events are primarily observed during the hot summer months, when emissions from the Salton Sea are transported northwest toward inland areas of the Coachella Valley. As part of the ECV CERP, SCAQMD has expanded the H2S monitoring network to identify the origin, provide real-time H2S data, and inform community members of potential odor events.

The project does not contain land uses typically associated with emitting objectionable odors. Potential odor sources associated with the proposed project may result from construction equipment exhaust and the application of asphalt and architectural coatings during construction activities and the temporary storage of typical solid waste (refuse) associated with the proposed project's (long-term operational) uses. Standard construction requirements under Rule 403, which call for contractors to operate properly maintained equipment to minimize emissions, would also help reduce odor impacts from construction.

The construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction; thus, it is considered less than significant. It is expected that project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with current solid waste regulations. The proposed project would also be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. The project site's water features would be properly operated with mechanical aeration, circulation, and maintained to prevent these features from

71 City of Coachella, General Plan Update Draft EIR, Air Quality Section (Section 4.11), pg. 4.11-19.

presenting an additional source of objectionable odors. The proposed development would not conflict with or obstruct with the ECV CERP strategies for addressing odor concerns from the Salton Sea.

Therefore, odors and other emissions (such as those leading to odors) associated with construction and operations activities of the proposed project would be less than significant and no mitigation is required. As a result, the project would be consistent with the analysis within the GPU EIR because it would not create new impacts, increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

Conclusion:

With regards to the issue area of Air Quality, the following findings can be made:

1. No peculiar impacts to the project or its site have been identified. The project-specific Air Quality Impact Analysis determined that construction and operational emissions would not exceed the applicable South Coast Air Quality Management District (SCAQMD) regional significance thresholds for criteria pollutants, including ozone precursors, PM10, and PM2.5. Localized Significance Threshold analyses also demonstrated that emissions at nearby sensitive receptors would remain below applicable thresholds.
2. There are no potentially significant off-site and/or cumulative impacts which were not discussed in the City of Coachella General Plan 2035 Program EIR. The Program EIR evaluated consistency with the applicable Air Quality Management Plan, regional and cumulative criteria pollutant emissions, localized air quality impacts, exposure of sensitive receptors, and odor impacts associated with buildout of the General Plan. The Program EIR concluded that implementation of the City of Coachella General Plan 2035 would not conflict with regional air quality planning efforts and would result in less-than-significant air quality impacts.
3. No substantial new information has been identified which results in an impact more severe than anticipated by the City of Coachella General Plan 2035 Program EIR. Although the applicable air quality planning framework has been updated through adoption of the 2022 Air Quality Management Plan and the Eastern Coachella Valley Community Emissions Reduction Plan, the project-specific Air Quality Impact Analysis demonstrates that construction and operational emissions would remain below applicable regional and localized significance thresholds. The Project would also remain consistent with the assumptions, goals, and attainment strategies of the current Air Quality Management Plan and would not interfere with implementation of the Eastern Coachella Valley Community Emissions Reduction Plan.
4. No mitigation measures were identified in the GPU EIR for air quality impacts. Compliance with SCAQMD Rules 402, 403, and 403.1; Chapter 8.20 (Fugitive Dust Control) of the City of Coachella Municipal Code; and applicable General Plan policies related to air quality protection, dust control, compatible land use planning, and multimodal transportation would ensure that potential impacts related to criteria pollutants, localized air quality, sensitive receptors, and odors would remain less than significant.

4. BIOLOGICAL RESOURCES -- Would the project:	Project Peculiar Impact that is not Substantially Mitigated by Uniformly Applied Policies	Significant Impact not Analyzed as Significant in the GP EIR	Potentially Significant Offsite or Cumulative Impact not Discussed in the GP EIR	Adverse Impact More Severe based on Substantial New Information	No New Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☐	☒
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	☐	☐	☐	☐	☒
c) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☐	☒
d) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?	☐	☐	☐	☐	☒

Sources: City of Coachella 2035 General Plan Update, 2015; Coachella Valley Multiple Species Habitat Conservation Plan, 2007; *Habitat Assessment and CVMSHCP Consistency Analysis*, ELMT Consulting (ELMT), April 2025.

a) **Less Than Significant with Mitigation**. Because the City is not fully developed, the biodiversity surrounding the planning area could be negatively impacted by growth under the General Plan. The GPU EIR determined that impacts would be less than significant with mitigation.[72] However, Subarea 3, in which the proposed project will be developed, is not indicated to include sensitive wildlife or plant species within the GPU EIR. Regardless, this does not exclude the presence of sensitive species, and therefore the development of the planning area will be required to adhere to the following policy to ensure that impacts are not significant:

72 City of Coachella, 2035 GPU Draft EIR, Biological Resources, at 4.3-23.

9.8. Sensitive Species. Require projects proposing to develop in Subareas 5, 6, and 7 to conduct surveys to determine if there is occurrence of sensitive species within the project area. If sensitive species are present, projects must implement mitigation measures necessary as prescribed by a qualified biologist and approved by any applicable resource agency in order to receive necessary City permits.

Despite existing in Subarea 3, the proposed project had a biological survey and subsequent report prepared for site by ELMT in February 2025 (Appendix B). The report states that the 87-acre project site supports an agricultural land cover type in the form of row crops. Agricultural segments for date palm (*Phoenix dactylifera*) and grape (*Vitis sp.*) occur throughout the proposed project site. These areas consist of dense monocultures of the aforementioned crop species. Additional plant species in the agricultural areas onsite include Russian thistle (*Salsola tragus*), Saharan mustard (*Brassica tournefortii*), Mediterranean mustard (*Hirschfeldia incana*), and prickly lettuce (*Lactuca seriola*).

The developed area of the project site contains an irrigation pond in the central-northern area of the site, with nearby pump housing and approximately three existing support structures. These are dilapidated and uninhabitable structures with a combined estimated building footprint of approximately 6,143 square feet, and they appear to have been used in connection with past agricultural operations. These areas are predominantly void of vegetation with the exception of a few weedy, ruderal, and nonnative/invasive species. The pond was primarily inundated due to recent pumping practices and precipitation and serves to irrigate the surrounding agricultural areas onsite. The irrigation pond does not support hydrophytic vegetation or wetland-obligate species.

No special-status plant species were observed on-site during the field investigation. Based on habitat requirements for specific special-status plant species and the availability and quality of habitats on-site, it was determined the project site does not have potential to support any special-status plant species known to occur in the area, and all are presumed absent due to the removal of native habitats through historical agricultural land use and development within the project site. Therefore, no impact is expected to occur on special-status plant species. This is consistent with the determination for Subarea 3 in the GPU EIR.

The project site provides suitable habitat to support reptilian species adapted to disturbed environments and conditions in the Coachella Valley. No reptilian species were detected onsite during the investigation.

The project site provides suitable foraging and nesting habitat for avian species adapted to routine human disturbance and desert environments. The 2025 California Natural Diversity Data Base by California Department of Fish and Wildlife (CDFW) lists a total of 26 special-status wildlife species as having the potential to occur within the Indio quadrangle (list available in the Habitat Assessment in Appendix B). No special-status animal species were observed on-site during the field investigation. Based on habitat requirements for the identified special-status wildlife species, known distributions, and the routine disturbance, it was determined that the proposed project site has a high potential to support Cooper's hawk (*Astur cooperii*) due to suitable foraging habitat. However, Cooper's hawk is not a State or federally listed species. Further, it was determined that no other special-status wildlife species have the potential to occur on-site, and all are presumed absent. Although the project site has a high potential to support Cooper's hawk occurrences, it is not expected to nest onsite due to the location of the site lying outside of the typical breeding range for the species. In addition, the ELMT biological survey and report states that "No bat species are expected to roost on-site due to a lack of suitable roosting habitat (i.e., trees, crevices, abandoned structures) within and surrounding the project site. " This is consistent with the General Plan EIR, which concluded that no special status bat species are expected to occur in the planning area.

No nest of any avian species was found within the project boundaries. However, the project site and surrounding areas contain numerous suitable nesting sites. Nesting birds are protected pursuant to the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (Sections 3503, 3503.3, 3511, and 3513 of the California Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs). Therefore, to

ensure impacts to any special status birds would be less than significant, the biological report recommends a pre-construction nesting bird clearance survey shall be conducted prior to ground disturbance if construction occurs between February 1st and August 31st. The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active avian nests will occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities should stay outside of a no-disturbance buffer. The size of the no-disturbance buffer will be determined by the wildlife biologist and will depend on the level of noise and/or surrounding anthropogenic disturbances, line of sight between the nest and the construction activity, type and duration of construction activity, ambient noise, species habituation, and topographical barriers. The biological report states that the pre-construction nesting bird survey is compliant with and will be performed per the MBTA and California Fish and Game Code, detailed above. While surveys are not included in the original text of the MBTA and Game Code, the United States Fish and Wildlife Services (USFWS) formally recognizes and provides best management practices for nesting bird surveys.[73] The implementation of these practices will reduce impacts to migratory and nesting birds within the project site.

The biological report states that if construction occurs between February 1st and August 31st, a pre-construction clearance survey for nesting birds should be conducted within three (3) days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction. The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active avian nests will occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities are to stay outside of a no-disturbance buffer. The size of the no-disturbance buffer will be determined by the wildlife biologist and will depend on the level of noise and/or surrounding anthropogenic disturbances, line of sight between the nest and the construction activity, type and duration of construction activity, ambient noise, species habituation, and topographical barriers. These factors will be evaluated on a case-by-case basis when developing buffer distances; Limits of construction to avoid an active nest will be established in the field with flagging, fencing, or other appropriate barriers; and construction personnel will be instructed on the sensitivity of nest areas. A biological monitor should be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction activities within the buffer area can occur.[74]

One functionally non-covered and sensitive avian species was a possible occupant of the project site and vicinity: the burrowing owl (*Athene cunicularia*). The burrowing owl, a candidate endangered species under the California Endangered Species Act (CESA), was not observed or detected on or near the project site. The existing agricultural crops do not provide line-of-sight observations favored by burrowing owl. Further, the trees found onsite and surrounding electrical poles north of the project site provide suitable perching opportunities for large raptors (i.e., red-tailed hawks) that can prey on burrowing owl. Based on the results of the field investigation, it was determined that the project site does not have potential to support burrowing owl, and focused surveys are not recommended.

The project area is located within the Plan Area of the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP), which outlines policies for conservation of habitats and natural communities. According to Figure 4-1 of the CVMSHCP, the site is not designated as a conservation area. Additionally, the site is not located immediately adjacent to a Conservation Area of the CVMSHCP and is therefore not subject to CVMSHCP requirements regarding lands adjoining Conservation Areas. The project is required as a standard condition to comply with and pay the relevant CVMSHCP Land Development Mitigation Fees (LDMF). This is required in the City's Municipal Code, Chapter 4.48: Coachella Valley Multiple Species Habitat Conservation Plan/Natural Community Conservation Plan Mitigation Fee.

As previously discussed, the GPU EIR determined impacts to special status species as significant and unavoidable. However, the EIR determined impacts to be less than significant with the incorporation of a

73 United States Fish and Wildlife Services, *Nationwide Avoidance & Minimization Measures for Birds*, 2024, https://www.fws.gov/media/nationwide-avoidance-minimization-measures-birds
74 *Habitat Assessment and CVMSHCP Consistency Analysis*, ELMT Consulting (ELMT), April 2025, at page 21.
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biological site assessment and adherence to any mitigation proposed by a qualified biologist. The proposed project will have avoidance measures in place for nesting migratory birds and will be and the requirement to pay the LDMF by the City Municipal Code. Therefore, the project would be consistent with the analysis within the GPU EIR. The project would not create new impacts, increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

b) **Less than Significant Impact**. Within the planning area, riparian habitat occurs in a very limited area north of the City near the Whitewater River. Impacts of the GPU were determined to be less than significant.[75] There are no other occurrences of riparian habitat within the City. Due to the dispersed nature of riparian habitat, the planning area does not support associated sensitive species. The proposed project does not contain nor is it adjacent to any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or U.S. Fish and Wildlife Service. There is no blue line stream within the project property as depicted on the United States Geological Survey topographic maps or National Hydrography Dataset.[76] Therefore, the project would be consistent with the analysis within the GPU EIR and would not create new impacts or increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

c) **Less than Significant Impact.** The GPU determined that impacts would be less than significant.[77] Though there is potential for impact on migratory species from the loss of forage areas for these species from such growth as projected by the GPU, these impacts are expected to be less than significant due to the significant tracts of land that would be set aside as open space as proposed by the GPU Land Use Plan.[78]

No migratory wildlife corridors or native wildlife nursery sites are found on the project or adjacent properties. As previously discussed, the site consists primarily of agricultural development in the form of row crops in the central and eastern portion of the site and a palm plantation within the western portion. An irrigation pond occurs in the central-northern area of the site with nearby pump housing and additional support structures. Disturbances have eliminated the natural plant communities that historically occurred on the project site. Moreover, there are no existing drainages that would support wildlife nursery sites or corridors, and the site is not located in a known wildlife corridor. To ensure no impact occurs to migratory birds, the biological report prepared by ELMT suggests a pre-construction nesting bird clearance survey which will be conducted prior to ground disturbance if construction occurs between February 1st and August 31st. This recommendation is consistent with the requirements of the MBTA, California Fish and Game Code, and USFWS.

As previously discussed, the GPU EIR determined impacts to wildlife movement corridors as less than significant. The project would be consistent with the analysis within the GPU EIR. The project would not create new impacts or increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

d) **Less than Significant Impact**. The City of Coachella and its SOI are located within the area for the CVMSHCP. According to the GPU EIR, impacts to this resource were anticipated to be less than significant.[79] There is very little CVMSHCP Conservation Land within the Planning Area, occurring in Subarea 17 only. Under the GPU, these areas are proposed for preservation as open space. Additionally, the GPU identifies and provides policy for the City to support and adhere to the CVMSHCP. To ensure compliance with the CVMSHCP, the following policies can be found in the Sustainability + Natural Environment Element of the GPU.[80]

75 City of Coachella, 2035 GPU Draft EIR, Biological Resources, at 4.3-26.
76 Riverside County Map My County Interactive Map, *Blueline Streams* (2025), https://gis1.countyofriverside.us/Html5Viewer/?viewer=MMC_Public.
77 City of Coachella, 2035 GPU Draft EIR, Biological Resources, at 4.3-28.
78 *Ibid*.

79 *Id.*, at 4.3-29.
80 City of Coachella, General Plan 2035 Update: Sustainability & Natural Environment, at 07.9 – 0.7-10 (Apr. 22, 2015).

9.4 **Conservation and preservation easements.** Develop a program to facilitate the creation of conservation and preservation easements that identifies key habitat areas, habitat corridors and sensitive biological resources and:

- Establishes a simple process for land owners to grant easements, including identifying organizations or agencies capable of holding the easements; and
- Provides information to the landowners of identified properties about the benefits of conservation and preservation easements.

9.5 **Multiple species habitat conservation plan.** Support and adhere to the Coachella Valley Multiple Species Habitat Conservation Plan.

10.2 **Whitewater river corridor.** Preserve a public open space corridor of trails and wildlife habitat along the Whitewater River.

10.7 **Wildlife corridors.** Establish and preserve wildlife corridors.

As previously stated, the project site occurs in Subarea 3 and is not located within or adjacent to a designated Conservation Area under CVMSHCP. Therefore, it is not subject to CVMSHCP requirements regarding lands adjoining Conservation Areas. The CVMHSCP implements a Local Development Mitigation Fee for all new development to support the acquisition of conservation lands. The fee would be applied per Chapter 4.48 of the City of CMC. Based on these provisions, the applicable fees would be collected, and the project is expected to comply with the policies outlined in the Sustainability + Natural Environment Element of the GPU, which were designed in accordance with provisions of the CVMSHCP. There are no local tree preservation policies or ordinances in place. The proposed project will include landscaping improvements in a manner that is consistent with local development standards. The project will comply with landscaping policies outlined in the Sustainability + Natural Environment Element of the GPU and the CVMSHCP. Policies include integration of native, drought tolerant desert plants as well as site-sensitive architectural designs with the goal of providing or enhancing wildlife habitat and extending the desert environment into the urban design of the city. There are no other unique local policies or ordinances protecting biological resources that would cause a conflict, nor does the site support valuable biological resources that could be affected.

As stated, the GPU EIR found impacts to a habitat conservation plan to be less than significant. The project would be consistent with the analysis within the GPU EIR and it would not create new impacts or increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

Additional current CEQA Biological Resources thresholds not addressed in the GPU EIR include those pertaining to impacts on state or federally protected wetlands. This is provided for informational purposes. The project site does not contain, nor is it adjacent to, federally protected wetlands, marshes, or other drainage features. As a result, implementation of the proposed project would not result in direct removal, filling, or other hydrological interruption of these resources. The project applicant will also be required to develop and implement a Project-Specific Water Quality Management Plan (WQMP) to ensure that the project does not contribute pollutants of concern from storm runoff. Therefore, no impacts are anticipated.

Conclusion:

With regards to the issue area of Biological Resources, the following findings can be made:

1. No peculiar impacts to the project or its site have been identified.
2. There are no potentially significant off-site and/or cumulative impacts which were not discussed in the City of Coachella General Plan 2035 Program EIR. The Program EIR adequately addressed the potential impacts to biological resources.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the City of Coachella General Plan 2035 Program EIR. The biological report prepared by

ELMT Consulting is consistent with the findings and assumptions of the Program EIR.

4. No mitigation measures are required within the GPU EIR. Recommendations pertaining to pre-construction surveys are compliant with requirements established by the MBTA, California Fish and Game Code, and the USFWS. Recommendations will reduce impacts to nesting birds to less than significant levels. The project specific impacts would be less than significant with the adherence to the MBTA, CDFW Fish and Game Code, and USFWS.

5. CULTURAL RESOURCES AND TRIBAL CULTURAL RESOURCES - Would the project:	Project Peculiar Impact that is not Substantially Mitigated by Uniformly Applied Policies	Significant Impact not Analyzed as Significant in the GP EIR	Potentially Significant Offsite or Cumulative Impact not Discussed in the GP EIR	Adverse Impact More Severe based on Substantial New Information	No New Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☐	☐	☐	☒
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☐	☐	☒
d) Directly or indirectly destroy a unique paleontological resource or site or unique geologic figure?	☐	☐	☐	☐	☒
e) Would the project cause a substantial adverse change in the significance of a Tribal cultural resource, defined in Public Resource Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:					
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local Register of historical resources as defined in Public Resource Code Section 5020.1(k), or;	☐	☐	☐	☐	☒
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.	☐	☐	☐	☐	☒

Source: City of Coachella General Plan 2035, 2015; City of Coachella General Plan 2035 Draft Environmental Impact Report, 2015; Cultural Resources Survey Report Ranch at Coachella, CRM Tech, June 2025).

a) No Impact. CEQA establishes that "a project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment."[81] "Substantial adverse change" means "demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired."[82] CEQA Guidelines state that the term "historical

81 Pub. Res. Code § 21084.1.
82 *Id.* at § 5020.1(q).

resource" applies to any such resources listed in or determined to be eligible for listing in the California Register of Historical Resources, included in a local register of historical resources, or determined to be historically significant by the lead agency.[83]

Records searches of historical/archaeological resources were conducted at the South Coastal Information Center (SCIC) at the San Diego State University on February 11, 2025 by CRM Tech (Appendix C).[84] Digital maps, records, and databases for previously identified cultural resources and existing cultural resources reports within a one-mile radius of the project were reviewed as a part of the records search. Previously identified cultural resources included properties designated as California Historical Landmarks, as well as those listed in the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), or the California Historical Resources Inventory (CHRIS). Historical research also included a review of published literature in local and regional history, US General Land Office (GLO) land survey plat maps dated 1856, U.S. Geological Survey (USGS) topographic maps dated 1904-1979, aerial/satellite photographs taken in 1953-2025, as well as materials presented in past studies on the project area.

Within the one-mile scope of the records search, SCIC records identified 56 additional studies and 36 additional cultural resources, including 30 sites and six isolates. Eight of the sites and five of the isolates were prehistoric in origin, consisting mainly of habitation remains, a resource procurement area, scattered ceramic and lithic artifacts, and a cremation site. The other 22 sites and one isolate dated to the historic period and consisted of various buildings, farm/ranch complexes, structural remains, refuse items, and a cemetery. None of these sites or isolates was found in the immediate vicinity of the project area. Therefore, none of them requires further consideration during the study.

According to the SCIC records, the project area was covered in its entirety by three similar cultural resources surveys completed in 2005, 2006, and 2008. As a result of the 2005 and 2006 surveys, a farm complex dating to the 1940s-1950s, including two single-family residences, and an isolated prehistoric groundstone artifact were recorded on the property and subsequently designated 33-014903 and 33-014904 in the CHRIS. Since all three of these surveys are now more than 10 years old, they are considered out-of-date for statutory compliance purposes today.

Site 33-014903 was first recorded during the 2005 and 2006 studies on the project area as a farm complex dating to the 1940s-1950s era. Used for table grape and date cultivation at the time, the farm contained two single-family residences, both constructed in or around 1949-1950, along with ancillary buildings such as two work sheds. The 2008 study on the project area reported that by then one of the residences at was no longer extant. During the field survey for the study, it was observed that the farm remained operational, with date palms planted on approximately two-thirds of the total acreage. The grape vines on the rest of the land, meanwhile, appeared to have been abandoned. The surviving residence had also been abandoned and was in a dilapidated state.

Isolate 33-014904 was recorded during the 2006 study on the project area as a granitic biface mano. No other prehistoric cultural material was observed nearby, and the mano was collected at the time since it could be easily obscured by shifting surface silt. Neither the 2008 survey nor the current survey found any artifacts or archaeological features on the surface at or near the isolate. At the time of the field survey, the location of the isolate was occupied by rows of table grape vines, but the vineyard operation appeared to have been abandoned. A dense collection of fallen foliage and overgrown grass obscured much of the ground surface between the vines.

The Cultural Resources Survey determined that the localities do not meet CEQA definition of a "historical resource." As an isolate, or a locality with fewer than three artifacts, 33-014904 by definition does not qualify as an archaeological site due to the lack of contextual integrity. As such, it would not be considered

83 Cal. Code Regs. tit. 14, § 15064.5(a).
84 Cultural Resources Survey Report Ranch at Coachella, CRM Tech, June 2025 (Appendix C).

a potential "historical resource" if it remained extant in the field. Regarding Site 33-014904, the 2005 and 2006 studies both concluded that the farm, or the residences individually, did not appear to meet any of the criteria for listing in the CRHR. No other potential historical resources were encountered. Therefore, it was determined that no historical resources exist within the project area.

The proposed project is consistent with the GPU EIR, which finds impacts to historical resources less than significant through adherence to existing regulatory requirements and the following General Plan policies:[85]

- **Policy 12.2 (Tribal Coordination):** Requires notification of California Native American tribes and organizations of proposed projects that have the potential to adversely impact cultural resources.
- **Policy 12.4 (Preservation of Historic Resources):** Where practical, encourages the preservation of historic resources.
- **Policy 12.5 (Document Historic Resources):** When it is not practical to preserve a historic resource, requires the architectural details and design elements of historic structures to be preserved during renovations and remodels.

Therefore, there are no recognizable potential historical resources as defined in Section 15064.5 of the CEQA Guidelines that would be adversely affected by the proposed project. No impacts are anticipated. The project would be consistent with the analysis within the GP EIR because it would not create new impacts or increase impacts, and there is no new information of substantial importance than identified within the GP EIR.

b) Less Than Significant Impact. As previously discussed, CRM Tech conducted a records search with the SCIC. Within the one-mile scope of the records search, SCIC records identified 56 additional studies and 36 additional cultural resources, including 30 sites and six isolates. Eight of the sites and five of the isolates were prehistoric in origin, consisting mainly of habitation remains, a resource procurement area, scattered ceramic and lithic artifacts, and a cremation site. The other 22 sites and one isolate dated to the historic period and consisted of various buildings, farm/ranch complexes, structural remains, refuse items, and a cemetery. None of the sites or isolates were found in the immediate vicinity of the project area. Therefore, further study was not conducted.

According to SCIC records, the project area was covered in its entirety by three similar cultural resources surveys completed in 2005, 2006, and 2008. As a result of the 2005 and 2006 surveys, a farm complex dating to the 1940s-1950s, including two single-family residences, and an isolated prehistoric groundstone artifact were recorded on the property and subsequently designated 33-014903 and 33-014904 in CHRIS. However, the 2008 survey noted that one of the residences a part of Site 33-014903 was no longer extant, and CRM Tech's survey noted that the other residence has been abandoned and was in a dilapidated state. Moreover, Isolate 33-014904 is no longer extant in the field.

Based on these findings, the proposed project will have no impact on any known historical resources, as discussed above. However, sources consulted during this study suggest that the project area was the site of early settlement activities dating at least to the early 20th century, before the onset of widespread settlement and development in the Coachella Valley. In addition, the project location lies in the relatively close proximity to an important Desert Cahuilla village known as La Mesa dated around the turn of the century (now a part of the Augustine Indian Reservation). As a result, the project area demonstrates the potential for subsurface archaeological deposits of both prehistoric and early historical origin.

On February 13, 2025, CRM Tech submitted a written request to the State of California Native American Heritage Commission (NAHC) for a records search in the commission's Sacred Lands File. The NAHC is the State of California's trustee agency for the protection of "tribal cultural resources," as defined by the California Public Resources Code section 21074, and is tasked with identifying and cataloging properties

85 City of Coachella, General Plan 2035 Update: Sustainability & Natural Environment, at 07-12 (Apr. 22, 2015).

of Native American cultural value. In the meantime, in accordance with previously established consultation protocol with the Desert Cahuilla tribes, CRM Tech also notified, by email and telephone, the nearby Torres Martinez Desert Cahuilla Indians of the upcoming archaeological field survey and invited tribal participation.

In response to CRM Tech's inquiry, the NAHC states in a letter dated March 3, 2025, that the Sacred Lands File identified no Native American cultural resources in the project vicinity. Noting that the lack of specific information in the Sacred Lands File does not necessarily indicate the absence of such resources, however, the NAHC recommended that local Native American groups be consulted for further information and provided a referral list of 25 individuals associated with 12 local Native American groups. The Torres Martinez Desert Cahuilla Indians were notified of the archaeological fieldwork and invited to participate, but no response was received during the preparation and completion of the Cultural Resources Survey.

The proposed project is consistent with the City of Coachella General Plan 2035 EIR, which finds impacts to unique archaeological resources less than significant through adherence to existing regulatory requirements and the following General Plan policies:[86]

- **Policy 10.3 (Archaeological Resource Preservation):** Requires preservation of important archaeological and paleontological resources from loss or destruction, and requires development to include appropriate mitigation to protect the quality and integrity of these resources.

- **Policy 10.4 (Mitigation and Preservation of Cultural Resources):** Requires development to avoid archaeological and paleontological resources whenever possible. If complete avoidance is not possible, requires development to minimize and fully mitigate the impacts to the resources.

- **Policy 10.5 (Grading):** Requires that proposed projects involving a significant amount of grading have an archaeological and paleontological survey conducted before construction.

Therefore, impacts to unique archaeological resources would be less than significant and the project would be consistent with the analysis within the GP EIR because it would not create new impacts or increase impacts, and there is no new information of substantial importance than identified within the GP EIR.

c) Less Than Significant Impact. As discussed above, the records search at the SCIC as well as the archaeological survey of the project area did not identify a cultural resource onsite. Moreover, the NAHC Sacred Lands File search was negative for known tribal resources. Pursuant to the State of California Health and Safety Code section 7050.5 and the CEQA Guidelines section 15064.5 require that in the event of discovery or recognition of any human remains in any location other that a dedicated cemetery, there shall be no further excavation or disturbance of the site, or any nearby area reasonably suspected to overlay adjacent remains, until the County Coroner has examined the remains. If the coroner determines the remains to be Native American or has reason to believe that they are those of Native American, the coroner shall contact the Native American Heritage Commission by telephone within 24-hours. Pursuant to the California Health and Safety Code, proper actions shall take place in the event of a discovery or recognition of any human remains during project construction activities.

The proposed project is consistent with the GPU EIR, which similarly identifies the potential for discovery of human remains during ground-disturbing activities and requires compliance with California Health and Safety Code section 7050.5, CEQA Guidelines section 15064.5, and the California Native American Graves Protection and Repatriation Act, consistent with General Plan Policy 12.1 and 12.6:[87]

86 *Id*., at 07-10.
87 *Id*., at 07-12 – 07-13.

- **Policy 12.1 (Disturbance of human remains):** Requires that any human remains discovered on proposed project sites, the project must implement mitigation measures to prevent impacts to human remains in order to receive permit approval.

- **Policy 12.6 (Discovery of human remains):** Requires any discovered human remains to be treated with respect and dignity, fully complying with the California Native American Graves Protection and Repatriation Act and other applicable laws.

Adherence to these existing requirements reduces impacts to less than significant. Therefore, the project would be consistent with the analysis within the GPU EIR because it would not create new impacts or increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

d) Less than Significant Impact. According to the GPU EIR Paleontological Resources Sensitivity Exhibit 88the project area is located within a portion of the planning area with low sensitivity, or probability, for having paleontological resources. Impacts to paleontological resources within the planning area were deemed to be less than significant due to currently developed conditions. The proposed project is consistent with the GPU EIR, which finds impacts to paleontological resources less than significant through adherence to existing regulatory requirements and General Plan Policies 10.3, 10.4, and 10.5, as discussed above, as well as the following additional policy:[89]

- **Policy 12.7 (Paleontological Resources):** Requires any paleontological artifacts found within the City or Sphere of Influence to be reported to the City and temporarily loaned to local museums such as the Western Science Center for Archaeology and Paleontology in Hemet, CA.

Therefore, less than significant impacts to paleontological resources are anticipated. The project would be consistent with the analysis within the GPU EIR because it would not create new impacts, increase impacts, and there is no new information of substantial importance than identified within the GPU EIR

e.i) No Impact. As discussed in the Historical Resources section above, no historical resources were identified within the project area. No tribal cultural resources meeting the definition of Public Resources Code section 21074, including any site, feature, place, cultural landscape, sacred place, or object with cultural value to a California Native American tribe, that are listed or eligible for listing in the CRHR or a local register of historical resources, were identified within the project area.

The project area lies in relatively close proximity to an important Desert Cahuilla village known as La Mesa dated around the turn of the century, now a part of the Augustine Indian Reservation. In consideration of this proximity, CRM Tech submitted a written request to the NAHC for a Sacred Lands File search. The NAHC responded in a letter dated March 3, 2025 that the Sacred Lands File identified no Native American cultural resources in the project vicinity. The Torres Martinez Desert Cahuilla Indians were notified of the archaeological fieldwork and invited to participate, but no response was received during the course of the study.

Because the proposed project is processed as a General Plan Consistency Analysis pursuant to CEQA Guidelines Section 15183 and Public Resources Code Section 21083.3 formal AB 52 tribal consultation is not required. The proposed project is consistent with the GPU EIR, which requires coordination with Native American tribes and organizations pursuant to General Plan Policy 12.2 (Tribal Coordination). Therefore, no impacts to tribal cultural resources listed or eligible for listing in the California Register or a local register are anticipated. The project would be consistent with the analysis within the GPU EIR because it would not

88 GPU EIR Section 4.4 Cultural Resources Figure 4.4.3 Paleontological Resources Sensitivity.
89 *Id*., at 07-13.

create new impacts or increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

e.ii) Less than Significant Impact. As discussed above, the NAHC Sacred Lands File search produced negative results for Native American cultural resources in the project vicinity, and the Torres Martinez Desert Cahuilla Indians were notified and invited to participate in the archaeological fieldwork but did not respond. No other tribes responded during the course of the study.

No tribal cultural resources were identified during the field survey or through the records search process that have been determined, in the lead agency's discretion and supported by substantial evidence, to be significant pursuant to the criteria set forth in subdivision (c) of Public Resources Code section 5024.1.

However, the project area retains sensitivity for buried tribal cultural resources due to the isolated prehistoric artifacts and cremation site previously documented within the records search area, as well as the project's proximity to the historic Desert Cahuilla village of La Mesa.

The proposed project is consistent with the GPU EIR, which directly addresses this sensitivity through the following applicable policies:[90]

- **Policy 10.4 (Mitigation and Preservation of Cultural Resources):** Requires development to avoid archaeological and paleontological resources whenever possible. If complete avoidance is not feasible, requires development to minimize and fully mitigate impacts to those resources.

- **Policy 12.2 (Tribal Coordination):** Requires notification of California Native American tribes and organizations of proposed projects that have the potential to adversely impact cultural resources.

Adherence to these policies ensures that any Tribal Cultural Resources encountered during project implementation would be appropriately avoided, minimized, or mitigated in coordination with local Native American groups. Because the proposed project is processed as a General Plan Consistency Analysis pursuant to CEQA Guidelines Section 15183 and Public Resources Code Section 21083.3, formal AB 52 tribal consultation is not required. With adherence to the applicable General Plan policies, impacts to Tribal Cultural Resources, as defined in Public Resources Code Section 21074, would be less than significant. As such, the project would be consistent with the analysis within the GPU EIR because it would not create new impacts, increase impacts, or introduce new information of substantial importance beyond that identified within the GPU EIR.

Conclusion:

With regards to the issue area of Cultural and Tribal Cultural Resources, the following findings can be made:

1. No peculiar impacts to the project or its site have been identified. The project area does not contain any historical, archaeological, or tribal cultural resources listed or eligible for listing in any federal, state, or local register.

2. There are no potentially significant off-site and/or cumulative impacts which were not discussed in the City of Coachella General Plan 2035 Program EIR. The Program EIR adequately addressed the potential for discovery of buried prehistoric and historic resources within the planning area, including areas of Native American sensitivity.

3. No substantial new information has been identified which results in an impact more severe than anticipated by the City of Coachella General Plan 2035 Program EIR. The records search, Sacred Lands File search, and tribal outreach conducted by CRM Tech are consistent with the findings and assumptions of the

90 *Id*., at 07-10, 07-12.

Program EIR.

4. No mitigation measures were identified in the GPU EIR for historical or archaeological resources. Compliance with General Plan Policies 10.3, 10.4, 10.5, 12.1, 12.2, 12.4, 12.5, 12.6, and 12.7 ensures that potential impacts to cultural and tribal cultural resources would remain less than significant.

6. ENERGY -- Would the project:	Project Peculiar Impact that is not Substantially Mitigated by Uniformly Applied Policies	Significant Impact not Analyzed as Significant in the GP EIR	Potentially Significant Offsite or Cumulative Impact not Discussed in the GP EIR	Adverse Impact More Severe based on Substantial New Information	No New Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☐	☐	☒
b) Conflict with or obstruct a state or local plan for renewable energy of energy efficiency?	☐	☐	☐	☐	☒

Sources: The City of Coachella 2035 General Plan, 2015; City of Coachella Climate Action Plan, 2014; California Energy Consumption Database, California Energy Commission, 2025; Greenhouse Gas Analysis, Urban Crossroads, Inc. November 2025[91] (Appendix E); U.S. Energy Information Administration, 2025.

Energy use was not specifically analyzed within the GPU EIR as a separate issue area under CEQA. At the time, Energy Use was contained within Appendix F of the CEQA Guidelines and since then has been moved to the issue areas within Appendix G of the CEQA Guidelines. However, the issue of energy use in general was discussed within the GPU and GPU EIR within the Sustainability and Natural Environment Element. The analysis below specifically evaluates the energy use of the project for informational purposes.

a) **Less than Significant Impact.** The project site occupies approximately 87 acres of land west of Van Buren Street, south of Avenue 52, and east of Calhoun Street in the City of Coachella. The project proposes a mixed-use development consisting of residential, resort, and recreational uses with 162 two-story single-family residences, 240 condo hotel cottages, Crystal Lagoon water features, a lake, restaurants, a beach club, event space, pop-up shops, outdoor amphitheater, pools, recreation areas, and kids play spaces. Total buildout will result in 402 units, private sector uses ((i.e., onsite resort amenities, recreational courts, spa/pool, lagoon and water features, bar and entertainment, library, restaurant), approximately 170,000 square feet of public sector uses (i.e., beach club, bar, restaurant, etc.), and approximately 12 acres of water features. Associated improvements include pedestrian walkways and sidewalks, and paved drive aisles and parking spaces.

According to the City of Coachella's Climate Action Plan (CAP), energy is used for heating and cooling, transportation, manufacturing, and producing food.[92] The most common sources of energy include fossil fuels like oil, gasoline, natural gas, and coal. The consumption of these energy sources leads to the production of greenhouse gas (GHG) emissions. In 2010, total GHG emissions in Coachella were approximately 382,787 metric tons (MTCO2e), a 22 percent increase over 2005 emissions of 312,628 MTCO2e.[93] This number accounts for direct emissions from the on-site combustion of fuels and the combustion of fuel in vehicles, as well as indirect emissions associated with community electricity consumption, and emissions from solid waste generated, crop management and water consumed by Coachella. The residential sector was the third largest producer of GHG emissions within the City, after transportation and commercial/industrial. The City of Coachella established various methods to reduce energy-related GHG emissions produced by the City in the CAP.

Electricity is provided to the City of Coachella by Imperial Irrigation District (IID). IID is the sixth-largest utility in California, has an energy service area of 6,471 square miles, serving more than 166,000 customers and controlling more than 1,100 megawatts (MW) of energy.[94] Electricity is delivered through high voltage

91 Greenhouse Gas Analysis, Urban Crossroads, Inc. November 2025 (Appendix E).
92 City of Coachella, CAP, at 1 (April 22, 2015).
93 City of Coachella, GPU Draft EIR, Greenhouse Gases, at 4.12-4, 4.12-7; *see also* City of Coachella, General Plan Update 2035: Existing Conditions, at 03-17 (April 22, 2015).
94 Imperial Irrigation District, Power: About IID Power (2025), https://www.iid.com/power.

transmission and low voltage distribution power lines. Distribution power lines transport anywhere from 4 kV to 69 kV, while transmission lines can transport 69 kV to 765 kV of electricity. Distribution power poles lie on the northern boundary of the project.

The Southern California Gas Company (SoCalGas or the Gas Company) provides natural gas to the City of Coachella, including the project site. Natural gas is used primarily for space and water heating, as well as cooking. High pressure distribution pipelines operate at pressures above 60 pounds per square inch (psi) and deliver gas in smaller volumes to the lower pressure distribution system.

The project is expected to consume energy in the form of electricity, natural gas, and petroleum during project construction and operation. In November 2025, a Greenhouse Gas Analysis was prepared by Urban Crossroads, Inc. to evaluate project-related construction and operational emissions (Appendix E). Urban Crossroads utilized the most recent version of California Air Pollution Control Officers Association's (CAPCOA) modelling resource (CalEEMod 2022.1.1.30) to calculate construction-source and operational-source emissions and energy consumption.

Electricity

According to the California Energy Commission (CEC), Riverside County consumed approximately 17,418 million kWh (GWh) in 2024.[95] Electricity is provided to the City of Coachella, and the project site, by IID. In 2024, IID's service area consumed 3,645 million kWh (GWh) of electricity.[96] Electricity use resulted in the second largest emissions produced community-wide, behind petroleum (discussed further below).

Construction

Temporary electrical power for lighting and electronic equipment, such as computers inside interim construction trailers, would be provided by IID. Electricity consumed for onsite construction trailers, which are used by managerial staff during the hours of construction activities, and electrically powered hand tools are expected to use a minimal amount of electricity. However, the electricity used for such activities would be temporary and negligible. Most energy used during construction would be from petroleum consumption (discussed further below).

Operation

The project proposes the operation of 162 single family units, 240 condo hotel cottages, recreational amenities (i.e., restaurants, bar, event spaces, kids play areas, spas, etc.), 12 acres of water features, and associated improvements (i.e., pedestrian sidewalks, and paved aisles, parking spaces, and landscaping). According to the CalEEMod calculations the project is expected to generate the demand for approximately 13,497,884 kWh of annual unmitigated electricity use for the site and approximately 6,862,266 kWh/yr of annual mitigated electricity use, as depicted in the table below.

Table VI-1 Operational Electricity Demand

Land Use	Electricity Use (kWh/yr)	
	Unmitigated	Mitigated
Single Family Housing	1,545,056	768,447
Condo/Townhouse	1,790,418	893,101

95 California Energy Commission, *Energy Consumption Data Files* — "AGG_CONSUMPTION_ELEC_COUNTY_TBL_ada.xlsx" (county/year totals; data last updated Sept. 5, 2025), http://www.energy.ca.gov/files/energy-consumption-data-files.
96 U.S. Energy Info. Admin., *Electric Sales, Revenue & Average Price*, Table T10 (All sectors, by state & utility) (with data for 2024) (Oct. 7, 2025), https://www.eia.gov/electricity/sales_revenue_price/pdf/table_10.pdf.

Movie Theater (No Matinee)[97]	8,438,137	4,219,069
Quality Restaurant	1,485,248	742,624
User Defined Residential	0	0
Parking Lot	239,025	239,025
Recreational Swimming Pool	0	0
Other Asphalt Surfaces	0	0
Total	**13,497,884**	**6,862,266**

Sources: Greenhouse Gas Analysis, Urban Crossroads, Inc. November 2025 (Appendix E).

The project would not result in the use of excessive amounts of electricity and would not result in the need to develop additional sources of energy. Even though energy use at the project would not be excessive, the project would incorporate several measures directed at minimizing energy use. These measures include applying energy efficient design building shells and building components, such as windows, roof systems, electrical lighting systems, and heating, ventilating, and air conditioning systems to meet the most current Title 24 California Building Standards Code, as well as providing low-flow appliances and covered parking stalls. Therefore, reducing the use of electricity during project operation.

The proposed project has received a will-serve letter from IID and would contribute financially to a new regional substation to provide electrical power to the project site. The project would also incorporate solar generation and battery storage systems to help offset electricity demand from the regional grid. The project-specific Greenhouse Gas Analysis (Appendix E) recommends 50 percent of electricity for single-family homes, condos/townhomes, movie theaters, and restaurants to be provided by on-site solar systems/photovoltaic systems (GHG-2). This is consistent with the City Climate Action Plan, which recommends the incorporation of solar/photovoltaic systems into all new construction. For single family homes built prior to 2020, provide 10 percent of the projected electricity demand via onsite solar photovoltaics. For single family homes built between 2020 and 2035, provide 25 percent of the projected electricity demand via onsite solar photovoltaics. For non-residential and multi-family residential buildings built prior to 2020, provide 20 percent of the project electricity demand via onsite solar photovoltaics. For non-residential and multi-family residential buildings built between 2020 and 2035, provide 50 percent of the project electricity demand via onsite solar photovoltaics. It is likely that the majority of the solar/photovoltaic systems will occur on rooftops, with the battery storage being mounted nearby. These systems would reduce reliance on off-site energy sources and support overall energy efficiency. In the future, the project may consider implementing a microgrid or geothermal system to further offset demand on the grid; however, these features are not part of the current project proposal and are not evaluated as a component of the project at this time. Electrical improvements will take place within the boundaries of the project and will not result in significant environmental impacts.

Natural Gas

Natural gas is provided to the City of Coachella, and the project site, by SoCalGas. According to the CEC, SoCalGas provided 4,959 millions of therms in 2024, while Riverside County consumed 426.7 millions of therms in 2024.[98]

97 The project does not propose the construction or operation of a movie theater. The "Movie Theater (No Matinee)" land use subtype was used in the modeling, which, per the CalEEMod User Guide, consist of audience seating, single or multiple screens and auditoriums, a lobby and a refreshment stand. Movie theaters without matinees show movies on weekday evenings and weekends only; there are no weekday daytime showings. This land use subtype was used in the modelling because it was the closest use to the Project's operation of the beach club use, since the beach club will not open sooner than 11:00 a.m., similar to a movie theater, with a majority of the trips arriving in close duration to each other. Both the movie theater and the beach club are entertainment uses open all day and night, where people come and stay for a few hours, and arrival and departure times are spread out throughout the day with multiple rounds of event/movie turnover.

98 California Energy Commission, *California Natural Gas Consumption Dashboard – Annual Agency and County Totals* (data last updated Sept. 5, 2025), https://data.cnra.ca.gov/dataset/california-natural-gas-consumption.

Note, the CalEEMod program uses thousand British thermal units (kBTU) to quantify natural gas use, where 1 therm equals approximately 99.976 kBTU. For example, an approximately 600,000 therm increase of natural gas consumption between 2005 and 2010 is equivalent to approximately 59,985,680 kBTU. Thousand British thermal units will be used when analyzing the potential project-related natural gas consumption below.

Construction

Natural gas is not anticipated to be required during construction of the project. Fuels used for construction would primarily consist of diesel and gasoline, which are discussed under the following petroleum subsection. Any minor amounts of natural gas that may be consumed because of project construction would be temporary and negligible and would not have an adverse effect.

Operation

The consumption of natural gas typically occurs during building heating, water heating, and cooking, which will occur during project operation. The project's expected natural gas consumption was calculated using the CalEEMod default values. Based on the CalEEMod calculations, the project is estimated to consume approximately 11,356,473 kBTU of natural gas annually during operation of the restaurant and recreational uses. This is displayed in Table VI-2, Operational Natural Gas Demand, below.

Table VI-2 Operational Natural Gas Demand[1]

	Natural Gas Use
Land Use	kBTU/yr
Single Family Housing	0
Condo/Townhouse	0
Movie Theater (No Matinee)[99]	9,024,353
Quality Restaurant	2,332,120
User Defined Residential	0
Parking Lot	0
Recreational Swimming Pool	0
Other Asphalt Surfaces	0
Total	11,356,473

Sources: Greenhouse Gas Analysis, Urban Crossroads, Inc. November 2025 (Appendix E).
CalEEMod Modeling utilized for electricity consumption during operation.
Note: 1. Mitigated and unmitigated natural gas use is the same.

As such, the project would result in a long-term increase in demand for natural gas. However, the project would be designed to comply with Title 24, Part 6 of the California Code of Regulations (CCR). Moreover, the residential buildings (single-family homes and condos/townhomes) will be fully electrified, eliminating the use of natural gas. This is identified in Measure GHG-1 (see Appendix E, Greenhouse Gas Analysis, and the Greenhouse Gas Emissions discussion). Natural gas consumption would be appropriate and not place a significant burden on SoCalGas services.

Petroleum

99 *See Id. 85.* The project does not propose the construction or operation of a movie theater. The "Movie Theater (No Matinee)" land use was used in the modeling because the use is similar to those proposed in the project.

Petroleum is the main energy source for transportation in the U.S., accounting for 89 percent in 2025.[100] In 2024, California consumed 26.4 billion gallons of petroleum, including 13.6 billion gallons of finished gasoline and 3.5 billion gallons of diesel.[101] Gasoline and other vehicle fuels are commercially provided commodities and would be available to the project via commercial outlets.[102] Technological advances, market trends, consumer behavior, and government policies could result in significant changes to fuel consumption by type and total. Various policies, rules, and regulations have been enacted to improve vehicle fuel efficiency, promote the development and use of alternative fuels, reduce transportation-source air pollutants and GHG emissions, and reduce vehicle miles traveled (VMT) at federal and state levels. Technological advances have made use of other energy resources or alternative transportation modes increasingly feasible, as market forces have driven the price of petroleum products steadily upward.

The transportation sector within the City of Coachella produced approximately 206,909 $MTCO_2e$ in 2010, being the largest contributor to GHG emissions in the City.[103] Overall, the transportation sector emitted 54 percent of the City's GHG emissions in 2010. Transportation sector emissions were estimated in the City's CAP by applying conversion factors to daily VMT. It was estimated that 75 percent of the GHG emissions from the transportation sector were the result of burning gasoline, and the remainder resulted from burning diesel fuel.[104]

Construction

Petroleum would be consumed throughout construction of the project. Fuel consumed by construction equipment would be the primary energy resource expended over the course of construction, while VMT associated with the transportation of construction materials and construction worker commutes would also result in petroleum consumption. Heavy-duty equipment used for project construction would rely on diesel fuel, as would haul trucks involved in off-hauling materials from excavation. Construction workers are expected to travel to and from the project site in gasoline-powered passenger vehicles. There are no unusual project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities or use of equipment that would not conform to current emission standards (and related fuel efficiencies).

Heavy-duty construction equipment of various types would be used during each phase of construction. CalEEMod was used to estimate construction equipment usage. Fuel consumption from construction equipment was estimated by converting the total CO2 emissions from each construction phase to gallons using the conversion factors shown in the tables included below.

Table VI-3, Construction Worker Gasoline Demand (below), illustrates the demand of gasoline fuel for construction worker trips to and from the site. Construction worker demand equals a total of 236,744.6 gallons of gasoline during operation of the project.

Table VI-3 Construction Worker Gasoline Demand

Phase	Days	Trips	Miles	VMT	KgCO2e	Kg/CO2/Gallon[1]	Gallons
Demolition	75	20	18.5	27,750	9,110	8.89	1,024.7
Site Preparation	45	22.5	18.5	18,731.25	6,130	8.89	689.5
Grading	115	27.5	18.5	58,506.25	18,800	8.89	2,114.7
Building Const.	900	361	18.5	6,010,650	1,877,000	8.89	211,136.1
Paving	110	15	18.5	30,525	9,320	8.89	1,048.4

100 U.S. Energy Information Administration, Use of Energy Explained – Energy Use for Transportation (2025). https://www.eia.gov/energyexplained/use-of-energy/transportation.php.
101 *See* California Energy Commission, California Gasoline Data, Facts & Statistics (2024), https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-gasoline-data-facts-and-statistics; *see also* California Energy Commission, *Diesel Fuel Data, Facts & Statistics* (2024), https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/diesel-fuel-data-facts-and-statistics.
102 *Ibid.*
103 City of Coachella, GPU Draft EIR, at 4.12-4 & tbl. 4.12-1.
104 City of Coachella, CAP, at 24 (April 22, 2015).
80237.00027\45404105.1
80237.00027\45491467.1

Arch. Coating	450	72.2	18.5	601,065	184,300	8.89	20,731.2
Total							**236,744.6**

Note: 1. https://www.epa.gov/energy/greenhouse-gases-equivalencies-calculator-calculations-and-references
https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator

Table VI-4, Construction Vendor Diesel Fuel Demand (below), illustrates the demand of diesel fuel for construction vendor trips to and from the site. These trips are associated with the delivery of construction materials during the construction phase. Construction vendor demand equals a total of 92,518.6 gallons of diesel fuel.

Table VI-4 Construction Vendor Gasoline Demand

Phase	Days	Trips	Miles	VMT	KgCO2e	Kg/CO2/Gallon	Gallons
Demolition	75	7	10.2	5,355	7,710	10.18	757.4
Site Preparation	45	4	10.2	1,836	2,630	10.18	258.3
Grading	115	10	10.2	11,730	16,500	10.18	1,620.8
Building Const.	900	74	10.2	679,320	915,000	10.18	89,882.1
Paving	110	0	10.2	0	0	10.18	0
Arch. Coating	450	0	10.2	0	0	10.18	0
Total							**92,518.6**

Table VI-5, Construction Equipment Diesel Fuel Demand (below), displays the demand for diesel fuel for construction vehicles on-site during the various construction phases. Construction equipment diesel demands equals a total of 282,750.5 gallons of diesel fuel.

Table VI-5, Construction Equipment Diesel Fuel Demand

Phase	Days	Equipment Units	KgCO2e	Kg/CO2/Gallon	Gallons
Demolition	75	8	169,000	10.18	16,601.2
Site Preparation	45	9	148,400	10.18	14,577.6
Grading	115	11	476,000	10.18	46,758.4
Building Const.	900	16	1,973,000	10.18	193,811.4
Paving	110	6	75,600	10.18	7,426.3
Arch. Coating	450	1	36,400	10.18	3,575.6
Total					**282,750.5**

Table VI-6, Hauling Diesel Fuel Demand (below), illustrates the demand of diesel fuel for hauling trips to and from the site. These trips are associated with the removal of materials (i.e., dirt, vegetation, etc.) during the demolition phase. Hauling demand equals a total of 221 gallons of diesel fuel.

Table VI-6 Hauling Diesel Fuel Demand

Phase	Days	Trips	Miles	VMT	KgCO2e	Kg/CO2/Gallon	Gallons
Demolition	75	0.95	20	1,425	2,250	10.18	221.0
Total							**221.0**

Overall, the project is estimated to consume approximately 236,744.6 gallons of gasoline and 375,490.1 gallons of diesel fuel during the project's construction phases. In total, the project will consume approximately 612,234.7 gallons of petroleum. Petroleum use is necessary to operate construction equipment. Recent amendments to the In-Use Off-Road Diesel-Fueled Fleets Regulation were approved by CARB in 2022. The 2022 amendments expand requirements that any added vehicles be cleaner and accelerate the phase-out of older, higher-emitting engineers from existing fleets. Specifically, the 2022 amendments require that added vehicles be cleaner than previously required and that older, dirtier engines be removed from operation. In effect, only

Tier 4 or cleaner engines may be added to large and medium fleets starting January 1, 2024.[105] Fleet owners are required to report all vehicles to CARB through their online reporting system (DOORS).[106] The 2022 amendments require that fleets no longer operate vehicles with Tier 0, 1 or 2 off-road engines and comparable on-road vehicles over a 12-year period, between 2024 and 2036. The vehicle emissions standards will reduce both tailpipe and evaporative emissions from passenger cars, light-duty trucks, medium duty passenger vehicles, and some heavy-duty vehicles. Due to CARB's In-Use Off-Road Diesel-Fueled Fleets Regulation and amendment, it is anticipated that construction equipment will include Tier 3 and 4 engines, therefore would be newer off-road equipment units.

The energy used during the construction of the project would be limited to the development of the project and would not require long-term petroleum use. Additionally, there are no unusual project characteristics or construction processes that require the use of equipment that would be more energy intensive than is used for comparable activities or use of equipment that would not conform to current emissions standards (and related fuel efficiencies). Thus, project construction would not consume petroleum in a wasteful or inefficient manner.

Operation

Lowering transportation emissions requires making vehicles and their fuels cleaner, reducing the length of driving trips, managing the demand for travel, and providing alternatives such as walking, biking, and transit for travel. According to the Coachella CAP, in 2010 the City produced approximately 900,000 vehicle miles traveled each day, producing 180,078 MTCO2e from transportation-related emissions.[107]

According to the figures provided by the CalEEMod calculations, the project would have an estimated annual VMT of 12,144,280, depicted in Table VI-7 below. Total mobile source CO2e is 3,500 MT per year, or 3,550,000 kg per year. CalEEMod assumes 92.5 percent of VMT burns gasoline, while the remaining 7.5 percent burn diesel. Thus, of the 3,550,000 kg of mobile emissions, 3,283,750 kg is generated by gasoline combustion, and 266,250 kg is generated by diesel combustion. The project would have an annual gasoline demand of 369,375.7 gallons and an annual diesel demand of 26,154.2 gallons, as displayed in the following Table VI-8.

Table VI-7 Operational Petroleum Demand

	Annual VMT
Combined Land Uses	12,144,280
Total	12,144,280

Table VI-8 Operational Annual Petroleum

	Annual VMT	**KgCO2e**	**Kg/CO2/Gallon**	**Annual Gallons**
Gasoline	11,233,459	3,283,750	8.89	369,375.7
Petroleum	910,821	266,250	10.18	26,154.2
Total				395,529.9

Over the lifetime of the project, the fuel efficiency of vehicles in use is expected to increase, as older vehicles are replaced with newer, more efficient models. Therefore, it is expected that the amount of petroleum consumed due to the vehicle trips to and from the project site during operation would decrease over time. Additional advancement of technology includes the use of plug-in hybrid and zero emission vehicles in California, which will also decrease the amount of future petroleum consumed in the state. With the foregoing, operation of the project is expected to use decreasing amounts of petroleum over time due to advances in fuel economy.

105 Amendments to the In-Use Off-Road Diesel-Fueled Fleets Regulation, California Air Resources Board (2023), https://ww2.arb.ca.gov/resources/fact-sheets/fact-sheet-added-vehicle-restrictions-and-tier-phase-out-requirements.
106 In-Use Off-Road Diesel-Fueled Fleets Regulation, California Air Resources Board (2026), https://ww2.arb.ca.gov/our-work/programs/use-road-diesel-fueled-fleets-regulation/about.
107 City of Coachella, CAP, at 46 (Apr. 22, 2015).

Additionally, the proposed mixed-use project would reduce VMT traveled in the area since it is likely that the residents and visitors of the site would stay on the project site and enjoy the onsite restaurants and amenities. Commercial uses are located approximately 1 mile east of the project along Harrison Street.

Bus services, provided by SunLine Transit, will also be accessible to the project. Bus Route 8 provides the closest bus stops to the project, located a mile east and north of the project, at Cesar Chavez and Avenue 52, and Avenue 50 and Van Buren, respectively. Bus Route 8 travels from Coachella to North Indio, with connections to other routes throughout the Coachella Valley. The availability of bus lines and services will reduce the amount of potential VMT created by the proposed project.

Although the project would result in an increase in petroleum use during construction and operation compared to the existing, vacant conditions, the project would comply with the City's GPU, City Municipal Code, and CAP regarding VMT reduction. Project Design Feature 3 has been provided and requires the project applicant to ensure that any business operating within the proposed project (including both construction and operations of the proposed project) with 20 or more full-time onsite employees shall implement at least one of the following programs: (1) Pre-tax election program to allow employees to exclude wages for commuting costs for transit or vanpools; (2) An employer supplied transit pass; (3) Employer provided transit; or (4) Other, similar demand management programs.[108] With implementation of Project Design Feature 3, the project will be consistent with the transportation demand management in the CAP to reduce automobile trip generation related to employment. Additionally, the project would provide a pedestrian access network that internally links the proposed commercial uses to the surrounding uses. Providing a pedestrian access network to link areas within the project site and surrounding areas encourages people to walk instead of drive, therefore reducing the regional VMT and associated vehicular-source emissions. Given these considerations, petroleum consumption associated with the project operation would not be considered excessive.

Development and operation of the proposed project would increase demand for energy in the project area and in the service areas of IID and SoCalGas Company. However, based on the findings described above, project construction and operation are not anticipated to result in potentially significant impacts due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation. Therefore, the project would be consistent with the analysis within the GPU EIR because it would not create new impacts, increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

b) **Less than Significant Impact**. The approximately 87-acre project site proposes the development of 162 single family units, 240 condo hotel units, recreational amenities, 12 acres of water features, and associated improvements (i.e., pedestrian sidewalks, and paved aisles, parking spaces, and landscaping). As stated in the previous discussion, project development and operation are not anticipated to use an unnecessary or wasteful amount of energy resources. To ensure the conservation of energy, the state of California and the City of Coachella implement various regulations in order to be more energy efficient and reduce the amount of GHG emissions. Some of the state-wide and local regulations are listed below.

State Regulations

Assembly Bill 32

Assembly Bill 32 (AB 32) was signed in 2006 to establish and reduce the amounts of GHGs being emitted on a state-wide level.[109] Specifically, AB 32 requires a reduction of emissions to 1990 levels by 2020.[110] It plans to do this by establishing an annual reporting program for significant sources. Energy efficiency goals listed in AB 32 include maximizing energy efficiency building and appliance standards, pursuing additional efficiency efforts including new technologies, and pursuing new policy and implementation mechanisms.

108 COVA Greenhouse Gas Analysis, Urban Crossroads, Inc., 2026. Appendix E, at 59.
109 Cal. Air Res. Bd., AB 32: The California Global Warming Solutions Act of 2006 (Sept. 28, 2018).
110 Cal. Health & Saf. Code § 38550 (West 2025).

Senate Bill 32

Senate Bill 32 (SB 32) was signed in 2016 and requires the reduction of greenhouse gas emissions to 40 percent below 1990 levels by the year 2030. SB 32 stresses the continued effort to reduce greenhouse gas emissions to protect all areas of the state, especially disadvantaged communities, as those communities are affected first by the impacts of climate change.

CARB Scoping Plan

A specific requirement of AB 32 was to prepare a Climate Change Scoping Plan for achieving the maximum technologically feasible and cost-effective GHG emission reduction by 2020.[111] CARB developed an AB 32 Scoping Plan that contains strategies to achieve the 2020 emissions cap. The initial Scoping Plan was approved in 2008, and contains a mix of recommended strategies that combined direct regulations, market-based approaches, voluntary measures, policies, and other emission reduction programs calculated to meet the 2020 statewide GHG emission limit and initiate the transformations needed to achieve the State's long-range climate objectives.[112] Updates to the Scoping Plan occurred in 2014,[113] 2017,[114] and 2022.[115]

Assembly Bill 1493/Pavley Regulations

California Assembly Bill 1493 (AB 1493), enacted on July 22, 2002, required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks.[116] In 2005, CARB submitted a "waiver" request to the EPA from a portion of the federal Clean Air Act in order to allow the State to set more stringent tailpipe emission standards for CO2 and other GHG emissions from passenger vehicles and light duty trucks.[117] On December 19, 2007, the EPA announced that it denied the "waiver" request.[118] On January 21, 2009, CARB submitted a letter to the EPA administrator regarding the State's request to reconsider the waiver denial.[119] The EPA approved the waiver on June 30, 2009.[120]

Executive Order S-3-05

Executive Order (EO) S-3-05, passed in 2005, established reduction targets of an 80 percent of 1990 levels reduction by 2050, and created agencies to achieve these targets.[121] The passage of this regulation requires the use of more energy efficient practices regarding building development and operation in order to reduce the amount of GHGs produced.

Senate Bill 1389 and California Integrated Energy Policy Report

Senate Bill 1389 (SB 1389) required the CEC to prepare an integrated energy plan every other year that analyzed electricity, natural gas, and transportation fuel consumption. SB 1389 was passed in 2002. The CEC is responsible for preparing the Integrated Energy Policy Report (IEPR), which identifies major trends related to energy supply and demand in California.[122] The IEPR provides policy recommendations to conserve resources, protect the environment, and ensure public health and safety, and maintain a healthy economy. The IEPR calls for the state to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this

111 *Id.* at § 38561(h).
112 CARB, Climate Change Scoping Plan: A Framework for Change 4 (Dec. 2008).
113 CARB, *First Update to the Climate Change Scoping Plan* (May 22, 2014), Resolution 14-16.
114 CARB, *California's 2017 Climate Change Scoping Plan* (Nov. 2017), Resolution 17-46.
115 CARB, *2022 Scoping Plan for Achieving Carbon Neutrality* (Dec. 15, 2022), Resolution 22-21.
116 Cal. Health & Saf. Code § 43018.5 (West 2025).
117 Cal. Air Res. Bd., California's Greenhouse Gas Vehicle Emission Standards under Assembly Bill 1493 of 2002 (Pavley) (2009).
118 U.S. Envtl. Prot. Agency, Letter to Governor Arnold Schwarzenegger from EPA Administrator Stephen Johnson Regarding California's Request for a Waiver of Pre-emption for Its Greenhouse-Gas Regulations (Dec. 19, 2007).
119 Congressional Research Service, California's Waiver Request under the Clean Air Act to Control Greenhouse Gases from Motor Vehicles (RL34099, Feb. 10, 2009) at 4.
120 U.S. Environmental Protection Agency, California State Motor Vehicle Pollution Control Standards; Notice of Decision Granting a Waiver of Clean Air Act Preemption for California's 2009 and Subsequent Model Year Greenhouse Gas Emission Standards for New Motor Vehicles, 74 Fed. Reg. 32744 (Jul. 8, 2009).
121 Cal. Exec. Order S-3-05, 2005 Cal. Exec. Order 3 (June 1, 2005).
122 California Energy Commission, Integrated Energy Policy Report, website accessed at https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report-iepr.

policy, the IEPR identifies a number of strategies, including assistance to public agencies and fleet operators and encouragement of urban designs that reduce VMT and accommodate pedestrian and bicycle access.

Title 20: Appliance Efficiency Standards

The CCR regulates the sale of appliances in California.[123] The Appliance Efficiency Regulations include standards for both federally regulated appliances and non-federally regulated appliances. Twenty-three categories of appliances are included in the scope of these regulations. The standards within these regulations apply to appliances that are sold or offered for sale in California, except those sold wholesale in California for final retail sale outside the state and those designed and sold exclusively for use in recreational vehicles or other mobile equipment.

Title 24: Building Energy Efficiency Standards and CALGreen Building Standards Code

In addition to Title 20 of the CCR, Parts 6 and 11 of Title 24 also outline energy efficient building designs for new development. The CCR's Building Energy Efficiency Standards (Title 24, Part 6) and the CALGreen Building Standards Code (Title 24, Part 11) establish mandatory guidelines and standards requiring more energy efficient new and existing developments. The CEC adopted the Building Energy Efficient Standards for all new residential and nonresidential construction to reduce GHGs as a part of the California Building Code, Title 24. The Building Energy Efficiency Standards emphasize the use of heat pumps for space heating and water heating, and it encourages the use of photovoltaic and battery storage systems and other demand flexible technology to operate together with heat pumps to enable California buildings to be responsive to climate change. Title 24, Part 11, establishes design and development methods that include environmentally responsible site selection, building design, building siting, and development to protect, restore, and enhance the environmental quality of the site and respect the integrity of adjacent properties. The proposed project will be required to comply with the state implemented standards for energy efficient new developments.

California's Renewable Portfolio Standards

The California Renewable Portfolio Standards will reduce GHG emissions by requiring utility companies, such as IID, to switch from non-renewable resources, such as coal-fired power plants, to renewable resources, such as wind turbines and solar power.[124]

Low Carbon Fuel Standard

The Low Carbon Fuel Standard (LCFS), or Executive Order (EO) S-1-07, establishes a low carbon fuel standard for transportation fuels in California.[125] EO S-1-07 was enacted to reduce carbon intensity in transportation fuels as compared to conventional petroleum fuels, such as gasoline and diesel. It requires that the carbon intensity of California's transportation fuels be reduced at least 10 percent by 2020.

Clean Car Standards

The Clean Car Standards, otherwise known as Pavley 1493, sets more stringent vehicle fuel economy standards for cars and light trucks that reduce greenhouse gas emissions.[126] In 2009, the federal government enabled the state of California to enforce stricter tailpipe emissions limits on new passenger vehicles.[127] In 2010, the US EPA and the Department of Transportation's National Highway Safety Administration announced new vehicle GHG emission standards and corporate average fuel economy standards that reinforce California's standard.[128]

CARB's In-Use Off-Road Diesel-Fueled Fleets Regulation and Amendments

123 Cal. Code Regs. tit. 20, §§ 1601-1608 (Appliance Efficiency Regulations).
124 Cal. Energy Comm'n, *Renewables Portfolio Standard – RPS* (2025), https://www.energy.ca.gov/programs-and-topics/programs/renewables-portfolio-standard.
125 Cal. Exec. Order S-01-07 (Jan. 18, 2007), *Low Carbon Fuel Standard for California*, available at https://climateactionnetwork.ca/wp-content/uploads/2011/06/CaliforniaExecutiveOrderLCFS2.pdf.
126 Cal. Air Res. Bd., *California's Greenhouse Gas Vehicle Emission Standards under Assembly Bill 1493 of 2002 (Pavley)*, at 1 (2009), https://ww2.arb.ca.gov/californias-greenhouse-gas-vehicle-emission-standards-under-assembly-bill-1493-2002-pavley.
127 U.S. Envtl. Prot. Agency, Notice of Decision Granting a Waiver of Clean Air Act Preemption for California's 2009 and Subsequent Model Year Greenhouse Gas Emission Standards for New Motor Vehicles, 74 Fed. Reg. 32744, 32744 (Jul. 8, 2009).
128 U.S. Envtl. Prot. Agency & Nat'l Highway Traffic Safety Admin., *Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards; Final Rule*, 75 Fed. Reg. 25,324, 25,324 (May 7, 2010).

CARB's recent 2022 amendments to the In-Use Off-Road Diesel-Fueled Fleets Regulation expand requirements that any added fleet vehicles be cleaner and accelerate the phase-out of older, higher-emitting engines from existing fleets. The 2022 amendments require that added vehicles be cleaner than previously required and that older, dirtier engines be removed from operation. In effect, only Tier 4 or cleaner engines may be added to large and medium fleets starting January 1, 2024.[129] Fleet owners are required to report all vehicles to CARB through their online reporting system (DOORS).[130] The 2022 amendments require that fleets no longer operate vehicles with Tier 0, 1 or 2 off-road engines and comparable on-road vehicles over a 12-year period, between 2024 and 2036. The vehicle emissions standards will reduce both tailpipe and evaporative emissions from passenger cars, light-duty trucks, medium duty passenger vehicles, and some heavy-duty vehicles. Due to CARB's In-Use Off-Road Diesel-Fueled Fleets Regulation and amendments, it is anticipated that construction equipment will include Tier 4 engines, therefore would be newer off-road equipment units.

City Regulations

The City of Coachella Climate Action Plan

The City of Coachella adopted their CAP in 2015 in order to achieve community-wide GHG reductions.[131] The CAP quantifies emissions from the build-out of the City and includes additional policies and implementation actions to help Coachella further reduce emissions. The CAP analyzes policies from the GPU that reduce energy use, VMT, resource consumption, and GHG emissions, comparing the emissions to voluntary statewide emissions targets outlined in the California Climate Action Scoping Plan and Executive Order S-03-05. In compliance with the statewide emission targets, the City established a per service population 2020 emissions reduction target of 15 percent below 2010 levels and a 2035 emissions reduction target of 49 percent below 2010 levels.[132]

The CAP organizes the General Plan policies into six strategies to reduce emissions reductions throughout the City: building and infrastructure energy efficiency, renewable energy generation, land use and transportation, vegetation and open space, solid waste, and water use.[133] According to the CAP, residential and non-residential buildings produce approximately 39 percent of Coachella's emissions and are a primary target for the CAP. The City plans to achieve this reduction through energy efficiency policies for homes, and businesses including energy performance targets to construct buildings 15 percent more energy efficient than Title 24 standards.

Coachella General Plan Update

Coachella's GPU emphasizes the importance of increasing energy conservation and efficiency and reducing energy consumption and emissions within its City. The various goals and policies outlined within the Sustainability and Natural Environment Element of the GPU focus on City development and its impact to climate change, energy, and water resources while presenting the goal to implement green building design into new developments in the City.[134] Reoccurring policies include GHG emissions reductions, water conservation methods, energy efficient building design, and implementation of renewable energy sources. Goal 2 specifically requires an energy efficient community that relies primarily on renewable and non-polluting energy sources.[135] Policies within this goal include building design strategies such as passive solar design, use of alternative energy, construction standards, and energy performance targets in order to create a more energy efficient community.

Another goal in the GPU is to establish efficient land use and transportation patterns in order to reduce emissions and VMT while improving air quality. The overall goal is to reduce energy consumption in the City to improve air quality, reduce GHG emissions, increase the quality of life for the City's residents.

129 Amendments to the In-Use Off-Road Diesel-Fueled Fleets Regulation, California Air Resources Board, 2023 https://ww2.arb.ca.gov/resources/fact-sheets/fact-sheet-added-vehicle-restrictions-and-tier-phase-out-requirements.
130 In-Use Off-Road Diesel-Fueled Fleets Regulation, California Air Resources Board, 2026. https://ww2.arb.ca.gov/our-work/programs/use-road-diesel-fueled-fleets-regulation/about.
131 City of Coachella, CAP, at 1 (Apr. 22, 2015).
132 *Id.*, at 1.
133 *Id.*, at 32.
134 City of Coachella, General Plan 2035: Sustainability & Natural Environment Element, at 07-1 – 07-2 (Apr. 22, 2015).
135 *Id.*, at 07-4.

Coachella Municipal Code

Similar to the City's CAP and GPU, the CMC also encourages the reduction of air pollution created by vehicle emissions. Chapter 12.40, Transportation Demand Management Program, of the CMC, is intended to protect the public health, welfare, and safety by reducing air pollution caused by vehicle trips and VMT. This chapter is intended to reduce emissions by requiring the development of a trip reduction and travel demand element to the congestion management plan (CMP), and it also requires the adoption and implementation of trip reduction and travel demand ordinances by local agencies.

The project proposes a mixed-use, residential, resort, and recreational community on 87 acres in the City of Coachella. The project will comply with state-implemented building standards such as those outlined in Title 20 and Title 24 of the California Code of Regulations. Energy efficient appliances, high efficiency lighting and covered parking stalls with photovoltaic solar facilities will be implemented during project operation. As stated in the previous discussion, project-related energy consumption and VMT created by the project are not anticipated to be substantial. Construction activities would require the use of equipment that would be more energy intensive than is used for comparable activities. Additionally, new construction equipment will comply with the Tier 3 and 4 program engines, per CARB's In-Use Off-Road Diesel-Fueled Fleets Regulation,[136] and therefore would be newer off-road equipment units.

The project would not impede the State's progress towards carbon neutrality by 2045 under the 2022 Scoping Plan. The project would be required to comply with applicable current and future regulatory requirements promulgated through the 2022 Scoping Plan. Some of the current transportation sector policies the project will comply with (through vehicle manufacturer compliance) include: Advanced Clean Cars II, Advanced Clean Trucks, Advanced Clean Fleets, Zero Emission Forklifts, Off-Road Zero-Emission Targeted Manufacturer Rule, Clean Off-Road Fleet Recognition Program, Amendments to the In-use Off-Road Diesel-Fueled Fleets Regulation, carbon pricing through the Cap-and-Trade Program, and the LCFS. As such, the project would be consistent with the 2022 Scoping Plan.

The project property is located in a built urban environment, surrounded by existing uses. Existing elementary schools, parks, and bus stops all lie within a half-mile radius of the project property. Pedestrian pathways that internally link all uses and connect to all existing planned external streets are proposed in the project design, which will assist in reducing potential project-related VMT.

The project has designated a potential on-site location for a substation as a contingency measure but based on current electrical infrastructure planning in the area, it is expected that the new substation will be constructed off-site in the area with new distribution conduits (if required) to be constructed in existing public road rights-of-way to serve the project. The project will contribute financially to a fair share contribution for a regional substation. The future IID substation is expected to serve multiple projects in the area, both within and outside the City of Coachella, and as an independent project, it will be subject to its own environmental review under CEQA once the substation project and location have been determined. The project would also incorporate solar generation and battery storage systems to help offset electricity demand from the regional grid. On-site solar systems will provide 50 percent of electricity for single-family homes, condos/townhomes, recreational uses, and restaurants. Additionally, all residential buildings (single-family homes and condos/townhomes) will be fully electrified, eliminating the use of natural gas. These systems would reduce reliance on off-site energy sources and support overall energy efficiency. In the future, the project may consider implementing a microgrid or geothermal system to further offset demand on the grid; however, these features are not part of the current project proposal and are not evaluated as a component of the project at this time. Electrical improvements will take place within the boundaries of the project and will not result in significant environmental impacts.

136 Amendments to the In-Use Off-Road Diesel-Fueled Fleets Regulation, California Air Resources Board, 2023. https://ww2.arb.ca.gov/resources/fact-sheets/fact-sheet-added-vehicle-restrictions-and-tier-phase-out-requirements
In-Use Off-Road Diesel-Fueled Fleets Regulation, California Air Resources Board, 2026. https://ww2.arb.ca.gov/our-work/programs/use-road-diesel-fueled-fleets-regulation/about.

The project property will comply with all applicable State and local guidelines and regulations regarding energy efficient building design and standards. Therefore, the proposed project is not anticipated to conflict or obstruct a state or local plan for renewable energy or energy efficiency. Less than significant impacts are expected.

The City is consistent with the State planning efforts for energy efficiency. Additionally, the project is consistent with the applicable strategies of the City of Coachella's Climate Action Plan, as well as CARB's Scoping Plan. The project property will comply with all applicable federal, state, and local guidelines and regulations regarding energy efficient building design and standards. Therefore, the proposed project is not anticipated to conflict or obstruct a state or local plan for renewable energy or energy efficiency. The project proposes transient lodging uses and will not have any long-term effects on an energy provider's future energy development or future energy conservation strategies. Less than significant impacts are expected. Therefore, the project would be consistent with the analysis within the GPU EIR because it would not create new impacts or increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

Conclusion:

With regards to the issue area of Energy Resources, the following findings can be made:

1. No peculiar impacts to the project or its site have been identified. The project would not result in wasteful, inefficient or unnecessary consumption of energy resources or conflict with a state or local plan for renewable energy or energy efficiency.
2. There are no potentially significant off-site and/or cumulative impacts which were not discussed by the GPU EIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the GPU EIR.
4. No mitigation measures are required within the GPU EIR. The project is consistent with the applicable strategies of the City of Coachella's Climate Action Plan, as well as CARB's Scoping Plan. The project property will comply with all applicable federal, state, and local guidelines and regulations regarding energy efficient building design and standards. The project specific impacts would be less than significant.

7. GEOLOGY AND SOILS -- Would the project:	Project Peculiar Impact that is not Substantially Mitigated by Uniformly Applied Policies	Significant Impact not Analyzed as Significant in the GP EIR	Potentially Significant Offsite or Cumulative Impact not Discussed in the GP EIR	Adverse Impact More Severe based on Substantial New Information	No New Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☐	☐	☒
i) Expose people or structures to potential substantial adverse effects, including risk of loss, injury or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	☐	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☐	☒
b) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☐	☒
c) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating direct or indirect substantial risks to life or property?	☐	☐	☐	☐	☒
d) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☐	☒

Sources: The City of Coachella 2035 General Plan, 2015; The City of Coachella 2035 General Plan Update EIR, 2015; Technical Background Report to the Safety Element of the General Plan for the City of Coachella, 2014; Geotechnical Investigation, Sladden Engineering, 2024; City of Coachella Municipal Code Chapter 15.66; Sustainable Groundwater Management Act (SGMA) Data Viewer; Federal Emergency Management Agency (FEMA) map number 06065C2262H, effective March 6, 2018; Riverside County General Plan EIR, 2015.

a) i. **Less than Significant Impact.** The GPU EIR concluded this impact to be less than significant.[137] The GPU EIR concluded that the GPU policies related to fault hazards in the Safety Element provides mechanisms for identifying and avoiding threats from fault rupture. Particularly Policy 1.1, which requires new development to be designed in accordance with the most recent California Building Code; Policy 1.2, which requires all new

137 City of Coachella, 2035 GPU Draft EIR, Geology and Soils, at 4.5-21.

habitable buildings and structures to be designed and built to be seismically resistant; and Policy 1.4, which promotes the strengthening of infrastructure and utilities to make them more earthquake resistant.[138]

After consulting the Alquist-Priolo Earthquake Fault Zone Map issued by the State Geologist, it was concluded that the subject property lies approximately 3.8 miles southeast of the closest Alquist-Priolo Earthquake Fault Zone. Therefore, the project site is not located on an active fault or within an Alquist-Priolo Earthquake Fault Zone.

Additionally, Sladden Engineering conducted a project-specific Geotechnical Investigation in July 2024 (Appendix D).[139] The purpose of the Geotechnical Investigation was to determine specific engineering characteristics of the near surface soil on the site to provide recommendations for foundation design and site preparation. The investigation included field exploration, drilling exploratory boreholes, laboratory tests, literature review, performing site-specific ground motion procedures, and engineering analysis. There were no signs of active surface fault rupture or secondary seismic effects on the project property during Sladden Engineering's site assessment. However, the Geotechnical Investigation provided recommendations for site clearing and foundation preparation to reduce the potential impacts of seismic events. These recommendations are consistent with Policy 2.1 and 2.2 in the GPU EIR. Policy 1.2 requires that all development proposals in the City to conduct, as a condition of approval, geotechnical and engineering geological investigations, prepared by state-certified professionals (geotechnical engineers and engineering geologists, as appropriate) following the most recent guidelines of the California Geological Survey and similar organizations, that address, as a minimum, the site-specific geologic hazards identified in the Technical Background Report. This includes the hazard of slope failure in, and adjacent to, hillside areas. Policy 2.2 requires all new developments to mitigate the geologic hazards that have the potential to have an impact on habitable structures and other improvements. The Geotechnical Investigation recommendations include but are not limited to the following:

1. Site Clearing: Any vegetation associated root systems, or underground utilities and debris, should be removed from the proposed building areas, and the resulting excavations should be properly backfilled.

2. Preparation of building and foundation areas: To provide firm and uniform bearing conditions, over-excavation and re-compaction throughout the proposed building areas is recommended. All artificial fill soil and native low density near surface native soil should be removed to a depth of at least 5 feet below existing grade or 4 feet below the bottom of the footings, whichever is deeper. Remedial grading should extend laterally for a maximum of five feet beyond the building limits. The exposed native soil should be scarified, moisture-conditioned to near optimum, and compacted to at least 90% relative compaction before placing new fill. The removed soil can then be replaced as compacted engineered fill.

3. Compaction: Soil used as engineered fill must be free of organic matter, debris, and other unsuitable materials. Fill should be placed in loose lifts no thicker than six inches. If imported fill is needed, it should be low to non-expansive and meet the following criteria: Plasticity Index < 12, Liquid Limit < 35, 15–35% passing the #200 sieve, and a maximum aggregate size of 3 inches. Both the subgrade and fill should be compacted to at least 90% relative compaction using suitable equipment. A Sladden Engineering representative should observe the exposed subgrade before placing fill. Compaction testing must be performed on each lift to verify proper placement.

4. Shrinkage and Subsidence: Volumetric shrinkage of the material that is excavated and replaced as controlled compacted fill should be anticipated. It is estimated that this shrinkage should be between 10 and 20 percent. Subsidence of the surfaces that are scarified and compacted should be between 1 tenth and 3 tenths of a foot. This will vary depending upon the type of equipment used, the moisture content of the soil at the time of grading and the actual degree of compaction attained.

138 City of Coachella, General Plan 2035: Safety Element, at 08-4 (Apr. 22, 2015).
139 Geotechnical Investigation, Sladden Engineering, 2024 (Appendix D).

These recommendations will be incorporated into project design and are subject to development plan approval by the City. These recommendations are consistent with policies in the GPU EIR relating to fault rupture.

In addition to the recommendations provided in the Geotechnical Investigation, the CMC reflects the possible impacts of potential seismic hazards in Chapter 15.66, Seismic Hazards Mitigation. New buildings are required to follow these codes to be structurally stronger and more likely to survive an earthquake, with the main purpose of preventing the collapse of buildings.

With the foregoing, risks associated with fault rupture at the project site are considered low since the project site is not located within the Alquist-Priolo Earthquake Fault Zone and will comply with required building codes, recommendations provided in the Geotechnical Investigation, and the implementation of Policies 1.1, 1.2, 1.4, 2.1 and 2.2. The project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, and impacts would be less than significant. The project would be consistent with the GPU EIR because it would not create new impacts, and there is no new information of substantial importance than that covered in the GPU EIR.

ii. **Less than Significant Impact.** The GPU EIR concluded this impact to be less than significant.[140] In order to reduce hazards associated with ground shaking impacts on people and buildings, the City of Coachella requires new buildings to be constructed in accordance with the most recent edition of the California Building Code (CBC) and CMC. The City implements the latest seismic safety design standards outlined in both the General Plan Technical Background Report, and the most recent CBC. Required adherence to the Uniform Building Code (UBC) for this seismic area will reduce the potential for nearly all impacts related to ground shaking for newly constructed buildings to a less than significant level. In particular, Section 15.08.030, Amendments to the California Building Code – Building Code Section 3403.5, includes requirements for new construction in Coachella that are more stringent than the standard CBC. Additionally, Chapter 15.66, Seismic Hazard Mitigation, identifies those buildings in the City that are most susceptible to earthquake damage and requires certain mitigation measures to protect the lives of persons working and residing in Coachella. Several proposed policies to minimize the effects of seismic ground shaking from the Safety Element of the GPU are listed below:[141]

1.3 **Strengthened and seismically retrofitted older structures.** Promote the strengthening of older structures to make them more resistant to seismic shaking. This includes encouraging owners of potentially hazardous buildings, such as pre-1952 wood-frame structures, concrete tilt-ups, pre-1971 reinforced masonry, soft-story, multi-family residential buildings and manufactured homes, to assess the seismic vulnerability of their structures and conduct seismic retrofitting as necessary to improve the buildings' resistance to seismic shaking.

1.5 **Seismically damaged buildings.** Prohibit any additions or reconstruction of structures damaged by seismic hazards, unless the structure is re-located to a safer area, or it can be demonstrated the proposed project and its occupants can be protected from future, recurrent damage by implementing mitigation measures not present in the original, damaged structure.

2.7 **Damaged buildings.** Prohibit any additions or reconstruction of habitable structures destroyed or damaged by geologic hazards unless the structure is relocated to a safer area or the applicant proves that the remedial measures proposed will mitigate the unsafe geological conditions so the proposed project and its occupants can be protected from future, recurrent damage.

The project site is in a seismically active region where earthquakes originating on local and regional seismic faults can produce severe ground shaking. Like most of the Coachella Valley, the project site has been subjected to past ground shaking by nearby faults. According to the project-specific Geotechnical Investigation, activity from nearby active faults is expected to produce strong seismic shaking during the design life of the proposed project. As stated in the previous discussion, the project will be required to implement the recommendations provided in the Geotechnical Investigations that will address the site's main geological concerns, which include

140 City of Coachella, 2035 GPU Draft EIR, Geology and Soils, at 4.5-24.
141 City of Coachella, General Plan 2035: Safety Element, at 08-4, 08-6 (Apr. 22, 2015).

the presence of artificial fill soil, loose and potentially compressible near-surface soil, and the potential for seismic settlement, mitigating the impact of strong seismic ground shaking. The project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking, and impacts would be less than significant. The project would be consistent with the GPU EIR because it would not create new impacts, and there is no new information of substantial importance than that covered in the GPU EIR.

iii. **Less than Significant Impact.** The GPU EIR concluded this impact to be less than significant.[142] The General Plan's Technical Background Report addresses the different forms of ground failure that the City of Coachella may be susceptible to after the event of an earthquake, including liquefaction, settlement, and slope failure. Liquefaction, according to the Technical Background Report, typically occurs in saturated, loose, fine- to medium-grained sandy to silty soils in the presence of ground accelerations of 0.2g, and groundwater within 50 feet below the ground surface. In the event of an earthquake, the increase of subsurface water pressure may fill the pores and increase subsurface water pressure, causing the soil to lose strength and behave like a liquid, potentially compromising the ground. The GPU listed the following policies in the Safety Element to address liquefaction:[143]

1.6 **Liquefaction assessment studies.** Require liquefaction assessment studies be conducted for all projects proposed in areas identified as potentially susceptible to liquefaction (Plate 1-3, Technical Background Report). These studies need to be conducted in accordance with the provisions in the Seismic Hazards Mapping Act and the most recent version of the California Geological Survey's Special Publication 117: Guidelines for Evaluating and Mitigating Seismic Hazards in California.

1.7 **Liquefaction mitigation.** In areas where geotechnical testing shows the sediments are susceptible to liquefaction, require the implementation of mitigation measures as a condition of approval. Liquefaction mitigation measures shall be applied to all habitable structures, bridges, roadways, major utility lines and park improvements to be built in these areas.

2.8 **Critical facility siting**. Regulate the location of new essential or critical facilities in areas that could be affected by geologic hazards by comparing, during the project feasibility stage, the location of the proposed facilities with the mapped areas in the Technical Background Report identified as susceptible to natural hazards.

According to the General Plan *Seismic Hazard Zones Map* in the Technical Background Report (Plate 1.3), the project site is in an area with high liquefaction susceptibility due to the youthful, unconsolidated sediments, and historically shallow groundwater within 30 feet of the ground surface.

According to the Sustainable Groundwater Management Act (SGMA) Data Viewer, one of the nearest monitored public wells to the project is identified as State Well 06S07E13J003S, approximately 1.2 miles south of the subject property.[144] Based on the most recent monitoring information, reported on March 11, 2025, the depth to groundwater at this well site was approximately 56.8 feet. During the boring tests for the project-specific Geotechnical Investigation, a groundwater depth of approximately 35 feet below the existing ground surface was found onsite. The native soil throughout the site consists primarily of fine-grained silty sand (SM), sandy silt (ML), and sandy clay (CL). Based on the current depth to groundwater and the generally uniform soil conditions underlying the site, differential seismic settlements are expected to be less than 1 inch over a horizontal distance of approximately 100 feet.

Settlement is a potential consequence of seismic activity and liquefaction, where the excess pore pressure generated by ground shaking and leading to liquefaction is associated with the tendency for loosely compacted, saturated soil to rearrange into a denser configuration during shaking. Dissipation of that excess pore pressure will produce volume decreases (termed consolidation or compaction) within the soil that may be manifested at

142 City of Coachella, 2035 GPU Draft EIR, Geology and Soils, at 4.5-25.
143 City of Coachella, General Plan 2035: Safety Element, at 08-4, 08-6 (Apr. 22, 2015).
144 SGMA Data Viewer, https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer#gwlevels.

the ground surface as settlement. Unconsolidated young alluvial deposits are especially susceptible to this hazard. Mitigation measures for seismically induced settlement and liquefaction are similar, according to the GPU Technical Background Report. The measures generally fall into one of two categories: (1) ground improvement and (2) foundation design. Recommended methods of ground improvement involve over-excavation and re-compaction of low-density soils, removal of excess groundwater, and densification of soils.

In addition to the Technical Background Report, the project-specific Geotechnical Investigation recommends the stripping of vegetation, root systems, and debris, over-excavation and re-compaction, and compaction. The recommendations provided in the Geotechnical Investigation are consistent with Policy 2.1 and 2.2 in the GPU EIR. With the implementation of Policy 2.1 and 2.2, impacts from seismically induced liquefaction, settlement, and ground failure on the project would be less than significant. The project would be consistent with the GPU EIR because it would not create new impacts, and there is no new information of substantial importance than that covered in the GPU EIR.

iv. **Less than Significant Impact.** The GPU EIR concluded this impact to be less than significant[145]. The project site and much of the surrounding lands are predominantly urbanized and level. A majority of the City has a 0 to 10 percent grade, including the project site. Areas with a 10 percent grade or greater involves the areas along the San Andreas Fault east of the project site. There are no natural slopes or other geologic conditions that would render the area susceptible to unstable slopes and landslides. According to Plate 1-3, *Seismic Hazard Zones*, in the Technical Background Report of the GPU, the project site is not located in an area that is susceptible to seismically induced rockfalls, rockslides, soil falls, soil slides, or soil slumps. Therefore, impacts are less than significant. The project is found to be consistent with the analysis within the GPU EIR because it would not create new impacts or increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

b) **Less than Significant Impact.** The GPU EIR concluded this impact to be less than significant.[146] The proposed project site is located in the western portion of the City of Coachella, on land that was previously utilized for agricultural purposes. The majority of the City has a grade of 0 to 10 percent, meaning that Coachella is relatively flat. The Technical Report in the City of Coachella's General Plan claims lake and distal fan as being a substantial deposit of the City, including the project site (Plate 2-1a, b, *Geologic Map* and *Explanation for Geologic Map*). This consists of predominantly fine-grained sand, silt, and clay. According to the project-specific Geotechnical Investigation, native soil throughout the site consists primarily of fine-grained silty sand (SM), sandy silt (ML) and clay (CL). Silty sand was the most prominent soil within the exploratory bores, but sandy silt and sandy clay were also encountered. The various soil components are vital to the stability of the project site specifically regarding landslides, lateral spreading, subsidence, liquefaction, or collapse.

As described above, relatively uniform grained sand and silty sand layers were encountered at the project site. When paired with the presence of groundwater at 35 feet below ground surface (bgs) at the site, the soils make the project site potentially susceptible to liquefaction during seismic shaking at its current state. Liquefaction is the process in which loose, saturated granular soil loses strength as a result of cyclic loading. The strength loss is a result of a decrease in granular sand volume and a positive increase in pore pressures. Generally, liquefaction can occur if all of the following conditions apply: liquefaction-susceptible soil, groundwater within a depth of 50 feet or less, and strong seismic shaking.

Since the site is potentially susceptible to liquefaction without mitigation, it could also be susceptible to settlement and lateral spreading, which also requires a shallow water table or proximity to a water source that could cause inundation of onsite soils. As stated in the project-specific Geotechnical Investigation, the main geotechnical concerns are the presence of artificial fill soil, the presence of loose and potentially compressible near-surface native soil throughout the project site and the potential seismic settlements.

As described in the GPU EIR, settlement or collapsible soils typically occur in recently deposited sediments

145 City of Coachella, 2035 GPU Draft EIR, Geology and Soils, at 4.5-27.
146 *Id.*, at 4.5-28.

that accumulated in arid or semi-arid environments.[147] Collapsible soils do not appear to be widespread in the planning area, but most likely do occur in localized areas, especially in those with distal fan and lake deposits. The project-specific Geotechnical Investigation determined that settlement resulting from the anticipated foundation loads should be minimal provided that the recommendations included in their Geotechnical Investigation are considered in foundation design and construction to reduce impacts to less than significant. In addition, site clearing, the preparation of building and foundation areas, soil compaction, and shrinkage and subsidence tests, as recommended in the project-specific recommendations in the Geotechnical Investigation ensure that impacts from liquefaction and lateral spreading are less than significant. The site is not susceptible to landslides due to its relatively flat terrain and distance from mountainous slopes, and although tectonic subsidence has been documented in the Coachella Valley, it is not known to occur in the project vicinity. Therefore, no impact would occur to the project site relating to landslides.

The project would not result in on- or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse, and impacts would be less than significant. The project would be consistent with the analysis within the GPU EIR because it would not create new impacts or increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

c) **Less than Significant Impact.** The GPU EIR states that new development would need to meet California's Building Standard Codes in order to obtain permits for construction, as well as comply with maintenance codes enforced through code enforcement. Adherence to these regulations and standards will ensure that people or structures are not impacted by expansive soils. Additionally, prior to approval of development projects, geotechnical investigation reports are required for projects to determine if the development site is subject to expansive soils and other geological hazards. Therefore, the GPU EIR concluded this impact to be less than significant.[148]

Sladden Engineering composed a project-specific Geotechnical Investigation in July 2024. The purpose of the Geotechnical Investigation was to determine specific engineering characteristics of the near surface soil on the site to provide recommendations for foundation design and site preparation. The investigation included field exploration, drilling exploratory boreholes, laboratory tests, literature review, performing site-specific ground motion procedures, and engineering analysis. According to the 2024 Geotechnical Investigation, the native soil throughout the site consists primarily of silty sand (SM), sandy silt (ML) and sandy clay (CL). Silty sand and sandy silt were the most prominent soils discovered during bore testing. Sandy clay was also encountered during the bore test. Laboratory testing conducted by Sladden Engineering indicated that the materials underlying the site are considered to have a "very low" expansion potential, in accordance with the UBC Standard 18-2. The expansion potential of the subsurface soil should be reevaluated after grading.

Risks of structural damage caused by expansive soils at the project site are anticipated to be less than significant with the implementation of GPU EIR Policy 2.1 and 2.2. The project would be consistent with the analysis within the GPU EIR because it would not create new impacts or increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

d) **Less than Significant Impact.** The GPU EIR concluded this impact to be less than significant.[149] The loss and erosion of topsoil is addressed through the implementation of City regulations and requirements for development within the Planning Area, including CMC Chapters 8.20 (Fugitive Dust Control) and 13.16 (Water Quality Control), discussed below. Only projects in compliance with existing regulations would be granted development permits. No mitigation measures are required.

Windborne erosion is a widespread concern in Riverside County, especially in the Coachella Valley. Approximately 20 percent of land area in the County is vulnerable to "high" and "very high" wind erosion. The Coachella Valley floor, including the subject property, is highly susceptible to wind erosion due to the high

147 *Id.*, at 4.5-16.
148 Id., at 4.5-29.
149 *Id.*, at 4.5-30.

winds funneled from the west.[150] Windborne erosion not only causes physical and structural damage but also damages public health by causing respiratory problems. The proposed project will require activities such as clearing onsite vegetation, construction, and other ground disturbances by heavy machinery that could result in the loss of some topsoil and generate particulate matter. The City of Coachella requires mitigation of this hazard with the implementation of a Fugitive Dust Control Plan (CMC Chapter 8.20, Fugitive Dust Control). The Fugitive Dust Control Plan is a document that describes fugitive dust sources at a site and the corresponding control measures. Pursuant to SCAQMD Rules 403 and 403.1, the project is required to implement the Fugitive Dust Control Plan and the use of best management practices (BMPs) during operations capable of generating fugitive dust in the Coachella Valley.

In addition to windborne erosion, a majority of the City, including the project site, is susceptible to water erosion due to the distal fan and lake deposits. According to FEMA map number 06065C2262H, effective March 6, 2018, the entire project is located within the FEMA Flood Zone X, which are areas determined to have moderate to low flood risk. Flood Zone X corresponds to areas of 500-year flood, areas of 100-year flood with average depths of less than one foot or with drainage areas less than one square mile, and areas protected by levees from 100-year flood. Approximately 2.9 miles east of the project property is the Coachella Valley Stormwater Channel, which FEMA designates as Flood Zone A. This flood zone is defined as an area subject to inundation by the 1-percent-annual-chance flood event and likely to create erosion within the zone.

The mitigation of waterborne erosion at the project site during construction activities includes the developer's compliance with the State's most current Construction General Permit (CGP) (Order No. 2022-0057-DWQ). Compliance with the CGP involves the development and implementation of a project-specific Stormwater Pollution Prevention Plan (SWPPP) designed to reduce potential adverse impacts to surface water quality during the period of construction.[151] The required plan will identify the locations and types of construction activities requiring BMPs and other necessary compliance measures to prevent soil erosion and stormwater runoff pollution. The plan will also identify the limits of allowable construction-related disturbance to prevent any exceedances or violations. Waterborne erosion and the City's Standard Conditions associated with it are thoroughly discussed in the Hydrology and Water Quality Section of this document.

The project would not result in substantial soil erosion or the loss of topsoil, and impacts would be less than significant. The project would be consistent with the analysis within the GPU EIR because it would not create new impacts or increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

e) **Less than Significant Impact.** The GPU EIR concluded this impact to be less than significant.[152] The project does not propose the use of septic tanks or alternative wastewater disposal systems. Therefore, no impact would occur. The project would be consistent with the analysis within the GPU EIR because it would not create new impacts, increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

Conclusion:

With regards to the issue area of Geology and Soils, the following findings can be made:

1. No peculiar impacts to the project or its site have been identified.
2. There are no potentially significant off-site and/or cumulative impacts which were not discussed in the City of Coachella General Plan 2035 Program EIR. The Program EIR adequately addressed geological and soil hazards with appropriate policies and recommendations.

150 Riverside County 2016 General Plan Safety Element, at S-38, (revised June 25, 2024), https://planning.rctlma.org/sites/g/files/aldnop416/files/2024-07/Safety%20Element.pdf?archive-consent=true.
151 The SWPPP is also enforced in Chapter 13.16, Water Quality Control, of the CMC.
152 City of Coachella, 2035 GPU Draft EIR, Geology and Soils, at 4.5-32.

3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the City of Coachella General Plan 2035 Program EIR. The recommendations of the Geotechnical Investigation by Sladden Engineering are consistent with the findings and assumptions of the Program EIR.

4. No mitigation measures are required within the GPU EIR for geological or soil resources. Compliance with General Plan Policies 2.1 and 2.2 ensures that potential impacts to geological and soil resources would remain less than significant.

8. GREENHOUSE GAS EMISSIONS – Would the project:	Project Peculiar Impact that is not Substantially Mitigated by Uniformly Applied Policies	Significant Impact not Analyzed as Significant in the GP EIR	Potentially Significant Offsite or Cumulative Impact not Discussed in the GP EIR	Adverse Impact More Severe based on Substantial New Information	No New Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☐	☐	☒
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☐	☒

Sources: Greenhouse Gas Analysis, Urban Crossroads, Inc. November 2025; California Greenhouse Gas Emissions for 2000 to 2020, Trends of Emissions and Other Indicators, 2022 Edition, California Air Resources Board; California Greenhouse Gas Emissions for 2000 to 2019, Trends of Emissions and Other Indicators, 2021 Edition, California Air Resources Board; Release No. 18-37 & 19-35, California Air Resources Board Press Release, July 2018 and August 2019.

a) **Less than Significant with Mitigation**.

The GPU EIR determined that GPU implementation would result in emission increases representing significant impacts, but such impacts would be mitigated under full adoption and implementation of State, GPU, and CAP measures and strategies. The GPU EIR further concluded that although existing State, federal, and local policies would reduce emissions sufficiently to meet the SCAQMD 2020 service population threshold, implementation of the GPU would introduce new GHG emission sources.[153] Even with these additions, the combined effect of GPU policies and broader State and federal reduction programs would keep 2020 emissions below the SCAQMD threshold of 6.6 $MTCO_2e$ per service population. However, emissions would still exceed the City's more stringent 2035 target of 4.2 $MTCO_2e$ per service population. Modeling prepared for the City's Climate Action Plan reached similar conclusions, showing that while State programs and GPU policies would achieve substantial reductions, additional measures would be required to meet the 2035 efficiency target.

The CAP evaluated reductions achievable through State programs, GPU policies, and additional CAP-recommended measures. State policies incorporated into the CAP, such as the Renewable Energy Portfolio Standard, Title 24, the Low Carbon Fuel Standard, and the Pavley Clean Cars standards, were estimated to reduce emissions by approximately 211,740 MT CO_2E in 2020 and 407,924 MT CO_2E in 2035.[154] GPU policies across the Land Use, Mobility, Sustainability and Natural Environment, Safety, and Infrastructure and Public Services Elements were estimated to provide an additional 126,306 MT CO_2E reduction in 2020 and 231,707 MT CO_2E in 2035.[155]

In total, combined federal, State, and GPU-level reductions would lower Citywide emissions by approximately 338,046 MT CO_2E in 2020, resulting in a per-service-population value of 6.2 MT CO_2E, below the SCAQMD

153 City of Coachella, General Plan 2035: Safety Element, at 08-4, 08-6 (Apr. 22, 2015).
154 City of Coachella, GPU Draft EIR: Greenhouse Gases, at 4.12-13.
155 City of Coachella, CAP, at 41 (Apr. 22, 2015).

threshold.[156] By 2035, these combined measures would reduce emissions by approximately 639,630 MT CO_2E, resulting in 5.4 MT CO_2E per service population, which would still exceed the City's 2035 target.[157]

The CAP also evaluated more aggressive implementation programs and additional measures not included in the GPU. Full implementation of these strategies could achieve approximately 838,494 MT CO_2E in reductions by 2035, meeting the 4.2 MT CO_2E target.[158] However, because the CAP had not yet been adopted, there was no assurance these measures would be implemented. As a result, the GPU EIR found that impacts would be significant but mitigable. Mitigation requires implementation of the Additional CAP Measures identified in Table 18 of the CAP, or other equally effective strategies, to achieve 4.2 MT CO_2E per service population or less by 2035.

To address the long-term adverse impacts associated with global climate change, California has established a regulatory framework that continues to guide statewide GHG reduction efforts and inform CEQA analysis. California's regulatory framework continues to serve as the foundation for addressing the long-term adverse impacts associated with global climate change. The Global Warming Solutions Act of 2006 (AB 32) requires CARB to reduce statewide greenhouse gas emissions to 1990 levels by 2020, establishing the basis for the State's climate policy and informing the development of localized Climate Action Plans, including the City's CAP. Senate Bill 32 (SB 32), signed in 2016, strengthened this framework by requiring statewide emissions to be reduced to 40 percent below 1990 levels by 2030, ensuring that the State's regulatory structure remains central to guiding ongoing and future GHG reduction efforts.

California's annual statewide GHG emission inventory is a relevant tool for tracking California's progress in reducing GHGs and achieving the statewide GHG target. The GHG inventory relies on data collected through various California Global Warming Solutions Act (AB 32) programs. Based on the most recent *California Greenhouse Gas Emissions from 2000 to 2023, Trends of Emissions and Other Indicators*, released on November 4, 2025, statewide GHG emissions in 2023 totaled 360.4 $MMTCO_2e$, a reduction of 11.2 $MMTCO_2e$, 3.0 percent, from 2022 and the lowest level recorded across the 2000 to 2023 inventory period.[159] The data indicates that California continues its long-term downward emissions trend, driven by notable reductions across major transportation, industrial, and electricity sectors.

The City of Coachella developed their CAP in 2014 and adopted it on April 22, 2015 in order to achieve community-wide GHG emissions reductions.[160] The CAP quantifies emissions from the build-out of the City and includes additional policies and implementation actions to help Coachella further reduce emissions. The CAP analyzes policies from the GPU that reduce energy use, VMT, resource consumption, and GHG emissions, comparing the emissions to voluntary statewide emissions targets outlined in the California Climate Action Scoping Plan and Executive Order S-03-05. In compliance with the statewide emission targets, the City established a per service population 2020 emissions reduction target of 15 percent below 2010 levels and a 2035 emissions reduction target of 49 percent below 2010 levels. The CAP has also established a 2035 target of 4.2 MTCO2e per service population.[161]

To achieve the targets, CAP organizes the General Plan polices into six strategies to reduce emissions reductions throughout the City: building and infrastructure energy efficiency, renewable energy generation, land use and transportation, vegetation and open space, solid waste, and water use.[162] According to the CAP, residential and non-residential buildings produce approximately 39 percent of Coachella's emissions and are a primary target for the CAP.[163] The City plans to achieve this reduction through energy efficiency policies for homes, and

156 *Id*., at 33.
157 *Id*., at 36.
158 *Id*., at 37-38.
159 CARB, California Greenhouse Gas Emissions from 2000 to 2023: Trends of Emissions and Other Indicators (Nov. 4, 2025), at 4, https://ww2.arb.ca.gov/sites/default/files/2025-11/nc-2000_2023_ghg_inventory_trends.pdf.
160 City of Coachella, CAP (April 22, 2015).
161 *Id*., at 29.
162 *Id*., at 32.
163 Ibid.
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businesses including energy performance targets to construct buildings 15 percent more energy efficient than Title 24 standards.

The *COVA Greenhouse Gas Analysis* (GHGA) was completed in November of 2025 to evaluate project-related construction and operational emissions and determine the level of GHG impacts as a result of constructing and operating the project.[164] The GHGA relied on the most current version of the California Emissions Estimator Model™ (CalEEMod) Version 2022, which is the adopted software from the California Air Pollution Control Officers Association (CAPCOA) to quantify construction emissions and operational GHG emissions from land development projects. The GHGA modeled GHG emissions from the proposed project land uses and dimensions consisting of 409 units: 165 two-story SFR and 244 condo hotel units.[165] The development factors also included a crystal lagoon and other residential amenities including restaurants, a beach club, event space, pop-up shops, outdoor amphitheater, pools, recreation areas, and kids play spaces.

SCAQMD defines the SP as the total residents and employees associated with a project. The origin of the SP is based on CARB's 2008 Scoping Plan.[166] The 2008 Scoping Plan identified that based on the GHG emissions inventories for the state, the people of California generate approximately 14 tons of GHG emissions per capita and would need to reduce annual emissions to approximately 10 tons per capita in order to meet the GHG reduction target of AB 32.[167] Because people who live in California generally work in California, the SP metric did not include employees. As CEQA significance thresholds were being determined by air districts, the air districts considered applying this efficiency metric to their air district boundaries. Consistent with methodology provided by the Regional Targets Advisory Committee (RTAC) as part of the Senate Bill No. 375 – Sustainable Communities and Climate Protection Act of 2008. target setting discussions, the definition of SP was amended to include employees in addition to residents. This is because the transportation sector is the primary source of project-related GHG emissions; unlike the state as a whole, people who work in one county/air district may not live in the same county/air district boundary. Also, people who live in a county/air district boundary would also have other trip ends such as school, parks, and retail uses. As such, the air district/county boundary as a whole did not take into account other users within the site.

Relevant to the proposed project, the SCAQMD Tier 4 Option 3 was to utilize an efficiency target. SCAQMD has proposed targets for project-level and plan-level analysis. At the September 2010 working group meeting, the SCAQMD recommended a project-level efficiency target of 4.8 $MTCO_2e$/SP as a target. [168]

The calculations behind this option are based on the same inventory calculated by CARB. The 4.8 MT/SP target is based on the same statewide 2020 GHG inventory in the CARB Scoping Plan, i.e., 295,530,000 $MTCO_2e$/yr. To derive the project level SP of 4.8 metric ton, SCAQMD took the 2020 statewide GHG reduction target for land use only (295,530,000 $MTCO_2e$/yr) and divided it by the total 2020 statewide population plus the total statewide employment for land use only (44,135,923 + 17,064,489) (i.e., (295,530,000 $MTCO_2e$/yr)/(44,135,923 + 17,064,489) = 4.8 $MTCO_2e$/yr). Thus, SCAQMD's threshold is another metric for assessing compliance with AB 32, just based on using numbers attributable to certain sectors and trying to break down the analysis to a finer grain based on a per person methodology associated with land use-related sectors.

This approach is a widely accepted screening threshold used by numerous cities in the basin and is based on the SCAQMD staff's proposed GHG screening threshold for stationary source emissions for non-industrial projects, as described in the SCAQMD's Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans.[169] The SCAQMD's Interim CEQA GHG Significance Threshold for Stationary Sources,

164 Greenhouse Gas Analysis, Urban Crossroads, Inc. November 2025 (Appendix E).
165 Note: The GHG analysis was prepared using an earlier project description with 409 units. The currently proposed Project includes 402 units, representing a reduction in development intensity relative to the analyzed scenario.
166 California Air Resources Board, Climate Change Scoping Plan – A Framework for Change (Dec. 2008).
167 *Id*., at ES-1.
168 South Coast Air Quality Management District (SCAQMD), *Draft Guidance Document: Interim CEQA Greenhouse Gas (GHG) Significance Threshold* (October 2008), available at https://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgattachmente.pdf.
169 Ibid.

Rules and Plans identifies a screening threshold to determine whether additional analysis is required. As noted by the SCAQMD:

> *"…the…screening level for stationary sources is based on an emission capture rate of 90 percent for all new or modified projects...the policy objective of [SCAQMD's] recommended interim GHG significance threshold proposal is to achieve an emission capture rate of 90 percent of all new or modified stationary source projects. A GHG significance threshold based on a 90 percent emission capture rate may be more appropriate to address the long-term adverse impacts associated with global climate change because most projects will be required to implement GHG reduction measures. Further, a 90 percent emission capture rate sets the emission threshold low enough to capture a substantial fraction of future stationary source projects that will be constructed to accommodate future statewide population and economic growth, while setting the emission threshold high enough to exclude small projects that will in aggregate contribute a relatively small fraction of the cumulative statewide GHG emissions. This assertion is based on the fact that [SCAQMD] staff estimates that these GHG emissions would account for slightly less than one percent of future 2050 statewide GHG emissions target (85 [MMTCO2e/yr]). In addition, these small projects may be subject to future applicable GHG control regulations that would further reduce their overall future contribution to the statewide GHG inventory. Finally, these small sources are already subject to [Best Available Control Technology] (BACT) for criteria pollutants and are more likely to be single-permit facilities, so they are more likely to have few opportunities readily available to reduce GHG emissions from other parts of their facility."* [170]

Although the SCAQMD's draft significance criteria have not been adopted, the City has determined that the SCAQMD's project-level efficiency threshold methodology can be used to set an appropriate significance criterion by which to determine whether the project emits a significant amount of GHG. To determine a project-level GHG efficiency threshold for the project's Opening Year of 2030, a linear interpolation was used between the known targets of 2020 and 2045.

CARB's 2022 Scoping Plan establishes a goal of reducing statewide GHG emissions by 85% below 1990 levels by 2045.[171] Applying this 85% reduction to the previously established 2020 threshold of 4.8 $MTCO_2e$/SP, the resulting efficiency target for 2045 is 0.72 $MTCO_2e$/yr. A linear interpolation was applied between the established targets for 2020 and 2045 to calculate a project-level GHG efficiency threshold for the project's Opening Year of 2030, yielding a threshold of 3.17 $MTCO_2e$/SP. According to the population generation of the COVA Transportation Analysis Report , buildout of the project has the potential to generate a future population of approximately 2,380 people, including approximately 330 employees for commercial uses and 2,050 residents for residential uses. The threshold of 3.17 $MTCO_2e$/SP is more conservative than the City's target of 4.2 $MTCO_2e$/SP. 172

The GHGA applied the SCAQMD's efficiency-based methodology to establish a project-level GHG threshold for the 2030 opening year, using linear interpolation between the established 2020 and 2045 statewide reduction targets. This approach yielded a significance threshold of 3.17 $MTCO_2e$ per service population (SP). The project's unmitigated emissions were estimated at 3.27 $MTCO_2e$/SP, which would exceed the threshold and result in a potentially significant impact. To evaluate consistency with the City of Coachella General Plan 2035 (GPU), City of Coachella Climate Action Plan (CAP), and applicable State requirements, the GHGA incorporated GHG-1 through GHG-8 into the emissions analysis. These actions are project-level implementation measures derived from adopted GPU policies, CAP measures, and applicable regulatory standards. As summarized in Table Table VIII – 1, each action is tied to a specific GPU policy, CAP measure, or regulatory requirement and could be incorporated into the project as conditions of approval to ensure implementation during construction and operation. The subsequent discussion summarizes the relationship between GHG-1 through GHG-8 and the applicable GPU policies, CAP measures, and regulatory standards supporting their inclusion in the GHGA. With implementation of GHG-1 through GHG-8, project emissions

170 *Id*., at 3-2 – 3-3.
171 CARB, 2022 Scoping Plan for Achieving Carbon Neutrality (Dec. 15, 2022), at 1.
172 COVA Transportation Analysis Report, pg. 26.

would be reduced to approximately 2.81 $MTCO_2e$/SP, which is below the applicable significance threshold of 3.17 $MTCO_2e$/SP.

Table VIII – 1 Project Consistency with City of Coachella GPU Policies, CAP Measures, and Regulatory Standards

City of Coachella GPU Policies	City of Coachella CAP Measure / Regulatory Standard	Project Measure
SNE Policy 2.6 (Energy Performance Targets - New Construction); SNE Policy 2.7 (Energy Performance Targets - Existing Buildings)	Energy Efficiency and Renewable Energy Strategies; Title 24/CALGreen	**GHG-1** Building Electrification
SNE Policy 2.3 (Alternative Energy); SNE Policy 2.6 (Energy Performance Targets - New Construction); SNE Policy 2.7 (Energy Performance Targets - Existing Buildings); SNE Policy 2.12 (Solar Access)	Solar Energy Development Standard; Climate-Ready Development Standard requiring onsite solar PV. For nonresidential and multifamily residential buildings constructed between 2020 and 2035, provide 50% of project electricity demand via onsite solar photovoltaics.	**GHG-2** On-Site Solar PV (50% Demand)
SNE Policy 3.1 (Conservation Performance Targets - New Construction)	Water Conservation Performance Targets	**GHG-3** Indoor Water Conservation
SNE Policy 3.7 (Landscape Design); SNE Policy 13.14 (Sustainable Landscaping)	Landscape Water Reduction Strategy	**GHG-4** Water-Efficient Landscaping
IPS Policy 5.3 (Solid Waste Diversion and Recycling); IPS Policy 5.4 (Zero Waste); IPS Policy 5.9 (Greener Waste Management Practices); IPS Policy 5.15 (On-Site Collection and Storage of Recyclables)	Solid Waste Reduction and Recycling Measures	**GHG-5** Waste Diversion Program
No specific GPU policy identified; measure primarily implements CAP and State regulatory requirements.	Construction Emissions Reduction Development Standard; CARB Off-Road Diesel Vehicle Regulation (5-minute idling limit)	**GHG-6** Construction Equipment Idling Restrictions
SNE Policy 2.3 (Alternative Energy); SNE Policy 2.11 (Building and Facility Energy Efficiency Upgrades)	Construction Emissions Reduction Development Standard encouraging electric or hybrid-electric construction equipment and alternative fuels.	**GHG-7** Electric Construction Equipment and Temporary Electrical Service
Mobility Policy 5.1 (Transit Improvements); Mobility Policy 5.4 (Transit-Accessible Development); Mobility Policy 5.6 (Commute Survey); Mobility Policy 5.7 (Safe Routes to Transit)	Transportation Demand Management Development Standard for nonresidential projects with 20 or more employees.	**GHG-8** Transportation Demand Management Program
Notes: GPU = City of Coachella General Plan 2035; CAP = City of Coachella Climate Action Plan; SNE = Sustainability and Natural Environment Element; IPS = Infrastructure and Public Services Element; CARB = California Air Resources Board. Policy references correspond to the applicable goals and policies contained in the City of Coachella General Plan 2035.		

GHG-1 through GHG-8 would implement existing greenhouse gas reduction strategies contained in the City of Coachella General Plan 2035 (GPU), the City of Coachella Climate Action Plan (CAP), and applicable State regulations.

GHG-1 and GHG-2 would implement GPU energy policies related to alternative energy, energy performance targets, and solar access, as well as CAP strategies promoting building electrification, renewable energy generation, and onsite solar photovoltaic systems. GHG-3 and GHG-4 would implement GPU and CAP water conservation strategies through high-efficiency fixtures, reduced potable water demand, drought-tolerant landscaping, and efficient irrigation practices. GHG-5 would implement GPU and CAP solid waste reduction objectives through diversion, recycling, composting, and waste minimization practices. GHG-6 and GHG-7 would implement the CAP's Construction Emissions Reduction Development Standard and applicable State requirements by reducing fuel consumption and emissions from construction equipment through idling restrictions, temporary electrical service connections, and increased use of electric-powered equipment. GHG-8 would implement the CAP Transportation Demand Management Development Standard and support GPU Mobility Element policies that promote transit use, transit-accessible development, vanpooling, ridesharing, and reductions in single-occupant vehicle trips.

Collectively, GHG-1 through GHG-8 would be consistent with, and in several instances would exceed, the performance standards and reduction strategies identified in the City of Coachella CAP. Because these actions would be tied to adopted GPU policies, CAP measures, and applicable regulatory requirements, they could be incorporated into the project as conditions of approval and implemented during construction and operation. Implementation of these actions would help reduce project-generated greenhouse gas emissions and support consistency with the City's greenhouse gas reduction goals and strategies.

The project's unmitigated emissions of 3.27 $MTCO_2e$/SP would be substantially lower than the Citywide 2035 emissions level modeled in the CAP of 5.4 $MTCO_2e$/SP and would also be below the City's more aggressive 2035 efficiency target of 4.2 $MTCO_2e$/SP. As discussed above, implementation of GHG-1 through GHG-8 would further reduce project emissions to approximately 2.81 $MTCO_2e$/SP, which is approximately 48 percent lower than the modeled 2035 CAP emissions level and approximately 33 percent lower than the City's 2035 efficiency target. These reductions demonstrate that the project would be consistent with the GPU and CAP greenhouse gas reduction framework and would perform substantially better than the emissions levels anticipated under the City's long-term planning documents. Accordingly, the project would not result in a new or more severe greenhouse gas impact than those evaluated in the GPU Program EIR. Consistent with CEQA Guidelines Section 15183, implementation of GHG-1 through GHG-8 would ensure consistency with the applicable GPU policies, CAP measures, and regulatory requirements, and no new information of substantial importance has been identified that would require additional environmental review beyond that contained in the GPU Program EIR.

b) **Less than Significant Impacts:** The GPU EIR determined that the policies, programs, measures, and actions of the GPU were consistent with CARB's Scoping Plan, which served as the statewide strategy for achieving the goals of AB 32.173 This impact was therefore considered less than significant. Implementation of the GPU was determined to result in GHG emissions associated with construction and operational activities. However, in order for the City of Coachella and the State of California to meet their GHG reduction goals, both the efficiency of construction practices and the manner in which new and modified development operated were required to become more GHG efficient. Implementation of GPU policies and programs, together with the CAP, would affect the major GHG-producing sectors in the City, helping the City progress toward its reduction targets and maintain consistency with the Scoping Plan, SCAG RTP, and SCS. Therefore, the proposed project would be consistent with applicable GHG reduction plans. The GPU's consistency with the SCAG Sustainable Communities Strategy was discussed in Chapter 4.9, Circulation.

In addition to being consistent with the policies and goals of the adopted RTP and SCS, the proposed GPU would also be consistent with the RTP and SCS goal to achieve reductions in per capita GHG emissions of 8 percent by 2020 and 13 percent by 2035. Based on the GHG emission estimates in the CAP, implementation of the GPU, in combination with State initiatives, would reduce annual GHG emissions from 8.2 MT CO_2E per service population in 2010 to 6.2 MT CO_2E per service population in 2020 and 5.4 MT CO_2E per service population in 2035. These values represented reductions of approximately 25 percent and 34 percent by 2020

173 City of Coachella, GPU Draft EIR, Greenhouse Gases, at 4.12-16.

and 2035, respectively. While per service population and per capita metrics are not identical, the reductions demonstrated that the GPU would be generally consistent with the GHG reduction goals in the adopted RTP and SCS.

The GPU was developed to reduce GHG emissions consistent with AB 32 reduction goals. The GPU would implement numerous policies that reduce emissions from transportation, energy, water, and solid waste sources. Implementation of these policies supported CARB's Scoping Plan goals to achieve reductions from land use and development-related sources and to promote more GHG-efficient growth without constraining population or economic expansion. The GPU policies would reduce emissions across all sectors identified in the Climate Change Scoping Plan and would not preclude or obstruct its implementation. Therefore, the policies, programs, measures, and actions of the GPU were consistent with CARB's Scoping Plan, which served as the statewide strategy for achieving the goals of AB 32. This impact was therefore considered less than significant. The project would be consistent with the GPU EIR because it would not create new impacts, and there is no new information of substantial importance than that covered in the GPU EIR.

Conclusion:

With regards to the issue area of Greenhouse Gas Emissions, the following findings can be made:

1. No peculiar impacts to the project or its site have been identified. The Project's greenhouse gas emissions were evaluated using a project-specific Greenhouse Gas Analysis and the SCAQMD efficiency-based service population methodology. The analysis determined that unmitigated emissions would be 3.27 $MTCO_2e$ per service population (SP), and implementation of GHG-1 through GHG-8 would reduce emissions to approximately 2.81 $MTCO_2e$/SP, which is below the applicable significance threshold of 3.17 $MTCO_2e$/SP.
2. There are no potentially significant off-site and/or cumulative impacts which were not discussed in the City of Coachella General Plan 2035 Program EIR. The Program EIR evaluated the cumulative nature of greenhouse gas emissions, consistency with State greenhouse gas reduction goals, implementation of the City of Coachella Climate Action Plan (CAP), and the effectiveness of General Plan policies designed to reduce emissions from transportation, energy consumption, water use, and solid waste generation. The Program EIR concluded that implementation of CAP measures and General Plan policies would substantially reduce greenhouse gas emissions associated with future development accommodated under the General Plan.
3. No substantial new information has been identified which results in an impact more severe than anticipated by the City of Coachella General Plan 2035 Program EIR. Since certification of the Program EIR, California has continued to implement and expand greenhouse gas reduction programs through implementation of AB 32, SB 32, updated Climate Change Scoping Plans, renewable energy requirements, building efficiency standards, and transportation-related emissions reduction programs. The project-specific Greenhouse Gas Analysis demonstrates that the Project would be consistent with the assumptions, goals, and reduction strategies incorporated into the City of Coachella CAP and would not result in greenhouse gas impacts more severe than those evaluated in the Program EIR.
4. The GPU EIR determined that greenhouse gas impacts would be significant but mitigable through implementation of General Plan policies, Climate Action Plan measures, and other equally effective greenhouse gas reduction strategies. Consistent with the GPU EIR, GHG-1 through GHG-8 implement applicable City of Coachella General Plan 2035 policies, City of Coachella CAP measures, and State regulatory requirements related to energy efficiency, renewable energy generation, water conservation, waste reduction, transportation demand management, and construction emissions reductions. These measures can be incorporated into the Project as conditions of approval and would ensure that Project emissions remain below the applicable significance threshold and consistent with the City's greenhouse gas

reduction framework. Accordingly, greenhouse gas impacts would remain less than significant.

9. HAZARDS AND HAZARDOUS MATERIALS – Would the project:	Project Peculiar Impact that is not Substantially Mitigated by Uniformly Applied Policies	Significant Impact not Analyzed as Significant in the GP EIR	Potentially Significant Offsite or Cumulative Impact not Discussed in the GP EIR	Adverse Impact More Severe based on Substantial New Information	No New Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☐	☒
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☐	☒
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☐	☒
f) For a project near a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☐	☒
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☐	☒

Sources: City of Coachella 2035 General Plan Update, 2015; City of Coachella Official Zoning Map, April 2023; Coachella Municipal Code; Coachella Technical Background Report to the Safety Element Update, 2014; Enforcement and Compliance History Online, EPA; EnviroStor, Department of Toxic Substances Control; GeoTracker, State Water Resources Control Board; Phase I Environmental Site Assessment, Sladden Engineering (Appendix F.1); Phase II Environmental Site Assessment, Kimly Horn (Appendix F.2).

a/b) **Less than Significant Impact.** The development of the Planning Area would include industrial and commercial land uses that could indirectly contribute to the temporary or continuous transportation of hazardous materials;

however, the GPU EIR concluded this impact to be less than significant with the implementation of existing regulations and policies regarding the transport of hazardous materials through the Planning Area.[174] The regulations and policies would reduce future potential risk and environmental impacts to a minimum by requiring safe transport, ongoing vehicle inspections, state licensing of transporters and effective response to spills. Per the GPU EIR, the GPU provides policies and guidelines to help steer the vision for development over the coming decades. The most likely occurrence of an impact occurring through the release of hazardous materials would occur on industrial land in the City. Additionally, there is an extensive framework of state and federal laws regulating the safe use, storage, disposal, and cleanup of hazardous waste.[175] No mitigation measures are required.

The project proposes the development of a mixed-use community with single family residences, condo hotels, suites, water amenities, and additional amenities including restaurants and bars, health and wellness, sports and recreational facilities. The project site is currently occupied by agricultural uses. The proposed project is not expected to involve the use of any hazardous materials with the operation of the residential community.

The Code of Federal Regulations defines hazardous materials based on ignitability, reactivity, corrosivity, and/or toxic properties.[176] The State of California defines hazardous materials as substances that are toxic, ignitable, or flammable, reactive and/or corrosive, which have the capacity of causing harm or a health hazard during normal exposure or an accidental release.[177] As a result, the use and management of hazardous or potentially hazardous substances is regulated under existing state, federal and local laws. Hazardous waste requires special handling and disposal methods to reduce their potential to damage public health and the environment. Manufacturer's specifications also dictate the proper use, handling, and disposal methods for the specific substances.

Project construction would involve the use of heavy equipment that has a potential for fuel and oil spills due to the usage of fuel, oil, lubricants, and other potentially flammable substances. The contractor will be required to identify a staging area for storing these materials, as well as other practices to prevent any hazardous discharge or release into the environment, in their Storm Water Pollution Prevention Plan (SWPPP). The SWPPP requires a list of pollutant sources and the identification of construction areas where additional control measures are necessary to prevent pollutants from being discharged. BMPs are necessary for proper material delivery and storage, material use, and spill prevention and control. The measures will outline the required physical improvements and procedures to prevent impacts of pollutants and hazardous materials to workers and the environment during construction. For example, all construction materials including paints, solvents, and petroleum products must be stored in controlled areas and according to the manufacturer's specifications. Additionally, perimeter controls (fencing with wind screen), linear sediment barriers (gravel bags, fiber rolls, or silt fencing), and access restrictions (gates) would help prevent temporary impact to the public and environment; therefore, less than significant impacts during the construction of the project site are expected.

Operation of the project includes residential units, a commercial component, and water features, including a 9.4-acre Hotel Lagoon, 0.4-acre Beach Club Lagoon, and 2.5-acre lake. Development of the project, including the Lagoon and lake, will not result in export of soils, as the site will be balanced. The nature of these uses is not expected to involve, as a primary activity, the routine transport, use, or disposal of hazardous materials in quantities or in a manner that would pose a threat to the project and its surroundings by creating a significant hazard through foreseeable accident conditions involving the release of hazardous materials into the environment. The regular operation of the proposed project would not result in the use of hazardous materials in amounts that exceed what is typically required for resort, commercial, and residential uses. The handling, application, and storage of cleaning agents, building maintenance products, paints, solvents, and other related substances used to carry out the necessary operations in each facility is expected to occur within the project in

174 City of Coachella, GPU Draft EIR: Hazardous Materials, at 4.6-9.
175 *Id.*, at 4.6-11.
176 CFR Title 40, Part 261.
177 Cal. Code Regs. tit. 8, § 5161.

a manner typical of similar projects throughout the City. Additionally, these materials would not be present in sufficient quantities to pose a significant hazard to public health and safety or the environment.

The California Department of Public Health is authorized to establish standards for public swimming facilities. According to Section 65529, Public Pool Disinfection, of Title 22 of the CCR, it is required that public pools, when open or in use, be disinfected continuously by a chemical that imparts a disinfectant consistent with minimum and maximum concentrations, also determined in Section 65529. If halogens other than chlorine are used, residuals of equivalent strength shall be maintained. Records of the routine maintenance and repairs are also required per the CCR. Additionally, the pool operator shall maintain a test kit for measuring the disinfectant residual, pH and, if used, cyanuric acid concentration in the public pool. The public water features shall be required to adhere to all applicable standards and regulations within the CCR, the California Building Code, and the California Electrical Code regarding public swimming pools. The enforcing agency that would evaluate the plans prior to construction would be the Riverside County Department of Environmental Health.

The no contact recreational lake will also be required to implement the measures required by the Riverside County Department of Environmental Health.

Residential and resort uses, by nature, do not typically result in the use of hazardous materials in large quantities. The project proposes resort uses and recreational uses. The resort uses will consist of condo hotel units, suites, restaurants, bars, and fitness and spa areas. The recreational use will consist of a kids' area and sports courts. The regular operation of the proposed project will involve the handling, application, and storage of cleaning agents, building maintenance products, paints, solvents, and other related substances commonly used with residential and resort maintenance. However, these materials are not typically stored in quantities that could be harmful to the public or environment. The materials required for the maintenance of landscaped areas (i.e., fertilizers, pesticides, etc.), the water features, and the proposed buildings will be stored onsite and regulated by State and local law, including Fire Department regulations requiring proper storage and inspection. These regulations, including those imposed by both the County of Riverside and the Fire Department, are designed to lower impacts to less than significant levels. Compliance with these procedures will ensure that the use, transport, and disposal of hazardous materials would not impact the public or environment or result in the accidental release of hazardous materials.

The handling, application and storage of cleaning agents, building maintenance products, paints, solvents, and other related substances is expected to occur within the project in order to carry out the necessary operations for the residential, community, and recreational uses. However, these materials would not be present in sufficient quantities that pose a significant hazard to public health and safety, or the environment. Less than significant impacts are anticipated. The project would handle all hazardous materials in accordance with all applicable federal, state, and local regulations. As noted previously, residential and resort communities do not typically store, use, or handle hazardous materials in large quantities. Therefore, accidental conditions involving the release of hazardous materials are unlikely. The project is required to follow industry regulations related to use and storage of maintenance-related chemicals. Less than significant impacts are expected to result from project implementation.

As previously stated, the GPU EIR determined impacts from transport, use, and disposal of hazardous materials and accidental release of hazardous materials to be less than significant.[178] As the project would have a less than significant impact for the reasons listed above, the project would be consistent with the analysis within the GPU EIR because it would not create new impacts, increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

c) **Less than Significant Impact.** The GPU EIR concluded this impact to be less than significant.[179] The GPU lists policies that protect school properties from the release of emissions. Policy 5.3 prohibits the placement of proposed new facilities that will be involved in the production, use, storage, transport or disposal of hazardous

178 City of Coachella, GPU Draft EIR: Hazardous Materials, at 4.6-9.
179 *Id.*, at 4.6-11.

materials near existing land uses or new sensitive facilities (like schools, child-care centers, nursing homes, senior housing, etc.) that may be adversely affected by such activities. Policy 6.14 avoids locating new sensitive uses such as schools, child-care centers, multifamily housing and senior housing in proximity to sources of pollution (e.g., I-10, truck routes, busy roadways and agricultural land where pesticides and chemical fertilizers are used regularly) and vice versa.[180] Based upon existing regulations and policies in the GPU, the GPU EIR concluded that environmental impacts on schools from hazardous emissions would result in no significant impacts.

The closest school to the project site is Coral Mountain Academy, located approximately 0.26 miles north of the project. As previously discussed, the project proposes the development of a residential and resort community with recreational amenities. During the construction of the project, the contractor will be required to identify a staging area for storing materials, as well as other practices to prevent any hazardous discharge or release into the environment, in their SWPPP. The SWPPP requires a list of pollutant sources and the identification of construction areas where additional control measures are necessary to prevent pollutants from being discharged. BMPs are necessary for proper material delivery and storage, material use, and spill prevention and control. The measures will outline the required physical improvements and procedures to prevent impacts of pollutants and hazardous materials to workers and the environment during construction. For example, all construction materials (including paints, solvents, and petroleum products) must be stored in controlled areas and according to the manufacturer's specifications. Additionally, perimeter controls (fencing with wind screen), linear sediment barriers (gravel bags, fiber rolls, or silt fencing), and access restrictions (gates) would help prevent temporary impact to the public and environment. These standard operational procedures and protocols, as well as the BMPs, will minimize any potential public exposure to hazardous materials. The nature of the project during operation would not involve the use or handling of hazardous substances in qualities or conditions. Therefore, hazardous material-related impacts to schools are expected to be less than significant.

As previously discussed, the GPU EIR determined impacts to school sites would be less than significant. As the project would have a less than significant impact for the reasons detailed above, the project would be consistent with the analysis within the GPU EIR because it would not create new impacts, and there is no new information of substantial importance than identified within the GPU EIR.

d) **Less than Significant Impact.** The GPU EIR concluded this impact to be less than significant.[181] At the time the GPU EIR was written, there was one registered site containing hazardous materials pursuant to Government Code Section 65962.5. This site was located approximately 1.40 northeast of the project site, at 1577 First Street, and stored pesticides and fertilizers. Due to the distance of the registered site from the proposed project, no impacts are expected. The GPU also established policies to prevent negative environmental impacts of hazardous materials sites. These include policies that enforce disclosure laws that require facilities to identify the hazardous materials and wastes utilized on a site (Policy 5.1) and the effective response from fire and sheriff departments (Policy 5.2); prohibit the placement of facilities that use, store or transport hazardous materials or waste near sensitive uses (Policy 5.3); and provide continued support of programs and recycling centers that accept hazardous substances (i.e., paint, paint thinner, used waste oil, etc.).

As previously discussed, the project site proposes the development of a mixed-use community on approximately 87 acres west of Van Buren Street, south of Avenue 52, and east of Calhoun Street in Coachella. Previous land uses include agricultural operations, primarily date palm groves and grape vineyards.

Record searches on the project property were performed within multiple database platforms, pursuant to Government Code 65962.5 and its subsections. The resources consulted included GeoTracker, EnviroStor and the EPA Enforcement and Compliance History Online (ECHO).

180 "Where such uses are located in proximity to sources of air pollution, use building design, construction and technology techniques to mitigate the negative effects of air pollution on indoor air quality. For guidance consult with the South Coast Air Quality Management District, CARB's Air Quality and Land Use Handbook, or other more recent scientific studies or tools." City of Coachella, General Plan 2035: Safety Element, at 8-11 (Apr. 22, 2015).
181 City of Coachella, GPU Draft EIR: Hazardous Materials, at 4.6-12.

GeoTracker is a database maintained by the State of California Water Resources Control Board that provides online access to environmental data.[182] It serves as the management system for tracking regulatory data on sites that can potentially impact groundwater, particularly those requiring groundwater cleanup, and permitted facilities, such as operating underground storage tanks and land disposal sites.

EnviroStor is a database maintained by the State of California Department of Toxic Substances Control (DTSC).[183] The EnviroStor database identifies sites with known contamination or sites for which there may be reasons to investigate further. It includes the identification of formerly contaminated properties that have been released for reuse; properties where environmental deed restrictions have been recorded to prevent inappropriate land uses; and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Moreover, the ECHO database focuses on inspection, violation, and enforcement data for the Clean Air Act (CAA), Clean Water Act (CWA), and Resource Conservation and Recovery Act (RCRA) and also includes Safe Drinking Water Act (SDWA) and Toxics Release Inventory (TRI) data.[184]

In May 2025, a search was performed on all three database platforms. The three consulted databases did not list any facilities related to the project site. Two of the three databases, however, recorded sites within a half-mile radius of the project property. The results are described below:

The GeoTracker database search results showed that there are no Underground Storage Tank (UST) and Leaking Underground Storage Tanks (LUST) Cleanup Sites associated with the project or within a half-mile radius of the project property.

The EnviroStor database revealed one facility within a half-mile radius of the project property. The site is registered as a school investigation site for the proposed, West Coachella Elementary School located at Van Buren Street and Avenue 52, north of the project site. As of July 2002, no further action was recommended for the site. Therefore, this site is not expected to impact the project.

The Enforcement and Compliance History Online (ECHO) database did not reveal a facility within the project site or within a half-mile radius of the project.

In addition to the online database searches, a Phase I Environmental Site Assessment (ESA) and Phase II ESA[185] were completed for the project site to determine whether Recognized Environmental Concerns (REC) were identified onsite. In 2008, Moore Twinning completed a Phase I and II ESA to assess potential environmental persistent chemicals (OCPs and arsenic).[186] The results of the 2008 studies revealed detectable concentrations of dichlorodiphenyldichloroethylene (DDE) and dichlorodiphenyltrichloroethane (DDT) in the near surface and attenuated with depth to two deep bgs. However, the environmental concerns associated with these were low and below regulatory threshold.

In June 2024, Sladden Engineering completed a Phase I ESA[187] for the project site, which identified the presence of DDE, DDT and other hydrocarbons due to the previous and ongoing onsite farming/agricultural use along with the findings of the previous environmental reports. Due to these findings, Sladden Engineering

182 California State Water Resources Control Board, *About GeoTracker* ("GeoTracker is the State Board's Internet-accessible database system used … to track and archive compliance data …") (last updated Aug. 10, 2023), https://www.waterboards.ca.gov/ust/electronic_submittal/about.html.
183 Cal. Dep't of Toxic Substances Control, *Your EnviroStor* ("EnviroStor is DTSC's online data-management system for tracking site cleanup, permitting, enforcement and investigation efforts at hazardous-waste facilities and contaminated sites.") (accessed Nov. 24, 2025), https://www.envirostor.dtsc.ca.gov/public.
184 U.S. Envtl. Prot. Agency, *About the Data | Enforcement and Compliance History Online (ECHO)*, https://www.epa.gov/enforcement/enforcement-data-and-results (last visited Nov. 24, 2025).
185 Phase I Environmental Site Assessment, Sladden Engineering (Appendix F.1); Phase II Environmental Site Assessment, Kimly Horn (Appendix F.2).
186 Phase II Environmental Site Assessment, Kimly Horn (Appendix F.2), at 1.
187 Phase I Environmental Site Assessment, Sladden Engineering (Appendix F.1).

recommended that a Phase II shallow soil sampling laboratory testing program be performed.

In November 2024, Kimley-Horn prepared a Phase II ESA[188] to determine the absence/presence of hazardous materials in concentrations of concern by completing soil sampling and testing throughout the site. Kimley-Horn completed soil sampling throughout the site in July 2024, which consisted of 64 discrete soil samples within the 50-acre date grove, 36 discrete soil samples within the 26-acre grape vineyard, and 3 soil samples near the residential structure onsite, for a total of 103 discrete soil samples. Field observations did not discover staining or odors in the samples that would indicate the presence of contaminants. The laboratory results did not identify exceedances of pesticides or arsenic in the agricultural areas, or exceedances of pesticides, arsenic or TPH in the soil near the residential structure. One exceedance of 4,4-DDE was detected in a residential sample adjacent to the water well and fertilizer storage area in the July 2024 sampling event, and one exceedance of Dieldrin was detected in residential sample near the former residence. Therefore, additional samples were collected in September 2024, which determined DDE was below the residential screening level, and Dieldrin exceeded exceedance levels.

The Phase II ESA concluded that the laboratory analytical results do not indicate evidence for significant release(s) associated with the historical agricultural operations conducted at the project site based on the REC identified within the Phase I ESA. Traces of the pesticides: chlordane, endosulfan I and II, endrin, heptachlorepoxide, methoxychlor, and toxaphene, and Total Petroleum Hydrocarbons (TPH) were also discovered. The detected levels of pesticides are below the California Regional Water Quality Control Board Environmental Screening Levels (ESL) for residential soil and for the protection of soil and groundwater and would not likely trigger actions if reported to a regulatory agency. Arsenic was detected at concentrations that exceed the ESLs for residential soil; however, the concentrations of arsenic reported in the soil samples collected during this investigation are below the typical Southern California background level of 11 mg/kg per DTSC, Human and Ecological Risk Office (HERO). Areas around the former residential structure indicate exceedances above the residential screening level for 4,4-DDE and Dieldrin. As the property's intent is for a resort development, these de minimis areas should be isolated or removed prior to mass grading. If the property is planned for commercial development versus residential, the detections of 4,4-DDE is below the 8.27 mg/kg screening level and dieldrin is below the 1.6 mg/kg screening level. The location of the former residential structure, where the exceedances were found, would be developed into the proposed Hotel Lagoon and resort cottages.

The GPU includes policies that address soil contamination and require investigation and remediation prior to development. Specifically, Policy 6.10 (Agriculture Soil Quality), which requires testing of land previously used for agricultural purposes and mandates that, if contaminants are present, soils shall be treated and re-tested or, if necessary, removed; and Policy 6.11 (Soil Quality), which also requires soil testing on sites with potential chemical exposure and implementation of a remediation strategy or reduce or eliminate contamination.[189] Consistent with these policies, and applicable federal and state regulations, contaminated soils identified on the project site would be remediated, including removal and disposal of the contaminated soil, per DTSC regulations, prior to grading activities. Therefore, the proposed project would not result in a new or more severe hazardous materials impact than those analyzed in the GPU EIR. Moreover, impacts related to hazardous materials would be addressed through compliance with the GPU policies.

As previously discussed, the GPU EIR determined impacts from existing hazardous material sites to be less than significant. Per the GPU EIR, all future development would be required to comply with applicable federal and state laws and local regulations pertaining to hazardous materials, including but not limited to Title 22 of the CCR, the California Building Code, the California Electrical Code, the Riverside County Department of Environmental Health, and CEQA. As the proposed project would have a less than significant impact for the reasons discussed above, the project would be consistent with the analysis within the GPU EIR because it would not create new impacts or increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

188 Phase II Environmental Site Assessment, Kimly Horn (Appendix F.2).
189 City of Coachella, General Plan 2035: Safety Element, at 08-10 (Apr. 22, 2015).

e/f) **Less than Significant Impact.** The GPU EIR concluded that impacts related to private airstrips or public airports would be less than significant.[190] No mitigation measures are necessary. The southern portion of the Planning Area is within proximity of the Jacqueline Cochran Regional Airport. Properties within two miles will comply with GPU policies to reduce potential hazards from airports, including requiring the conformance of the airport land use and safety plans (Policy 10.4); coordinating with airport authorities and the City to meet the region's aviation needs (Policy 10.5); and review from the Airport Land Use Commission (Policy 10.6).[191]

The Jacqueline Cochran Regional Airport is located approximately 2.8 miles southeast of the project site and is not located within the boundaries of the airport's land use compatibility plan. The project site is also not located in the vicinity of a private airstrip. The project will not result in safety hazards or excessive noise for people living or working in the area. No impacts are expected.

As previously discussed, the GPU EIR determined impacts to public and private airports will not be significant. As the proposed project would have no impact due to its distance from a private airstrip or public airport, the project would be consistent with the analysis within the GPU EIR because it would not create new impacts or increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

g) **Less than Significant Impact.** The GPU EIR concluded this impact to be less than significant.[192] No mitigation measures are required. According to the GPU EIR, development proposed under the GPU would need to comply with existing emergency response plans, as to not interfere with carefully planned evacuation routes or regulations. The GPU Safety Element presents policies to prevent interference with plans, including a commitment for the City to update the Local Hazard Mitigation Plan (Policy 8.1), emergency response (Policy 8.2), disaster response plans (Policy 3.7), fire response (Policy 4.4), medical response (Policy 8.4), emergency exercises (Policy 8.6), as well as providing emergency response training, community training programs, and local preparedness plans (Policies 8.14, 8.15 and 8.17).[193]

The City of Coachella's Technical Background Report to the Safety Element Update analyzes various safety hazards within the City.[194] These potential hazards include seismic hazards, geologic hazards, fire hazards, hazardous materials management, and severe weather hazards. The preparation, response, and recovery of these hazards are outlined within Chapter 7 of the Technical Background Report. According to Chapter 7, the City of Coachella is a participant member of the Riverside County Operational Area Multi-Jurisdictional Hazard Mitigation Plan (HMP), approved by FEMA in 2005, and ongoing updates to the document.

The Coachella Fire Department Station is the closest fire station to the project site, located approximately 1.7 driving miles northeast of the project site at 1377 6th Street. The closest police station to the project site is the Indio Police Department, at 46800 Jackson Street, and is 3.5 driving miles northwest of the project site. Thermal Sheriff Station at 86625 Airport Boulevard is approximately 5 driving miles southeast of the project property. The Police Department typically serves as the lead organization in carrying out evacuations, supported by the Fire Department as appropriate. The Public Works Department typically assists in the identification of the best evacuation routes and in barricading the evacuated areas.

As depicted in Plate 7-2, *Potential Emergency Shelters and Evacuation Routes*, in the Technical Background Report, Avenue 52, immediately north of the project, is the closest City designated evacuation route to the project.

The project lies within the City's Regional Retail District and is surrounded by existing agricultural and residential properties. Implementation of the proposed project would not significantly modify the existing

190 City of Coachella, GPU Draft EIR: Hazardous Materials, at 4.6-14.
191 City of Coachella, General Plan 2035: Community Character, at 04-96 (Apr. 22, 2015).
192 City of Coachella, GPU Draft EIR: Hazardous Materials, at 4.6-15.
193 City of Coachella, General Plan 2035: Safety, at 08-7 – 08-8, 08-12 – 08-14 (Apr. 22, 2015).
194 *See* City of Coachella, Document Central, https://www.coachella.org/services/document-central/-folder-165.

circulation pattern in the area or adversely impact emergency evacuation procedures as the site is currently bordered by established paved improvements. The proposed project is consistent with the GPU land use and zoning designations. The City's Circulation system was planned to accommodate buildout conditions, and roadway classifications identified in the GPU are intended to address projected traffic volumes.[195]

The proposed parking and circulation plans will be reviewed by the Fire and Police Departments to assure that the project's ingress/egress driveways and roads are adequate for accommodating emergency vehicles. A Traffic Control Plan may be required as a condition of approval to be implemented throughout all construction activities. This plan will work to reduce potential impacts that may arise due to conflicts with construction traffic. If required, the plan would be submitted to the Fire Department for review prior to development in order to assure that the project does not interfere with emergency access during development. Less than significant impacts are anticipated.

As the project would have a less than significant impact for the reasons discussed above, the project would be consistent with the analysis within the GPU EIR because it would not create new impacts or increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

h) **Less than Significant Impacts.** The GPU EIR concluded the impact of wildfires to be less than significant.[196] No mitigation measures are required. According to the GPU, new developments, whether they are new urban or new agricultural uses, would be required to maintain a protective buffer, such as landscape setbacks, hedgerows, windrows, or canopy trees, that ensures urban and agriculture uses land use conflicts do not occur (Policy 5.8). Additionally, vegetation control methods are required to reduce the hazard of wildland fire (Policy 4.1), and to ensure that fire services such as firefighting equipment and personnel, infrastructure and response times, are adequate for all sections of the City. To that end, continue to regularly evaluate specific fire hazard areas, and adopt reasonable safety standards, such as adequacy of nearby water supplies, fire-retardant roofing materials, fire-equipment accessible routes, clarity of addresses, street signage and street maintenance (Policy 4.4).

The areas of Southern California are susceptible to wildfires all year round due to the region's weather, topography, and vegetation conditions. The Coachella Valley's hot dry summer and autumn weather is ideal to generate the dry vegetation that fuels most wildfires. The California Board of Forestry (CDF) ranks fire hazard of wildland areas of the State using four main criteria: fuels, weather, assets at risk, and level of service. The project site is located on relatively flat topography. The project site and its surroundings are located outside of the Very High Fire Hazard Severity Zone (FHSZ) for Local Responsibility Area and outside of the Very High/High/Moderate FHSZ for State and Federal Responsibility Areas.[197] The project will include the on-site fire protection facilities necessary to satisfy the local Fire Department requirements. The project will also include streets that accommodate fire equipment, with appropriate turnaround radiuses, consistent with Policy 4.4 of the GPU. Additionally, the project will include block walls, perimeter landscaping that is routinely maintained, and setbacks compliant with GPU Policies 5.8 and 4.1. No impacts related to wildland fire are expected.

As the project would have a less than significant impact for the reasons detailed above, the project would be consistent with the analysis within the GPU EIR because it would not create new impacts or increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

Conclusion:

With regards to the issue area of Hazards and Hazardous Materials, the following findings can be made:

1. No peculiar impacts to the project or its site have been identified. The project would not result in the use,

195 City of Coachella General Plan Update: Mobility Element, at 5-1 and 5-7.
196 City of Coachella, GPU Draft EIR: Hazardous Materials, at 4.6-18.
197 Cal Fire Fire Hazard Severity Zone Map (2025) https://experience.arcgis.com/experience/5065c998b4b0462f9ec3c6c226c610a9.

storage or transport of hazardous materials, or the release of hazardous materials. Moreover, the project would not impact a local school, airport, evacuation/emergency response plan, hazardous materials site, or lands vulnerable to wildfires.

2. There are no potentially significant off-site and/or cumulative impacts which were not discussed by the GPU EIR. The EIR adequately addressed the potential for hazardous material release or use, and impact within the planning area.

3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the GPU EIR. The database searches and findings within the Phase I and II ESAs are consistent with the findings and assumptions in the GPU EIR.

4. No mitigation measures are required within the GPU EIR. Compliance with the GPU Policies 5.8, 4.1, 4.4, 6.10, and 6.11 and regulations established by the California Department of Public Health, Riverside County Department of Environmental Health, California Building Code, and Electrical Code, and Construction General Permit (SWPPP) ensures that potential impacts to hazards and hazardous materials would remain less than significant.

10. HYDROLOGY AND WATER QUALITY -- Would the project:	Project Peculiar Impact that is not Substantially Mitigated by Uniformly Applied Policies	Significant Impact not Analyzed as Significant in the GP EIR	Potentially Significant Offsite or Cumulative Impact not Discussed in the GP EIR	Adverse Impact More Severe based on Substantial New Information	No New Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	☐	☐	☒
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would:					
i) result in substantial erosion or siltation on- or off-site;	☐	☐	☐	☐	☒
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☐	☐	☒
iii) create or contribute runoff water which would exceed the capacity of existing or planned storm-water drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☐	☐	☒
iv) impede or redirect flood flows?	☐	☐	☐	☐	☒
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☐	☒

Sources: Flood Insurance Rate Map, FEMA map number 06065C2262H, effective March 6, 2018; 2035 Coachella General Plan, 2015, City of Coachella; Water Quality Control Plan for the Colorado River Basin Region, January 2019; 2020 Coachella Valley Regional Urban Water Management Plan, June 2021)

a) **Less than Significant Impacts**. The GPU EIR determined that impacts would be less than significant.198 The EIR found that implementation of the GPU would not violate applicable water quality standards or waste discharge requirements. Federal, state, and local regulations, including the Clean Water Act, the Porter-Cologne Water Quality Control Act, Regional Water Quality Control Plans, and the Safe Drinking Water Act, establish a comprehensive framework that governs pollutant discharges, protects surface and groundwater quality, and requires compliance as a condition of development approval. As the GPU Planning Area grows, all new development projects would continue to be subject to these requirements that prohibit activities that could degrade water quality or impair beneficial uses. The GPU included supporting policies that reinforce

198 City of Coachella, GPU Draft EIR, Water Quality and Hydrology, 4.7-17.

compliance with existing regulations by limiting pollutant discharges and ensuring that water quality in local waterways meets applicable state and federal standards. Because future development must demonstrate compliance during permitting and ongoing operations, and because violations would trigger corrective actions or cessation of activities, implementation of the GPU would not result in significant impacts related to water quality standards or waste discharge requirements.

General Plan Policies Supporting the Protection of Water Quality and Compliance with State and Federal Standards

Sustainability and Natural Environment Element

Goal 3. Water Resources. Protected and readily available water resources for community and environmental use.

Policy 3.4 - Low Impact Development: Require the use of low-impact development strategies to minimize urban run-off, increase site infiltration, manage stormwater and recharge groundwater supplies.

Policy 3.8 - Groundwater Infiltration: Encourage the use of above-ground and natural stormwater facilities in new development and redevelopment, such as grassy or vegetated swales, permeable paving and rain gardens.

Goal 7. Waterways. Waterways and desert washes that serve a natural, environmental function and provide aesthetically pleasing open space for the community.

Policy 7.1 - Pollution Prevention: Limit the amount and concentration of pollutants released into the City's waterways.

Policy 7.2 - Development Impacts: When considering development applications, require consideration of onsite detainment of stormwater runoff and require the incorporation of appropriate stormwater treatment and control measures, in accordance with the most recent NPDES permit requirements.

Policy 7.3 - Soil Erosion: Require the prevention of water-born soil erosion from sites, especially those undergoing grading and mining activities.

Policy 7.4 - Water Quality: Ensure water quality in the City's waterways meets applicable state and federal standards.

Infrastructure and Public Services Element

Goal 2. Water Supply Facilities. Water supply facilities that meet future growth within the city and assure a high-quality and reliable supply of water to current and future residents.

Policy 2.9 - Water Supply Source Protection: Protect local groundwater resources from localized and regional contamination sources such as septic tanks, underground storage tanks, industrial businesses and urban runoff.

Goal 4. Stormwater Capacity. Sufficient stormwater drainage facilities and services that are environmentally sensitive, accommodate growth and protect residents and property.

Policy 4.5 - New Development: Require the preparation of drainage studies that evaluate adherence to City stormwater design requirements and incorporate measures to prevent on- or off-site flooding with all new development applications."

Policy 4.6 - Stormwater Pollution Prevention: "Cooperate in regional programs to implement the National Pollutant Discharge Elimination System program.

Summary of Regulatory Framework Relevant to Hydrology and Water Quality:

Hydrology refers to the occurrence, distribution, and movement of surface water, including water found in rivers and stormwater drainage systems. Stormwater particularly refers to the surface runoff and drainage resulting from rain events. Stormwater runoff and surface drainage patterns are determined by the soil conditions, topography, and associated gradients of the land. Surface water quality refers to selected physical, chemical, or biological characteristics found in stormwater in relation to existing standards. Groundwater is the

water found underground in the voids in soil, sand, and rock. It is stored in and moves slowly through aquifers. Groundwater supplies are naturally replenished, or recharged, by precipitation that seeps into the land's surface and by replenishment efforts made by local water agencies.

The Clean Water Act (CWA) of 1972 was enacted to restore and maintain the chemical, physical, and biological integrity of the nation's waters by regulating the discharge of pollutants to waters of the U.S. from point sources. The National Pollutant Discharge Elimination System (NPDES) was enacted as a program under the CWA to regulate non-point source discharges from urban land runoff and other diffused sources that were also found to contribute to runoff pollution. Under CWA, the EPA delegated the NPDES program responsibility to various state, tribal, and territorial governments, enabling them to perform many of the permitting, administrative, and enforcement aspects of the program. California is a delegated NPDES state and has authority to administer the NPDES program within its limits.

The Porter-Cologne Water Quality Control Act is the principal law governing water quality regulation for surface waters in California, thus effectuating the delegated provisions of the federal CWA and its NPDES program.[199] It has set forth a comprehensive program to protect water quality and the beneficial uses applicable to surface waters, wetlands, and groundwater and to point and nonpoint sources of pollution. The Porter-Cologne Act establishes that, as a matter of policy, all the waters of the State shall be protected; all activities and factors affecting the quality of water shall be regulated to attain the highest water quality within reason; and the state must be prepared to exercise its full power and jurisdiction to protect the quality of water in the state from degradation. The Porter-Cologne Act established the State Water Resources Control Board (SWRCB) and nine California Regional Water Quality Control Boards (RWQCBs), including Region 7, Colorado River Basin Regional Water Quality Control Board, which has jurisdiction in the City of Coachella and project site.

Under this framework, the Colorado River Basin Water Quality Control Plan (Basin Plan) serves as the guiding document prepared, adopted, and maintained to identify the existing and potential beneficial uses of waters of the State and establish water quality objectives to protect these uses. It is worth noting that as defined in Section 13374 of the California Water Code (CWC), the term "Waste Discharge Requirements" (WDRs) is equivalent of the term "permits" and is therefore attained through a regulatory compliance process. Compliance with WDRs is achieved through the appropriate permit registration process under the applicable NPDES program described in this section.

At the regional level, the project is located within the Whitewater River Watershed, which is an arid desert region encompassing approximately 1,645 square miles. Within this watershed, an area of approximately 367 square miles (22 percent), encompassing most of the existing development in the Coachella Valley region, is regulated under the established Whitewater River Region Municipal Separate Storm Sewer System Permit (MS4 Permit). The Riverside County Flood Control and Water Conservation District (RCFC&WCD), Coachella Valley Water District, and the incorporated Coachella Valley cities, including Coachella, have joint permittee responsibility for coordinating the regional MS4 Permit compliance programs and other activities aimed at reducing potential pollutants in urban runoff from land development construction, municipal, commercial, and industrial areas to the maximum extent possible. These public entities are generally in charge of stormwater management within their jurisdiction.

At the City level, Chapter 13.16 (Water Quality Control) of the CMC serves as the local stormwater management standard, aligning with the MS4, NPDES, and CWA programs.

Existing Drainage Conditions:

The project site consists of relatively level terrain that is actively maintained to support and irrigate agricultural fields planted with date palm orchards and grapevines. According to the USDA Natural Resources Conservation Series, Web Soil Survey, the on-site mapped soil series include Gilman fine sandy loam, Indio fine sandy loam,

199 California Water Code §§ 13000 *et seq*.

Indio very fine sandy loam (It), and Coachella fine sand. The majority of these soils are classified under Hydrologic Soil Group B, which is characterized by moderate runoff potential and moderate infiltration rates. The property's street frontage lacks public or private stormwater infrastructure, such as curbs, gutters, or drainage conveyance lines.

Summary of Regional Groundwater Resource Management:

The project site is located within the domestic water service area of Coachella Water Authority (CWA), the primary domestic water purveyor for the City of Coachella which relies on groundwater as the primary supply.

The Coachella Valley Groundwater Basin is the primary groundwater source for the project region's domestic water purveyors, including CWA. Based on the California Department of Water Resources (DWR), the Coachella Valley Groundwater Basin has an approximate storage capacity of 39.2 million acre-feet (AF) of water within the upper 1,000 feet and is divided into four subbasins: Indio, Mission Creek, Desert Hot Springs, and San Gorgonio.[200] The project site is specifically underlain by the Indio Subbasin, which is also known as the Whitewater River Subbasin. DWR has estimated that the Indio Subbasin contains approximately 29.8 million AF of water in the first 1,000 feet below the ground surface, representing approximately 76 percent of the total groundwater in the Coachella Valley Groundwater Basin.[201] Local groundwater management is currently taking place under the framework of the 2020 Coachella Valley Regional Urban Water Management Plan (2020 RUWMP), the preparation of which involved the collaboration of the six urban water suppliers in the Coachella Valley, including CWA.[202] The 2020 RUWMP describes the region's water supplies and anticipated demands through 2045, along with each agency's programs to encourage efficient water use.

Indio Subbasin is served by the operation and maintenance of three replenishment facilities: 1) the Whitewater River Groundwater Replenishment Facility, 2) the Thomas E. Levy Groundwater Replenishment Facility, and 3) the Palm Desert Groundwater Replenishment Facility.[203] Artificial replenishment, or recharge, is recognized by the water districts as one of the most effective methods available for preserving local groundwater supplies, reversing aquifer overdraft and meeting demand by domestic consumers.[204] According to the CVWD, the primary operator of these facilities, local agencies have percolated over 650 billion gallons of water back into the aquifer.[205] Combined with water conservation and efficiency requirements, individual development projects can contribute to groundwater sustainability by implementing the required stormwater retention and retention facilities.

The collaboration among CWA, CVWD, and other local water districts has resulted in an established water conservation, water reuse, and groundwater recharge strategy to ensure water availability and system capacity to meet the growing needs of the City. These planning efforts include: residential and commercial landscape and irrigation upgrade rebates, water audits, water conservation kits, budget-tiered rate structure, water conservation workshops, and a Memorandum of Understanding to help ensure a sufficient and reliable water supply for development projects within the City and in its SOI.

Summary of City of Coachella Engineering Requirements:

200 California Dept. of Water Resources (DWR), California's Ground Water: Bulletin 118 – Update 2003, Volume 3 – South Coast Hydrologic Region at 160 (2003).
201 Ibid.
202 Coachella Valley Water District, et al., *2020 Coachella Valley Regional Urban Water Management Plan*, at 1-1 (June 30, 2021), https://www.cvwd.org/DocumentCenter/View/5437/Public-Review-Draft-2020-Coachella-Valley-Regional-Urban-Water-Management-Plan.
203 Coachella Valley Water District, *Groundwater Replenishment & Imported Water* ("The district currently manages or co-manages four active groundwater replenishment facilities … Whitewater River Groundwater Replenishment Facility … Thomas E. Levy Groundwater Replenishment Facility … Palm Desert Groundwater Replenishment Facility.") (last visited Nov. 24, 2025), https://www.cvwd.org/162/Groundwater-Replenishment-Imported-Water.
204 U.S. Geological Survey, *Artificial Groundwater Recharge*, https://www.usgs.gov/mission-areas/water-resources/science/artificial-groundwater-recharge (last updated 2016, last visited Nov. 24, 2025).
205 Coachella Valley Water District, *Water News* (Winter 2014), at 1, https://www.cvwd.org/DocumentCenter/View/1093/2014-Water-News-Winter-PDF (last visited Nov. 24, 2025).
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In the City of Coachella, engineering requirements related to storm drain design, stormwater management, and water quality are primarily established through the City's Engineering Design Manual, Standard Plans, and Standard Specifications, which govern grading, drainage infrastructure, and construction practices. These local requirements operate in conjunction with the City's Municipal Code Chapter 13.16 (Water Quality Control) and Chapter 15.56 (Floodplain Management), which mandate compliance with water quality protection measures, pollutant control practices, adequate drainage, and stormwater discharge regulations. Together, these City-adopted standards form the foundational regulatory framework for evaluating drainage and water quality considerations, supplemented by regional MS4 level criteria that guide hydrology methods, storm drain sizing, and stormwater facility design. Therefore, subsequent references to the City's engineering requirements pertain to ensuring adequate sizing and related design measures that must be incorporated into improvement plans, which are subject to review and approval by the City of Coachella.

Proposed Project

Project implementation will comply with the applicable CWA, NPDES, state, and local regulations designed to prevent violations or impacts to surface water quality standards and waste discharge requirements pertinent to surface or groundwater quality. This form of compliance must be demonstrated to the City and other regulatory entities prior to site disturbance and grading.

During the period of construction, the project proponent must comply with the State's most current NPDES Construction General Permit (2022 CGP), which requires the preparation of a Notice of Intent (NOI) and a project-specific SWPPP, designed to prevent potential adverse impacts to surface water quality, including erosion and siltation, during the period of construction. The NOI and SWPPP are submitted to the SWRCB for approval and permit coverage. The SWPPP is a site-specific compliance plan required to identify a strategy of storm water BMPs in accordance with Section XIV (SWPPP Requirements) of the 2022 CGP. Storm water BMPs refer to a schedule of activities, prohibitions, practices, maintenance procedures, and other management practices to avoid, eliminate, or reduce the pollution of the receiving waters, primarily focused on preventing erosion, siltation, illicit discharge, and contamination. The SWPPP will include such measures as erosion control, sediment control, storm drain inlet protection, proper waste management and pollution prevention. The SWPPP must be prepared concurrently with final engineering design and must meet all NPDES plan review elements for acceptance by the City of Coachella. Compliance and plan implementation during construction will be regulated and enforced as part of the local agency site inspection protocols.

In order to obtain a grading permit, the project proponent is also required to submit and obtain approval for a Project-Specific Water Quality Management Plan (WQMP) in accordance with the current standards of the *Whitewater River Region Water Quality Management Plan for Urban Runoff*, the *Whitewater River Watershed MS4 Permit*, and the City of Coachella's engineering requirements. The WQMP is a compliance plan required to account for the stormwater facilities and management conditions to be followed by the site operator during the life of the project (post-construction). A Preliminary WQMP and Hydrology Report have been prepared for this project in order to meet the City's engineering approval requirements. Based on preliminary engineering, grading and hydrology design, the project site is represented by a single drainage management area (tributary area) covering the entire project site. Stormwater runoff volume resulting from the worst-case 100-year storm event will be conveyed southerly along stabilized surface and piped flows to designated retention facilities, where the stormwater runoff volume will be contained. The proposed method of stormwater retention will involve designated irrigation ponds or basins with available freeboard that has been sized to contain the full stormwater volume generated across the project site. This conclusion is supported by the post-construction runoff calculations in the Preliminary Hydrology Report and the demonstrated volumetric capacity of the proposed retention basins, which together show that the provided storage is sufficient to accommodate the calculated runoff volume. All storm drain and retention facilities will be privately constructed and maintained as part of the project scope. Storm drain inlets connected to this retention facility may be equipped with screening methods to filter out potential trash, organic debris, and other solids. The storm drain outlets may also be configured to allow for adequate screening prior to discharge into the private retention facilities. The provided retention volumetric capacity will comply with the local development requirements for retention and,

in doing so, will also adequately retain the smaller stormwater volume for water quality purposes, as defined by Section 2.3 (Implementation of WQMP Requirements) of the Whitewater River Region WQMP Guidance. As a result, project runoff will be completely contained within the project proponent's facilities and will not result in discharge capable of resulting in downstream hydrologic modifications or a contribution of urban runoff pollutants that would affect surface water quality. As a standard requirement per the City of Coachella's Engineering Requirements, all elements of the WQMP implementation, including maintenance, must be documented during the life of the project. Maintenance implementation will be required based on a standard WQMP Agreement to be executed prior to issuance of a grading permit. The project's engineering plans, hydrology report, and WQMP will be subject to City review and approval to validate MS4 compliance.

In summary, during construction and operation, project implementation will require plan- and permit-based compliance with CWA, NPDES, and local regulations to prevent impacts to water quality standards and the beneficial uses assigned to local receiving waters. Following City engineering review and approval, the stormwater capture and management strategy for on- and off-site runoff will avoid waste discharge violations through the implementation of properly sized retention facilities. Less than significant impacts are expected.

This assessment is consistent with the GPU EIR's finding that future development would be required to demonstrate compliance during permitting and ongoing operations as required by federal, state, and local regulations. Therefore, the project would be consistent with the analysis within the GPU EIR and it would not create new impacts, increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

b) **Less than Significant Impact.** The GPU EIR determined that this impact associated with this threshold would be less than significant. The EIR found that groundwater in the Planning Area had been subject to long-term overdraft because more water was extracted from the Whitewater River Basin than was naturally replenished. This deficit contributed to declining groundwater levels, reduced surface water, land subsidence, degraded water quality, and the potential for saltwater intrusion, all of which could have resulted in significant and irreversible environmental impacts. Historical data evaluated during the GPU EIR preparation showed a steady decrease in basin storage, and projected population growth would have increased demand on the groundwater supply.

Regional planning efforts, including the Coachella Valley Urban Water Management Plan (2010), identified strategies such as groundwater recharge, water conservation, recycled water use, and expanded reliance on Colorado River and State Water Project supplies to stabilize long-term water availability. Goal 3 and Policies 3.1 through 3.10 of the GPU Sustainability and Natural Environment Element included policies promoting greywater use, groundwater recharge, and water-efficient development. Because projected water demands represented a small proportion of the basin's overall capacity and recharge programs were expected to offset future use, the EIR concluded that groundwater supply impacts under the GPU would be less than significant.

The established groundwater replenishment facilities previously described for the Indio Subbasin are not located on or near the project. Therefore, from the aspect of land use and location, project implementation is not deemed to be in conflict with any existing or planned groundwater recharge facility or associated infrastructure.

A project-specific Water Supply Assessment (WSA) has been prepared for the COVA project to evaluate the project's anticipated water demand. The assessment considered the proposed land uses and associated landscaping. This WSA was prepared in compliance with the requirements under SB 610 and SB 1262 by MSA Consulting Inc. in consultation with CWA and the City of Coachella, although pending a formal approval, the WSA is undergoing the last stages of agency review. . The project is anticipated to utilize the CWA Domestic System to provide water to the residential, commercial, amenity, and public Beach Club Lagoon portions of the site. CVWD Canal Water will be utilized for the irrigation and stormwater lake, and subsequently, the open space irrigation. A new well would be constructed to supply the proposed Hotel Lagoon at a location to be determined during final site design. The well would be sited, permitted, and installed in accordance with County of Riverside Department of Environmental Health requirements. Following selection of the well location, a

Registered Well Driller would prepare and submit the required permit application to the County for review and approval. Compliance with the County's well permitting and approval process would ensure that potential impacts to groundwater quantity and quality remain less than significant. The WSA analysis concluded that sufficient water supplies exist, or will exist based on current water planning assumptions, to meet the projected demands of the project, in addition to current and future projected water demands within CWA's service area in normal, single-dry, and multiple-dry years over a 20-year projection. This WSA will be reviewed every five years, or in the event that the water planning assumptions have changed, until the project begins construction to ensure it remains accurate and no significant changes to either the project or available water supply has occurred. The combination of water sources proposed to serve the project is not anticipated to result in a substantial depletion of groundwater supplies or significantly interfere with groundwater recharge in a manner that would hinder the sustainable management of the basin.

Moreover, proposed project aligns with the local and regional groundwater recharge strategies by implementing on-site retention and low impact development improvements as part of the site design. Project's stormwater management design includes a system of on-site retention facilities designed to collect and retain storm water runoff resulting from the controlling 100-year event, in accordance with the City's engineering standards. As such, the entire volume of stormwater runoff generated on-site up to the 100-year event will be contained on-site, contributing to groundwater recharge. As a function of the WQMP, operation of the development will include the required non-structural and structural pollution source control measures that work toward the protection of groundwater quality during the life of the project and under the project owner's responsibility. Non-structural source control measures consist of site operations, activities, and/or programs to be finalized in the WQMP and implemented by the project operator to educate site managers, employees, and users to prevent potential pollutants from being produced, coming into contact with the storm drain system. Structural source control measures consist of physical facility design standards to prevent direct contact between potential pollutants and stormwater runoff. The storm drain and retention system will be privately operated and maintained during the life of the project per a required WQMP agreement to be entered between the project proponent and the City. The proposed facilities are therefore not expected to violate or interfere with the groundwater quality. Regarding groundwater quality, less than significant impacts are anticipated.

Therefore, the project would be consistent with the analysis within the GPU EIR and it would not create new impacts or increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

c) i) **Less than Significant Impacts**. The GPU EIR determined that impacts associated with this threshold would be less than significant.[206] The EIR found that altering existing drainage patterns under the GPU had the potential to redirect historic water flows into areas not capable of handling increased runoff, which could have resulted in erosion, over saturated soils, land loss, and changes to stream stability. Such erosion related impacts could have permanently affected ground surfaces, stream channels, and associated ecosystems. Although no intentional relocation of waterways was planned, portions of the Whitewater River were partially channelized and could have been affected by runoff or soil disturbance from adjacent development. Construction activities and localized changes in drainage also had the potential to increase erosion and negatively affect fish, wildlife, structures, and nearby populations.

However, the EIR determined that existing federal and state regulations, including the Clean Water Act, NPDES Program, and Streambed Alteration Agreement requirements, prohibited development that would substantially alter waterways or degrade stream flows.207 Goal 7, Policies 7.1 through 7.6 of the GPU Sustainability and Natural Environment Element also included supporting policies to minimize erosion through sustainable site design and water conscious development practices. With these regulatory protections and existing channelization infrastructure in place, the EIR concluded that impacts related to erosion, sedimentation, or substantial changes in drainage patterns would have been less than significant.

206 City of Coachella, GPU Draft EIR, Water Quality and Hydrology, 4.7-22.
207 City of Coachella, GPU Draft EIR, Water Quality and Hydrology, 4.7-22 – 23.

The project site has been historically maintained to support agricultural uses and does not have any naturally occurring drainage courses or flood-prone patterns. Therefore, development of the site would not result in any alteration or obstruction of a natural river, stream, or other naturally occurring drainage course. As a standard requirement under the local development standards and City of Coachella's Engineering Requirements, the project will implement the necessary street improvements along the parcel frontage to provide adequate street drainage.

Based on the USDA Natural Resources Conservation Service Web Soil Survey, the site soils primarily correspond to Hydrologic Soil Group B, which is characterized for having moderate infiltration rates and moderate runoff potential.[208] Given the absence of drainage patterns and slopes, the site soils are not deemed to be prone to existing erosion or siltation in a considerable manner.

As a standard practice, erosion and siltation conditions will be prevented during construction and operation through the required compliance plans. The required SWPPP will include BMPs for proper soil stabilization and perimeter controls to prevent erosion and siltation from being generated by site clearing, grading, and construction activities. Upon completion, all construction related soil disturbance will be properly restored to a stabilized condition consisting of permanent project improvements (structures, hardscape, street pavement, and landscaping) with the properly designed storm drainage system and retention system of adequate capacity according to the City's engineering standards. The storm drainage system and retention facility will be subject to final design review and approval by the City to ensure compliance with the City's engineering standards.

During the life of the project, the ongoing maintenance and operation of facilities will ensure that all permanently improved ground surfaces are adequately maintained. As required by Chapter 13.16 (Water Quality Control) of the CMC and the City of Coachella's Infrastructure Development Standards, all project-related runoff must be adequately handled along engineered conveyances (sheet flow, swales, gutters, or pipes) to the designated retention facilities. Proposed curb and gutter improvements along the project frontage will contribute to adequate drainage in an area that was previously unimproved. The privately constructed and operated on-site storm drain system will be a function of the site plan and final engineering plans subject to City review and approval. Less than significant impacts are anticipated regarding substantial erosion or siltation, on- or off-site.

Therefore, the project would be consistent with the analysis within the GPU EIR and would not create new impacts or increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

ii) **Less than Significant Impacts**. The GPU EIR determined that impacts associated with this threshold would be less than significant.[209] The EIR found that altering existing drainage patterns under the GPU had the potential to redirect flows into areas not capable of accommodating new runoff, which could have resulted in flooding, erosion, and long-term changes to waterway stability and habitat. Such changes could have exposed structures, wildlife, and natural environments to temporary or permanent flood damage. Although no intentional modification of the Whitewater River or Coachella Canal was planned, the partially channelized Whitewater River could have been affected by unintended changes in drainage patterns or increased runoff from development. Because the GPU did not determine site specific drainage designs, localized construction activities and grading could also have contributed to erosion or flooding risks.

However, the EIR determined that existing federal and state regulations, including the CWA, NPDES Program, and Streambed Alteration Agreement requirements, prohibited development that would substantially alter waterways or increase flood hazards. GPU Policies 7.6 (Waterways as Amenities), 10.9 (Preservation of Natural Land Features), and 13.12 (Active Recreational Areas) of the Sustainability + Natural Environment Element, and Policy 4.5 (New Development) of the Infrastructure + Public Services Element, also included policies requiring development to assess and maintain existing drainage patterns, incorporate water conscious design,

208 https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx.
209 City of Coachella, GPU Draft EIR, Water Quality and Hydrology, 4.7-23.

and avoid creating new flood risks. With these regulatory protections and policy measures in place, the EIR concluded that potential impacts related to drainage pattern changes and associated flooding would have been less than significant.

The project's on-site stormwater retention system has been adequately sized to protect the proposed buildings and facilities from flooding conditions up to the controlling 100-year storm event. According to FEMA Flood Insurance Rate Maps (FIRMs) (Panel 06065C2262H), entire project property is located within Zone X, which is designated as an "area of minimal flood hazard."

As a standard Floodplain Management and Water Quality Control requirement under the City's Code of Ordinances, the proposed development includes adequate improvements and storm drain system to handle the relevant hydrologic conditions in a way that prevents inundation to the proposed structures and facilities. The project will introduce impervious surfaces (buildings, hardscape, asphalt, etc.) to the project property, but it will also include the required storm drain system (catch basins, lines, outlets, and retention facilities) to intercept, convey, and retain the controlling storm event stormwater volume from the site, therefore preventing a condition of urban runoff to the local surroundings or to the publicly maintained regional stormwater infrastructure. In adhering to the City's engineering and retention requirements, the proposed development will provide on-site retention facilities sized for the project's stormwater quantities and therefore is not expected to substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. Less than significant impacts are anticipated.

Therefore, the project would be consistent with the analysis within the GPU EIR, and it would not create new impacts or increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

iii) **Less than Significant Impacts**. The GPU EIR determined that impacts associated with this threshold would be less than significant.[210] The EIR found that stormwater runoff within the Planning Area increased as development and human activity intensified, carrying pollutants such as litter, oil, fertilizers, and sediments into storm drains and natural waterways. Polluted runoff had the potential to degrade water quality, harm aquatic and riparian habitat, and affect downstream water supplies. Additional development under the GPU could have contributed to increased pollutant loads and placed added stress on the existing drainage system. However, stormwater quality was regulated under the NPDES Program, which established limits for point source discharges and required best management practices for nonpoint source discharges to reduce pollutants in urban runoff to the maximum extent practicable.

The EIR determined that projects within the GPU Planning Area would continue to be required to comply with NPDES permit requirements, ensuring that site runoff would not become a pollutant source to local or regional waterways. However, Policy 7.1 (Pollution Prevention), Policy 7.2 (Development Impacts), Policy 10.9 (Preservation of Natural Land Features), and Policy 13.12 (Active Recreational Areas) of the Sustainability + Natural Environment Element, together with Policy 4.5 (New Development) of the Infrastructure + Public Services Element, address drainage-related impacts through measures that protect water quality, minimize impacts to natural drainage systems and significant land features, and require development to incorporate stormwater treatment, maintain adequate drainage infrastructure, and reduce pollutant discharges. With these regulatory protections and GPU policies in place, the EIR concluded that potential impacts related to stormwater runoff and water quality would have been less than significant.

The City of Coachella is a Permittee of the Whitewater River Watershed Municipal Separate Storm Sewer System (MS4) permit area. Within the City limits, MS4 facilities include a system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) designed for collecting and conveying stormwater. Storm drain facilities can be public or private. Examples of public facilities include pipes, gutters, channels, and basins occurring within the public right-of-way and/or maintained by a public agency. Private facilities are distinguished by being maintained separately

210 *Id.*, at 4.7-24.

by a private entity. As discussed previously, the project site is absent of any private or public storm drain infrastructure.

The traditional land development process generally results in the conversion of pervious ground surface (pre-development condition) into a setting with a higher impervious cover, occurring through the introduction of buildings, streets, and hardscape (post-development condition). This conversion generally leads to an increase in post-construction runoff volumes and rates compared to the pre-development condition.

As a standard requirement under the City of Coachella's engineering standards, the project is required to include retention facilities sized to contain stormwater volume resulting from the controlling 100-year storm event. This retention capacity is provided by a surface basin with adequate freeboard to accept and contain the entire volume resulting from the worst-case storm event during the life of the project, as confirmed in the project hydrology report and preliminary WQMP. This approach meets the City's local engineering requirements. The project's engineering plans and retention capacity will be subject to standard City review and approval. Therefore, by complying with the local retention requirements that take into account the existing facilities, the project will prevent a runoff discharge condition into stormwater capable of contributing to or exceeding the MS4 capacity. Less than significant impacts are anticipated.

The project would be consistent with the analysis within the GPU EIR, and it would not create new impacts or increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

iv) **Less than Significant Impacts**. The GPU EIR determined that impacts associated with this threshold would be less than significant.[211] The EIR found that 100 year floods, which had a 1-percent annual probability of occurring, could have significantly increased water volumes within designated flood hazard areas and placed substantial stress on existing drainage systems. Development located within these areas would have been exposed to flood risks, including damage to structures, habitat, and natural environments. Within the Planning Area, flood hazards were primarily associated with the Whitewater River, its tributaries, mountain drainage, and intense summer monsoons. Although the GPU did not propose housing within the riverbanks, portions of the Planning Area west of the Coachella Canal were located within 100-year and 500-year flood zones. Existing channelization along the Whitewater River was engineered to convey flows exceeding the 100-year event, reducing the likelihood of major flooding impacts.

The EIR determined that federal and local regulations, including FEMA floodplain management requirements and Riverside County Ordinance 458, ensured that any development within a floodplain would be subject to strict design and permitting standards to minimize flood risk.212 Projects unable to meet these requirements would not have been permitted to build within the flood hazard area. The GPU also included policies promoting open space uses in floodplains, retrofitting of frequently flooded structures, and emergency planning to reduce exposure to flood hazards. Considering existing infrastructure, regulatory protections, and GPU policies, the EIR concluded that potential impacts related to flooding would have been less than significant.

Mudflow potential occurs mainly in the eastern portion of the Planning Area, where little development is set to occur as this land is primarily reserved for open space and very low development. However, with the regulatory framework proposed by the CGPU, projects seeking permits would not be allowed to develop unless CGPU criteria have been met and projects are shown to have little potential to impacts from mudflows. Policy strategies include siting potential hazards and infrastructure needs, monitoring slope failures, learning from past geologic hazards, and planning for emergency response and preparedness. With these safety measures, the potential harm from mudflow inundation can be reduced to ensure safety to structures and people within the Planning Area. The potential for mudflows and seiches within the Planning Area is possible, however the impacts of such events would be minimal due to the designated land use preserves, CGPU policies, and minor water level rise

211 *Id.*, at 4.7-29.
212 *Id.*, at 4.7-33.

from any potential seiches. Impacts from inundation by seiches, tsunami, or mudflow under the CGPU are considered less than significant.

As previously discussed, the project is absent of any mapped natural drainage courses or designated FEMA zones with flood flow concerns. The proposed development is not situated in an area where flood flows could be impeded, redirected, or increased as a result of project implementation. The site's proposed storm drain system will meet the local MS4 and City requirements by including the properly sized retention facilities. Therefore, less than significant impacts are anticipated.

The project would be consistent with the analysis within the GPU EIR and it would not create new impacts, increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

d) **No Impact**. The GPU EIR determined there would be no impacts relative to this threshold.[213] The EIR found that failure of levees or dams could have resulted in sudden inundation of water, mud, or debris, creating both immediate and long-term impacts on structures, infrastructure, and natural environments. Within the Planning Area, flood protection was provided primarily by the channelized and leveed portions of the Whitewater River and by the East Side Dike, which directed mudflows away from developed areas and toward the Coachella Valley Stormwater Channel. Although these facilities were engineered to withstand flows exceeding those associated with a 100 year flood, structural failure from seismic activity or other causes could have exposed nearby housing, infrastructure, and habitat to flooding or mudslides. Floodplain areas, where such risks were greatest, were subject to federal and local regulations requiring strict design and construction standards.

The EIR determined that FEMA floodplain management requirements, Riverside County Ordinance 458, and the permitting process administered by the Coachella Valley Water District and local agencies ensured that development within flood hazard areas would not proceed unless it met engineering and safety criteria intended to minimize risks from levee or dam failure.214 The GPU also included policies requiring monitoring of at-risk areas, emergency preparedness planning, and careful review of development proposals near flood-prone or mudflow-susceptible areas. Because projects that did not meet regulatory and GPU requirements would not have been permitted, and because existing infrastructure and policies reduced exposure to inundation hazards, the EIR concluded that impacts related to levee or dam failure would have been less than significant.

FIRMs serve as the basis for identifying potential flood hazards. According to FIRM panel 06065C2262H, effective March 6, 2018, the entire Subject Property is located within Zone X, which is categorized as an area of minimal flood hazard. The project is not located near any coastal areas and therefore is not prone to tsunami hazards.

A seiche is primarily defined by free or standing wave oscillations on the surface of water, the causes of which may be wind, atmospheric changes, or seismic activity. Although the project is not located in any mapped seiche zones, such as those associated with large bodies of water, the proposed development will include artificial lagoons and a lake for various uses. The proposed water features have been designed with the necessary freeboard and setbacks to protect on-site structures. This design approach provides resilience against potential seiche-induced wave action resulting from significant seismic or atmospheric events. As a result, any water surface oscillations generated by such events are expected to be effectively contained, preventing off-site releases or inundation-related impacts. Moreover, the project's storm drain system is designed to properly capture the site's urban runoff to prevent any risk of uncontrolled pollutant discharge. Being a proposed residential development, the project site will not host the storage of pollutants, petroleum products, or other hazardous materials in conditions which would be deemed a risk of release in an inundation condition. Therefore, no impacts are anticipated.

213 *Id.*, at 4.7-34.
214 *Id.*, at 4.7-33.

Therefore, the project would be consistent with the analysis within the GPU EIR, and it would not create new impacts or increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

e) **Less than Significant Impacts**. The GPU EIR determined that impacts associated with this threshold would be less than significant.215 The EIR found that development and increased human activity under the GPU had the potential to degrade water quality within the Planning Area through runoff pollution, contamination, or insufficient groundwater replenishment. Because water is a critical resource for sustaining the community, any decline in potable water quality or degradation of local waterways could have resulted in long-term or irreversible impacts. Water quality within the Planning Area is regulated by the Coachella Valley Water District in coordination with the SWRCB and the Colorado River Basin Regional Water Quality Control Board. In addition, activities that could discharge to waters of the United States are subject to Clean Water Act Section 401 certification, enforced by the U.S. Army Corps of Engineers, ensuring that projects that could not meet water quality standards would not be permitted.

Although development under the GPU could have increased pollutant loads from urban activity, the EIR determined that the existing regulatory framework, combined with GPU policies in the Sustainability + Natural Environment and Safety elements, would ensure compliance with federal, state, and local water quality requirements. These policies required new development to incorporate design features that reduced pollutant discharges, managed stormwater effectively, and protected surface and groundwater resources. Based on these regulations and supporting GPU policies, the EIR concluded that potential impacts on water quality would have been less than significant.

As discussed previously, the project proponent is required to implement a project-specific WQMP to comply with the most current standards of the *Whitewater River Region Water Quality Management Plan for Urban Runoff*, *Whitewater River Watershed MS4 Permit*, and the City of Coachella's Water Quality Control regulations outlined in the Code of Ordinances (Chapter 13.16). The WQMP will incorporate grading, hydrology, and other plans to document the site design, source controls, and treatment controls with a required operation and maintenance program to comply with the hierarchy water quality objectives. Moreover, the project's storm drain system will ensure that urban runoff is adequately retained on-site. Combined with the required water conservation practices, the project is expected to contribute to the groundwater sustainability efforts implemented for the Coachella Valley region. Less than significant impacts are anticipated.

The project would be consistent with the GPU EIR because it would not create new impacts, and there is no new information of substantial importance than that covered in the GPU EIR.

Conclusion:

With regards to the issue area of Hydrology and Water Quality, the following findings can be made:

1. No peculiar impacts to the project or its site have been identified. The project-specific hydrology, water quality, and water supply analyses determined that the Project would comply with applicable federal, State, regional, and local regulations governing water quality, stormwater management, groundwater resources, and flood protection. Compliance with the Construction General Permit, preparation and implementation of a SWPPP and WQMP, City engineering requirements, and implementation of appropriately sized on-site stormwater retention facilities would ensure that impacts related to water quality, groundwater resources, drainage, erosion, flooding, and stormwater management remain less than significant.
2. There are no potentially significant off-site and/or cumulative impacts which were not discussed in the City of Coachella General Plan 2035 Program EIR. The Program EIR evaluated impacts associated with water quality standards, waste discharge requirements, groundwater supply and recharge, drainage patterns, erosion, stormwater runoff, flooding, flood hazards, and consistency with applicable water quality management programs. The Program EIR concluded that compliance with existing regulatory requirements and implementation of General Plan policies protecting water quality, groundwater resources, and

215 *Id.*, at 4.7-26.

stormwater management would reduce these impacts to less-than-significant levels.

3. No substantial new information has been identified which results in an impact more severe than anticipated by the City of Coachella General Plan 2035 Program EIR. Project-specific analyses demonstrate that adequate water supplies are available to serve the Project, stormwater runoff would be fully contained within on-site retention facilities designed in accordance with City standards, and the Project would comply with applicable Clean Water Act, NPDES, MS4 Permit, Water Quality Control Plan, and groundwater management requirements. The Project's hydrology, drainage, and water quality characteristics are consistent with the assumptions and conclusions evaluated in the Program EIR.

4. No mitigation measures were identified in the GPU EIR for hydrology and water quality impacts. Compliance with applicable federal and State water quality regulations, including the Clean Water Act, Porter-Cologne Water Quality Control Act, NPDES permitting requirements, Whitewater River Watershed MS4 Permit requirements, City of Coachella Municipal Code Chapters 13.16 and 15.56, applicable City engineering standards, and General Plan policies related to water quality protection, groundwater recharge, stormwater management, pollutant control, drainage design, and flood protection would ensure that potential impacts related to water quality, groundwater resources, drainage patterns, stormwater runoff, erosion, flooding, and water quality management plans remain less than significant.

11. LAND USE AND PLANNING - Would the project:	Project Peculiar Impact that is not Substantially Mitigated by Uniformly Applied Policies	Significant Impact not Analyzed as Significant in the GP EIR	Potentially Significant Offsite or Cumulative Impact not Discussed in the GP EIR	Adverse Impact More Severe based on Substantial New Information	No New Impact
a) Physically divide an established community?	☐	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☐	☒

Sources: City of Coachella 2035 General Plan Update, 2015; Coachella General Plan Update Environmental Impact Report, 2015; Coachella Municipal Code.

a) **No Impact.** The GPU EIR concluded this impact to be less than significant.[216] Under GPU, development would continue to occur in the western portion of the Planning Area, where density and development are most prominent and extend eastward into current agricultural and open space areas. Though the Planning Area will experience a great amount of growth throughout the GPU timeline, development will grow around the existing built environment as an extension of the established City and aim to enhance the existing developed community both socially and physically without dividing communities. This is ensured by the implementation of GPU policies that guide development through 2035, and emphasize community character and an active, connected community.[217] The GPU Policies include the redevelopment of existing retail into neighborhood centers (Land Use Element Policy 6.6), improved perceived and actual safety in Coachella (Community Health Element Policy 4.3), and encourage urban beautification through landscaping (Community Health Element Policy 4.7). No mitigation measures are required.

The 87-acre project site is characterized by agricultural land and supports dilapidated agricultural structures and an abandoned residential structure. Avenue 52 delineates the project's northern boundary; Van Buren Street delineates the project's eastern boundary; Calhoun Street delineates the project's western boundary; and agricultural land within the unincorporated Community of Vista Santa Rosa delineates the project's southern boundary. The project site is owned by a single entity. The properties to the north, south, east, and west of the project are also owned by entities separate from the project. Therefore, the project site is not anticipated to physically divide an established community. No impacts are anticipated.

As stated above, the GPU EIR determined impacts related to division of an established community to be less than significant. As the project would have a less-than-significant impact for the reasons detailed above, the project would be consistent with the analysis within the GPU EIR because it would not create a new impact, and there is no new information of substantial importance than identified within the GPU EIR.

b) **Less than Significant Impact.** The GPU EIR concluded that impacts would be less than significant because the GPU would be consistent with, and supplement, adopted plans and regulations governing land use and development in the Planning Area.[218] No mitigation is required. The GPU is a policy document and outlines a number of development strategies, land use plans, and regulations to guide the growth of the City through 2035.

216 City of Coachella, GPU Draft EIR, Land Use + Planning, at 4.8-9 (2015).
217 *Ibid.*
218 *Id.*, at 4.8-13.

The GPU outlines a land use program that focuses on the form and character of the built environment. The land use approach of the GPU is structured to provide flexibility to respond to changing market and demographic conditions as well as provide the community with certainty of place type for the different areas of the community. Moreover, the land use designations in the GPU describe the intent of the designation, allowed land uses, development intensity, network and connectivity, street design, parks and open space, and urban form guidelines, to ensure development consistent with the vision of the GPU, with enough variation to manage economic and changes in the community's development direction.[219]

According to the Coachella General Plan Land Use Designations Map,[220] the project site is located within the Regional Retail District land use designation. According to the Coachella GPU, Regional Retail District provides opportunities for a wide range of shopping and entertainment in a variety of urban and suburban formats.[221] These include regional shopping centers, mixed designation centers or similar uses. The uses allowed in this designation will cater to regional clientele and provide a unique amenity to all residents of the Coachella Valley and an important revenue source for the City. The primary purpose of the District is to provide for commercial opportunities with residential uses supporting the retail environment.

The project site is primarily surrounded by agricultural properties and scattered residential properties. The table below shows the surrounding land uses and designations.

Table XI-1 Existing Uses and Land Use Designations

Direction	Existing Uses	Land Use Designations
North	Vacant, Agriculture, and Residential	Regional Retail District
East	Residential and Agriculture	Regional Retail District and General Neighborhood
South	Vacant, Agricultural, and Residential	Unincorporated Community of Vista Santa Rosa: Agriculture and Estate Density Residential
West	Agriculture	Unincorporated Community of Vista Santa Rosa: Agriculture

Per the GPU, commercial use (which include commercial and services, general office, and mixed commercial and industrial) occupies approximately 244 acres of the City.[222] This makes up approximately 5 percent of the total area within the City, while vacant land occupies approximately 53 percent. Agricultural land uses occupy 33 percent of the City's area, being the second largest land use classification in the City. Transportation, communications and utilities are the third largest land use, covering approximately 6 percent of the City. As distinguished in the Project Description provided earlier in this document, and as graphically portrayed in the site exhibits, the site of the proposed project is currently characterized primarily by agricultural land.

General Plan Land Use and Zoning Designations

Future development of the project site and all lands within the City of Coachella are subject to land use and other development related goals and policies contained in the recently adopted Coachella GPU, and the codified regulations, standards and other criteria provided in the CMC. The current GPU Land Use designation for the project site is Regional Retail District. Districts are areas of the City that are more single use and automobile-oriented. The Districts include large format retail and commercial areas, industrial areas, and resorts. These areas are critical to the overall economic prosperity of the City but have a lower level of design regulation and pedestrian-orientation than other areas of the City (Coachella General Plan pg. 04-4). Regional Retail Districts provide opportunities for a wide range of shopping and entertainment in a variety of urban and suburban

219 City of Coachella, GPU Draft EIR: Project Description, at 3.0-8 (2015).
220 City of Coachella, General Plan 2035 – Land Use Designations Map, available at https://www.coachella.org/home/showpublisheddocument/8259/637592601028770000 (last visited Nov. 24, 2025).
221 City of Coachella, General Plan 2035: Land Use + Community Character, at 37 (2015).
222 City of Coachella, GPU Draft EIR: Project Description, tbl. 3.0-1: Existing Land Use Designations at 3.0-15.

formats. These include regional shopping centers, mixed destination centers, or similar uses. The uses allowed in this designation will cater to regional clientele and provide a unique amenity to all residents of the Coachella Valley and an important revenue source for the City. The primary purpose of the District is to provide for commercial opportunities, with residential uses supporting the retail environment. Regional Retail Districts allow for 10 to 15 du/ac, and floor area ratio (FAR) 0.35 to 2.0.

The zone in which the project site lies is Regional Commercial (RC), as designated by the City of Coachella. RC zones are intended to encourage a wide range of shopping and entertainment in a variety of urban and suburban formats. These include regional shopping centers, mixed designation centers or similar uses. The uses allowed in this zone will cater to regional clientele and provide a unique amenity to all residents of the Coachella Valley and an important revenue source for the City.

For planning purposes, the City of Coachella is divided into 17 unique subareas, and every parcel in the City is located in one of these areas. The purpose of the subareas is to define an overall vision and specific policy direction that supplements the General Plan Designations and the citywide goals and policies. The project is located in Subarea 3, Van Buren Corridor, which is predominantly single-family, retail, schools, and vacant land. The vision for this subarea is to be a major sub-regional retail designation that will provide a wide variety of goods and services for Coachella residents, as well as neighboring communities.

The project proposes the development of a resort residential community on approximately 87 acres south of Avenue 52 and west of Van Buren Street. The project proposes a mixed-use development, consisting of a total of 402 units on approximately 28 acres (14.4 du/ac), which is consistent with the General Plan residential density range of 10 to 15 dwelling units per acre.[223] The private sector also includes complimentary resort features including water amenities, club amenities, health and wellness spaces, sports and recreational amenities, additional areas for events and restaurants, roadways, and open space on the remainder of the site. The public sector of the site is situated on approximately six acres in the northwest corner of the site and will consist of a beach club area, restaurant, sports bar, back-of-house area, and parking garage. The public sector uses have a combined FAR of approximately 0.65, which is consistent with the Regional Retail standard of 0.35 to 2.0.[224] The project is consistent with the existing land use and zoning designations. The public sector uses will require a future City-approved CUP and Entertainment permit, which will be sought once the plans and details for these uses are further defined during project implementation.

A tentative tract map is being prepared to illustrate the lots proposed for the multiple uses for the proposed project. Additionally, the project is required to go through Architectural Review to provide flexibility in the placement and interrelationship of the proposed structures and uses; to provide for the implementation of sound site plan design concepts while maintaining the overall intensity of land use and density of population; to review the site plan of those uses which are not intrinsically objectionable to the predominant use category of the district, but which have inherent characteristics which, if not properly handled, have potentials for becoming detrimental to the health, safety, or general welfare of the public, or to neighboring land uses; to determine whether or not a proposed development will properly comply with the architectural guidelines of the city and the provisions and development standards required by this chapter or as prescribed by the planning director, or other authorized agent; to improve the quality of development and to provide a mechanism whereby the city can insure well-designed development (CMC Section 17.72.010).

Overall, the project will comply with the land use policies provided by the City of Coachella to ensure impacts are less than significant.

223 City of Coachella, General Plan 2035: Land Use + Community Character, Tabel 4-1: General Plan Designations Summary, at 4-56 (2015).
224 Ibid.

Finally, as described throughout this environmental document, all other impacts not requiring mitigation would be less than significant or would have no impact. Therefore, the project would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, and impacts would be less than significant. The project would be consistent with the GPU EIR because it would not create new impacts, and there is no new information of substantial importance than that covered in the GPU EIR.

c) **Less than significant impact.** The GPU EIR concluded this impact to be less than significant.[225] The GPU EIR states the Planning Area is within the jurisdiction of the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP), which is in place to protect sensitive species within Coachella Valley include migratory birds, and native flora, and protects land within the Mecca Hills, and overlaps with the City of Coachella's Sphere of Influence. Under the GPU land use designations, this land is set aside for open space preservation and is not planned for development. The GPU EIR has addressed the biological resources of the Planning Area and the goals of the CVMSHCP.[226] The 87-acre project site is characterized by agricultural land and support structures as well as an abandoned residential property. The project site is located within the Regional Retail District land use designation. According to the Coachella GPU, Regional Retail District provides opportunities for a wide range of shopping and entertainment in a variety of urban and suburban formats.[227] The site is not designated for open space and is not located in an area protected by the CVMSHCP. Therefore, the project will not result in new impacts as no impacts are anticipated. The project would not create new impacts and there is no new substantial information that was not covered in the GPU EIR.

Conclusion:

With regards to the issue area of Land Use and Planning, the following findings can be made:

1. No peculiar impacts to the project or its site have been identified. The project would not physically divide and established community, or conflict with a land use plan or applicable habitat conservation plan.
2. There are no potentially significant off-site and/or cumulative impacts which were not discussed by the GPU EIR. The EIR adequately addressed the potential for land use and planning related to buildout of the City.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the GPU EIR.
4. No mitigation measures are required within the GPU EIR. Compliance with GPU Policies 6.6 of the Land Use Element, and Policies 4.3 and 4.7 in the Community Health Element, as well as consistency with the GPU land use designation, Zoning code, and CVMSHCP, ensures that potential impacts would remain less than significant.

225 City of Coachella, GPU Draft EIR, Land Use + Planning, at 4.8-20 (2015).
226 City of Coachella, GPU DEIR, at 4.8-20 (2015).
227 City of Coachella, General Plan 2035: Land Use + Community Character, at 04-38 (2015).

12. MINERAL RESOURCES -- Would the project:	Project Peculiar Impact that is not Substantially Mitigated by Uniformly Applied Policies	Significant Impact not Analyzed as Significant in the GP EIR	Potentially Significant Offsite or Cumulative Impact not Discussed in the GP EIR	Adverse Impact More Severe based on Substantial New Information	No New Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☐	☒

Sources: The City of Coachella 2035 General Plan; The City of Coachella 2035 General Plan Environmental Impact Report, 2015; Surface Mining and Reclamation Act.

a) **Less than Significant Impact**. The GPU EIR determined impacts would be less than significant.[228] Land within City boundaries is classified as MRZ 1, areas where available geological information indicates that little likelihood exists for presence of significant mineral resources. Subarea 17 of the Planning Aea contains portions zoned MRZ 2a (PCC), where geologic data indicate that significant measured or indicated mineral resources are present. It is in the MRZ 2a (PCC) area that 2 permitted mining operations occur. The proposed project exists within the MRZ 1 classification area and therefore no impacts to available or known mineral resources are anticipated. This conclusion is consistent with the GPU EIR analysis. The project would be consistent with the GPU EIR because it would not create new impacts, and there is no new information of substantial importance than that covered in the GPU EIR.

b) **Less than Significant Impact**. The GPU EIR determined that impacts would be less than significant.[229] As stated above, the GPU EIR concluded that land within city boundaries is classified as MRZ 1, areas where available geological information indicates that little likelihood exists for presence of significant mineral resources. Subarea 17 of the Planning Area contains portions zoned MRZ 2a (PCC), where geologic data indicate that significant measured or indicated mineral resources are present. It is in the MRZ 2a (PCC) area that 2 permitted mining operations occur.[230] The proposed project exists within the MRZ 1 classification area and therefore no impacts to available or known mineral resources are anticipated. This conclusion is consistent with the GPU EIR analysis. The project would not create new impacts and there is no new information of substantial importance than that covered in the GPU EIR.

Conclusion:

With regards to the issue area of Mineral Resources, the following findings can be made:

1. No peculiar impacts to the project or its site have been identified.
2. There are no potentially significant off-site and/or cumulative impacts which were not discussed in the City of Coachella General Plan 2035 Program EIR. The Program EIR adequately addressed the potential impact to mineral resources.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the City of Coachella General Plan 2035 Program EIR.
4. No mitigation measures are required within the GPU EIR for mineral resources. The project specific

228 City of Coachella, 2035 GPU Draft EIR, Geology and Soils, at 4.5-33.
229 *Id.*, at 4.5-34.
230 *Id.*, at 4.5-33.

impacts would be less than significant.

13. NOISE -- Would the project result in:	Project Peculiar Impact that is not Substantially Mitigated by Uniformly Applied Policies	Significant Impact not Analyzed as Significant in the GP EIR	Potentially Significant Offsite or Cumulative Impact not Discussed in the GP EIR	Adverse Impact More Severe based on Substantial New Information	No New Impact
a) Result in exposure of persons to noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☐	☒
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☐	☒
c) Result in a substantial temporary or periodic increase in ambient noise levels above levels existing without the project?	☐	☐	☐	☐	☒
d) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☐	☒
e) For a project located within the vicinity of a private airstrip would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☐	☒

Sources: Coachella General Plan, 2015; Coachella General Plan Environmental Impact Report, 2015; Coachella Municipal Code; Federal Transit Administration; Noise Analysis, Urban Crossroads, Inc. 2025 (Appendix H); Traffic Impact Analysis, Fehr and Peers, 2025 (Appendix I).

a/c) **Less than Significant Impact.** The GPU EIR concluded that this impact would result in less than significant levels.[231] Various goals and policies of the proposed GPU, such as Noise Element Policies 1.2 and 3.2, listed below, would assist noise-reduction strategies, while also ensuring that future development would not expose noise-sensitive receptors to noise levels in excess of the City's standards.

1.2 **Noise Analysis and Mitigation.** Require projects involving new development or modifications to existing development to implement mitigation measures, where necessary, to reduce noise levels to at least the normally compatible range. Mitigation measures should focus on architectural features and building design and construction, rather than site design features such as excessive setbacks, berms and sound walls, to maintain compatibility with adjacent and surrounding uses.

3.2 **Traffic Calming.** Where roadway noise exceeds the normally compatible range, consider the implementation of traffic calming measures such as reduced speed limits or roadway design features to reduce noise levels through reduced vehicle speeds and/or diversion of vehicle traffic.

Noise is simply defined as "unwanted sound."[232] When interfering with normal activities, causing physical harm, or causing adverse effects on health, sound becomes unwanted. Noise is measured on a logarithmic scale of pressure level known as a decibel ("dB"). An A-weighted decibel ("dBA") is an expression of the relative loudness of sounds in air as perceived by the human ear. In the A-weighted system, the decibel values of sounds

231 City of Coachella, GPU Draft EIR, Noise, at 4.10-16 (2015).
232 U.S. Env'tl. Prot. Agency, *Clean Air Act Title IV - Noise Pollution*, https://www.epa.gov/clean-air-act-overview/clean-air-act-title-iv-noise-pollution (last updated July 18, 2025).

at low frequencies are reduced compared with unweighted decibels, in which no correction is made for audio frequency.[233] Excessive noise or prolonged exposure to noise can contribute to temporary and permanent impairments, such as hearing loss, fatigue, stress, sleep deprivation, anxiety, and annoyance. Although noise has been accepted as a necessary by-product of urban development, it can become an environmental hazard. A variety of components of the urban environment generate noise; these include construction equipment and activities, motor vehicles, air traffic, mechanical equipment, household appliances, and other sources.

The State of California requires each city and county to adopt Noise Elements as a part of their General Plan.[234] In addition to the 12 Land Use Categories included in the Noise Element, there are four Community Noise Equivalent Level's (CNEL) used to interpret the compatibility of the 12 Land Use Categories. Zone A (Green) – Clearly Compatible, Zone B (Yellow) – Normally Compatible, Zone C (Orange) – Normally Incompatible, Zone D (Red) Clearly Incompatible.[235] The four zones of compatibility are dependent on the Land Use Categories.[236]

According to the Coachella General Plan Noise Element, the predominant noise source in the City is motor vehicles.[237] High volume roadways in the City are Highway 111, State Route 86, and Harrison Street, which generate vehicle noise along these roadways. Other major sources of noise in Coachella include the railway that runs through Coachella along the east side of Highway 111 and factories, processing, and distribution facilities. Other, less significant noise sources in Coachella include aircraft overflights, air conditioning units and other mechanical equipment on buildings, landscaping equipment, and human speech. None of these sources significantly contribute to overall noise levels when compared to traffic noise.

The General Plan states that noise levels are generally low in agricultural and rural areas and higher in more urbanized areas.[238] Noise in eastern Coachella Valley is generally related to linear sources, or "noise corridors," such as roadways and railroads, or to aircraft. Within the General Plan Area, principal noise corridors are major roadways such as Highway 111 and Highway 86/86s; Southern Pacific Railroad; Harrison Street and Polk Street to the west and east, respectively, and the Jacqueline Cochran Regional Airport. Other sources of vehicular noise include the local streets in the General Plan Area. Transportation noise is concentrated along these roadways and can vary with the volume of traffic, the vehicular speed, the vehicular mix and the roadway cross-section. The project is not situated in proximity to these roadways. Avenue 52, Van Buren Street, and Calhoun Street delineates the project's northern, eastern, and western boundaries, respectively.

In Coachella, Interior and Exterior Noise Standards are between 45 (interior) and 65 (exterior) for Residential, as well as between 45 and 65 dB for Commercial, Industrial and Institutional. Various sources are used to calculate noise level in the City. As part of the development of the Noise Element of the General Plan, noise level measurements were collected at 11 different locations throughout the City. Noise measurements were not taken along the roadway segments adjacent to the project boundaries. The closest noise measurement was taken Harrison Street, one mile east of the project, and one mile northeast of the project. Existing noise measurements at these locations were 68.6 dBA and 68.1 dBA, respectively. The noise measurement collected on Avenue 52 and Shady Lane, approximately 1.50 miles east of the project, was 62.7 dBA.

Future noise throughout the City was provided in Table 4 of the Noise Technical Appendix.[239] The only roadway segment adjacent to the project measured included Van Buren Street from Avenue 52 to Avenue 54. This segment will have a noise level of 74.2 dBA. Avenue 52 from Van Buren Street to Harrison Street (east of the project) is projected to have a noise level of 72.5 dBA.

233 NTi Audio, *Frequency Weightings for Sound Level Measurements* (2025), https://www.nti-audio.com/en/support/know-how/frequency-weightings-for-sound-level-measurements (last visited Nov. 24, 2025).
234 Cal. Gov't Code § 65302(f) (West 2024).
235 City of Coachella, Noise Element of the General Plan, at 10-2 (2015), https://cityofcoachellageneralplanupdate.weebly.com/uploads/1/2/1/2/12129446/noise.pdf.
236 Ibid.
237 *Id*., at 10-1.
238 Ibid.
239 City of Coachella GPU EIR Noise Technical Appendix, at 8-16 (2015).

Project-Specific Noise Analysis

A project-specific Noise Analysis[240] was prepared by Urban Crossroads, Inc. (Urban Crossroads) in September 2025 to determine the noise impacts associated with the development of the proposed project (Appendix H). The Noise Analysis evaluates the future exterior noise environment, potential off-site traffic impacts, the project-related long-term stationary-source operational noise, and project-related short-term construction noise and vibration impacts. The Noise Analysis utilized the following significance criteria matrix to determine whether the project would result in noise impacts (see following table).

Table XIII-1 Significance Criteria Summary

Analysis	Receiving Land Use	Condition(s)	Significance Criteria	
			Daytime	Nighttime
Off-Site Traffic	Noise-Sensitive[1]	If ambient is < 60 dBA CNEL	≥ 5 dBA CNEL Project increase	
		If ambient is 60 - 65 dBA CNEL	≥ 3 dBA CNEL Project increase	
		If ambient is > 65 dBA CNEL	≥ 1.5 dBA CNEL Project increase	
Off-Site Traffic	Non-Noise-Sensitive[2]	If ambient is > 70 dBA CNEL	≥ 3 dBA CNEL Project increase	
On-Site	Noise Sensitive	Exterior Noise Level Criteria	See Exhibit 3-1	
		Interior Noise Level Standard[3]	45 dBA CNEL	
Operational	Noise-Sensitive	Residential Exterior Noise Level[4]	55 dBA Leq	45 dBA Leq
		If ambient is < 60 dBA Leq[1]	≥ 5 dBA Leq Project increase	
		If ambient is 60 - 65 dBA Leq[1]	≥ 3 dBA Leq Project increase	
		If ambient is > 65 dBA Leq[1]	≥ 1.5 dBA Leq Project increase	
Construction	Noise-Sensitive	Noise Level Threshold[5]	80 dBA L_{eq}	
		Exterior Noise Level Increase[6]	20 dBA L_{eq}	
		Vibration Level Threshold[7]	0.30 PPV (in/sec)	

[1] FICON, 1992.
[2] Figure 10- 1 of the City of Coachella General Plan Noise Element
3 Cali[f]ornia Code of Regulations, Title 24, Building Standards Administrative Code, Part 2
4 City of Coachella Municipal Code section 7.04.030(A).
5 Fede[r]al Transit Administration, Transit Noise and Vibration Impact Assessment Manual.
6 Calt[r]ans Traffic Noise Analysis Protocol, April 2020.
7 Calt[r]ans Transportation and Construction Vibration Manual, April 2020 Table 19
"Daytime" = 6:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 6:00 a.m.

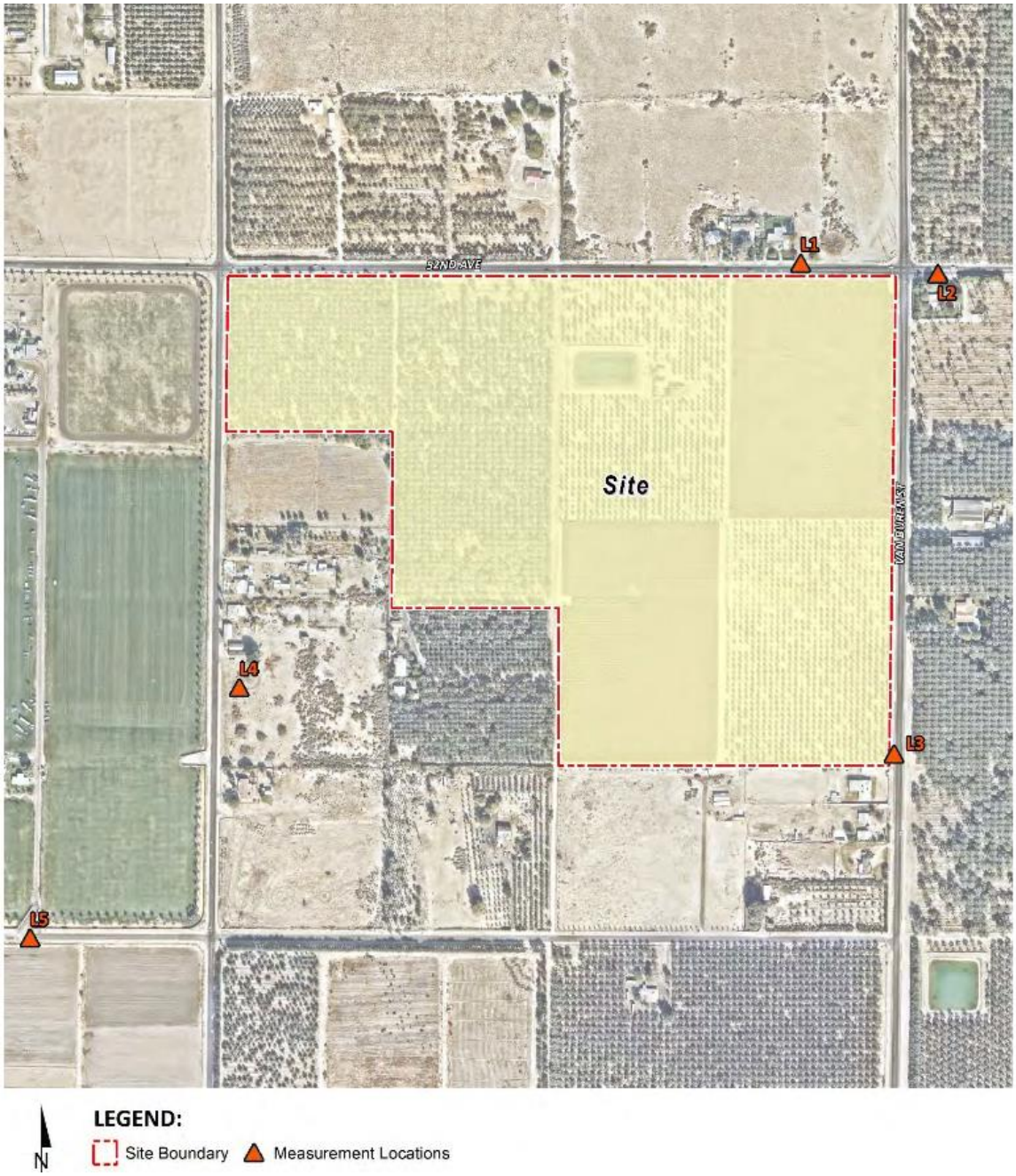
Existing Noise Level Measurements

To assess the existing noise level environment, 24-hour noise level measurements were taken at five locations in the project area. The receiver locations were selected to describe and document the existing noise environment within the project area. To fully describe the existing noise conditions, long-term noise level measurements were collected by Urban Crossroads on Friday, July 25, 2025. By collecting individual hourly noise level measurements, it is possible to describe the equivalent daytime and nighttime hourly noise levels. The long-term noise readings were recorded using Piccolo Type 2 integrating sound level meter and dataloggers. All noise meters and microphones were equipped with a windscreen during all measurements.

The long-term noise level measurements were positioned as close to the nearest sensitive receiver locations as possible to assess the existing equivalent hourly noise levels surrounding the project site. The measurement locations were selected in compliance with Caltrans and Federal Transit Administration ("FTA") guidance. Collecting noise level measurements at the nearby sensitive receiver locations allows a comparison of the before and after project noise levels and is necessary to assess potential noise increase due to the project's contribution to ambient noise levels, pursuant to CEQA. The exhibit below illustrates the noise measurement locations.

240 Noise and Vibration Analysis, Urban Crossroads, Inc., September 2025 (Appendix G).

Exhibit XIII-1 Noise Measurement Locations



The table below indicates the noise measurement locations and the daytime (7:00 am to 10:00 pm) and nighttime (10:00 pm to 7:00 am) noise levels, focusing on the equivalent or the hourly energy average sound level (Leq) to describe the existing ambient conditions. The Leq represents a steady-state sound level containing the same total energy as a time-varying signal over a given sample period. The daytime and nighttime equivalent noise levels represent the average of all hourly noise levels observed during these time periods expressed as a single number.

Table XIII-2 Ambient Noise Level Measurements

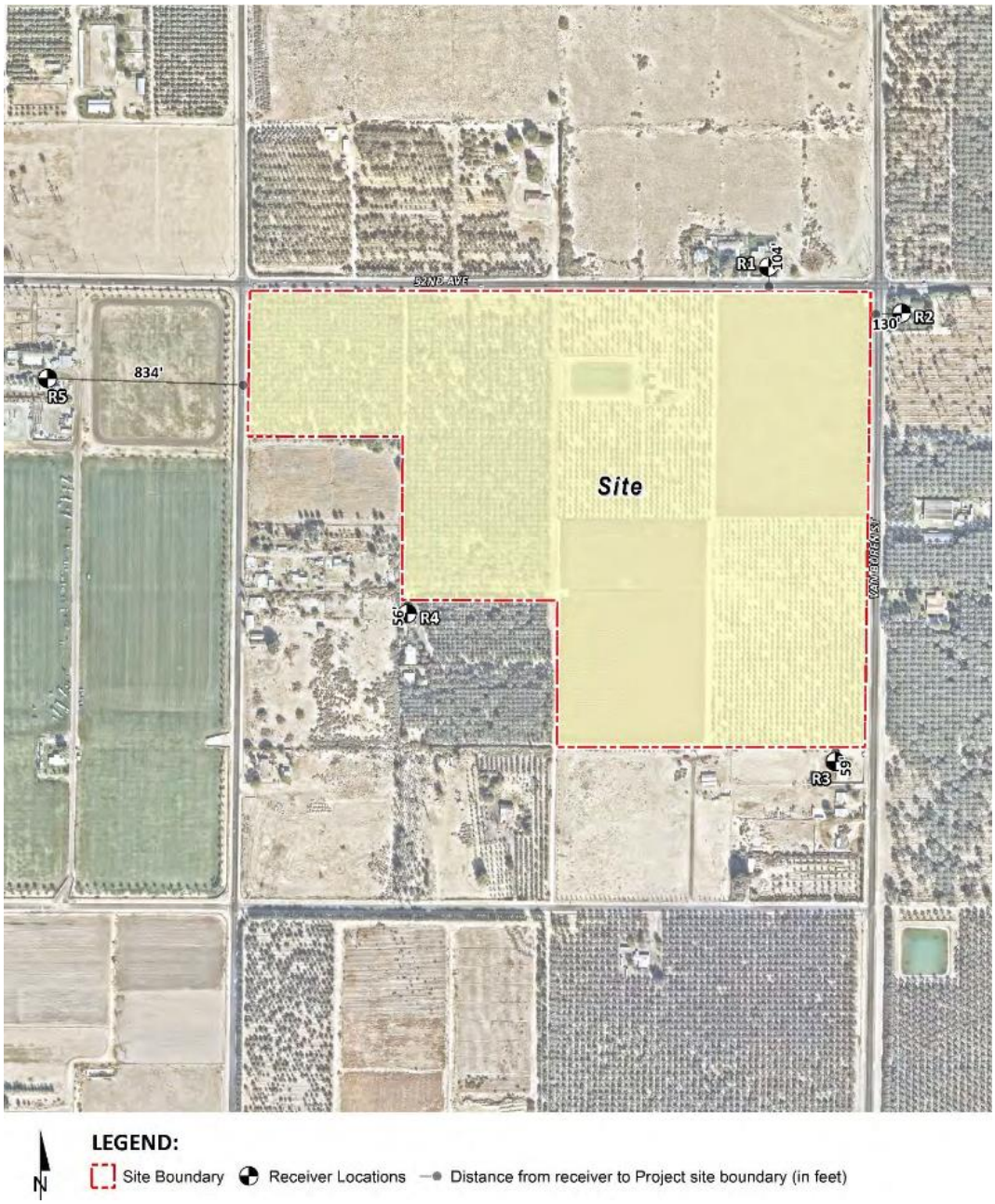
Location[1]	Description	Energy Average Noise Level (dBA L_{eq})[2]	
		Daytime	Nighttime
L1	Located north of the site near the residence at 83876 52nd Ave.	66.2	60.5
L2	Located east of the site near the residence at 84045 52nd Ave.	67.5	61.8
L3	Located south of the site near the residence at 52815 Van Buren St.	66.4	59.1
L4	Located south of the site near the residence at 52480 Calhoun St.	56.4	49.2
L5	Located west of the site near the residence at 83465 52nd Ave.	61.4	52.5

[1] See Exhibit 5-1 for the noise level measurement locations.
[2] Energy (logarithmic) average levels. The long-term 24-hour measurement worksheets are included in Appendix 5.2.
"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

Receiver Locations

Sensitive receivers are generally defined as locations where people reside or where the presence of unwanted sound could otherwise adversely affect the use of the land. Noise-sensitive land uses are generally considered to include schools, hospitals, single-family dwellings, mobile home parks, churches, libraries, and recreation areas. To assess the potential for long-term operational and short-term construction noise impacts, five receiver locations in the vicinity of the project site were identified. The analysis measured distances from the outermost boundary of the active construction area to the nearest noise-sensitive use location, such as building facades or outdoor use areas (e.g., backyards), where individuals are reasonably expected to spend extended periods of time. The receiver locations were selected consistent with the Federal Highway Administration (FHWA), Caltrans and FTA guidelines.

Exhibit XIII-2 Receiver Locations



The proposed project is located on approximately 87 acres south of Avenue 52, west of Van Buren Street, and east of Calhoun Street. The project site currently operates as agricultural land, with date palm groves and vineyards and a vacant residential structure. The site is surrounded by agricultural properties, scattered residential, and vacant lots. The project proposes to develop a residential and resort community with various amenities, including two lagoons and a lake feature. The following discussion analyzes the project's potential short- and long-term noise impacts generated by construction and operation of the project.

Construction

Construction of the project site is expected to generate short-term noise increases compared to the existing levels. A temporary incremental increase in noise levels along local roadways is expected to occur during the transport of workers and equipment to and from the site. Noise increases will also be generated by the actual on-site construction activities. Equipment used during the construction phases would generate both steady state and episodic noise that would be heard both on and off the project site.

The FTA's *Transit Noise and Vibration Impact Assessment Manual* recognizes that construction projects are accomplished in several different stages and outlines the procedures for assessing noise impacts during construction.[241] Each stage has a specific equipment mix, depending on the work to be completed during the stage. As a result of the equipment mix, each stage has its own noise characteristics; some stages have higher continuous noise levels than others, and some have higher impact noise levels than others. The project construction activities are expected to occur in the following stages:

- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating

Project-related construction noise was predicted using reference construction equipment noise levels from the FHWA published the Roadway Construction Noise Model (RCNM), which includes a national database of construction equipment reference noise emission levels. According to the EPA, FTA, and FHWA, the overall construction noise level is governed primarily by the noisiest pieces of equipment. The quieter pieces do not affect the overall level, but they do reduce the magnitude of the fluctuations in the noise level. Therefore, a rough estimate of the noise level need to only include the noisiest pieces of equipment expected at the site. The table below shows the combined noise levels for the loudest construction activities expected for each stage, consistent with FHWA and FTA guidance for detailed construction noise assessment, assuming all equipment operates simultaneously.

Table XIII-3 Construction Reference Noise Levels

Construction Stage	Reference Construction Equipmnet[1]	Reference Noise Level @ 50 Feet (dBA L_{eq})	Composite Reference Noise Level (dBA L_{eq})	Reference Power Level (dBA L_w)
Site Preparation	Tractor	80.0	82.9	114.5
	Front End Loader	75.0		
	Dozer	78.0		
Grading	Tractor	80.0	84.2	115.9
	Grader	81.0		
	Compactor (ground)	76.0		
Building Construction	Crane	73.0	82.1	113.7
	Generator	78.0		
	Gradall	79.0		
Paving	Paver	74.0	77.8	109.5
	Dump Truck	72.0		
	Roller	73.0		
Architectural Coating	Man Lift	68.0	76.2	107.8
	Compressor (air)	74.0		
	Generator (<25kVA)	70.0		

[1] FHWA Road Construction Noise Model.

Construction projects involve various stages, and activities frequently shift from one location to another. For example, during site preparation and grading, noise-generating activities may concentrate in an area for a short period to remove an obstruction, while the majority of the grading involves the equipment moving back and forth in a predictable pattern throughout the site; building construction and foundation work generally concentrate near the building footprint, while paving generally involves a predictable pattern of movement

241 FTA Transit Noise and Vibration Impact Assessment Manual, at 172 (2018), available at https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf.

throughout the site. Therefore, construction activities are best evaluated as multiple moving point sources within the construction area since the speed and power of the equipment varies, and the equipment constantly changes position in terms of its distance and direction relative to the receivers. The noise analysis evaluates construction noise under worst-case operating conditions consistent with regulatory guidance. Specifically, overall construction noise is governed by the loudest equipment types, rather than all equipment equally; assumes that the loudest pieces of equipment are operating simultaneously, representing peak activity conditions; and assumes that multiple crews may operate concurrently, resulting in combined noise levels equivalent to more than a dozen (e.g., 12+) of the loudest heavy construction equipment types operating at once. This approach effectively captures the potential for overlapping operations during peak construction periods, therefore, modeling worst-case simultaneous equipment operation.

Using the reference construction equipment noise levels and the CadnaA (Computer Aided Noise Abatement) noise prediction model, calculations of the project construction noise level impacts by phase at the nearby sensitive receiver locations were completed. Construction impacts are based on the loudest activity and the highest noise level calculated at each receiver location. The highest construction noise levels are expected to range from 54.6 to 63.6 dBA Leq at the nearby receiver locations (see table below).

Table XIII-4 Construction Equipment Noise Level Summary

Receiver Location[1]	Site Preparation	Grading	Building Construction	Paving	Architectural Coating	Highest Levels[2]
R1	61.9	63.2	61.1	56.8	55.1	63.2
R2	60.2	61.5	59.4	55.1	53.4	61.5
R3	62.3	63.6	61.5	57.2	55.5	63.6
R4	62.0	63.3	61.2	56.9	55.2	63.3
R5	53.3	54.6	52.5	48.2	46.5	54.6

[1] Construction noise source and receiver locations are shown in Exhibit 9-1.
[2] Construction noise level calculations based on distance from the project site boundaries (construction activity area) to nearby receiver locations. CadnaA construction noise model inputs are included in Appendix 9.1.

To evaluate whether the project will generate potentially significant short-term noise levels at the nearest receiver locations, a construction-related daytime noise level threshold of 80 dBA Leq is used as a reasonable threshold to assess the daytime construction noise level impacts. The noise analysis determined that project construction noise would not exceed the reasonable daytime 80 dBA Leq significance threshold at any receiver location (see table below). Therefore, the noise impacts due to project construction noise are considered less than significant.

Table XIII-5 Construction Noise Level Compliance

Receiver Location[1]	Construction Noise Levels (dBA L_{eq})		
	Highest Construction Noise Levels[2]	Threshold[3]	Threshold Exceeded?[4]
R1	55.1	80	No
R2	53.4	80	No
R3	55.5	80	No
R4	55.2	80	No
R5	46.5	80	No

[1] Construction noise source and receiver locations are shown in Exhibit 9-1.
[2] Highest construction noise level calculations based on distance from the construction noise source activity to the nearest receiver locations, as shown in Table 9-2.
[3] Construction noise level thresholds as shown in Table 4-1.
[4] Do the estimated Project construction noise levels exceed the construction noise level threshold?

Moreover, the project construction activities will contribute to noise level increases ranging from 0.1 to 2.5 dBA Leq during the daytime hours at the nearest receiver locations. The unmitigated construction noise analysis

shows the nearest receiver locations will not exceed the 20 dBA Leq noise level increase significance threshold during project construction activities (see table below). Therefore, temporary project-related construction noise level increases will result in a less than significant impact.

Table XIII-6 Daytime Construction Noise Level Increases

Receiver Location[1]	Typical Project Construction Noise Level[2]	Measurement Location[3]	Reference Ambient Noise Levels[4]	Combined Project and Ambient[5]	Project Increase[6]	Increase Criteria[7]	Increase Criteria Exceeded?
R1	55.1	L1	66.2	66.5	0.3	20	No
R2	53.4	L2	67.5	67.7	0.2	20	No
R3	55.5	L3	66.4	66.7	0.3	20	No
R4	55.2	L4	56.4	58.9	2.5	20	No
R5	46.5	L5	61.4	61.5	0.1	20	No

[1] Construction noise source and receiver locations are shown in Exhibit 9-1.
[2] Typical Project daytime construction noise levels as shown in Table 9-3.
[3] Reference noise level measurement locations as shown in Exhibit 5-A.
[4] Observed daytime ambient noise levels as shown in Table 5-1.
[5] Represents the combined ambient conditions plus the Project construction activities.
[6] The noise level increase expected with the addition of the proposed Project construction activities.
[7] Caltrans Traffic Noise Analysis Protocol.

Finally, as a standard requirement, the project is expected to abide by the CMC regulations on construction hours, which limit activities to the less sensitive times of the day. The restriction on hours of construction would keep any such construction activities exceeding 72 VdB at the nearest sensitive receptor from significantly interfering with people's sleep. Section 7.04.070 of the CMC specifically exempts noise sources associated with construction, erection, demolition, alteration, repair, addition to or improvement of any building, structure, road or improvement to realty, provided that such activities take place during daytime hours, as follows:

October 1st through April 30th

Monday – Friday: 6:00 a.m. to 5:30 p.m.
Saturday: 8:00 a.m. to 5:00 p.m.
Sunday: 8:00 a.m. to 5:00 p.m.
Holidays: 8:00 a.m. to 5:00 p.m.

May 1st through September 30th

Monday – Friday: 5:00 a.m. to 7:00 p.m.
Saturday: 8:00 a.m. to 5:00 p.m.
Sunday: 8:00 a.m. to 5:00 p.m.
Holidays: 8:00 a.m. to 5:00 p.m.

To maintain normal noise levels during construction and vehicle movement on/off the project site, the project will abide by the construction hours established by the City to avoid high noise levels. Less than significant impacts are anticipated.

Operation

Operation of the project will include a mix of residential, resort, and recreational uses. Residential units will consist of single family residential dwellings, while resort units will consist of condo hotel units and suites. The resort component will also consist of restaurants, bars, clubs, and event spaces. Recreational amenities include a 9.4-acre Hotel Lagoon, 2.5-acre lake, 0.4-acre Beach Club Lagoon, fitness and spa buildings, various sports courts (pickleball, tennis, basketball, etc.), and a children's play area. Project-related operational noise sources

will include the operation of the residential, resort and recreational uses, grounds maintenance equipment, heating, ventilation and air conditioning (HVAC) units, and vehicular traffic accessing the site. The vehicle mix will be comparable with existing vehicles on surrounding roads.

To estimate the project operational noise impacts, reference noise level measurements were collected from similar types of activities or equipment to represent the noise levels expected with the development of the project. The reference activities and noise level measurements are discussed as follows:

Individual Air Conditioning Units: To assess the noise levels created by the air conditioning units, reference noise levels were taken from equipment specifications for a 2- to 5-ton residential packaged air conditioning unit (Carrier 50VR-A). At a uniform reference distance of 50 feet, the units would generate a reference noise level of 44.4 dBA Leq. The air conditioning units were modeled 3 feet above ground level, operating 45 minutes per hour during the daytime and nighttime, which represents the typical maximum operating time for properly sized AC systems.

Commercial Air Conditioning Units: The noise level measurements describe a single mechanical rooftop air conditioning unit. The reference noise level represents a Lennox SCA120 Series 10-ton model packaged air conditioning unit. At the uniform reference distance of 50 feet, the reference noise level is 59.2 dBA Leq. The air conditioning units were modeled 5 feet above the ground level, operating 45 minutes per hour during the daytime and nighttime, which represents the typical maximum operating time for properly sized AC systems.

Basketball/Volleyball Activity: To describe the noise levels associated with tennis court activities, Urban Crossroads collected a reference noise level measurement. The measured reference noise level at the uniform 50-foot reference distance is 52.1 dBA L50 for basketball and volleyball court activity. The basketball and volleyball court activity noise levels include eight people playing basketball, the sound of the ball hitting the ground, gates closing, and background park noise sources including people talking. Noise associated with basketball and volleyball court activities is expected to occur for the entire hour (60 minutes).

Outdoor Activity: To describe the outdoor common area, courtyards, and activity areas, a reference noise level was found by modeling an outdoor event with 500 people present, averaging 66 dBA Leq over the outdoor area. At 50 feet, the reference noise level is 59.9 dBA Leq at a noise source height of 5 feet. The reference noise level measurement includes music and speaking. Outdoor common area activities are limited to daytime hours only.

Children's Play Area Activity: To describe the noise levels associated with children's play area activities, Urban Crossroads collected a reference noise level measurement. The measured reference noise level at the uniform 50-foot reference distance is 57.8 dBA L50 for children's play area activity. The children's play area activity noise levels include children playing on swing sets and play structures with background park noise sources, such as parents talking on phones and with other parents. Noise associated with children's play area activities is expected to occur for the entire hour (60 minutes).

Pool/Spa Activity: To describe the noise levels associated with pool and spa activities, Urban Crossroads collected a reference noise level measurement. The measured reference noise level at the uniform 50-foot reference distance is 63.0 dBA L50 for pool and spa activity. The pool activity noise levels include kids playing, running, screaming, splashing, playing with a ball, and parents talking. Noise associated with pool and spa activities is expected to occur for the entire hour (60 minutes).

Pickleball Court Activity: To describe the noise levels associated with pickleball court activities, Urban Crossroads collected a reference noise measurement. The measured reference noise level at the uniform 50-foot reference distance is 64.8 dBA L50 for pickleball court activity. Pickleball court activity noise levels include the constant talk of the players, the "pop" sound of rackets hitting pickle balls, metal gates closing, and background park noise sources, including people talking. Noise associated with pickleball court activities is expected to occur for the entire hour (60 minutes).

Tennis Court Activity: To describe the noise levels associated with the tennis court activities, Urban Crossroads, collected a reference noise level measurement. The measured reference noise level at the uniform 50-foot reference distance is 49.6 dBA L50 for tennis court activity. The tennis court activity noise levels include an instructor and student playing tennis, the instructor giving constant verbal feedback, the sound of rackets hitting tennis balls, metal tennis court gates closing, and background park noise sources, including people talking. Noise associated with tennis court activities is expected to occur for the entire hour (60 minutes).

To fully describe the exterior operational noise levels from the project, Urban Crossroads developed a noise prediction model using the CadnaA computer program. CadnaA calculates the distance from each noise source to the noise receiver locations, using the ground absorption, distance, and barrier/building attenuation inputs to provide a summary of the noise level at each receiver and the partial noise level contributions by noise source.

Using the reference noise levels to represent the project operations that include ground mounted air conditioning units, Urban Crossroads calculated the operational source noise levels that are expected to be generated at the project site and the project-related noise level increases that would be experienced at each of the sensitive receiver locations. The table below shows the project operational noise levels during the daytime hours of 7:00 a.m. to 10:00 p.m. The daytime hourly noise levels at the off-site receiver locations are expected to range from 44.4 to 49.9 dBA Leq.

Table XIII-7 Daytime Project Operational Noise Levels

Noise Source[1]	Operational Noise Levels by Receiver Location (dBA Leq)				
	R1	R2	R3	R4	R5
Residential Air Conditioning Units	44.5	42.4	41.8	41.7	38.4
Commercial Air Conditioning Unit	35.1	38.8	20.9	19.2	15.0
Basketball/Volleyball Activities	43.9	41.8	40.4	42.9	39.7
Outdoor Activity Area	41.0	34.4	21.0	20.1	16.0
Children's Play Area	42.9	41.2	40.9	43.1	40.5
Pool/Spa Activities	39.6	43.5	29.6	27.2	22.5
Total (All Noise Sources)	49.9	48.9	46.0	47.4	44.4

[1] See Exhibit 8-1 for the noise source locations. CadnaA noise model calculations are included in Appendix 8.2.

Project operational noise levels during the nighttime hours of 10:00 p.m. and 7:00 a.m. are indicated in the table below. The nighttime hourly noise levels at the existing off-site receiver locations are expected to range from 16.5 to 39.2 dBA Leq. The differences between the daytime and nighttime noise levels are largely related to the estimated duration of noise activity.

Table XIII-8 Nighttime Project Operational Noise Levels

Noise Source[1]	Operational Noise Levels by Receiver Location (dBA Leq)				
	R1	R2	R3	R4	R5
Residential Air Conditioning Units	43.6	41.4	40.8	40.7	37.5
Commercial Air Conditioning Unit	0.0	0.0	0.0	0.0	0.0
Basketball/Volleyball Activities	0.0	0.0	0.0	0.0	0.0
Outdoor Activity Area	0.0	0.0	0.0	0.0	0.0
Children's Play Area	0.0	0.0	0.0	0.0	0.0
Pool/Spa Activities	0.0	0.0	0.0	0.0	0.0
Total (All Noise Sources)	43.6	41.4	40.8	40.7	37.5

[1] See Exhibit 8-1 for the noise source locations. CadnaA noise model calculations are included in Appendix 8.2.

Project Operational Noise Level Compliance

To demonstrate compliance with local noise regulations, the unmitigated project-only operational noise levels are evaluated against exterior noise level thresholds based on the City of Coachella exterior noise level standards at nearby receiver locations. The table below shows that the mitigated operational noise levels associated with the project will not exceed the City of Coachella daytime and nighttime exterior noise level standards at the existing nearby noise-sensitive receiver locations. Therefore, the mitigated operational noise impacts are considered less than significant at the nearby noise-sensitive receiver locations.

Table XIII-9 Operational Noise Level Compliance

Receiver Location[1]	Project Operational Noise Levels (dBA Leq)[2]		Noise Level Standards (dBA Leq)[3]		Noise Level Standards Exceeded?[4]	
	Daytime	Nighttime	Daytime	Nighttime	Daytime	Nighttime
R1	49.9	43.6	50.0	45.0	No	No
R2	48.9	41.4	50.0	45.0	No	No
R3	46.0	40.8	50.0	45.0	No	No
R4	47.4	40.7	50.0	45.0	No	No
R5	44.4	37.5	50.0	45.0	No	No

[1] See Exhibit 7-1 for the receiver locations.
[2] Proposed Project unmitigated operational noise levels as shown on Tables 8-2 and 8-3.
[3] Exterior noise level standards, as shown in Table 4-1.
[4] Do the estimated Project operational noise source activities exceed the noise level standards?
"Daytime" = 7:00 a.m. - 10:00 p.m.; "Nighttime" = 10:00 p.m. - 7:00 a.m.

Project Operational Noise Level Increases

To describe the project operational noise level increases, the project operational noise levels are combined with the existing ambient noise level measurements for the nearby receiver locations that may be potentially impacted by project operational noise sources. Noise levels that would be experienced at receiver locations when project-source noise is added to the daytime and nighttime ambient conditions are presented in the tables below.

Table XIII-10 Daytime Project Operational Noise Level Increases

Receiver Location[1]	Total Project Operational Noise Level[2]	Measurement Location[3]	Reference Ambient Noise Levels[4]	Combined Project and Ambient[5]	Project Increase[6]	Increase Criteria[7]	Increase Criteria Exceeded?
R1	49.9	L1	66.2	66.3	0.1	1.5	No
R2	48.9	L2	67.5	67.6	0.1	1.5	No
R3	46.0	L3	66.4	66.4	0.0	1.5	No
R4	47.4	L4	56.4	56.9	0.5	5.0	No
R5	44.4	L5	61.4	61.5	0.1	5.0	No

[1] See Exhibit 7-1 for the receiver locations.
[2] Total Project daytime operational noise levels as shown in Table 8-2.
[3] Reference noise level measurement locations as shown in Exhibit 5-A.
[4] Observed daytime ambient noise levels as shown in Table 5-1.
[5] Represents the combined ambient conditions plus the Project activities.
[6] The noise level increase expected with the addition of the proposed Project activities.
[7] Significance increase criteria as shown in Table 4-1.

Table XIII-11 Nighttime Operational Noise Level Increases

Receiver Location[1]	Total Project Operational Noise Level[2]	Measurement Location[3]	Reference Ambient Noise Levels[4]	Combined Project and Ambient[5]	Project Increase[6]	Increase Criteria[7]	Increase Criteria Exceeded?
R1	43.6	L1	60.5	60.6	0.1	5.0	No
R2	41.4	L2	61.8	61.8	0.0	5.0	No
R3	40.8	L3	59.1	59.2	0.1	5.0	No
R4	40.7	L4	49.2	49.8	0.6	5.0	No
R5	37.5	L5	52.5	52.6	0.1	5.0	No

[1] See Exhibit 7-1 for the receiver locations.
[2] Total Project nighttime operational noise levels as shown in Table 8-3.
[3] Reference noise level measurement locations as shown in Exhibit 5-A.
[4] Observed daytime ambient noise levels as shown in Table 5-1.
[5] Represents the combined ambient conditions plus the Project activities.
[6] The noise level increase expected with the addition of the proposed Project activities.
[7] Significance increase criteria as shown in Table 4-1.

As indicated in the tables above, the project will generate daytime operation noise increases ranging from 0.0 to 0.7 dBA Leq and nighttime operational noise level increases ranging from 0.0 to 2.4 dBA Leq at the nearest receiver locations. Project-related operational noise level increases would not exceed the operational noise level increase significance criteria (see Table XIII-1). Therefore, project-related operational noise level increases at the sensitive receiver locations will be less than significant.

Off-Site Transportation Noise Analysis
The project is anticipated to generate 2,144 weekday trips per day. The project would access Calhoun Street, Van Buren Street, and Avenue 52. Approximately 30 percent of the traffic is expected on Van Buren Street and Avenue 52, with the remaining 40 percent using Calhoun Street. Based on the City of Coachella traffic counts on these roads: Calhoun Street has an average daily traffic (ADT) volume of 3,893, Van Buren Street has an ADT volume of 3,799, and Avenue 52 has an ADT volume of 8,316. To generate a 3 dBA increase in traffic noise would generally require a substantial increase in truck traffic relative to the overall mix of vehicles, or a doubling of traffic volumes. The project would not result in the generation of substantial truck trips, and the increase in daily traffic volumes is not expected to generate a perceptible noise level increase (i.e., less than 3 dBA CNEL) at sensitive land uses along affected roadways. Therefore, due to the low traffic volumes generated by the project, the off-site traffic noise levels generated by the project are considered less than significant.

Overall, impacts will be less than significant.

As previously discussed, the GPU EIR determined impacts to be less than significant. As the proposed project would have a less than significant impact for the reasons detailed above, the project would be consistent with the analysis within the GPU EIR because it would not create new impacts, increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

b) **Less than Significant Impact.** The GPU EIR concluded that vibration impacts will be less than significant.[242] Groundborne vibration can be described as perceptible rumbling, movement, shaking or rattling of structures and items within a structure. Groundborne vibration can generate a heightened disturbance in residential areas. These vibrations can disturb residential structures and household items while creating difficulty for residential activities such as reading or other tasks. Although groundborne vibration is sometimes perceptible in an outdoor environment, it does not result in the degree of disturbance that is experienced inside a building. Groundborne vibration can be measured in terms of amplitude and frequency or vibration decibels (VdB).

242 City of Coachella, GPU Draft EIR, Noise, at 4.10-20 (2015).

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods employed. The operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Ground vibration levels associated with various types of construction equipment are summarized in the table below. Based on the representative vibration levels presented for various construction equipment types, it is possible to estimate the potential for human response (annoyance) and building damage using the following vibration assessment methods defined by Caltrans.

Table XIII-12 Vibration Source Levels for Construction Equipment

Equipment	PPV (in/sec) at 25 feet
Small bulldozer	0.003
Jackhammer	0.035
Loaded Trucks	0.076
Large bulldozer	0.089
Vibratory Roller	0.210

Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual

Project vibration impacts were estimated using the vibration source level of construction equipment provided in the table above and the construction vibration assessment methodology published by the FTA. At distances ranging from 3 to 207 feet from project construction activities, construction vibration velocity levels are estimated to range from less than 0.01 to 5.05 PPV in/sec (see table below). Based on the maximum acceptable continuous vibration threshold of 0.30 PPV (in/sec), the typical project construction vibration levels will not exceed the vibration thresholds at any receivers. Therefore, the project-related vibration impacts are considered less than significant during typical construction activities at the project site.

Table XIII-13 Project Construction Vibration Levels

Location[1]	Distance to Const. Activity (Feet)[2]	Typical Construction Vibration Levels PPV (in/sec)[3]						Thresholds PPV (in/sec)[4]	Thresholds Exceeded?[5]
		Small bulldozer	Jack-hammer	Loaded Trucks	Large bulldozer	Vibratory Roller	Highest Vibration Level		
R1	104'	0.00	0.00	0.01	0.01	0.02	0.02	0.30	No
R2	130'	0.00	0.00	0.01	0.01	0.02	0.02	0.30	No
R3	59'	0.00	0.01	0.02	0.02	0.06	0.06	0.30	No
R4	56'	0.00	0.01	0.02	0.03	0.06	0.06	0.30	No
R5	834'	0.00	0.00	0.00	0.00	0.00	0.00	0.30	No

[1] Construction noise source and receiver locations are shown in Exhibit 9-1.
[2] Distance from receiver building facade to Project construction boundary (Project site boundary).
[3] Based on the Vibration Source Levels of Construction Equipment (Table 9-5).
[4] Caltrans Transportation and Construction Vibration Guidance Manual, April 2020, Table 19, p. 38.
[5] Does the peak vibration exceed the acceptable vibration thresholds?
"PPV" = Peak Particle Velocity

It should be noted that vibration levels at the site of the closest sensitive receiver are unlikely to be sustained during the entire construction period but will occur only during the times that heavy construction equipment is operating adjacent to the project site perimeter. Moreover, construction at the project site will be restricted to the daytime hours, consistent with City of Coachella requirements, eliminating potential vibration impacts during the sensitive evening and nighttime hours.

After construction, the nature of the proposed residential property would not typically involve activities expected to generate excessive vibration or groundborne noise. All activities within the project will be required to adhere to the City's Noise Ordinance. Less than significant impacts are anticipated.

Overall, the project would be consistent with the analysis within the GPU EIR because it would not increase impacts identified within the GPU EIR.

d/e) **Less than Significant Impact.** The GPU EIR concluded that this impact would be less than significant.[243] The project is located approximately 2.8 miles from the Jacqueline Cochran Regional Airport and is located outside of the 70, 65 and 60 CNEL noise contours associated with this facility. Furthermore, the Jacqueline Cochran Regional Airport Land Use Plan does not identify the project as being located within its planning area. Less than significant impacts are expected.

As previously discussed, the GPU EIR determined impacts to be less than significant. As the proposed project would have a less than significant impact for the reasons detailed above, the project would be consistent with the analysis within the GPU EIR because it would not create new impacts or increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

Conclusion:

With regards to the issue area of Noise, the following findings can be made:

1. No peculiar impacts to the project or its site have been identified. The project would not result in substantial increased noise and groundborne vibration, or impact an airport.
2. There are no potentially significant off-site and/or cumulative impacts which were not discussed by the GPU EIR. The GPU EIR adequately addressed the potential for noise impacts related to buildout of the City.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the GPU EIR. The project-specific Noise Analysis conducted by Urban Crossroads, Inc. is consistent with the findings and assumptions of the EIR.
4. No mitigation measures are required within the GPU EIR. Compliance with GPU Policies 1.2 and 3.2, as well as Section 7.04.070 of the CMC and the City's Noise Ordinance ensures that potential impacts to noise would remain less than significant.

243 *Id.*, at 4.10-22 (2015).

14. POPULATION AND HOUSING – Would the project:	Project Peculiar Impact that is not Substantially Mitigated by Uniformly Applied Policies	Significant Impact not Analyzed as Significant in the GP EIR	Potentially Significant Offsite or Cumulative Impact not Discussed in the GP EIR	Adverse Impact More Severe based on Substantial New Information	No New Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☐	☒

Sources: Coachella 2035 General Plan Update, 2015; Coachella General Plan Update Environmental Impact Report, 2015; Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, and the State, 2020-2025.

a) **Less than Significant Impact.** The GPU EIR determined impacts would be less than significant.[244] The GPU EIR stated that growth under the GPU would more than double the Planning Area population at the time the GPU EIR was written. Based on the 2025 California Department of Finance population and housing estimates, the City of Coachella's current total population is approximately 44,384 with an average household size of 4.19 persons per household (pph).[245] The GPU EIR analyzed future growth in Chapter 4.13, *Population and Housing*.[246] Figure 4.13-2 in the EIR forecasts a population of 135,000 by year 2035.[247] The current population is approximately 33 percent of the projected 2035 population of 135,000. The GPU EIR states that the GPU has been prepared to respond to the growth demand projected for Coachella as described by Southern California Association of Governments (SCAG) and the Riverside County Center for Demographic Research. Per the GPU EIR, the City has enough undeveloped land to accommodate generations of growth and has long anticipated growing into a mid-sized City.[248] Additionally, the GPU provided goals and policies that assist development within the City to account for the projected population and employment growth. Goal 1 in the GPU's Land Use and Community Character Element focuses on development regulations that reinforce the City's desire to grow from a small town to a medium sized city in a sustainable and orderly manner.[249] Policies that support this goal establish the orderly growth of the City related to the City limits, annexation areas, sphere of influence, planning area, subareas, general plan land use designations, and specific plans (Policies 1.1 to 1.6).[250] Goal 2 focuses on the successful transformation of Coachella from a small town into a medium-sized, full-service City that is a major economic center for the Coachella Valley.[251] Policies 2.1 through 2.18 support Goal 2 by outlining guiding principles for population and employment growth, the City's character and identity, urban design as identity, natural context, high-quality construction and architecture, architectural diversity, climate-appropriate design, growth and development evaluation, infill development, contiguous development plan, new growth, high priority development areas, growth expansion areas, reserve development areas, steep slopes, range of uses, parks and open space, and open space conservation.[252] The GPU EIR concluded that buildout of the GPU would induce growth relative to economic expansion, population growth, precedent setting action, and encroachment into open space. However, comprehensive programs for growth management provided in the

244 City of Coachella, GPU Draft EIR, Population and Housing, at 4.13-8.
245 E-5 Population and Housing Estimates for Cities, Counties, and the State, 2020-2026, Department of Finance, 2025. https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2026/.
246 City of Coachella, GPU Draft EIR, Population and Housing.
247 *Id*., at 4.13-2.
248 *Id*., at 4.13-9.
249 City of Coachella, Land Use + Community Character Element of the General Plan, at 4-85 (2015), https://cityofcoachellageneralplanupdate.weebly.com/uploads/1/2/1/2/12129446/noise.pdf.
250 Ibid.
251 *Id.*, at 4-86.
252 *Ibid.*

GPU minimize inappropriate development patterns and environmental impacts.[253]

The project proposes the development of 162 residential units and 240 condo hotel units, for a total of 402 units. The project also proposes various water amenities, including a 9.4-acre Hotel Lagoon, 2.5-acre lake, and 0.4-acre Beach Club Lagoon. Additional amenities include restaurants, a hotel lounge, pool bar, beach bar, fitness and spa area, sport court (i.e., tennis, pickleball, padel, basketball), and event spaces. At buildout, the project will include various amenity spaces and 402 units.

The project proponent determined that the residential units and condo hotel units would function as short-term, long-term, or time-share properties. With this, it is expected that the project will have an annual population of 2,050. The 2,050 population is an average of the projected residents and guests at the site throughout the year. See Table XIV-1, below. Guests of the project would include hotel guests as well as guests of short-term rental properties.

Table XIV-1 Combined Weekday and Weekend Daily Annualized Population

Program Area	Visitor Type	Average Population
Private	Residents	950
Public	Guests	1,100
Project Total		**2,050**

The addition of 2,050 people in the City could increase the current population by approximately 4.6 percent, to 46,434 people, which is still below the projected 2035 population forecast of 135,000. Although the project would contribute to growth within the City of Coachella, significant growth to population, housing, and employment is already anticipated in the City's GPU and GPU EIR. Although the project does include residential units and resort cottages, the project proponent has determined that a majority of these units would be used as second homes, timeshares, short term rentals, and long-term rental properties.

The project is located within the Regional Retail District land use designation, as established in the City of Coachella General Plan. Regional Retail Districts allow 10 to 15 dwelling units per acre. The project site is approximately 87 acres, therefore, up to 1,290 dwelling units are allowed within the project site, potentially resulting in 5,455 people.

In addition, this projected increase is a conservative figure because it assumes that the project's future residents will not be current residents of Coachella. However, it is anticipated that some of the project's residents will be existing residents from within the City and/or from neighboring incorporated and unincorporated areas. Additionally, the hotel guests will not lead to permanent residents of the project.

In 2017, 9.4 percent of jobs in the City of Coachella were in the leisure (hospitality) sector, and 8.1 percent were in the retail sector.[254] As previously stated, the project is located within the City's Regional Retail District land use designation. Regional Retail Districts are intended to provide opportunities for a wide range of shopping and entertainment in a variety of urban and suburban formats. These include regional shopping centers, mixed destination centers, or similar uses. The uses allowed in this designation will cater to regional clientele and provide a unique amenity to all residents of the Coachella Valley and an important revenue source for the City. The primary purpose of the District is to provide for commercial opportunities, with residential uses supporting the retail environment. The nature of the Regional Retail District will require the need for employees, and employee growth has been analyzed in the General Plan.

253 City of Coachella, GPU Draft EIR: Population and Housing, at 4.13-12.
254 Southern California Association of Governments, *Profile of the City of Coachella, Local Profiles Report 2019*, at 27–28 (May 2019), https://sustain.scag.ca.gov/sites/default/files/2024-05/coachella_localprofile.pdf.

The project's proposed hotel, commercial, and amenity uses will generate an average of 330 employees. See Table XIV-2, below. The project will not result in unplanned employment, and jobs created at the project will be absorbed by new and existing residents of the City and surrounding jurisdictions.

Table XIV-2 Combined Weekday and Weekend Daily Annualized Employees

Program Area	Visitor Type	Average Employee
Private	Employees	210
Public	Employees	120
Project Total		**330**

The proposed project lies adjacent to the existing paved roadways Avenue 52 (north), Van Buren Street (east), and Calhoun Street (west). Extensions of these roadways are not proposed as part of project implementation. However, according to the GPU, Avenue 52, along the project frontage, is designated as a primary arterial with bicycle facility; Van Buren Street along the project frontage is a major arterial with bicycle facility; and Calhoun Street along the project frontage is designated as a collector with bicycle facility.[255] The proposed project shall build out the street frontages consistent with the City's circulation standards in order to accommodate residents, guests, and staff, and future buildout of the General Plan. These rights-of-way will not indirectly induce unplanned population growth because the roadways currently exist and buildout of Avenue 52, Van Buren Street, and Calhoun Street are projected in the City's General Plan circulation system.

Currently, the project site is not served by public water or sewer facilities. Therefore, the project will connect to existing water and sewer mains. Existing water mains occur on Van Buren Street, approximately 0.26 miles north of the project, and Avenue 52, approximately 0.26 miles east of the project. The project will connect to these mains and extend 12-inch public lines 0.26 miles south from the existing Van Buren Street main, and 0.26 miles west from the existing Avenue 52 main. The project will extend a total of approximately 2,760 feet of 12-inch public water lines to the project. Public 12-inch water lines will occur within the public beach and resort main streets. Public 8-inch water lines will occur throughout the project within the residential areas.

Existing sewer lines exist at the Avenue 52 and Van Buren Street intersection, the Fredrick Street and Avenue 53 intersection, and Avenue 64. The project will connect to the existing 12-inch sewer main at the Avenue 52 and Van Buren Street intersection and extend approximately 174 feet of 12-inch public sewer lines to the project. The proposed public sewer line will connect to a private sewer forcemain, which will connect to private 8-inch sewer mains throughout the site.

The project site is connected to existing electrical facilities in the area. Overhead power lines occur north of the project (along Avenue 52), east of the project (along Van Buren Street), and west of the project (along Calhoun Street).

The project is not anticipated to result in an indirect growth inducing impact because the proposed water and sewer lines will result in projected buildout of this area of Coachella. Therefore, approval and development of this project is not expected to significantly increase growth in the City. Less than significant impacts are expected.

As previously discussed, the GPU EIR determined impacts from population growth to be less than significant. As the proposed project would have a less than significant impact for the reasons detailed above, the project would be consistent with the analysis within the GPU EIR because it would not create new impacts or increased impacts, and there is no new information of substantial importance than identified within the GPU EIR.

255 City of Coachella, Mobility Element of the General Plan, Figure 5-1, at 5-7 (2015), https://www.coachella.org/home/showpublisheddocument/8415/637818911636900000.

b) **Less than Significant Impact.** The GPU EIR concluded this impact to be less than significant because the GPU does not propose displacing existing housing or people.[256] No mitigation is required. The site once existed as an agricultural field, but agricultural production has now stopped. A residential home is located on the project site; however, the residence has been abandoned and is a dilapidated state. Due to the residence's dilapidated state, it does not currently provide housing. Therefore, removal of the residence would not displace a substantial number of existing people or housing, necessitating the construction of replacement housing elsewhere. Less than significant impacts are anticipated.

The GPU EIR determined impacts from displacement of housing to be less than significant. As the proposed project would have a less than significant impact for the reasons detailed above, the project would be consistent with the analysis within the GPU EIR because it would not create new impacts or increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

Conclusion:

With regards to the issue area of Population and Housing, the following findings can be made:

1. No peculiar impacts to the project or its site have been identified. The project would not induce substantial growth or would displace people or housing.
2. There are no potentially significant off-site and/or cumulative impacts which were not discussed by the GPU EIR. The EIR adequately addressed growth related to the buildout of the City.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the GPU EIR.
4. No mitigation measures are required within the GPU EIR. The project specific impacts would be less than significant.

256 City of Coachella, GPU Draft EIR, Population and Housing, at 4.13-12.

15. PUBLIC SERVICES –	Project Peculiar Impact that is not Substantially Mitigated by Uniformly Applied Policies	Significant Impact not Analyzed as Significant in the GP EIR	Potentially Significant Offsite or Cumulative Impact not Discussed in the GP EIR	Adverse Impact More Severe based on Substantial New Information	No New Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	☐	☐	☐	☐	☒
I. Fire Protection?	☐	☐	☐	☐	☒
II. Law Enforcement?	☐	☐	☐	☐	☒
III. Schools?	☐	☐	☐	☐	☒
IV. Parks?	☐	☐	☐	☐	☒
V. Medical and Healthcare Facilities?	☐	☐	☐	☐	☒

Sources: Coachella 2035 General Plan, 2015; Coachella General Plan Environmental Impact Report, 2015; City of Coachella Website.

a) **Less than Significant Impact**. Impacts related to fire protection were determined to be less than significant by the GPU EIR.[257] The City of Coachella contracts with Riverside County Fire Department (RCFD) for a full range of fire protection services provided 24-hours a day, 7-days a week. The RCFD is staffed with a combination of County and State of California Department of Forestry & Fire Protection employees. They currently operate 106 fire stations that serve approximately two million residents, over 7,000 square miles of Riverside County.[258] The City of Coachella has one fire station, Battalion 6, Coachella Fire Station No. 79, located at 1377 6th Street and approximately 1.5 driving miles, a four-minute drive, northeast of the site. According to the Coachella GPU EIR, Fire Station No. 79 is staffed by 18 full-time personnel, 10 volunteer firefighters, and 10 explorer cadets. Six firefighters are always on duty.[259] The Station is equipped with two Type 1 fire engines which includes a staff of three persons per engine per day. It is the goal of the RCFD fire service to have the first engine company arrive on the scene within five minutes 90 percent of the time. Response times to emergency calls within the City average approximately four minutes or less 80% of the time. Other nearby stations include Indio Fire Station No. 86 (approximately 6 minutes north), and La Quinta Fire Station No. 70 (approximately 6 minutes west).

The project would be consistent with the existing land use designation for the site. Therefore, the anticipated population growth at the site has been accounted for and is consistent with the analysis in the GPU EIR, which found impacts to fire protective services to be less than significant. The proposed project would be consistent with planning projections for future fire protection facilities within the city. Furthermore, the project would be required to pay development impact fees (DIFs) that would contribute the project's fair share towards the funding of future fire protection facilities. Therefore, the project would be consistent with the analysis within the GPU EIR because it would not create new impacts or increase impacts, and there is not new information of

257 City of Coachella, 2035 GPU Draft EIR, Public Services, at 4.15-35.
258 Riverside County Fire Dep't, *Emergency Command Center (ECC)*, https://rvcfire.org/our-departments/operational-support/ecc (last visited Nov. 24, 2025).
259 City of Coachella, 2035 GPU Draft EIR, Public Services, at 4.15-2.

substantial importance than identified within the GPU EIR.

b) **Less than Significant Impact**. The GPU EIR determined that impacts related to Law Enforcement were anticipated to be less than significant.[260] Law enforcement services are provided to the City of Coachella through a contractual agreement with Riverside County Sheriff's Department. The Sheriff's department provides 24-hour municipal police services associated with a City police department. The Sheriff's station is located at 86-625 Airport Boulevard in Thermal, approximately 4.8 driving miles southeast of the subject property. Per the City's 2035 General Plan EIR, the Coachella Police Department has 36 sworn officers and two non-sworn personnel, for a total of 38 positions.[261] Twenty-four of these positions are dedicated to the patrol division with the remaining deputies dedicated to special assignments such as the Community Action Team, a School Resources Officer, and Gang and Narcotics Enforcement. The Coachella Police Department divides the City into three beats. The Patrol Division of the department covers an area of 30 square miles.

The project would be consistent with the existing land use designation for the site and therefore would accommodate anticipated population growth and would be consistent with planning projections for future police protection facilities within the city. Furthermore, the project would be required to pay DIFs that would contribute the project's fair share towards the funding of future police protection facilities. Therefore, the project would be consistent with the analysis within the GPU EIR because it would not create new impacts or increase impacts, and there is not new information of substantial importance than identified within the GPU EIR.

c) **Less than Significant Impact**. The GPU EIR determined that impacts associated with Schools were anticipated to be less than significant.[262] proposed project lies within the Coachella Valley Unified School District. Although the project does include residential units and condos, the project proponent has determined that a majority of these units would be used as second homes, timeshares, short term rentals, and long-term rental properties. This determination reduces the likelihood that all or most of these units would create new students for the local school district. In addition, the project would be required to follow the Coachella Valley Unified School District (CVUSD) statutory school facility fees on new residential and commercial/industrial construction. The project would be consistent with the existing land use designation for the site and therefore would accommodate anticipated population growth and would be consistent with planning projections for future schools within the city. Therefore, the project would not result in substantial adverse physical impacts associated with the provision of new or physically altered school facilities, and impacts would be less than significant.

The project would be consistent with the existing land use designation for the site and therefore would accommodate anticipated population growth and would be consistent with planning projections for future school facilities within the city. Furthermore, the project would be required to pay CVUSD statutory school facility fees that would contribute the project's fair share towards the funding of future school facilities. Therefore, the project would be consistent with the analysis within the GPU EIR because it would not create new impacts or increase impacts, and there is no new information of substantial importance than that identified within the GPU EIR.

d) **Less than Significant Impact**. The GPU EIR determined that impacts to Parks would be less than significant.[263] The Coachella Valley Recreation and Park District (CVRPD) provide park and recreational services to the City. Per the City of Coachella website, there are eight public parks located within the City of Coachella. The GPU EIR proposed policies that address reductions in potential environmental impacts to park facilities from the buildout of the General Plan. These include Policies 2.13, 2.17, 2.18, 3.6, 4.7, 5.16, 8.2, 8.4, and 9.5 of the Land Use and Community Charter, Policies 8.1 and 8.5 of the Community Health and Wellness Element, Policies 2.8, 2.9, 3.7, 3.8, and 13.1 through 13.25 of the Sustainability + Natural Environment Element, Policy 3.6 of

260 *Id.*, at 4.15-38.
261 *Id.*, at 4.15-8.
262 *Id.*, at 4.15-40.
263 *Id.*, at 4.15-43.

the Safety Element, and Policies 1.8 and 2.17 of the Infrastructure + Public Services Element.[264]

The proposed project would be consistent with the existing land use designation for the site and therefore would accommodate anticipated population growth and would be consistent with planning projections for impacts to park facilities within the city. The project would be required to pay DIFs to contribute to the project's fair share funding of future facilities. Therefore, the project would not result in substantial adverse physical impacts associated with the provision of new or physically altered public facilities, and impacts would be less than significant.

The project would be consistent with the existing land use designation for the site and therefore would accommodate anticipated population growth and would be consistent with planning projections for future park and recreational services within the city. Furthermore, the project would be required to pay DIFs that would contribute the project's fair share towards the funding of future park and recreational services. Therefore, the project would be consistent with the analysis within the GPU EIR because it would not create new impacts or increase impacts, and there is not new information of substantial importance than identified within the GPU EIR.

e) **Less than Significant Impact**. The GPU EIR determined that impacts to Medical and Healthcare Facilities would be less than significant.[265] Demand for medical facilities will increase as population increases, and this additional development within the Planning Area may result in environmental impacts. The GPU accommodates future development of medical facilities within several land uses and outlines policies to promote sustainable design practices, improve street connectivity, and efficient development. These policies include Policies 8.1, 8.2, and 14.1 of the Land Use and Community Charter, Policies 1.1, 1.2, 1.6, 2.3, 2.6, 2.7, 2.11, 2.14, 3.1, 3.7, and 3.8 of the Sustainability + Natural Environment Element, Policies 9.4, 9.9, 9.10, and 9.11 of the Community Health + Wellness Element, and Policy 8.3 of the Mobility Element.[266]

The Proposed Project would be consistent with the existing land use designation for the site and therefore would accommodate anticipated population growth and would be consistent with planning projections for future facilities within the City. Therefore, the project would be consistent with the analysis within the GPU EIR because it would not create new impacts or increase impacts, and there is not new information of substantial importance than identified within the GPU EIR.

Conclusion:

With regards to the issue area of Public Services, the following findings can be made:

1. No peculiar impacts to the project or its site have been identified.
2. There are no potentially significant off-site and/or cumulative impacts which were not discussed in the City of Coachella General Plan 2035 Program EIR. The Program EIR adequately addressed impacts to public services.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the City of Coachella General Plan 2035 Program EIR..
4. No mitigation measures are required within the GPU EIR for public services. Compliance with the above listed General Plan policies ensures that potential impacts to public services would remain less than significant.

264 City of Coachella, 2035 GPU Draft EIR, Public Services, at 4.15-44.
265 *Id.*, at 4.15-49.
266 *Id.*, at 4.15-49.

16. RECREATION –	Project Peculiar Impact that is not Substantially Mitigated by Uniformly Applied Policies	Significant Impact not Analyzed as Significant in the GP EIR	Potentially Significant Offsite or Cumulative Impact not Discussed in the GP EIR	Adverse Impact More Severe based on Substantial New Information	No New Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☐	☐	☒

Sources: Coachella 2035 General Plan, 2015; Coachella General Plan Environmental Impact Report, 2015; City of Coachella Website.

a-b) **Less than Significant Impact.** The GPU EIR did not specifically analyze Recreation. Impacts to recreation were analyzed within Section 15, Public Services, of the GPU. Impacts to Parks were anticipated to be less than significant by the GPU EIR.[267] As previously stated, the GPU EIR proposed policies that address reductions in potential environmental impacts to park facilities from the buildout of the General Plan. These include Policies 2.13, 2.17, 2.18, 3.6, 4.7, 5.16, 8.2, 8.4, and 9.5 of the Land Use and Community Charter, Policies 8.1 and 8.5 of the Community Health and Wellness Element, Policies 2.8, 2.9, 3.7, 3.8, and 13.1 through 13.25 of the Sustainability + Natural Environment Element, Policy 3.6 of the Safety Element, and Policies 1.8 and 2.17 of the Infrastructure + Public Services Element.

The proposed project would include the development of residential units and condo hotel units. The residential and condo components of the proposed project will primarily operate under fractional ownership, timeshare, second homes, and/or short-term and long-term rental models. This will significantly reduce any use of regional parks or recreational facilities. The project also proposes the development of various water amenities, including a 9.4-acre Hotel Lagoon, 2.5-acre lake, and 0.4-acre Beach Club Lagoon. The Beach Club Lagoon will be open to the public for use, providing the community with additional recreational space. Additional amenities include restaurants, a hotel lounge, pool bar, beach bar, fitness and spa area, sport courts (i.e., tennis, pickleball, padel, basketball), and event spaces. The private recreational amenities will provide residents with on-site recreation options. This will reduce impacts on regional recreational facilities because residents will be inclined to utilize the facilities on-site. At buildout, the project will include approximately 279,000 square feet of amenity spaces. The impact to existing recreation facilities associated with the project is not expected be substantial due to the amenities, both public and private, provided on the project site and its consistency with land use designations. The anticipated population growth and subsequent impact on recreational facilities associated with the project has been accounted for in the GPU EIR. Therefore, less than significant impacts are anticipated. The project would be consistent with the analysis within the GPU EIR because it would not create new impacts or increase impacts, and there is not new information of substantial importance than identified within the GPU EIR.

Conclusion:

With regards to the issue area of Recreation, the following findings can be made:

1. No peculiar impacts to the project or its site have been identified.
2. There are no potentially significant off-site and/or cumulative impacts which were not discussed n the City of Coachella General Plan 2035 Program EIR. The Program EIR adequately addressed the potential impacts

267 City of Coachella, 2035 GPU Draft EIR, Public Services, at 4.15-43.

to recreation.

3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the City of Coachella General Plan 2035 Program EIR..

4. No mitigation measures are required within the GPU EIR for recreation. Compliance with General Plan Policies 2.13, 2.17, 2.18, 3.6, 4.7, 5.16, 8.2, 8.4, and 9.5 of the Land Use and Community Charter, Policies 8.1 and 8.5 of the Community Health and Wellness Element, Policies 2.8, 2.9, 3.7, 3.8, and 13.1 through 13.25 of the Sustainability + Natural Environment Element, Policy 3.6 of the Safety Element, and Policies 1.8 and 2.17 of the Infrastructure + Public Services Element ensures that potential impacts to public services would remain less than significant.

17. TRANSPORTATION – Would the project:	Project Peculiar Impact that is not Substantially Mitigated by Uniformly Applied Policies	Significant Impact not Analyzed as Significant in the GP EIR	Potentially Significant Offsite or Cumulative Impact not Discussed in the GP EIR	Adverse Impact More Severe based on Substantial New Information	No New Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☐	☒
b) Conflict with the Riverside County Transportation Commission (RCTC) Congestion Management Program (CMP), including, but not limited to Level of Service standards and travel demand measures, or other standards established by the RCTC for designated roads or highways?	☐	☐	☐	☐	☒
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) or impede emergency vehicle access?	☐	☐	☐	☐	☒
e) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☐	☒

a) Sources: Coachella 2035 General Plan, 2015; Coachella General Plan Environmental Impact Report, 2015; Cova Transportation Analysis Report, Fehr and Peers, November 2025 (Appendix I). **Significant and Unavoidable Impacts.** The 2015 GPU EIR concluded that regional roadways are projected to face significant and unavoidable congestion due to the GPU and overall growth in the Coachella Valley.[268] These impacts stem from both the City's proposed General Plan land uses and development occurring outside Coachella, as these regional facilities serve broader travel demands. As a result, full mitigation is not feasible for impacted regional roadways.

268 City of Coachella, 2035 GPU Draft EIR, Traffic, at 4.9-33.

Future conditions also show I-10 operating at LOS E/F and SR-86 South at LOS F, creating substantial congestion within the Planning Area. Because the necessary mitigation measures fall outside the City of Coachella's jurisdiction, these regional impacts remain significant and unavoidable.

Impacts to City (local) roadways are anticipated to be less than significant with mitigation. Mitigation consists of payment of DIFs to be used for the physical improvements identified in the GPU EIR.[269]

The proposed project is located on approximately 87 acres at the southwest corner of Van Buren Street and Avenue 52 in the City of Coachella. The western boundary of the property is formed by Calhoun Street. Primary access to the proposed project, as well as emergency access to the site will be provided on Van Buren Street, Avenue 52 and Calhoun Street. Existing on-street bike lanes are located on Van Buren Street. No sidewalks are found in the vicinity.

The project is located within the Regional Retail District land use designation, as established in the City of Coachella GPU. Regional Retail Districts allow 10 to 15 dwelling units per acre and a commercial FAR of 0.35 to 2.0.

Project Summary

The project proposes to develop a mixed used development with both private and public components. The two primary sectors are described as follows:

- **Private Sector**: Includes 162 single family recreational home dwelling units and 240 condo-hotel recreational home units, both of which would operate under fractional ownership, timeshare, second home, and short term and long-term rental models. These land uses will be complemented by significant on-site resort amenities (i.e. dining, entertainment, recreation).

- **Public Sector**: Includes a beach club, restaurant, and an event tent. These subareas are expected to operate with a typical weekday capacity of 500 persons and a weekend capacity of 1,500. The public sector components will generally be operated between 11:00 AM and 2:00 PM, with the highest level of activity occurring in the evening between 7:00 PM and 8:00 PM, and on weekends.

The proposed project is designed so that the combined resort features of dwelling units, dining, amenities, outdoor/recreational spaces, and entertainment, create a self-contained destination. The project expects to include high internal trip capture, with most guests staying onsite for lodging, recreation, dining, and entertainment. The public facing restaurants, beach club, and event spaces are largely anticipated to serve onsite guests.

Private sector access will be provided by an entry/exit driveway on Avenue 52 and a driveway on Van Buren Street. Public sector access points are aligned perpendicular to Calhoun Street and Avenue 52. There is an additional right in/right out entrance for back of house staff on Van Buren Street.

The Transportation Analysis Report (TA) (Appendix I) was prepared to provide an overview of Project characteristics, such as trip generation, distribution and assignment that explains how Project traffic will interact with the surrounding transportation network. Additionally, the TA includes a VMT screening assessment for informational purposes.

Intersection operations analysis was based on the procedures contained in the Transportation Research Board (TRB) *Highway Capacity Manual* (HCM), 7th Edition.[270] This methodology is considered the state of the practice methodology for evaluating intersection operations. The traffic modeling and signal timing optimization software package Synchro (Version 12) was utilized to analyze signalized intersections. The level

269 *Id*., at 4.9-29.
270 Transportation Research Board, *Highway Capacity Manual, 7th Edition: A Guide for Multimodal Mobility Analysis* (Nat'l Acad. of Scis., Eng'g & Med. ed., 2022).

of service and capacity analysis performed by Synchro takes into consideration optimization of signalized intersections within a network. Unsignalized intersections are also evaluated using methodology described in the HCM. The LOS rating is based on the weighted average control delay expressed in seconds per vehicle.

The following parameters are consistent with the *County of Riverside Transportation Analysis Guidelines for Level of Service & Vehicle Miles Traveled* (2020)[271] and HCM for use in the LOS analysis:

- Measured Peak Hour Factors (PHF) were utilized in the Existing (2025) and Opening Year (2030) Scenarios.
- Signal timing information for study intersections 6, 8, 9, 10, 11, and 12 were provided by the City of Coachella. Signal timing information for study intersections 13 and 14 were provided by Caltrans. These signal timings were used for the Existing (2025) and Opening Year (2030) Plus Project Scenarios.
- A standard heavy vehicle factor of 2% was used for all analysis scenarios.

Traffic counts were collected in May 2025 during morning peak period (7:00 to 9:00 AM) and evening peak period (4:00 PM to 6:00 PM) at the study intersections. Counts were collected during fair weather, while school was in session, and during a typical (non-holiday) weekday.

A Big Data source, Streetlight, was reviewed to compare May travel patterns against Spring travel patterns in the City to verify that peak season travel was accurately accounted for. Streetlight data indicated that March 2025 traffic volumes were approximately 15% higher than those observed in May 2025. Streetlight traffic volumes data were collected within the immediate Census Block Groups to the project site – extending about 5 miles in all directions. A cumulative average of all block groups showed a 15% decline between March and May. Traffic counts were thus adjusted to scale collected May 2025 traffic counts to the peak seasonal volumes of March by a factor of 15%.

The potential impacts to traffic and circulation were evaluated for each of the following conditions:

- Existing (2025) Conditions
  - Existing (2025) traffic volumes, lane geometries and traffic signal timing.
- Opening Year (2030) Plus Project Conditions
  - Existing (2025) traffic volumes.
  - Opening Year (2030) volumes (ambient growth rate of 2% per year)
  - Project Traffic
- Opening Year (2030) Plus Project Plus Cumulative Project Conditions
  - Opening Year Volumes (2030)
  - Project Traffic
  - Cumulative Projects within a 5-mile radius of the project.

Based on the City-approved scoping agreement, the study area consists of the following 14 study intersections:

1. West Driveway 1 / Calhoun Street
2. West Driveway 2/ Calhoun Street
3. Calhoun Street/Avenue 52
4. North Driveway 1/Avenue 52
5. North Driveway 2/Avenue 52
6. Van Buren Street/Avenue 52
7. East Driveway/Van Buren Street

271 County of Riverside, *Transportation Analysis Guidelines for Level of Service & Vehicle Miles Traveled* (April 2026), https://riversideca.gov/publicworks/sites/riversideca.gov.publicworks/files/pdf/2026/Traffic-Impact-Analysis-Guidelines-for-Vehicle-Miles-Traveled-and-Level-of-Service-Assessment_Riverside_04152026.pdf.

8. Calhoun Street/Avenue 50
9. Van Buren Street/Avenue 50
10. Calhoun Street/Avenue 48
11. Van Buren Street/Avenue 49
12. Dillon Road/Avenue 48
13. SR-86 SB Ramps/Dillon Road
14. SR-86 NB Ramps/Dillon Road

Future Traffic Conditions

Trip generation estimates for the private sector components were sourced from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (12th Edition, 2025) land use codes. The intended land use characteristics (ownership and use) were considered to apply the ITE land use code with the most representative overlap. The estate lots, zero lot line lots, bungalow lots, VIP suites and the condo hotel units will be a majority (>75%) fractional ownership second homes that will be used for short-term and long-term rental, ITE code 260 "Recreational Homes" was applied. The condo hotel units may be sold as individual, one-bedroom units or up to four-bedroom; and area expected to operate like recreational home ITE characterized units.

Trip generations for the public sector (beach club and restaurant) used the most comparable ITE land use code that represented the best matched time of day distribution for the planned components; calculations were based on seats to match the developer's weekday and weekend peak person capacity assumptions. The event tent was calculated using assumptions, which similarly derived from the peak capacity.

The project is positioned to achieve significant internal capture (33%) of trips between the onsite uses with the expectation that a majority of onsite guests will stay on the property once they arrive. Many of guests' daily needs would be accommodated by the resort lodging, recreation, dining, and entertainment options without leaving the property. A significant share of the public facing restaurant, beach club, and event space are anticipated to be used by onsite guests.

The ITE *Trip Generation Manual* (12th Edition, 2025) trip generation rates were queried to determine trip generation for the proposed project.[272]

Table XVII-1 Project Trip Generation Rates[1] Weekday

Land Use	ITE LU Code	Quantity[2]	Weekday Peak Hour Trips		Daily
			AM Peak Hour Total	PM Peak Hour Total	
Private					
Single Family Residential	260	DU	0.28	0.31	3.68
Condo Hotel	260	DU	0.28	0.31	3.68
Public					
Beach Club	445	Seats	0.09	0.08	1.76
Restaurant	931	Seats	0.15	0.37	2.60
Event Tent	Custom	Seats	0.09	0.28	1.76

Table XVII-2 Projected Trip ITE Trip Generation Results Weekday[273]

Land Use	ITE LU Code	Quantity[2]	Weekday Peak Hour Trips		Daily
			AM Peak Hour Total	PM Peak Hour Total	
Private					
Single Family Residential	260	165 DU	46	51	607
Condo Hotel	260	244 DU	68	76	898

272 Institute of Transportation Engineers, *Trip Generation Manual*, 12th ed. (2025), available at https://www.ite.org/technical-resources/topics/trip-and-parking-generation-v2/trip-generation-info.

273 The Projected Trip ITE Trip Generation Results Weekday analysis was prepared using an earlier project description with 409 units. The currently proposed Project includes 402 units, representing a reduction in development intensity relative to the analyzed scenario.

Private Subtotal			***114***	***127***	***1,505***
Public					
Beach Club	445	100 Seats	9	8	176
Beach Club with Internalization[3]			*116*	*6*	*116*
Restaurant	931	200 Seats	30	74	520
Restaurant with Internalization[3]			*343*	*20*	*343*
Event Tent	NA	200 Seats	18	56	352
Event Tent with Internalization[3]			*232*	*12*	*232*
Private Subtotal			***38***	***91***	***692***
Weekday Total			**152**	**218**	**2,197**

1. *Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, 12th Edition (2025)*
2. *KSF = Thousand Square Feet; DU = Dwelling Units*
3. *Internalization of 33% was applied.*

Project Trip Distribution and Assignment

The project trip distribution reflects the likely approach and departure routes to the project site. Trip geographic distribution would be as follows: 60% north, 5% south, 10% east, and 25% west. Access to the project site will be provided from Calhoun Street, Avenue 52, and Van Buren Street. Project trips would utilize Van Buren Street or Calhoun Street to access the project, with most trips travelling to/from I-10 via Dillon Road. There are six total project driveways: two along Calhoun Street (one full access and one right in right out only), one full access driveway along Avenue 52, one full access driveway along Van Burent Street and a right in/right out access for back of house. Calhoun Street would represent 40%, Avenue 52 30% and Van Buren Street 30% of entry/exit trip percentages for the project.

Opening Year (2030) Plus Project Traffic Conditions

Opening Year (2030) intersection operations were evaluated using the HCM methodology. Opening year lane configurations and intersection control types changed as documented in the TA including adjacent roadway improvements and as summarized below:

- The project will implement an additional lane in the direction adjacent to the project on the north and west side,
- The project will implement two lanes in the direction adjacent to the project on the east side of the project, and
- Additional lanes were added based off SCAG RTP.

Table XVII-3 below illustrates that under the Plus Project (2030) Conditions, all but two intersections are expected to operate at LOS D or better. The two intersections are:

3. Calhoun Street and Avenue 52
6. Van Buren Street and Avenue 52.

Table XVII-3 Intersection Analysis for Opening Year (2030) Plus Project Traffic Conditions

ID - Study Intersection	Traffic Control[1]	AM Peak Hour		PM Peak Hour	
		Delay[2]	LOS	Delay[2]	LOS
1. West Driveway 1/Calhoun Street	SSSC[1]	1	A	1	A
2. West Driveway 2/Calhoun Street	SSSC	1	A	1	A
3. Calhoun Street/Avenue 52	AWSC[1]	**95**	**F**	**156**	**F**
4. North Driveway 1/Avenue 52	SSSC	1	A	1	A
5. North Driveway 2/Avenue 52	SSSC	1	A	1	A
6. Van Buren Street/Avenue 52	Signal[1]	**56**	**E**	34	C
7. East Driveway/Van Buren Street	SSSC	1	A	1	A
8. Calhoun Street/Avenue 50	Signal	29	C	25	C
9. Van Buren Street/Avenue 50	Signal	34	C	35	C

10. Calhoun Street/Avenue 48	Signal	42	D	34	C
11. Van Buren Street/Avenue 49	Signal	29	C	44	C
12. Dillon Road/Avenue 48	Signal	25	C	24	D
13. SR-86 SB Ramps/Dillon Road	Signal	12	B	14	B
14. SR-86 NB Ramps/Dillon Road	Signal	22	C	16	B

1. Signal = Traffic Signal; AWSC = All Way Stop Control; SSSC = Side Street Stop Control
2. Deficient intersection operations are noted in bold text (below LOS D)
3. Delay estimates above 250 seconds are out of bounds of the Syncro software

Opening Year 2030 Cumulative Projects

The City identified a list of Cumulative projects within a five-mile radius of the proposed project to be analyzed with the Plus Project conditions at opening (2030). The intersection analysis identified five intersections that would be deficient at the 2030 scenario.

- Calhoun Street and Avenue 52 (Intersection 3)
- Van Buren Street and Avenue 52 (Intersection 6)
- Van Buren Street and Avenue 48 (Intersection 11)
- Dillon Road and Avenue 48 (Intersection 12)
- SR-86 and Southbound Ramps and Dillion Road (Intersection 13)

The TIA identified improvements to bring the operationally deficient intersections to acceptable levels (LOS D or better), which will require a traffic signal, traffic signal timing updates, and/or converting a turn lane to a shared turn lane through. The Project's fair share contribution toward these improvements was also identified. The five intersections, intersection improvements and fair share contributions are discussed subsequently.

Opening Year (2030) Improvements

Feasible measures were identified to improve intersection operations at deficient intersections to an acceptable LOS (LOS D or better).

Calhoun Street and Avenue 52 (Intersection 3) – This intersection is expected to operate at LOS E and F during AM and PM peak hour under Opening Year (2030) Plus Project and Cumulative Projects. A traffic signal is warranted and recommended at Calhoun and Avenue 52 to improve operations. Signal warrant analyses for project driveways (Intersections 1 and 2, 4 and 5, and 7) indicate that signals are not warranted. Detailed signal warrant analysis are provided in Appendix G of the TA.

Van Buren Street and Avenue 52 (Intersection 6) – This intersection is expected to operate at LOS E and F during AM and PM peak hour under Opening Year (2030) Plus Project and Cumulative Projects. To improve intersection operations, optimizing splits and increasing cycle lengths would improve to acceptable conditions. Communication with Coachella Valley Sync is not needed because intersection 6 is uncoordinated.

Van Buren Street and Avenue 48 (Intersection 11) – This intersection is expected to operate at LOS E during PM peak hour under Opening Year (2030) Plus Project and Cumulative Projects. To improve intersection operations, convert southbound right lane to a shared southbound right through.

Dillon Road and Avenue 48 (Intersection 12) – This intersection is expected to operate at LOS E and F during AM and PM peak hour under Opening Year (2030) Plus Project and Cumulative Projects. To improve intersection operations, optimizing the traffic signal timing would improve to acceptable conditions.

SR-86 and Southbound Ramps and Dillion Road (Intersection 13) – This intersection is expected to operate at LOS E during PM peak hour in Opening Year (2030) Plus Project and Cumulative Projects. To improve intersection operations, optimizing the traffic signal timing would improve to acceptable conditions.

The project will be required to pay a fair share of contribution towards the improvements at the five intersections recommended above. Fair Share calculations were performed for the deficient intersections and are as follows:

- Calhoun Street and Avenue 52 (Intersection 3) – 18.6%
- Van Buren Street and Avenue 52 (Intersection 6) – 23.1%
- Van Buren Street and Avenue 48 (Intersection 11) – 13.2%
- Dillon Road and Avenue 48 (Intersection 12) – 8.9%
- SR-86 and Southbound Ramps and Dillion Road (Intersection 13) – 7.0%

Table XVII-4 below illustrates that at the Opening Year (2030) Plus Project and Cumulative Projects and proposed improvements, all intersections are expected to operate at LOS D or better.

Table XVII-4 Intersection Analysis for Opening Year (2030) Plus Project and Cumulative Projects with Improvements

ID - Study Intersection	Traffic Control[1]	AM Peak Hour		PM Peak Hour	
		Delay[2]	LOS	Delay[2]	LOS
1. West Driveway 1/Calhoun Street	SSSC[1]	1	A	1	A
2. West Driveway 2/Calhoun Street	SSSC	1	A	1	A
3. Calhoun Street/Avenue 52	AWSC[1]	34	C	28	C
4. North Driveway 1/Avenue 52	SSSC	1	A	1	A
5. North Driveway 2/Avenue 52	SSSC	1	A	1	A
6. Van Buren Street/Avenue 52	Signal[1]	55	D	45	D
7. East Driveway/Van Buren Street	SSSC	1	A	1	A
8. Calhoun Street/Avenue 50	Signal	36	D	33	C
9. Van Buren Street/Avenue 50	Signal	36	D	38	D
10. Calhoun Street/Avenue 48	Signal	45	D	37	D
11. Van Buren Street/Avenue 49	Signal	34	C	52	D
12. Dillon Road/Avenue 48	Signal	53	D	50	D
13. SR-86 SB Ramps/Dillon Road	Signal	34	C	53	D
14. SR-86 NB Ramps/Dillon Road	Signal	34	C	53	D

1. Signal = Traffic Signal; AWSC = All Way Stop Control; SSSC = Side Street Stop Control
2. Deficient intersection operations are noted in bold text (below LOS D)Delay estimates above 250 seconds are out of bounds of the Syncro software

LOS Conclusion

The analysis prepared traffic forecasts for the following scenarios and evaluated operations at study intersections. The following results were identified:

• Existing (2025) Conditions, **one intersection operates at D or worse**
• Opening Year (2030) Plus Project, **two intersections operate at D or worse**
• Opening Year (2030) Plus Project Plus Cumulative, **five intersections operate at D or worse**

Improvements for the five impacted intersections were identified in the TIA to bring all intersections to acceptable LOS. The project's fair share contribution to these improvements was calculated. Following implementation of project improvements, payment of Fair Share Contributions and DIFs. The proposed project is not expected to have a significant adverse impact on the area transportation network relative to LOS.

The project would be consistent with the GPU land use designation; therefore, the project would not induce substantial unplanned population growth in the area as development of the site was accounted for within the GPU. Additionally, the project would not generate additional vehicle trips that were not accounted for in the GPU EIR. The project will be required to pay DIFs. Therefore, the project would be consistent with the analysis in the GPU EIR because it would not create new impacts or increase impacts, and there is no new information of substantial importance than that identified within the GPU EIR.

Program, Plan, Ordinance, and Policy Review

The GPU includes policies related to circulation; an impact is considered significant if the project conflicts with an adopted policy within the Mobility Element (ME) of the General Plan. Policies applicable to the Project include:

ME-1.5 Require that the City consider improvements to add roadway capacity only after considering improvements to other modes of travel.

- The improvements identified in Chapter 6 do not include roadway widenings that would increase capacity. Instead, signal timing adjustments are recommended to improve traffic flow and intersection operations.

ME-2.3 Periodically review and update designated truck routes to ensure efficiency and limit negative impacts on residential areas and other sensitive land uses.

- The project is not expected to generate heavy vehicle trips to or from the site.

ME-3.4 Require that all development or redevelopment projects provide pedestrian connections to the external pedestrian network.

- The project includes construction of new sidewalks along the project frontage on Calhoun Street, Avenue 53, and 52nd Avenue, improving pedestrian connectivity.

ME-4.1 Require that the City provide additional bicycle facilities along all roadways in the City which are built or reconstructed in the City except in those instances in which there is insufficient right-of-way or other physical limitations.

- The project proposes construction of bicycle facilities along the project frontage on Calhoun Street, Avenue 53, and 52nd Avenue.

ME-5.4 Encourage new large residential or commercial developments to locate on existing and planned transit routes.

- The project site is currently not served or planned to be served by any public transit services. The City will continue to monitor development patterns and transit demand and will adjust service as needed to support travel options.

ME-6.1 Require that new development pay for its fair share of construction costs for new and/or upgraded transportation infrastructure needed to accommodate this development.

- Chapter 6 outlines required intersection improvements and the project's fair share contribution. The project will also widen its adjacent roadway frontage consistent with the City's General Plan buildout.

ME-8.3 Prioritize connections between the City's bicycle and pedestrian network to regional facilities such as the CV Link and other regional trail facilities.

- The project includes construction of bicycle facilities that enhance connectivity and contribute to the City's overall regional bicycle and pedestrian network.

Congestion Management Plan Transportation Uniform Mitigation Fee Program

The County Congestion Management Plan (CMP) establishes a minimum standard of LOS E for designated regional roadways. The Transportation Uniform Mitigation Fee (TUMF) program identifies network backbone and local roadways that are needed to accommodate growth. The regional program ensures that developments

pay their fair share and that funding is in place for the construction of facilities needed to maintain an acceptable level of service for the transportation system. The TUMF is a regional mitigation fee program and is imposed and implemented in every jurisdiction in Riverside County. The Project will be required to pay TUMF.

The project proponent will be required to contribute DIFs and participate in the TUMF program and pay a fair share contribution to five study area roadways. Following the payment of required fees such as TUMF and DIF and fair share contribution, less than significand impacts are anticipated relative to the CMP.

The proposed project will not conflict with adopted program plans, ordinances, or policies regarding the circulation system, including public transit, roadway, bicycle, or pedestrian facilities. Less than significant impacts are anticipated. Therefore, the project would be consistent with the analysis in the GPU PEIR because it would not create new impacts or increase impacts, and there is no new information of substantial importance than that identified within the GPU EIR.

Vehicle Miles Travelled (VMT)

The current recommended metric in the CEQA guidelines for transportation impacts is VMT per capita per SB 743. The legislative intent of SB 743 is to balance the needs of congestion management with statewide goals for infill development, promotion of public health through active transportation and reduction of GHG emissions. This discussion is presented for informational purposes.

VMT is a measure of the amount of travel for all vehicles in a geographic region over a given period of time, typically a one-year period. The analysis of VMT (SB743) attributable to a project in CEQA went into full effect statewide on July 1, 2020. According to the Governor's Office of Planning and Research (OPR) proposed CEQA Guideline implementing SB 743, projects that decrease vehicle miles traveled in a project area compared to existing conditions should be considered to have a less than significant transportation impact. The California Air Pollution Control Officers Association (CAPCOA) publishes a resource for Local Government to assess emission reductions from greenhouse gas mitigation measures. The CAPCOA report[274] recognizes that land use planning provides the best opportunity to influence GHG emissions through a reduction in overall VMT.

According to the National Center for Sustainable Transportation, a number of cities, regions, and states across the United States have begun to deemphasize vehicle delay metrics such as LOS. In their place, policymakers are considering alternative transportation impact metrics that more closely approximate the true environmental impacts of driving. VMT is one metric that is increasingly being utilized.

Goals for reducing GHGs have been the primary motivation for the shift to VMT measures. Reductions in VMT produce many other potential benefits such as reductions in other air pollutant emissions, water pollution, wildlife mortality, and traffic congestion, as well as improvements in safety and health and savings in public and private costs.

As described throughout the EIR, and in accordance with State legislation, the GPU and CAP include policies and measures aimed at improving sustainability, including minimizing VMT and reducing GHG emissions. These policies included Neighborhood Site Enhancements: GP policies and actions include focusing on pedestrian safety, improving the connections between neighborhoods and commercial areas for pedestrians and cyclists, and providing traffic calming measures. Examples of these GP policies include M 1.1, M 1.2, M 1.5, M 2.1, M 2.2, M 3.1, M 3.2, and M 3.3. Other policies address Transit Service. Providing access to transit for City residents and employees can reduce automotive use. There are currently five Sunline Transit Bus Routes that provide access to the City. As part of this measure, the City would coordinate with Sunline Transit to increase transit service throughout the City. Examples of these policies include M 5.1, M 5.2, M 5.3, M 5.4, M 5.5, M 5.7 and M 8.1

274 CAPCOA, Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity, Fehr and Peers, February 14, 2022, available at https://www.caleemod.com/handbook/full_handbook.html

The proposed multimodal circulation network within the City would reduce dependence on fossil fuel energy sources by reducing VMT per capita in the City and promote development of Complete Streets. Specifically, the GPU provides a mix of land uses and supports a compact, transit-oriented development pattern consistent with state and regional planning goals.

Methodology

The City of Coachella utilizes the December 2020 County of Riverside Transportation Analysis Guidelines (County's TA Guidelines). The County's TA Guidelines set forth screening criteria under which Projects are not required to submit detailed VMT analysis. This guidance for determination of non-significant VMT impact is primarily intended to avoid unnecessary analysis and findings that would be inconsistent with the intent of SB 743. VMT screening criteria for development projects include the following:

- **Transit Priority Area (TPA)**: Presumed less than significant VMT impact for projects located in TPAs (1/2 mile of a rapid transit station or high-frequency bus route).
- **Low VMT Area Screening:** Presumed less than significant VMT impact for projects located in low VMT generated model traffic analysis zones (TAZs). These TAZs generate total daily VMT/SP that is less than the City baseline level.
- **Project Type Screening:** Local serving retail projects (per OPR's Technical Advisory less than 50,000 square feet), local essential services (i.e. day care, Police, Medical), small projects (i.e. DU <110 Units, general office less than 165 thousand square feet (TSF), parks) and affordable housing projects are assumed to have a less than significant VMT impact.

Project Screening

- The proposed project is not located in a TPA, within ½ mile of a rapid transit station or high frequency bus route. These services are currently not available in the Coachella Valley.
- The proposed project is not located in a low VMT generated model TAZ.
- The proposed project does not include local serving retail or local essential services, nor is it considered a small project or an affordable housing project.

The proposed project does not satisfy any of the screening criteria. Therefore, to determine if the project would result in a significant transportation impact relative to VMT, a full VMT modeling and forecasting assessment was completed.

VMT Analysis

VMT forecasts were prepared using the Riverside County Travel Demand Model (RIVCOM) version 4.0.1. Given the seasonal fluctuations in tourism in the Coachella region, and the increased weekend programming at the public facing elements of the project, an average daily service population (SP) was calculated to represent the project in the typical weekday model. This figure serves as a midpoint between the lowest and highest levels of employment and guest population that is reflective of the annualized demand.

The trip generation model was evaluated to confirm that employment categories—such as retail, arts and entertainment, and other services—appropriately reflect the nature of the Project. The model produced trip estimates approximately 50 percent higher than the project's own forecast, largely due to an underestimation of the internal capture expected. To maintain a conservative approach, no modifications were made to the model's forecasts. As noted in Table XVII-5, the projected total Annualized averages were estimated to be 2,050 Resident Guests and Guests and 330 Employees.

Table XVII-5 Project Service Population (SP)

Program Area	Visitor Type	Annualized Average	
		Population	Employment
Private	Resident Guests	950	-
	Employees	-	210

Public	Employees	-	120
	Guests	1,100	-
	Project Total	**2,050**	**330**

Source: Fehr & Peers, 2025

VMT estimates were prepared under the following conditions:

- No Project (2045)
- Cumulative (2045) Plus Project

The No Project conditions model runs were utilized to calculate the project-generated threshold of significance, and the county-wide boundary VMT without the project, and the city-wide boundary VMT without the project. The Plus Project conditions model runs were used to determine project related VMT.

County Estimates

Table XVII-6 presents the project VMT findings compared to the county-wide thresholds. The Cumulative (2025) Plus Project scenarios, including the Project VMT per SP, the project VMT Boundary per SP and the total net regional change would each be below the County Average.

Table XVII-6 County-wide and Project VMT Estimates

Scenario	Project	County-wide Cumulative No Project (Threshold)	Delta	Threshold Exceeded
OD VMT per Employee	22.64	28.41	(5.78)	No
Boundary VMT	80,751,251	80,760,223	(8,972)	No
Boundary VMT / SP	17.78	17.79	(0.01)	No
Total Net Regional VMT Change[275]			(1,906)	No

City Estimates

Table XVII-7 presents the project VMT findings compared to the city-wide thresholds. The Cumulative (2025) Plus Project scenarios, including the project VMT per SP, the Project VMT Boundary per SP and the total net regional change would each be below the City Average.

Table XVII-7 City-wide and Project VMT Estimates

Scenario	Project	City-wide Cumulative No Project (Threshold)	Delta	Threshold Exceeded
OD VMT per Employee	22.64	28.41	(5.78)	No
Boundary VMT	80,751,251	80,760,223	(8,972)	No
Boundary VMT / SP	17.78	17.79	(0.01)	No
Total Net Regional VMT Change[276]	--	--	(1,906)	No

Conclusions

Since the project-level VMT estimates for the project would be below the established significance thresholds for both the county-wide no project and city-wide cumulative no project, the project is expected to result in less than significant impacts relative to VMT.

The project is consistent with the GPU and will not conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all

275 RIVCOM, 2025.
276 Ibid.

modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit. The project would be consistent with the analysis within the GPU EIR because it would not create new impacts or increase impacts, and there is not new information of substantial importance than identified within the GPU EIR.

b) **Significant and Unavoidable Impact**. The GPU EIR concluded that similar to City roadways, growth in the City would create additional vehicular trips that will travel on regional roadways such as I-10 and SR 86 South. These facilities are with the jurisdiction of the Riverside County CMP, which is responsible for monitoring their operations. The incremental vehicular traffic associated with the buildout of the General Plan could create additional congestion on these CMP roadways. As mentioned previously, City policies cannot fully mitigate regional impacts as development outside of the city contributes to increase traffic volumes on these facilities impacts to these regional facilities are expected to be significant and unavoidable (Page 4.9-33).

Congestion Management Plan

The CMP requires a LOS E or better for regional roadways.[277] As noted previously the generation, distribution, and management of project traffic is not expected to conflict with the CMP; no CMP roadways were identified in the vicinity of the project. The project and background traffic will not exceed City level of service standards or travel demand measures, or other standards established by the City or Riverside County Transportation Commission (RCTC) for designated roads or highways.

The TUMF program identifies network backbone and local roadways that are needed to accommodate growth. The regional program was put into place to ensure that developments pay their fair share and that funding is in place for the construction of facilities needed to maintain an acceptable level of service for the transportation system. As mentioned previously, the TUMF is a regional mitigation fee program implemented in every jurisdiction in Riverside County. The Project will be required to pay TUMF.

The project is consistent with the analysis in the GPU EIR because it would not generate additional vehicle trips that were not accounted for in the GPU EIR. The project will be required to pay DIF and TUMF. Therefore, proposed project would not conflict with the RCTC CMP, including but not limited to level of service standards and travel demand measures, or other standards established by the RCTC for designated roads or highways.

The project would be consistent with the analysis in the GPU EIR because it would not create new impacts orincrease impacts, and there is no new information of substantial importance than that identified within the GPU EIR.

c) **Less than Significant Impact.** The GPU EIR concluded that impacts to air traffic patterns would be less than significant.[278] The GPU was determined to not have any direct or indirect impact upon any existing air facilities. The GPU fully incorporated the Airport Land Use Plan, which limits any impacts which might occur. See Section 9 Hazards and Hazardous materials for further discussion.

The project would not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location, that results in substantial safety risks, and impacts would be less than significant. Therefore, the project would be consistent with the analysis within the GPU EIR because it would not create new impacts orincrease impacts, and there is not new information of substantial importance than identified within the GPU EIR.

d) **Less than Significant Impact.** The GPU EIR concluded that the impacts relative to increasing hazards due to design features or incompatible uses or impeding of emergency vehicle access would be less than significant.[279]

277 Riverside County Transportation Commission, *Riverside County Congestion Management Program*, at 4-1 (2011).
278 City of Coachella, 2035 GPU Draft EIR, Traffic, at 4.9-34.
279 *Id*., at 4.9-34

The project would construct adjacent improvements to Avenue 52, Van Buren Street, and Calhoun Street. These roadway improvements would be designed and constructed consistent with all applicable *City of Coachella Infrastructure Development Standards*[280] as well as Fire Department roadway requirements. Private sector access will be provided by an entry/exit driveway on Avenue 52 and a driveway on Van Buren Street. Public sector access points are aligned perpendicular to Calhoun Street and Avenue 52. These driveways will be designed to incorporate proper stacking, sight distance and intersection control (e.g. left turn pockets) features.

Prior to construction, both the Fire Department and Police Department will review the project site plan to ensure safety measures are addressed, including emergency access. The project is not anticipated to result in inadequate emergency access.

Freeway Off-Ramp Queueing Assessment

Storage capacity for all SR-86 northbound and southbound off-ramps in the study area were evaluated using HCM 7th Edition methodologies. Existing storage capacities were compared against 95th percentile queue estimates prepared using the Synchro 12 software.

The following two intersections were included in the off-ramp queuing analysis for the Opening (2030) scenarios:

- 13. SR-86 SB Ramps and Dillion Road
- 14. SR-86 NB Ramps and Dillion Road

No movements are forecasted to exceed existing storage capacity under Opening Year (2030) Plus Project and Cumulative Projects. The queuing analysis summary in Table 6.2 presents results for one scenario Opening Year with Project and Cumulative Projects only. This scenario has higher traffic volumes than Opening Year with Project which queues are not reported since lower traffic volumes typically result in shorter queues. Detailed queuing worksheets are provided in Appendix F of the TA.

The project's pedestrian access points will be located with adequate visibility, and project-generated traffic will be consistent with existing traffic in the area. No offsite roadway improvements are proposed as part of the project.

A Traffic Control Plan may be required as a condition of approval to be implemented throughout all construction activities. This plan will work to reduce potential impacts that may arise due to conflicts with construction traffic. Impacts will be less than significant.

The project is consistent with the existing land use designation and will provide an internal circulation system without sharp curves or dangerous intersections that is subject to review and approval by the City Traffic Engineer and the Fire Department during standard City review processes. Therefore, the project would not substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses, and impacts would be less than significant. Therefore, the project would be consistent with the analysis within the GPU EIR because it would not create new impacts or increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

e) **Less than Significant Impact.** The GPU concluded impacts associated with non-motorized transportation including public transit, bicycle, or pedestrian facilities would be less than significant.[281]

Public Transit

280 City of Coachella Infrastructure Development Standards, February 22, 2008, available at https://www.coachella.org/home/showpublisheddocument/1392/635176274076400000.
281 City of Coachella, 2035 GPU Draft EIR, Traffic, at 4.9-35.

SunLine buses are wheelchair accessible and include bicycle racks accommodating two or three bicycles. The potential use of local bus services by future project residents is not expected to conflict with or substantially increase the demand for this transit service. Project implementation is not anticipated to interfere with the existing service or performance at bus stop facilities. Less than significant impacts are anticipated.

If future demand warrants, expansion of available services may be appropriate. Transit services are monitored by both the City and SunLine. Additional services are periodically considered in response to the anticipated increase in use.

The use of local bus services by project users is not expected to conflict with or substantially increase the demand for this transit service. Project implementation is not anticipated to interfere with the existing service or performance at bus stop facilities. The proposed project would not impact pedestrian or bicycle mobility. Therefore, the project would be consistent with the analysis in the GPU EIR because it would not create new impacts or increase impacts, and there is no new information of substantial importance than that identified within the GPU EIR.

Bicycle Facilities:

- Class I – Bike Path or Bike Trail: Class I facilities are bicycle trails or paths that are off-street and separated from automobiles. They are a minimum of eight feet in width for two-way travel and include bike lane signage and designated street crossings where needed.

- Class II – Bike Lane: Class II Bike Lanes can be either located next to a curb or parking lane. If located next to a curb, a minimum width of five feet is recommended. They are designated for the use of bicycles and include signage and lane lines and pavement markings.

- Class III – Bike Routes: This is a street for shared use by motor vehicles and bicyclists. While bicyclists have no exclusive use or priority, signage – both by the side of the street and stenciled on the roadway surface – alerts motorists to bicyclists sharing the roadway space and denotes that the street is an official bike route.

- Class IV – Separated Bikeway: Class IV bicycle facilities, sometimes called cycle tracks or separated bikeways, provide a right-of-way designated exclusively for bicycle travel adjacent to a roadway and are protected from vehicular traffic via separations (e.g., grade separation, flexible posts, inflexible physical barriers, on-street parking).

Class II Buffered Bike Lanes are located on Van Buren Street in the Project vicinity. Avenue 50 and Avenue 48 have existing Class II Bike Lanes, and portions of Avenue 52 (east of Van Buren Street). Otherwise, all other roadways within the project vicinity have either no bicycle facilities or have a narrow striped shoulder. There are no Class I, Class III, or Class IV facilities located in the project vicinity.

The City of Coachella updated their Active Transportation Plan in 2020, which proposes the following planned bicycle facilities near the study area:

- Class II Bike Lane along Dillon Road

- Class II Bike Lane on Calhoun Street between 50th Avenue and city limits

Existing on-street bike lanes are located on Van Buren Street. The proposed project is not anticipated to impact existing facilities. Less than significant impacts are expected.

Pedestrian Facilities: The project site is in an area with some developed pedestrian network to the north. All local roads adjacent to the project that act as borders do not have sidewalks. Some study intersections provide marked crosswalks, along Avenue 50 and Avenue 48. No sidewalks are found in the vicinity of the project.

The project's pedestrian access points will be located with adequate visibility, and project-generated traffic will be consistent with existing traffic in the area. No offsite roadway improvements are proposed as part of the project.

The project is consistent with the GPU and would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities, and impacts would be less than significant. Therefore, the project would be consistent with the analysis within the GPU EIR because it would not create new impacts or increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

Conclusion:

With regards to the issue area of Transportation, the following findings can be made:

1. No peculiar impacts to the project or its site have been identified.
2. There are no potentially significant off-site and/or cumulative impacts which were not discussed by the GPU EIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the GPU EIR.
4. No mitigation measures are required within the GPU EIR. The project specific impacts would be less than significant.

18. UTILITIES AND SERVICE SYSTEMS – Would the project:	Project Peculiar Impact that is not Substantially Mitigated by Uniformly Applied Policies	Significant Impact not Analyzed as Significant in the GP EIR	Potentially Significant Offsite or Cumulative Impact not Discussed in the GP EIR	Adverse Impact More Severe based on Substantial New Information	No New Impact
a. Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered facilities, need for new or physically altered facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service or to meet performance objectives for Natural Gas, Electricity, or Telecommunication?	☐	☐	☐	☐	☒
b. Would the project result in wasteful energy consumption?	☐	☐	☐	☐	☒
c. Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☐	☒
d. Would the project comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☐	☒
e. Will the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☐	☒
f. Will the proposed project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).	☐	☐	☐	☐	☒
g. Would the project require or result in the construction of new water treatment or collection facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☐	☒
h. Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☐	☒

i. Would the project require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☐	☒
j. Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☐	☒

Sources: The City of Coachella 2035 General Plan, 2015; City of Coachella 2015 Sewer System Master Plan, 2015; Coachella Valley Regional Urban Water Management Plan, 2015; Riverside County Countywide Integrated Waste Management Plan, 1996; Countywide Integrated Waste Management Plan Five Year Review Report, 2023; Coachella Water Authority Water Master Plan, 2017; California Department of Finance Population and Housing Estimates, 2025

a) **Less than Significant Impact**. Development of the General Plan would result in incremental development with concurrent utility infrastructure. The GPU EIR determined impacts would be less than significant.[282] Though the construction of natural gas, electricity, and telecommunication infrastructure has the potential to cause negative environmental impacts on the Planning Area, strategies and policies outlined in the Infrastructure + Public Services Element present approaches to reduce environmental impacts. Furthermore, all future infrastructure projects will be required to undergo project-level environmental review to evaluate potential impacts and identify mitigation measures as necessary. The GPU Policies are as follows: [283]

6.1 Private utilities. Work with private and quasi-public utilities to ensure the adequate provision of energy and telecommunications service that meets the needs of the community

6.2 Range of access. Work with service providers to ensure access to and availability of a wide range of state-of-the-art telecommunication systems and services for households, businesses, institutions and public agencies throughout the city.

6.3 Expanding service. Work with utility companies to retrofit areas that are not served by current telecommunication technologies and shall provide strategic long-range planning of telecommunication facilities for newly developing areas, as feasible.

6.4 Innovation. Encourage local industries, higher educational institutions and other entities to support innovation in the design and implementation of state-of-the-art telecommunication technologies and facilities.

6.5 Co-location of facilities. Encourage compatible co-location of telecommunication facilities and work with utility companies to provide opportunities for siting telecommunications facilities on City-owned property and public right-of-ways.

6.6 Smart communities. Establish requirements for the installation of state-of-the-art internal

282 City of Coachella, 2035 GPU Draft EIR, Public Utilities, at 4.14-9.
283 City of Coachella, General Plan 2035: Infrastructure & Public Services, at 09-8 (Apr. 22, 2015).

telecommunications technologies in new large-scale planned communities, office and commercial developments (e.g., wiring of all new housing and businesses).

6.7 High-voltage lines. Coordinate with the electrical utilities on the location of future high voltage corridors and the effects produced by high voltage electrical facilities in power corridors and electrical substations.

6.8 Utility line undergrounding. Require undergrounding of all new publicly owned utility lines, encourage undergrounding of all privately owned utility lines in new developments and work with electricity and telecommunications providers to underground existing overhead lines.

6.9 Utility siting standards. Coordinate with the appropriate utility purveyors to develop local standards for the location and design of natural gas, electrical and telecommunications facilities where such improvements are visible along street frontages.

6.10 Transmission corridors. Encourage the shared use of major transmission corridors and other appropriate measures as a means of preserving the aesthetic resources of the City and to lessen the visual impact of such development. The City shall work with the appropriate agencies in developing these corridors for recreational use.

The project exists within the service area of SoCal Gas for natural gas services, although all residential buildings will be fully electrified, eliminating the use of natural gas for a portion of the project.

As discussed in Section 6: Energy, the proposed project has received a will-serve letter from IID for electricity service that is conditioned on an additional electric substation and distribution facilities being constructed in the general project area. The project has designated a potential on-site location for a substation as a contingency measure but based on current electrical infrastructure planning in the area, it is expected that the new substation will be constructed off-site in the area with new distribution conduits (if required) to be constructed in existing public road rights-of-way to serve the project. The project will contribute financially to a fair share contribution for a regional substation. The future IID substation is expected to serve multiple projects in the area, both within and outside the City of Coachella, and as an independent project, it will be subject to its own environmental review under CEQA once the substation project and location have been determined. The project would also incorporate solar generation and battery storage systems to help offset electricity demand from the regional grid. These systems would reduce reliance on off-site energy sources and support overall energy efficiency. In the future, the project may consider implementing a microgrid or geothermal system to further offset demand on the grid; however, these features are not part of the current project proposal and are not evaluated as a component of the project at this time.

The project exists within the service area of Frontier for telecommunication. All connections of these utilities are located adjacent to the project's boundary, with the exception of the proposed future IID substation. The environmental impacts associated with the construction or relocation of natural gas, electric power, or telecommunication facilities is anticipated to be less than significant.

The GPU EIR found impacts to natural gas, electricity, and telecommunication facilities to be less than significant. For the above reasons, the project would have less than significant impacts and is consistent with the analysis of the GPU EIR. The project does not create new impacts or increase impacts, and no new information is of substantial importance.

b) **Less than Significant Impact**. The GPU EIR determined that impacts would be less than significant.[284] Energy is further discussed in Section 6 (Energy) of this analysis. However, the proposed project has received a will-serve letter from IID and is expected to contribute towards a new area substation and distribution conduits (if required) to provide electrical power to the project site. The project would also incorporate solar generation and

284 City of Coachella, 2035 GPU Draft EIR, Public Utilities, at 4.14-12.

battery storage systems to help offset electricity demand from the regional grid. As previously discussed in Section 6, the proposed photovoltaic systems will provide 50 percent of electricity for single-family homes, condos and townhomes, movie theaters, and restaurants. These systems would reduce reliance on off-site energy sources and support overall energy efficiency. In the future, the project may consider implementing a microgrid or geothermal system to further offset demand on the grid; however, these features are not part of the current project proposal and are not evaluated as a component of the project at this time. Electrical improvements will take place within the boundaries of the project and will not result in significant environmental impacts.

As discussed in Section 6, the GPU EIR found impacts to energy to be less than significant. The project would have less than significant impacts and is consistent with the analysis of the GPU EIR. The project does not create new impacts or increase impacts, and no new information is of substantial importance.

c-d) **Less than Significant Impact**. The GPU EIR determined impacts to be less than significant.[285] The GPU states that regulatory measures, such as AB 939 and SB 1374, are anticipated to slow the filling of landfills and extend the timeline for reaching capacity. AB 939 emphasized conservation of natural resources through reduction, recycling, and reuse of solid waste. SB 1374 outlines reporting policies to the California Integrated Waste Management Board (CIWMB) and requires a 50 to 75 percent diversion of construction and demolition waste materials to landfills. Policies outlined within the Infrastructure and Public Services element of the GPU will ensure that projects meet solid waste requirements.

Solid waste disposal and recycling services for the City of Coachella is provided by Burrtec. Solid waste and recycling collected from the proposed project will be hauled to the Coachella Valley Transfer Station, which has a 1,100 tons per day capacity.[286] Waste from this transfer station is then sent to a permitted landfill or recycling facility outside of the Coachella Valley. These include Badlands Sanitary Landfill, El Sobrante Sanitary Landfill, and Lamb Canyon Sanitary Landfill. Cal-Recycle data indicates the Badlands Sanitary Landfill has 4,900,000 cubic yards of remaining capacity, the El Sobrante Landfill has a remaining capacity of 121,083,583 tons of solid waste, and Lamb Canyon Sanitary Landfill has a remaining solid waste capacity of 14,540,000 cubic yards.[287]

As previously discussed, approximately 87 acres will be developed with a mixed-use residential development. The estimates for solid waste generation can be seen in Table XVIII-1.

Table XVIII-1 Solid Waste Generation[288]

Land Use	Rate	Unit	Solid Waste (pounds per day)	Solid Waste (tons per day)
Single Family	7.8lbs/unit/day	165 units	1,287	0.64
Hotel	2lbs/room/day	244 units	488	0.24
Commercial	13lbs/1000 sq.ft./day	256,000 sq.ft.	3,328	1.66
Total				**2.54**

Source: CalRecycle. Estimated Solid Waste Generation available at https://www2.calrecycle.ca.gov/wastecharacterization/general/rates

The project would generate an average of approximately 2.54 tons of solid waste per day. This estimate does not account for any required solid waste reductions. The projects proposed solid waste generation is 0.2% of the Coachella Valley Transfer station's daily receival allotment of 1,100 tons per day. The project would be served by a landfill with sufficient capacity to meet the demands of solid waste generated by the project.

285 City of Coachella, 2035 GPU Draft EIR, Public Utilities, at 4.14-14 and 4.14-16.
286 *Id.*, at 4.14-5
287 CalRecycle SWIS Facility/Site Search (2025), https://www2.calrecycle.ca.gov/SolidWaste/Site/Search.
288 The Solid Waste Generation analysis was prepared using an earlier project description with 409 units. The currently proposed Project includes 402 units, representing a reduction in development intensity relative to the analyzed scenario.

The project will comply with all applicable solid waste statutes and guidelines. Policies for solid waste reduction are outlined in the Infrastructure and Solid Waste Element of the GPU. Furthermore, all development is required to comply with the mandatory commercial and multi-family recycling requirements of Assembly Bill 341 (AB 341).[289] Less than significant impacts are expected relative to applicable solid waste statutes and regulations.

The GPU EIR found impacts to landfill capacity and solid waste regulations to be less than significant. For the reasons stated above, the project was determined to be consistent with the analysis of the GPU EIR. The project does not create new impacts or increase impacts, and no new information is of substantial importance.

e-f) **Less than Significant Impact**. The GPU EIR determined that impacts would be less than significant.[290] According to the GPU, the City of Coachella is supplied water by the Coachella Water Authority (CWA) in cooperation with the Coachella Valley Water District (CVWD). The water demands associated with the GPU have been accounted for as part of the CVWD regional water supply planning efforts, specifically within the 2020 Coachella Valley Regional Urban Water Management Plan (RUWMP), which is heavily reliant on land use and population projections within the City and its sphere of influence. The GPU EIR indicates that the City of Coachella has adequate water supplies to meet demands during normal, single-dry, and multiple-dry years throughout the 20-year planning period based on growth projections under the current adopted general plan.

The existing land use designation for the Proposed Project is Regional Retail District, characterized by regional shopping centers, mixed destination centers or similar uses, providing commercial opportunities, with residential uses. The Proposed Project is consistent with the existing land use designation and is anticipating a development intensity equal to what was accounted for in the GPU EIR, meaning that impacts to water supply will be equivalent at the project site to what was previously anticipated and analyzed in the GPU EIR. The project proposes a mixed-use development, consisting of a total of 402 units on approximately 28 acres (14.4 du/acre), which is consistent with the General Plan residential density range of 10–15 dwelling units per acre. Furthermore, within the RUWMP, the 2025 population within the City of Coachella was estimated to be 66,478. The current population of the City is 44,050 persons (2025 Department of Finance Population and Housing Estimates) which is below the RUWMP population estimates. The proposed project has anticipated that a majority of residential units would operate under fractional ownership, timeshare, second homes, and/or short-term and long-term rental models, and would therefore significantly reduce any impacts to water supply when compared to impacts typically associated with permanent residency. It is estimated that the project will have an annualized average population of 950 residential guests and 1,100 public guests, for a projected total of 2,050 guests. At full buildout, the project would not cause a substantial increase to the City's population estimates projected in the City's General Plan and RUWMP.

Pursuant to SB 610 and SB 221, any future "projects" within the City or its SOI that are defined within Water Code section 10912 will require the preparation of a Water Supply Assessment (WSA). A WSA has been prepared for the project and is undergoing CWA review and approval. The proposed development will implement water conservation measures to reduce impacts to public water supplies. Water fixtures within residential and commercial buildings will be low-flow, with a 30% reduction in water use for toilets, showerheads, and faucets.

According to the WSA and RUWMP, the project will account for 1.2 percent of the projected water demand of CWA through the year 2045. As previously discussed, the RUWMP indicates that Coachella has adequate water supplies to meet demands during normal, single-dry, and multiple-dry years throughout the 20-year planning, indicating adequate water supply for the project. The City's Landscape Development Guidelines, including drought-tolerant landscape materials and efficient irrigation systems, will be implemented. Water installation and connection fees in place at the time of development will be collected by CWA. In addition, the proposed development will also be required to pay the CVWD Replenishment Assessment Charge (RAC) through CWA. The RAC supports CVWD's groundwater replenishment program and covers a portion of the costs of replenishing the aquifer, including the cost of importing water for that purpose. Less than significant impacts

289 *See* CALRecylce, Mandatory Commercial Recycling, https://calrecycle.ca.gov/Recycle/Commercial.
290 City of Coachella, 2035 GPU Draft EIR, Water Supply and Wastewater, at 4.16-75.

to available groundwater and water supplies are expected.

The GPU EIR found impacts to water supply to be less than significant and due to consistency with the City's land use designation and preparation of a WSA, the proposed project is consistent with the analysis of the GPU EIR. The project does not create new impacts or increase impacts, and no new information is of substantial importance.

g) **Less than Significant Impact**. The GPU EIR determined that impacts were anticipated to be less than significant.[291] Water facilities serving the City are planned and managed through regional planning efforts by the City and the Coachella Valley Water District. Existing and planned facilities are expected to provide sufficient capacity to meet projected water demand associated with buildout of the City and its sphere of influence. Future development will continue to rely on the regional groundwater basin, supplemented by imported and recycled water supplies and supported by ongoing recharge and conservation programs. With implementation of the existing and planned water supply facilities and management programs, sufficient infrastructure is expected to be available to serve projected growth under normal and dry-year conditions.

The City of Coachella is currently supplied water by the CWA. CWA provides over 8,000 municipal water service connections and over 2,128 million gallons ("MG") of water to customers in their service area. The current water supply source is groundwater from the Indio Sub-basin and is drawn from CWA owned and operated wells. CWA's existing water system consists of different pressure zones, groundwater wells, storage reservoirs, booster pumping stations, and distribution facilities. Groundwater is pumped from six wells within the City's distribution system. The total capacity of active wells is approximately 11,400 gallons per minute (gpm). CWA has three storage reservoirs within the City, with a total reservoir capacity of approximately 10.5 MG. CWA's distribution system network consists of approximately 120 miles of pipeline, which ranges from 4-inches to 36-inches in diameter.

The residential and commercial components of the project are anticipated to utilize domestic water supplied by CWA and the 9.4-acre Hotel Lagoon will be supplied by a private, on-site well. Presently, an existing well occurs on-site, located adjacent to the existing irrigation pond. The existing well does not possess the infrastructure to supply the Hotel Lagoon and will be capped in accordance with County of Riverside Department of Environmental Health standards. The location of the new well-site will be determined in the final site design, but it will occur adjacent to the Lagoon. Well capping, placement, and permitting will be done in accordance with the County of Riverside Department of Environmental Health. Once a location is determined for the new well, a Registered Well Driller will be contracted to prepare the application for submittal to the Department of Environmental Health. Application approval by the County of Riverside will ensure that impacts to groundwater quantity and quality are not significant.

For domestic water supply, the project would connect to existing 12-inch water mains along Avenue 52 and Van Buren Street, northeast of the project. A 12-inch public water main is proposed to encompass the site along Calhoun Street, Avenue 52, and Van Buren Street in order to reach the existing water main. An 8-inch water main will be constructed internally to connect the project to the proposed 12-inch main. The project would connect to an existing 12-inch sewer main along Avenue 52. As previously mentioned, the project will comply with the existing water management program in place, such as adherence to the City's Landscape Development Guidelines. The infrastructure and design components for the project will be consistent with CWA requirements pertaining to landscaping and irrigation, domestic water systems, stormwater facilities, and general development. Requirements include utilizing water efficient irrigation and drought tolerant plants, adhering to standardized pipeline sizes and design standards, and stormwater facility compliance. The project will be reviewed by CWA and City staff to assure compliance with all current and applicable requirements. The proposed development will be expected to implement water conservation measures to reduce impacts to public water supplies. As previously discussed, water fixtures within residential and commercial buildings will be low-flow, with a 30% reduction in water use for toilets, showerheads, and faucets. Additionally, water installation and connection fees in place at the time of development will be collected by CWA.

291 *Id.*, at 4.16-85.

The GPU EIR found impacts to water facilities to be less than significant and due to proximity to existing infrastructure, the proposed project is consistent with the analysis of the GPU EIR. The project does not create new impacts or increase impacts, and no new information is of substantial importance.

h-i) **Less than Significant Impact**. The GPU states that the City's existing wastewater treatment facilities currently provide a capacity of approximately 4.5 MGD, which is insufficient to meet projected long-term demand associated with population growth under the GPU.[292] To support the anticipated population growth, wastewater treatment capacity may need to increase, potentially requiring expansion of existing facilities or construction of new treatment plants. Development of additional wastewater infrastructure could result in environmental impact. However, the site development impacts caused by the construction of additional wastewater infrastructure are very similar to those of any land development effort and fall within the broad, programmatic analysis of the development of the City under the GPU analyzed in the EIR. Future wastewater facility expansions would undergo project-level environmental review to evaluate potential impacts and identify mitigation measures as necessary.

The City of Coachella is currently served by the Coachella Sanitary District (CSD) for wastewater treatment. In 2010, the City upgraded the capacity of the Avenue 54 Wastewater Treatment Plant (WWTP) to 4.5 MGD, with a current average daily discharge of approximately 2.7 MGD. According to Table 4-4 Land Use Type with Model Flow Load Field of the City's 2015 Sewer System Master Plan, the current land use designation for the project site (general commercial) has an estimated unit flow rate of 600 gpd/acre.[293] Excluding proposed open space and proposed street acreage, the project is anticipated to have 55.5 acres of facilities with the capacity to generate wastewater. Considering the estimated flow rate of 600 gpd/acre, the proposed project is estimated to generate wastewater at a rate of 0.33 MGD, which represents approximately 7% of the WWTP's treatment capacity of 4.5 MGD. However, the proposed project has anticipated that a majority of residential units will operate under fractional ownership, timeshare, second homes, and/or short-term and long-term rental models, and would therefore significantly reduce rates of wastewater production when compared to impacts typically associated with permanent residency.

The proposed project would connect to the existing 12-inch sewer mains at the intersection of Avenue 52 and Van Buren Street, the intersection of Fredrick Street and Avenue 53, and Avenue 64. The project will connect to the existing 12-inch sewer main at the Avenue 52 and Van Buren Street intersection and extend approximately 174 feet of 12-inch public sewer lines to the project. The proposed public sewer line will connect to a private sewer forcemain, which will connect to private 8-inch sewer mains throughout the site. The project will be required to undergo review by CSD and City staff to ensure wastewater capacity and compliance with the current wastewater treatment requirements. Additionally, sewer installation and connection fees in place at the time of development will be collected by the City. No new or expanded treatment facilities are expected as a result of project implementation, nor is the project expected to exceed wastewater capacity. Therefore, less than significant impacts to wastewater facilities are expected.

The GPU EIR found impacts to wastewater facilities to be less than significant and due to proximity to existing infrastructure and the required payment of installation and connection fees, the proposed project is consistent with the analysis of the GPU EIR. The project does not create new impacts or increase impacts, and no new information is of substantial importance.

j) **Less than Significant Impact**. The GPU requires the city to properly manage stormwater facilities, coordinate stormwater facilities with CVWD, and requires the implementation of adequate infrastructure with new development. Based on these conditions, the impact of the GPU build-out on stormwater facilities is considered less than significant. The project's proposed stormwater facilities are within the project's current footprint. The proposed onsite storm drain system includes the 2.5-acre irrigation pond, which has been preliminarily sized to provide enough storage for the 100-year controlling storm event. The project does not require any off-site storm

292 *Id.*, at 4.16-92.
293 City of Coachella 2015 Sewer System Master Plan, 2015

water facilities or expansion of existing facilities, and impacts would be less than significant.

The GPU EIR found impacts to stormwater facilities to be less than significant[294] and due to the utilization of on-site retention, the proposed project is consistent with the analysis of the GPU EIR. The project does not create new impacts or increase impacts, and no new information is of substantial importance.

Conclusion:

With regards to the issue area of Utilities and Service Systems, the following findings can be made:

1. No peculiar impacts to the project or its site have been identified.
2. There are no potentially significant off-site and/or cumulative impacts which were not discussed in the City of Coachella General Plan 2035 Program EIR. The Program EIR adequately addressed the potential impacts to utility and service systems.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the City of Coachella General Plan 2035 Program EIR.
4. No mitigation measures are required within the GPU EIR for utility and service systems. Compliance with above listed General Plan policies ensures that potential impacts to utility and service systems would remain less than significant.

294 City of Coachella, 2035 GPU Draft EIR, Water Supply and Wastewater, at 4.16-94.

19. WILDFIRE – If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:	Project Peculiar Impact that is not Substantially Mitigated by Uniformly Applied Policies	Significant Impact not Analyzed as Significant in the GP EIR	Potentially Significant Offsite or Cumulative Impact not Discussed in the GP EIR	Adverse Impact More Severe based on Substantial New Information	No New Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water resources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff post-fire slope instability, or drainage changes?	☐	☐	☐	☐	☒

Sources: The City of Coachella 2035 General Plan, 2015; Cal Fire Fire Hazard Severity Zones Map, 2025; CALFIRE Fire Hazard Severity Zone Maps; Coachella Local Hazard Mitigation Plan, 2022.

The GPU EIR did not specifically address Wildfires. The topic of wildfire was analyzed within the GPU EIR within Section 4.8 Hazards and Hazardous Materials. The guidelines for determining significance stated that the proposed GPU would have a significant impact if it would expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands. In 2019, the issue of Wildfire was separated into its own section within Appendix G of the CEQA Guidelines to incorporate the four threshold questions above. The GPU EIR addressed wildfire in their analysis; however, it was not called out as a separate environmental topic. This section was not included in the original GPU EIR and is provided here for informational purposes.

According to Coachella's Local Hazard Mitigation Plan, fires are considered a medium mitigation priority that would result in negligible damages/injuries with a 1 percent to 10 percent likelihood.[295]

a-d) **Less than Significant Impact.** The project site currently includes agricultural fields, with date palm groves and grape vineyards. The date palm grove is still in operation; however, the grape vineyards have been abandoned. The project site is surrounded to the north, east, and west by existing, paved rights-of-way, Avenue 52, Van Buren Street, and Calhoun Street (respectively). Existing agricultural lands and residential properties are located south of the project.

295 City of Coachella, Coachella Local Hazard Mitigation Plan (2022), https://www.coachella.org/home/showpublisheddocument/10470/638816255571400000.

According to Cal Fire's Fire and Resource Assessment Program the proposed project site is not located within a Moderate, High, or Very High Fire Hazard Severity Zone.[296] As a result, the project is not expected to impair an adopted emergency response plan or emergency evacuation plan. No impacts are anticipated.

Wildfire risk is related to a number of parameters, including fuel loading (vegetation), fire weather (winds, temperatures, humidity levels and fuel moisture contents), and topography (degree of slope). Steep slopes contribute to fire hazards by intensifying the effects of wind and make fire suppression difficult. Fuels such as grass are highly flammable because they have a high surface area to mass ratio and require less heat to reach the ignition point. The project site is not expected to expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

The project provides development of infrastructure (water, sewer, and storm drainage). The proposed improvements would allow for decrease fire risk relative to existing conditions. The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. As a result, the project is not expected to require the installation or maintenance of associated infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.

The project site will connect to an existing network of city streets. The project proposes connections to Van Buren Street, Calhoun Street, and Avenue 52, as well as improvements to the street frontages (including curb and gutter). The proposed improvements would allow for greater emergency access relative to the existing conditions. Landslides include rockfalls, deep slope failure, and shallow slope failure. Factors such as the geological conditions, drainage, slope, vegetation, and others affect the potential for landslides. One of the most common causes of landslides is construction activity that is associated with road building. The project site is relatively flat; therefore, the potential for a landslide in the project site is essentially non-existent. As a result, the project is not expected to expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes and no impact is expected to result from the project.

No impact is expected to result from the project. Overall, less than significant impacts are anticipated. Therefore, the project would be consistent with the analysis within the GPU EIR because it would not create new impacts or increase impacts, and there is no new information of substantial importance than identified within the GPU EIR.

Conclusion:

With regards to the issue area of Wildfire, the following findings can be made:

1. No peculiar impacts to the project or its site have been identified.
2. There are no potentially significant off-site and/or cumulative impacts which were not discussed by the GPU EIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the GPU EIR.
4. No mitigation measures are required within the GPU EIR. The project specific impacts would be less than significant.

296 CAL FIRE, Fire Hazard Severity Zones, https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones.

COVA

Air Quality Impact Analysis

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LIST OF ABBREVIATED TERMS

µg/m^3	Microgram per Cubic Meter
(1)	Reference
1993 CEQA Handbook	SCAQMD's CEQA Air Quality Handbook (1993)
2020-2045 RTP/SCS	2020-2045 Regional Transportation Plan/Sustainable Communities Strategy
AB 2595	California Clean Air Act
AQIA	Air Quality Impact Analysis
AQMP	Air Quality Management Plan
BACT	Best Available Control Technology
C_2H_3Cl	Vinyl Chloride
CAA	Federal Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards Code
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CEQA Guidelines	2025 CEQA Statute and Guidelines
CO	Carbon Monoxide
COHb	Carboxyhemoglobin
City	City of Coachella
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
GHG	Greenhouse Gas
H_2S	Hydrogen Sulfide
HI	Hazard Index
lbs	Pounds
lbs/day	Pounds Per Day
LST	Localized Significance Threshold
LST Methodology	Final Localized Significance Threshold Methodology
MICR	Maximum Individual Cancer Risk
MM	Mitigation Measures
mph	Miles Per Hour
MWELO	California Department of Water Resources' Model Water Efficient Landscape Ordinance
N_2	Nitrogen
N_2O	Nitrous Oxide

NAAQS	National Ambient Air Quality Standards
NO	Nitric Oxide
NO_2	Nitrogen Dioxide
NO_X	Nitrogen Oxides
O_2	Oxygen
O_3	Ozone
O_2 Deficiency	Chronic Hypoxemia
ODC	Ozone Depleting Compounds
Pb	Lead
PM	Particulate Matter
PM_{10}	Particulate Matter 10 microns in diameter or less
$PM_{2.5}$	Particulate Matter 2.5 microns in diameter or less
ppm	Parts Per Million
Project	COVA
RECLAIM	Regional Clean Air Incentives Market
ROG	Reactive Organic Gases
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SIPs	State Implementation Plans
SO_2	Sulfur Dioxide
SO_4	Sulfates
SO_X	Sulfur Oxides
SRA	Source Receptor Area
SSAB	Salton Sea Air Basin
TAC	Toxic Air Contaminant
Title 24	California Building Code
TITLE I	Non-Attainment Provisions
TITLE II	Mobile Sources Provisions
VOC	Volatile Organic Compounds

EXECUTIVE SUMMARY

ES.1 SUMMARY OF FINDINGS

The results of this COVA Air Quality Impact Analysis (AQIA) are summarized below based on the significance criteria in Section 3 of this report consistent with Appendix G of the CEQA Guidelines (CEQA Guidelines) (1). Table ES-1 shows the findings of significance for each potential air quality impact under CEQA before and after any required mitigation measures (MM) described below.

TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS

Analysis	Report Section	Significance Findings	
		Unmitigated	Mitigated
Regional Construction Emissions	3.4	*Less Than Significant*	*n/a*
Localized Construction Emissions	3.6	*Less Than Significant*	*n/a*
Regional Operational Emissions	3.5	*Less Than Significant*	*n/a*
Localized Operational Emissions	3.6	*Less Than Significant*	*n/a*
CO "Hot Spot" Analysis	3.7	*Less Than Significant*	*n/a*
Air Quality Management Plan	3.8	*Less Than Significant*	*n/a*
Sensitive Receptors	3.9	*Less Than Significant*	*n/a*
Odors	3.10	*Less Than Significant*	*n/a*
Cumulative Impacts	3.11	*Less Than Significant*	*n/a*

ES.2 REGULATORY REQUIREMENTS

There are numerous requirements that development projects must comply with by law, and that were put in place by federal, State, and local regulatory agencies for the improvement of air quality. Any operation or activity that might cause the emission of any smoke, fly ash, dust, fumes, vapors, gases, or other forms of air pollution, which can cause damage to human health, vegetation, or other forms of property, or can cause excessive soiling on any other parcel shall conform to the requirements of the South Coast Air Quality Management District (SCAQMD). SCAQMD Rules that are currently applicable to this Project are described below.

SCAQMD Rule 402

A person shall not discharge from any source whatsoever such quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any such persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule do not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

SCAQMD Rule 403

This rule is intended to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (human-made) fugitive dust sources by requiring actions to prevent and reduce fugitive dust emissions. Rule 403 applies to any activity or human-made condition capable of generating fugitive dust and requires best available control measures to be applied to earth moving and grading activities.

SCAQMD Rule 1113

This rule serves to limit the volatile organic compound (VOC) content of architectural coatings used on projects in the SCAQMD. This rule applies to any person who supplies, sells, offers for sale, or manufactures any architectural coating for use on projects.

SCAQMD Rule 1301

This rule is intended to provide that pre-construction review requirements to ensure that new or relocated facilities do not interfere with progress in attainment of the National Ambient Air Quality Standards (NAAQS), while future economic growth within the SCAQMD is not unnecessarily restricted. The specific air quality goal is to achieve no net increases from new or modified permitted sources of nonattainment air contaminants or their precursors. Rule 1301 also limits emission increases of ammonia, and Ozone Depleting Compounds (ODCs) from new, modified or relocated facilities by requiring the use of Best Available Control Technology (BACT).

SCAQMD Rule 1401

A person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than three minutes in any 1 hour that is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the United States (U.S.) Bureau of Mines.

1 INTRODUCTION

This report presents the results of the AQIA prepared by Urban Crossroads, Inc., for the proposed COVA Project (Project). The purpose of this AQIA is to evaluate the potential impacts to air quality associated with construction and operation of the Project and recommend measures to mitigate impacts considered potentially significant in comparison to thresholds established by the SCAQMD.

1.1 SITE LOCATION

The Project is located at the southwest corner of the Van Buren Street and Avenue 52 intersection in the City of Coachella. The Project is surrounded by agricultural uses to the north, east, south, and west, as shown in Exhibit 1-A.

1.2 PROJECT DESCRIPTION

The proposed Project consists of 409 units: 165 two-story single-family residences (SFR) and 244 condo hotel units. The development includes a crystal lagoon, and other residential amenities including restaurants, a beach club, event space, pop-up shops, outdoor amphitheater, pools, recreation areas and kids play spaces. A preliminary site plan for the Project is shown in Exhibit 1-B.

EXHIBIT 1-A: LOCATION MAP

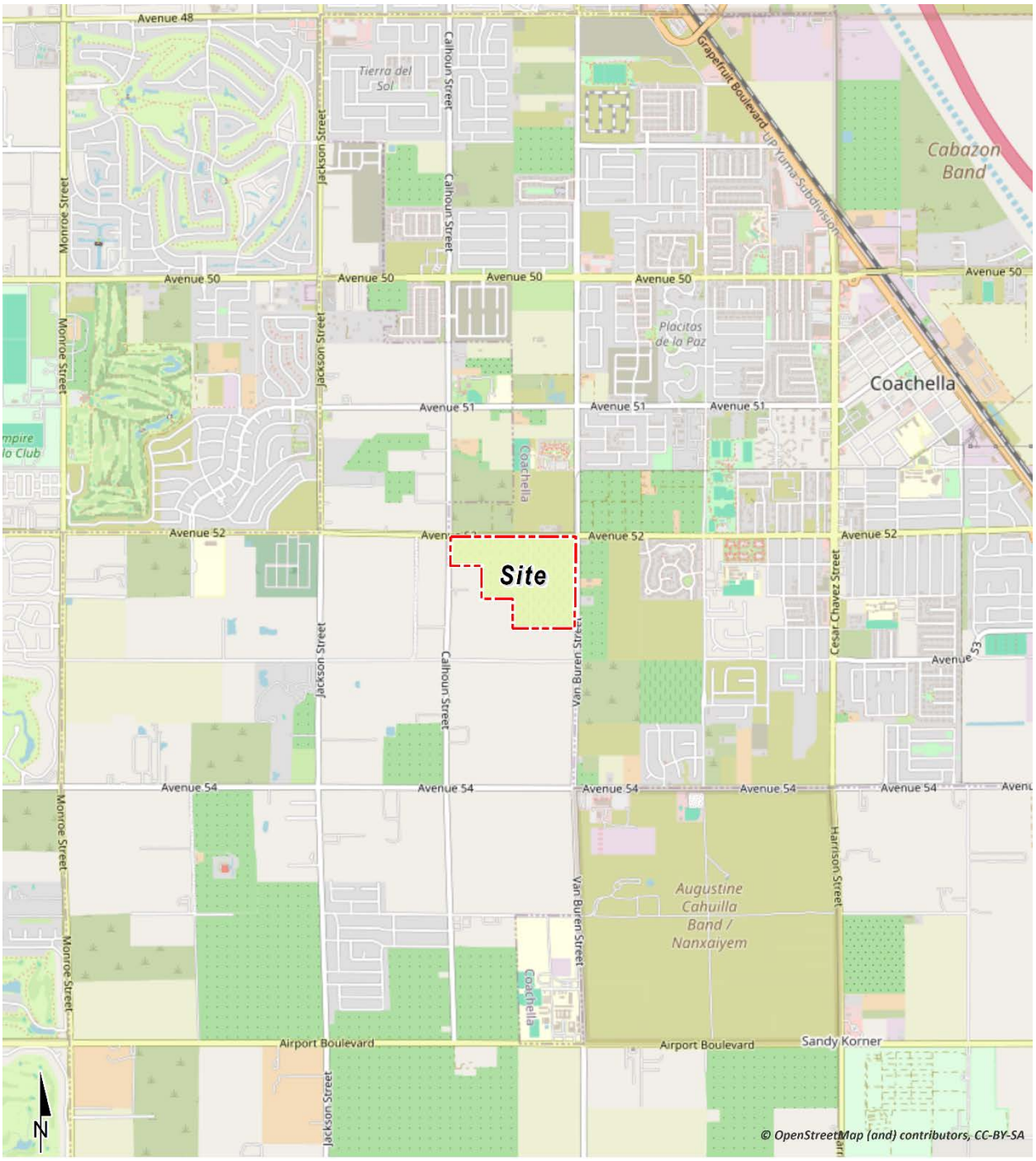
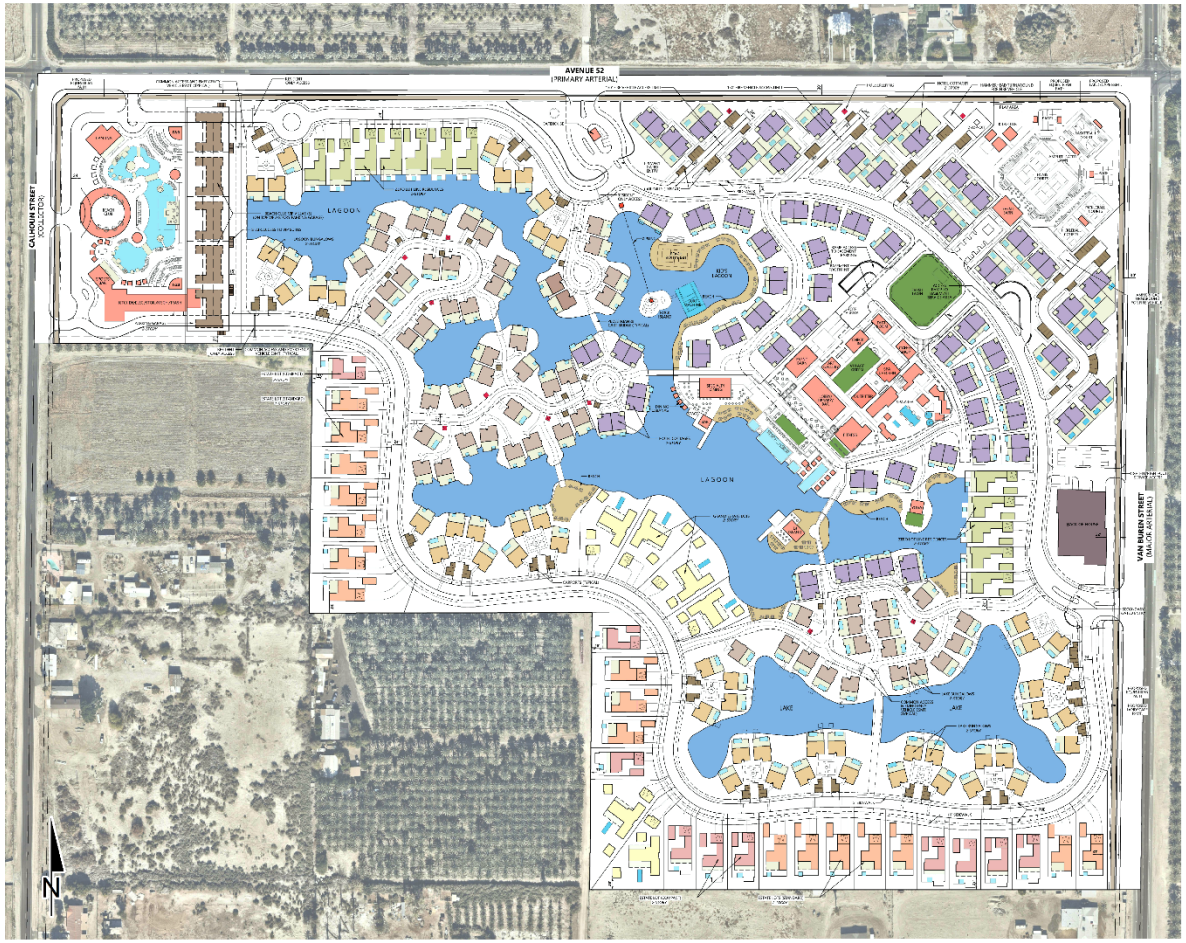


EXHIBIT 1-B: SITE PLAN



THE CITY OF COACHELLA OF THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

TECHNICAL SITE PLAN

EXHIBIT DATE: JULY 3, 2025

REVISIONS

NO.	DATE	DESCRIPTION

DATA TABLE

APPLICANT / LAND OWNER	RELEVANT COACHELLA OWNER, LLC
ADDRESS	6417 SELMA AVENUE HOLLYWOOD, CALIFORNIA 90028
CONTACT	GRANT KING
EXHIBIT PREPARER	MSA CONSULTING, INC.
ADDRESS	34200 BOB HOPE DRIVE RANCHO MIRAGE, CALIFORNIA 92270
CONTACT	PAUL DEPALATIS, AICP — TELEPHONE (760) 320-8811
SOURCE OF TOPOGRAPHY	INLAND AERIAL SURVEYS, INC.
ADDRESS	7117 ARLINGTON AVENUE, SUITE A RIVERSIDE, CALIFORNIA 92503
DATE OF TOPOGRAPHY	DECEMBER 22, 2021 — TELEPHONE (951) 687-4252
ASSESSOR'S PARCEL NUMBERS	700 040 001, 700 040 003, 760 060 001 & 760 060 002

LEGAL DESCRIPTION

BEING A PORTION OF NE 1/4 OF SECTION 12, TOWNSHIP 6 SOUTH, RANGE 7 EAST, SAN BERNARDINO MERIDIAN.

LAND USE DESCRIPTION	ACREAGE
EXISTING GROSS AREA	87.16 AC.
PROPOSED PUBLIC RIGHT OF WAY DEDICATION (CALHOUN STREET, AVENUE 52 & VAN BUREN STREET)	6.02 AC.
PROPOSED NET AREA	81.14 AC.

PROJECT STATISTICS

SINGLE-FAMILY RESIDENTIAL	LOT SIZE	# BEDS	# STORIES	# UNITS	FLOOR AREA (SF)
GRAND ESTATE LOT	100' X 150'	6	2	6	8,865 SF/UNIT[1]
ESTATE LOT (STANDARD+ADU[4])	75' X 150'	4-5	2	17	4,721 SF/UNIT[1]
ESTATE LOT (COMPACT)	75' X 150'	4-5	2	10	4,403 SF/UNIT[1]
ZERO LOT LINE RESIDENCE	50' X 150'	4-5	2	12	4,585 SF/UNIT[1]
LAGOON BUNGALOW	NA	3-4	2	61	2,500 SF/UNIT[1]
LAKE BUNGALOW	NA	3-4	2	51	2,500 SF/UNIT[1]
TOTAL				157	613,932 SF[2]
CONDO HOTEL					
HOTEL COTTAGES (1ST FLR.)	NA	1	1	120	1,249 SF/UNIT
HOTEL COTTAGES (2ND FLR.LOCKOFF)	NA	1	1	120	1,149 SF/UNIT
TOTAL				240	287,640 SF
BEACH CLUB					
BEACH CLUB VIP VILLAS	NA	1	1	5	4,629 SF/UNIT[1]
TOTAL					52,245 SF[2]
MAIN CLUB AMENITIES					256,531 SF[3]
PUBLIC BEACH AREA					16,178 SF[3]
SPORTS CENTER					5,100 SF[3]

PARKING PROVIDED	CAR SPACES	PARKING RATIO	CART SPACES
HOTEL (2-LEVEL BASEMENT PARKING GARAGE)	360		-
BEACH CLUB (1 LEVEL PARKING GARAGE)	143		-
HOTEL COTTAGES	47	0.2 SPACES/UNIT	50
BUNGALOWS	56	0.5 SPACES/UNIT	104
ZERO LOT LINE LOTS	24	2.0 SPACES/UNIT	
ESTATE LOTS	54	2.0 SPACES/UNIT	27
GRAND ESTATE LOTS	12	2.0 SPACES/UNIT	12
TOTAL	696		193

NOTES :

1. INTERIOR FLOOR AREA ONLY. DOESN'T INCLUDE EXT. COVERED AREA AND ADU AREA
2. INCLUDES EXT. COVERED AREA AND ADU AREA
3. PLEASE REFER TO LANDSCAPE PACKAGE FOR COMPLETE BLDG. PROGRAMMING
4. ADU FLOOR AREA, 518 SF

WATER AMENITIES	AREA
HOTEL LAGOON	9.4 ACRES
LAKE	2.5 ACRES
BEACH CLUB LAGOON	0.4 ACRES
TOTAL	12.0 ACRES

2 AIR QUALITY SETTING

This section provides an overview of the existing air quality conditions in the Project area and region.

2.1 ATMOSPHERIC SETTING

The Specific Plan site is located within Salton Sea Air Basin (SSAB) within the jurisdiction of the SCAQMD. The SSAB is aligned in a north-west-southwest orientation stretching from Banning Pass to the Mexican border. The regional climate, as well as the temperature, wind, humidity, precipitation, and amount of sunshine significantly influence the air quality in the SSAB.

The climate of the Coachella Valley is a continental, desert-type climate, with hot summers, mild winters, and very little annual rainfall. Precipitation is less than six inches annually and occurs mostly in the winter months from active frontal systems and in the late summer months from thunderstorms. Almost all of the annual rainfall comes from the fringes of mid-latitude storms from late November to early April with summers often being completely dry. Temperatures exceed 100 degrees Fahrenheit (°F), on the average, for four months each year, with daily highs near 110 °F during July and August. Summer nights are cooler with minimum temperatures in the mid-70s. During the winter season, daytime highs are quite mild, but the dry air is conducive to nocturnal radiational cooling, with early morning lows around 40 °F.

The Coachella Valley and adjacent areas are exposed to frequent gusty winds. The flat terrain of the valley and strong temperature differentials, created by intense solar heating, produce moderate winds and deep thermal convection. Wind speeds exceeding 31 miles per hour (mph) occur most frequently in April and May. On an annual basis, strong winds (greater than 31 mph) are observed 0.6 percent of the time and speeds of less than 6.8 mph account for more than one-half of the observed winds. Prevailing winds are from the northwest through southwest, with secondary flows from the southeast. The strongest and most persistent winds typically occur immediately to the east of Banning Pass, which is noted as a wind power generation resource area. Aside from this locale, the wind conditions in the remainder of the Coachella Valley are geographically distinct. Stronger winds tend to occur closer to the foothills. Less frequently, widespread gusty winds occur over all areas of the Valley.

Portions of the SSAB experience surface inversions almost every day of the year. Inversions in the SSAB are attributed to strong surface heating, but are usually broken, allowing pollutants to disperse more easily. Weak surface inversions are caused by cooling of air in contact with the cold surface of the earth at night. In the valleys and low-lying areas, this condition is intensified by the addition of cold air flowing downslope from the hills and pooling on the valley floor. In addition, inversions in the SSAB caused by the presence of the Pacific high-pressure cell can cause the air mass aloft to sink. As the air descends, compressional heating warms the air to a temperature higher than the air below. This subsidence inversion can act as a nearly impenetrable lid to the vertical mixing of pollutants. These inversions can persist for one or more days, causing air stagnation and the buildup of pollutants. Subsidence inversions are common from November through June and are relatively absent from July through October.

Within the Project area, there is a natural sand migration process, called "blowsand," that has direct and indirect effects on air quality. Blowsand produces particulate matter (PM_{10}) in two ways: (1) by

direct particle erosion and fragmentation as natural PM_{10}, and (2) by secondary effects, as sand deposits on road surfaces.

Also, where water has already receded around the Salton Sea, the surface areas contain a salty mix of sediments that can change from a hardened salt crust to a fluffy soft layer of dust depending upon the season. Exposed sediments could elevate PM_{10} levels throughout the region. Almost 120,000 acres of Salton Sea lakebed could be exposed as inflows to the Sea decrease in future years. Local communities may be affected by 60,000 potentially dust-blowing acres, which will cause PM_{10} levels to rise.

2.2 AIR POLLUTANTS

2.2.1 Criteria Pollutants

Air quality regulations were first promulgated with the Federal Clean Air Act (CAA) of 1970. Air quality is defined by ambient air concentrations of seven "criteria air pollutants," which are a group of common air pollutants identified by the United States Environmental Protection Agency (U.S. EPA) to be of concern with respect to the health and welfare of the general public. Federal and State governments regulate criteria air pollutants by using ambient standards based on criteria regarding the health and/or environmental effects of each pollutant. The seven "criteria" air pollutants defined by the U.S. EPA are: (1) CO; (2) sulfur dioxide (SO_2); (3) nitrogen dioxide (NO_2); (4) ozone (O_3); (5) respirable particulate matter with a diameter of 10 microns or less (PM_{10}), (6) fine particulate matter with a diameter of 2.5 microns or less ($PM_{2.5}$), and (7) lead (Pb). Criteria pollutants are pollutants that are regulated through the development of human health based and/or environmentally based criteria for setting permissible levels. Criteria pollutants, their typical sources, and health effects are identified below (2).

TABLE 2-1: CRITERIA POLLUTANTS (1 OF 7)

Criteria Pollutant	Description	Sources	Health Effects
CO	CO is a colorless, odorless gas produced by the incomplete combustion of carbon-containing fuels, such as gasoline or wood. CO concentrations tend to be the highest during the winter morning, when little to no wind and surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, unlike ozone (O_3), motor vehicles operating at slow speeds are the primary source of CO in the SSAB. The highest ambient CO	Any source that burns fuel such as automobiles, trucks, heavy construction equipment, farming equipment and residential heating.	Individuals with a deficient blood supply to the heart are the most susceptible to the adverse effects of CO exposure. The effects observed include earlier onset of chest pain with exercise, and electrocardiograph changes indicative of decreased oxygen (O_2) supply to the heart. Inhaled CO has no direct toxic effect on the lungs but exerts its effect on tissues by interfering with O_2 transport and competing with O_2 to combine with

TABLE 2-1: CRITERIA POLLUTANTS (2 OF 7)

Criteria Pollutant	Description	Sources	Health Effects
CO (Continued)	concentrations are generally found near congested transportation corridors and intersections.		hemoglobin present in the blood to form carboxyhemoglobin (COHb). Hence, conditions with an increased demand for O_2 supply can be adversely affected by exposure to CO. Individuals most at risk include fetuses, patients with diseases involving heart and blood vessels, and patients with chronic hypoxemia (O_2 deficiency) as seen at high altitudes.
SO_2	SO_2 is a colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant mainly as a result of burning high sulfur-content fuel oils and coal and from chemical processes occurring at chemical plants and refineries. When SO_2 oxidizes in the atmosphere, it forms sulfates (SO_4). Collectively, these pollutants are referred to as sulfur oxides (SO_X).	Coal or oil burning power plants and industries, refineries, diesel engines	A few minutes of exposure to low levels of SO_2 can result in airway constriction in some asthmatics, all of whom are sensitive to its effects. In asthmatics, an increase in resistance to air flow, as well as reduction in breathing capacity leading to severe breathing difficulties, are observed after acute exposure to SO_2. In contrast, healthy individuals do not exhibit similar acute responses even after exposure to higher concentrations of SO_2. Animal studies suggest that despite SO_2 being a respiratory irritant, it does not cause substantial lung injury at ambient concentrations. However, very high levels of exposure can cause lung edema (fluid accumulation), lung tissue damage, and sloughing off of cells lining the respiratory tract.

TABLE 2-1: CRITERIA POLLUTANTS (3 OF 7)

Criteria Pollutant	Description	Sources	Health Effects
SO_2 (Continued)			Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient SO_2 levels. In these studies, efforts to separate the effects of SO_2 from those of fine particles have not been successful. It is not clear whether the two pollutants act synergistically, or one pollutant alone is the predominant factor.
NO_2	NO_2 is a key component of NO_X, which also includes nitric oxide (NO) and nitrous oxide (N_2O). NO_X compounds are primarily produced during combustion processes when nitrogen (N_2) reacts with oxygen (O_2). Both NO and NO_2 serve as precursors in the formation of O_3 and $PM_{2.5}$, making their monitoring crucial for air quality assessments. NO_2, being the more abundant form of NO_X in the atmosphere, has a relatively short lifespan of one to seven days, which enhances its significance as a major air pollutant. As a criteria air pollutant, NO_2 poses various health risks, including respiratory issues and increased vulnerability to infections. It also absorbs blue light, imparting a brownish-red hue to the atmosphere and contributing to reduced visibility and smog formation.	Any source that burns fuel such as automobiles, trucks, heavy construction equipment, farming equipment and residential heating.	Population-based studies suggest that an increase in acute respiratory illness, including infections and respiratory symptoms in children (not infants), is associated with long-term exposure to NO_2 at levels found in homes with gas stoves, which are higher than ambient levels found in Southern California. Increase in resistance to air flow and airway contraction is observed after short-term exposure to NO_2 in healthy subjects. Larger decreases in lung functions are observed in individuals with asthma or chronic obstructive pulmonary disease (e.g., chronic bronchitis, emphysema) than in healthy individuals, indicating a greater susceptibility of these sub-groups.

TABLE 2-1: CRITERIA POLLUTANTS (4 OF 7)

Criteria Pollutant	Description	Sources	Health Effects
NO_2 (Continued)	Given that NO emissions largely convert to NO_2, the examination of NO_X emissions becomes essential when assessing potential air quality impacts. The concentrations of NO_2 are closely related to traffic density, often resulting in higher exposure levels for commuters in heavy traffic compared to what regional monitoring stations may indicate.		In animals, exposure to levels of NO_2 is considerably higher than ambient concentrations result in increased susceptibility to infections, possibly due to the observed changes in cells involved in maintaining immune functions. The severity of lung tissue damage associated with high levels of O_3 exposure increases when animals are exposed to a combination of O_3 and NO_2.
O_3	O_3 is a highly reactive and unstable gas that is formed when VOCs and NO_X, both byproducts of internal combustion engine exhaust, undergo slow photochemical reactions in the presence of sunlight. O_3 concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable to the formation of this pollutant.	Formed when ROGs and NO_X react in the presence of sunlight. ROG sources include any source that burns fuels, (e.g., gasoline, natural gas, wood, oil) solvents, petroleum processing and storage and pesticides.	Individuals exercising outdoors, children, and people with preexisting lung disease, such as asthma and chronic pulmonary lung disease, are considered to be the most susceptible sub-groups for O_3 effects. Short-term exposure (lasting for a few hours) to O_3 at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes. Elevated O_3 levels are associated with increased school absences. In recent years, a correlation between elevated ambient O_3 levels and increases in daily hospital admission rates, as well as mortality, has also been reported. An increased risk for asthma has been found in children who

TABLE 2-1: CRITERIA POLLUTANTS (5 OF 7)

Criteria Pollutant	Description	Sources	Health Effects
O_3 (Continued)			participate in multiple outdoor sports and reside in communities with high O_3 levels. O_3 exposure under exercising conditions is known to increase the severity of the responses described above. Animal studies suggest that exposure to a combination of pollutants that includes O_3 may be more toxic than exposure to O_3 alone. Although lung volume and resistance changes observed after a single exposure diminish with repeated exposures, biochemical and cellular changes appear to persist, which can lead to subsequent lung structural changes.
Particulate Matter	PM_{10}: A major air pollutant consisting of tiny solid or liquid particles of soot, dust, smoke, fumes, and aerosols. Particulate matter pollution is a major cause of reduced visibility (haze) which is caused by the scattering of light and consequently the significant reduction of air clarity. The size of the particles (10 microns or smaller, about 0.0004 inches or less) allows them to easily enter the lungs where they may be deposited, resulting in adverse health effects. Additionally, it should be noted that PM_{10} is considered a criteria air pollutant. $PM_{2.5}$: A similar air pollutant to PM_{10} consisting of tiny solid or liquid particles which are 2.5	Sources of PM_{10} include road dust, windblown dust and construction. Also formed from other pollutants (acid rain, NO_X, SO_X, organics). Incomplete combustion of any fuel. $PM_{2.5}$ comes from fuel combustion in motor vehicles, equipment, and industrial sources, residential and agricultural burning.	A consistent correlation between elevated ambient fine particulate matter (PM_{10} and $PM_{2.5}$) levels and an increase in mortality rates, respiratory infections, number and severity of asthma attacks and the number of hospital admissions has been observed in different parts of the United States and various areas around the world. In recent years, some studies have reported an association between long-term exposure to air pollution dominated by fine particles and increased mortality, reduction in

TABLE 2-1: CRITERIA POLLUTANTS (6 OF 7)

Criteria Pollutant	Description	Sources	Health Effects
Particulate Matter (Continued)	microns or smaller (which is often referred to as fine particles). These particles are formed in the atmosphere from primary gaseous emissions that include SO_4 formed from SO_2 release from power plants and industrial facilities and nitrates that are formed from NO_X release from power plants, automobiles, and other types of combustion sources. The chemical composition of fine particles highly depends on location, time of year, and weather conditions. $PM_{2.5}$ is a criteria air pollutant.	Also formed from reaction of other pollutants (acid rain, NO_X, SO_X, organics).	lifespan, and an increased mortality from lung cancer. Daily fluctuations in $PM_{2.5}$ concentration levels have also been related to hospital admissions for acute respiratory conditions in children, to school and kindergarten absences, to a decrease in respiratory lung volumes in normal children, and to increased medication use in children and adults with asthma. Recent studies show lung function growth in children is reduced with long term exposure to particulate matter. The elderly, people with pre-existing respiratory or cardiovascular disease, and children appear to be more susceptible to the effects of high levels of PM_{10} and $PM_{2.5}$.
Pb	Pb is a heavy metal that is highly persistent in the environment and is considered a criteria pollutant. In the past, the primary source of Pb in the air was emissions from vehicles burning leaded gasoline. The major sources of Pb emissions are ore and metals processing, particularly Pb smelters, and piston-engine aircraft operating on leaded aviation gasoline. Other stationary sources include waste incinerators, utilities, and lead-acid battery manufacturers. It should be noted that the Project does not include operational activities such as	Metal smelters, resource recovery, leaded gasoline, deterioration of Pb paint.	Fetuses, infants, and children are more sensitive than others to the adverse effects of Pb exposure. Exposure to low levels of Pb can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence quotient. In adults, increased Pb levels are associated with increased blood pressure. Pb poisoning can cause anemia, lethargy, seizures, and death; although it

TABLE 2-1: CRITERIA POLLUTANTS (7 OF 7)

Criteria Pollutant	Description	Sources	Health Effects
Pb (Continued)	metal processing or Pb acid battery manufacturing. As such, the Project is not anticipated to generate a quantifiable amount of Pb emissions.		appears that there are no direct effects of Pb on the respiratory system. Pb can be stored in the bone from early age environmental exposure, and elevated blood Pb levels can occur due to breakdown of bone tissue during pregnancy, hyperthyroidism (increased secretion of hormones from the thyroid gland) and osteoporosis (breakdown of bony tissue). Fetuses and breast-fed babies can be exposed to higher levels of Pb because of previous environmental Pb exposure of their mothers.

2.2.2 Additional Pollutants

The SCAQMD's primary focus is to achieve the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) for criteria pollutants. However, it also has a broader mandate to control emissions of air contaminants and safeguard public health. As a result, SCAQMD regulates additional pollutants beyond criteria pollutants, including reactive organic gases (ROGs), VOCs, and odors. Additional pollutants, their typical sources, and health effects are identified below (2).

TABLE 2-2: ADDITIONAL POLLUTANTS (1 OF 2)

Pollutant	Description	Sources	Health Effects
VOC	VOCs are hydrocarbon compounds (any compound containing various combinations of hydrogen and carbon atoms) that exist in the ambient air. VOCs contribute to the formation of smog through atmospheric photochemical reactions and/or may be toxic. Compounds of carbon (also	Organic chemicals are widely used as ingredients in household products. Paints, varnishes, and wax all contain organic solvents, as do many cleaning, disinfecting,	Breathing VOCs can irritate the eyes, nose, and throat, can cause difficulty breathing and nausea, and can damage the central nervous system as well as other organs. Some VOCs can cause cancer. Not all VOCs have all these health effects, though many have several.

TABLE 2-2: ADDITIONAL POLLUTANTS (2 OF 2)

Pollutant	Description	Sources	Health Effects
VOC (Continued)	known as organic compounds) have different levels of reactivity; that is, they do not react at the same speed or do not form O_3 to the same extent when exposed to photochemical processes. VOCs often have an odor, and some examples include gasoline, alcohol, and the solvents used in paints. Exceptions to the VOC designation include CO, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate. VOCs are a criteria pollutant since they are a precursor to O_3, which is a criteria pollutant. The terms VOC and ROG (see below) are used interchangeably.	cosmetic, degreasing and hobby products. Fuels are made up of organic chemicals. All of these products can release organic compounds while you are using them, and, to some degree, when they are stored.	
ROG	Similar to VOC, ROGs are also precursors in forming O_3 and consist of compounds containing methane, ethane, propane, butane, and longer chain hydrocarbons, which are typically the result of some type of combustion/decomposition process. Smog is formed when ROG and NO_X react in the presence of sunlight. ROGs are a criteria pollutant since they are a precursor to O_3, which is a criteria pollutant. The terms ROG and VOC (see previous) are used interchangeably.	Sources similar to VOCs.	Health effects similar to VOCs.

2.5 EXISTING AIR QUALITY

Existing air quality is measured at established SCAQMD air quality monitoring stations. Monitored air quality is evaluated in the context of ambient air quality standards. These standards are the levels of air quality that are considered safe, with an adequate margin of safety, to protect the public health and welfare. NAAQS and CAAQS currently in effect are shown in Table 2-3 (3).

The determination of whether a region's air quality is healthful or unhealthful is determined by comparing contaminant levels in ambient air samples to the state and federal standards. At the time of this AQIA, the most recent state and federal standards were updated by CARB on July 16, 2024, and are presented in Table 2-3. The air quality in a region is considered to be in attainment by the state if the measured ambient air pollutant levels for O_3, CO (except 8-hour Lake Tahoe), SO_2 (1 and 24 hour), NO_2, PM_{10}, and $PM_{2.5}$ are not to be exceeded. All others are not to be equaled or exceeded. It should be noted that the three-year period is presented for informational purposes and is not the basis for how the state assigns attainment status. Attainment status for a pollutant means that the SCAQMD meets the standards set by the EPA or the California EPA (CalEPA). Conversely, nonattainment means that an area has monitored air quality that does not meet the NAAQS or CAAQS standards. In order to improve air quality in nonattainment areas, a State Implementation Plan (SIP) is drafted by CARB. The SIP outlines the measures that the state will take to improve air quality. Once nonattainment areas meet the standards and additional redesignation requirements, the EPA will designate the area as a maintenance area (4).

TABLE 2-3: AMBIENT AIR QUALITY STANDARDS (1 OF 2)

Ambient Air Quality Standards						
Pollutant	**Averaging Time**	**California Standards [1]**		**National Standards [2]**		
		Concentration [3]	**Method [4]**	**Primary [3,5]**	**Secondary [3,6]**	**Method [7]**
Ozone (O_3)[8]	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m^3)		0.070 ppm (137 µg/m^3)		
Respirable Particulate Matter (PM10)[9]	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		—		
Fine Particulate Matter (PM2.5)[9]	24 Hour	—	—	35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	9.0 µg/m^3	15.0 µg/m^3	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		—	—	
Nitrogen Dioxide (NO_2)[10]	1 Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemiluminescence	100 ppb (188 µg/m^3)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)		53 ppb (100 µg/m^3)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)	—	Ultraviolet Flourescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[11]	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)[11]	—	
Lead[12,13]	30 Day Average	1.5 µg/m^3	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m^3 (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m^3		
Visibility Reducing Particles[14]	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	**No National Standards**		
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

See footnotes on next page ...

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TABLE 2-3: AMBIENT AIR QUALITY STANDARDS (2 OF 2)

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.

5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.

8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

9. On February 7, 2024, the national annual PM2.5 primary standard was lowered from 12.0 $\mu g/m^3$ to 9.0 $\mu g/m^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15.0 $\mu g/m^3$. The existing 24-hour PM10 standards (primary and secondary) of 150 $\mu g/m^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

11. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 $\mu g/m^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

For more information please call ARB-PIO at (916) 322-2990 **California Air Resources Board (7/16/24)**

2.6 REGIONAL AIR QUALITY

Air pollution contributes to a wide variety of adverse health effects. The EPA has established NAAQS for seven of the most common air pollutants: CO, Pb, O_3, PM_{10}, $PM_{2.5}$, NO_2, and SO_2 which are known as criteria pollutants. The SCAQMD monitors levels of various criteria pollutants at 35 permanent monitoring stations and 2 single-pollutant source Pb air monitoring sites throughout the air district (5). On January 25, 2024, CARB adopted the proposed 2023 amendments to the state and national area designations. See Table 2-4 for attainment designations for the SSAB (6). Appendix 2.1 provides geographic representation of the state and federal attainment status for applicable criteria pollutants within the SSAB.

TABLE 2-4: ATTAINMENT STATUS OF CRITERIA POLLUTANTS IN THE SSAB

Criteria Pollutant	State Designation	Federal Designation
O_3 - 1-hour standard	Nonattainment	--
O_3 - 8-hour standard	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Nonattainment
$PM_{2.5}$	Attainment	Unclassified/Attainment
CO	Attainment	Unclassified/Attainment
NO_2	Attainment	Unclassified/Attainment
SO_2	Attainment	Unclassified/Attainment
PB[1]	Attainment	Unclassified/Attainment

Note: See Appendix 2.1 for a detailed map of State/National Area Designations within the SSAB
"-" = no standard.

2.7 LOCAL AIR QUALITY

The SCAQMD has designated general forecast areas and air monitoring areas (referred to as Source Receptor Areas [SRA]) throughout the district in order to inform Southern California residents about the air quality conditions. The Project site is located within the Coachella Valley (SRA 30) area.

The primary air quality monitoring station relative to the Project site is the Coachella Valley 2[1] monitoring station, situated approximately 2.78 miles northwest of the Project site. This station provides data for O_3, PM_{10}, and $PM_{2.5}$ for the years 2021-2022. However, the data for O_3 (for the years 2023-2024), CO, NO_2, PM_{10} (for the years 2023-2024), and $PM_{2.5}$ (for the years 2023-2024) are not available from this station. To supplement these gaps, the next nearest monitoring stations have been identified.

- The Coachella 1 station, located approximately 23.09 miles northwest of the Project site, provides data for CO (2022-2024), NO2 (2022-2024), O3 (2023), and PM2.5 (2023)
- The Coachella 3 station, located approximately 10.28 miles southwest, reports PM_{10} (2023)
- The Coachella 4 station, located approximately 3.76 miles north of the Project site, provides data for O_3 (2024), PM_{10} (2024), and $PM_{2.5}$ (2024)

[1] The Coachella Valley 2 station closed some time in 2024 with operations moved to Coachella Valley 4.

Together, these nearby stations provide a comprehensive dataset to evaluate ambient air quality conditions in the vicinity of the Project site, ensuring an accurate assessment of local pollutant levels in the absence of complete data from the primary Coachella Valley 2 station.

The most recent three (3) years of data available is shown in Table 2-5 and identifies the number of days ambient air quality standards were exceeded for the study area, which is considered to be representative of the local air quality at the Project site. Data for O_3, CO, NO_2, PM_{10}, and $PM_{2.5}$ for 2022 through 2024 was obtained from the SCAQMD Air Quality Data Tables (7). Additionally, data for SO_2 has been omitted as attainment is regularly met in the SSAB and few monitoring stations measure SO_2 concentrations.

TABLE 2-5: PROJECT AREA AIR QUALITY MONITORING SUMMARY 2022-2024

Pollutant	Standard	Year		
		2022	2023	2024
O_3				
Maximum Federal 1-Hour Concentration (ppm)		0.072	0.116	0.098
Maximum Federal 8-Hour Concentration (ppm)		0.069	0.093	0.080
Number of Days Exceeding State 1-Hour Standard	> 0.09 ppm	0	10	2
Number of Days Exceeding State/Federal 8-Hour Standard	> 0.070 ppm	0	39	31
CO				
Maximum Federal 1-Hour Concentration	> 35 ppm	1.1	0.9	3.4
Maximum Federal 8-Hour Concentration	> 20 ppm	0.5	0.8	1.1
NO_2				
Maximum Federal 1-Hour Concentration	> 0.100 ppm	0.038	0.035	0.037
Annual Federal Standard Design Value		0.006	0.006	0.006
PM_{10}				
Maximum Federal 24-Hour Concentration (µg/m³)	> 150 µg/m³	160	306	143
Annual Federal Arithmetic Mean (µg/m³)		36.6	44.0	43.5
Number of Days Exceeding Federal 24-Hour Standard	> 150 µg/m³	1	5	0
Number of Days Exceeding State 24-Hour Standard	> 50 µg/m³	11	93	93
$PM_{2.5}$				
Maximum Federal 24-Hour Concentration (µg/m³)	> 35 µg/m³	21.3	26.2	33.5
Annual Federal Arithmetic Mean (µg/m³)	> 12 µg/m³	13.92	5.86	8.83
Number of Days Exceeding Federal 24-Hour Standard	> 35 µg/m³	0	0	0

ppm = Parts Per Million
µg/m³ = Microgram per Cubic Meter
Source: Data for O_3, CO, NO_2, PM_{10}, and $PM_{2.5}$ was obtained from SCAQMD Air Quality Data Tables.

2.8 REGULATORY BACKGROUND

2.8.1 Federal Regulations

The EPA is responsible for setting and enforcing the NAAQS for O_3, CO, NO_X, SO_2, PM_{10}, and Pb (8). The EPA has jurisdiction over emissions sources that are under the authority of the federal government including aircraft, locomotives, and emissions sources outside state waters (Outer Continental Shelf). The EPA also establishes emission standards for vehicles sold in states other than California. Automobiles sold in California must meet the stricter emission requirements of CARB. The Federal Clean Air Act (CAA) was first enacted in 1955 and has been amended numerous times in subsequent years (1963, 1965, 1967, 1970, 1977, and 1990). The CAA establishes the federal air quality standards, the NAAQS, and specifies future dates for achieving compliance (9). The CAA also mandates that states submit and implement SIPs for local areas not meeting these standards. These plans must include pollution control measures that demonstrate how the standards will be met.

The 1990 amendments to the CAA that identify specific emission reduction goals for areas not meeting the NAAQS require a demonstration of reasonable further progress toward attainment and incorporate additional sanctions for failure to attain or to meet interim milestones. The sections of the CAA most directly applicable to the development of the Project site include Title I (Non-Attainment Provisions) and Title II (Mobile Source Provisions) (10) (11). Title I provisions were established with the goal of attaining the NAAQS for the following criteria pollutants O_3, NO_2, SO_2, PM_{10}, CO, $PM_{2.5}$, and Pb. The NAAQS were amended in July 1997 to include an additional standard for O_3 and to adopt a NAAQS for $PM_{2.5}$. Table 2-4 (previously presented) provides the NAAQS within the SSAB. Mobile source emissions are regulated in accordance with Title II provisions. These provisions require the use of cleaner burning gasoline and other cleaner burning fuels such as methanol and natural gas. Automobile manufacturers are also required to reduce tailpipe emissions of hydrocarbons and NO_X. NO_X is a collective term that includes all forms of NO_X which are emitted as byproducts of the combustion process.

2.8.2 California Regulations

CARB

CARB, which became part of CalEPA in 1991, is responsible for ensuring implementation of the California Clean Air Act (AB 2595), responding to the federal CAA, and for regulating emissions from consumer products and motor vehicles. AB 2595 mandates achievement of the maximum degree of emissions reductions possible from vehicular and other mobile sources in order to attain the state ambient air quality standards by the earliest practical date. CARB established the CAAQS for all pollutants for which the federal government has NAAQS and, in addition, establishes standards for SO_4, visibility, hydrogen sulfide (H_2S), and vinyl chloride (C_2H_3Cl). However, at this time, H_2S and C_2H_3Cl are not measured at any monitoring stations in the SSAB because they are not considered to be a regional air quality problem. Generally, the CAAQS are more stringent than the NAAQS (12) (8). Local air quality management districts, such as the SCAQMD, regulate air emissions from stationary sources such as commercial and industrial facilities. All air pollution control districts have been formally designated as attainment or non-attainment for each CAAQS.

Serious non-attainment areas are required to prepare Air Quality Management Plans (AQMP) that include specified emission reduction strategies in an effort to meet clean air goals. These plans are required to include:

- Application of Best Available Retrofit Control Technology to existing sources;
- Developing control programs for area sources (e.g., architectural coatings and solvents) and indirect sources (e.g. motor vehicle use generated by residential and commercial development);
- A District permitting system designed to allow no net increase in emissions from any new or modified permitted sources of emissions;
- Implementing reasonably available transportation control measures and assuring a substantial reduction in growth rate of vehicle trips and miles traveled;
- Significant use of low emissions vehicles by fleet operators;
- Sufficient control strategies to achieve a 5% or more annual reduction in emissions or 15% or more in a period of three years for ROGs, NO_X, CO and PM_{10}. However, air basins may use an alternative emission reduction strategy that achieves a reduction of less than 5% per year under certain circumstances.

Title 24 Energy Efficiency Standards and California Green Building Standards

California Code of Regulations (CCR) Title 24 Part 6: The California Energy Code was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption.

The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. CCR, Title 24, Part 11: California Green Building Standards Code (CALGreen) is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on August 1, 2009, and is administered by the California Building Standards Commission.

The 2022 California Title 24 Energy Standards became effective on January 1, 2023, with updates for the 2025 standards set to take effect on January 1, 2026. As the Project is expected to be completed in 2030, it will need to comply with the Title 24 Energy Standards in effect at that time, which may include further updates beyond the 2025 version.

CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2025 California Green Building Code Standards that go into effect on January 1, 2026. The Project would be required to comply with the applicable standards in place at the time plan check submittals are made.

2.8.3 Regional Regulations

Air Quality Management Plan

Currently, the NAAQS and CAAQS are exceeded in most parts of the SSAB. In response, the SCAQMD has adopted a series of AQMPs to meet the state and federal ambient air quality standards (13). The Coachella Valley PM_{10} State Implementation Plan (CVSIP) establishes additional controls needed to demonstrate expeditious attainment of the PM_{10} standards in the Coachella Valley, located in the SSAB. This area which is under SCAQMD's jurisdiction has been designated as a serious non-attainment area for PM_{10}. AQMPs are updated regularly in order to more effectively reduce emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution

control on the economy. A detailed discussion on the AQMP and Project consistency with the AQMP is provided in Section 3.8.

3 PROJECT AIR QUALITY IMPACT

3.1 INTRODUCTION

This study quantifies air quality emissions generated by construction and operation of the Project and addresses whether the Project conflicts with implementation of the SCAQMD's AQMP and Lead Agency planning regulations. The analysis of Project-generated air emissions determines whether the Project would result in a cumulatively considerable net increase of any criteria pollutant for which the SSAB is in non-attainment under an applicable NAAQS and CAAQS. Additionally, the Project has been evaluated to determine whether the Project would expose sensitive receptors to substantial pollutant concentrations and the impacts of odors. The significance of these potential impacts is described in the following sections.

3.2 STANDARDS OF SIGNIFICANCE

The criteria used to determine the significance of potential Project-related air quality impacts are taken from the *CEQA Guidelines* (14 CCR §§15000, et seq.). Based on these thresholds, a project would result in a significant impact related to air quality if it would (1):

- Conflict with or obstruct implementation of the applicable air quality plan.
- Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in non-attainment under an applicable federal or state ambient air quality standard.
- Expose sensitive receptors to substantial pollutant concentrations.
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

The SCAQMD has developed regional and localized significance thresholds for criteria pollutants, as summarized at Table 3-1 and Table 3-2 (14). The SCAQMD's CEQA Air Quality Significance Thresholds (March 2023) provide daily emissions thresholds to determine regional construction and operational air quality impacts. Additionally, SCAQMD has published localized thresholds for construction and operations based on applicable ambient air quality standards to determine if a project would have localized impact.

TABLE 3-1: REGIONAL EMISSIONS SIGNIFICANCE THRESHOLDS

Pollutant	Construction	Operations
NO_X	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM_{10}	150 lbs/day	150 lbs/day
$PM_{2.5}$	55 lbs/day	55 lbs/day
SO_X	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Pb	3 lbs/day	3 lbs/day

lbs/day = Pounds Per Day; ppm = Parts Per Million; $\mu g/m^3$ = Micrograms Per Cubic Meter

TABLE 4-2: LOCALIZED EMISSIONS SIGNIFICANCE THRESHOLDS

Pollutant	Construction	Operations
NO_X	0.18 ppm	0.18 ppm
CO (1-hour average)	20 ppm	20 ppm
CO (8-hour average)	9 ppm	9 ppm
PM_{10}	10.4 µg/m^3	2.5 µg/m^3
$PM_{2.5}$	10.4 µg/m^3	2.5 µg/m^3

3.3 MODELS EMPLOYED TO ANALYZE AIR QUALITY

3.3.1 CalEEMod

Land uses such as the Project affect air quality through construction-source and operational-source emissions. The California Air Pollution Control Officers Association (CAPCOA) in conjunction with other California air districts, including SCAQMD, released CalEEMod 2022 in May 2022. CalEEMod periodically releases updates, as such the latest version available at the time of this report has been utilized in this analysis. The purpose of this model is to calculate construction-source and operational-source criteria pollutant (VOCs, NO_X, SO_X, CO, PM_{10}, and $PM_{2.5}$) and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures (15). Accordingly, the latest version of CalEEMod has been used for this Project to determine construction and operational air quality emissions. Output from the model runs for both construction and operational activity are provided in Appendix 3.1.

3.4 CONSTRUCTION EMISSIONS

3.4.1 Construction Activities

Construction activities associated with the construction of the Project would result in emissions of VOCs, NO_X, SO_X, CO, PM_{10}, and $PM_{2.5}$. Construction-related emissions are expected from the following construction activities:

- Demolition
- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating

Demolition Activities

Based on recent aerial imagery, the Project site contains approximately three existing structures. The combined estimated building footprint of these structures is approximately 6,143 square feet. These existing structures will require demolition and off-site removal as part of the proposed Project construction activities.

Site Preparation and Grading Activities

Dust is typically a major concern during grading activities. Because such emissions are not amenable to collection and discharge through a controlled source, they are called "fugitive emissions." Fugitive dust emissions rates vary as a function of many parameters (soil silt, soil moisture, wind speed, area disturbed, number of vehicles, depth of disturbance or excavation, etc.). CalEEMod was utilized to calculate fugitive dust emissions resulting from this phase of activity. This analysis assumes that earthwork activities are expected to balance on site and no import or export of soils would be required.

Building Construction, Paving, and Architectural Coating Activities

Building construction and paving emissions are primarily associated with exhaust emissions from on-site equipment and vehicular trips to the site by construction workers and vendor trips. Architectural coating emissions include worker trips as well, but the primary pollutant emission of concern during this phase is ROG/VOC. CalEEMod default emission rates include the effects of Rule 1113 to limit ROG/VOC emissions. To present a reasonable worst-case scenario, the building construction, paving, and architectural coating activities are modeled as overlapping phases.

Off-Site Utility and Infrastructure Improvements

In addition, to support the Project development, there will be paving for off-site improvements associated with roadway construction and utility installation for the Project. It is expected that the off-site construction activities would not take place at one location for the entire duration of construction. Impacts associated with these activities are not expected to exceed the emissions identified for Project-related construction activities since the off-site construction areas would have physical constraints on the amount of daily activity that could occur. The physical constraints would limit the amount of construction equipment that could be used, and any off-site and utility infrastructure construction would not use equipment totals that would exceed the equipment totals in Table 3-3. As such, no impacts beyond what has already been identified in this report are expected to occur.

3.4.2 Construction Duration

For purposes of analysis, construction will begin August 2026 and would last through December 2030. The construction schedule utilized in the analysis, shown in Table 4-3, represents a "conservative" analysis scenario should construction occur any time after the respective dates since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent.[2] The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per the *CEQA Guidelines* (1).

[2] As shown in the CalEEMod User's Guide Version 2022, Appendix G "Table G-11. Statewide Average Annual Offroad Equipment Emission Factors" as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirements.

TABLE 3-2: CONSTRUCTION DURATION

Construction Activity	Start Date	End Date	Days
Demolition	08/03/2026	11/13/2026	75
Site Preparation	11/14/2026	01/15/2027	45
Grading	01/16/2027	06/25/2027	115
Building Construction	06/26/2027	12/06/2030	900
Paving	07/06/2030	12/06/2030	110
Architectural Coating	3/19/2029	12/06/2030	450

3.4.3 Construction Equipment

Consistent with industry standards and typical construction practices, each piece of equipment listed in Table 3-3 is assumed to operate up to a total of eight (8) hours per day, or more than two-thirds of the period during which construction activities are allowed pursuant to the City code.

TABLE 3-3: CONSTRUCTION EQUIPMENT ASSUMPTIONS

Construction Activity	Equipment[1]	Quantity	Hours
Demolition	Concrete/Industrial Saws	1	8
	Excavators	4	8
	Rubber Tired Dozers	3	8
Site Preparation	Rubber Tired Dozers	4	8
	Crawler Tractors	5	8
Grading	Excavators	3	8
	Graders	1	8
	Rubber Tired Dozers	1	8
	Scrapers	3	8
	Crawler Tractors	3	8
Building Construction	Cranes	2	8
	Forklifts	5	8
	Generator Sets	2	8
	Tractors/Loaders/Backhoes	5	8
	Welders	2	8
Paving	Pavers	2	8
	Paving Equipment	2	8
	Rollers	2	8
Architectural Coating	Air Compressors	1	8

[1] In order to account for fugitive dust emissions, Crawler Tractors were used in lieu of Tractors/Loaders/Backhoes.

3.4.4 On-Road Trips

Construction generates on-road vehicle emissions from vehicle usage for workers, vendors, and haul trucks commuting to and from the site. The number of worker, vendor, and hauling trips per phase is presented below in Table 3-4. Worker trips are based on CalEEMod defaults. It should be noted that for vendor trips, specifically, CalEEMod only assigns vendor trips to the Building Construction phase. Vendor trips would likely occur during all phases of construction. As such, the CalEEMod defaults for vendor trips have been adjusted based on a ratio of the total vendor trips to the number of days of each subphase of activity.

TABLE 3-4: CONSTRUCTION TRIP ASSUMPTIONS

Construction Activity	Worker Trips	Vendor Trips	Hauling Trips
Demolition	20	7	1
Site Preparation	23	4	0
Grading	28	10	0
Building Construction	361	74	0
Paving	15	0	0
Architectural Coating	72	0	0

3.4.5 Construction Emissions Summary

CalEEMod calculates maximum daily emissions for summer and winter periods. As such, the estimated maximum daily construction emissions without mitigation for both summer and winter periods are summarized in Table 3-5. Detailed unmitigated construction model outputs are presented in Appendix 3.1. Under the assumed scenarios, emissions resulting from the Project construction would not exceed criteria pollutant thresholds established by the SCAQMD.

TABLE 3-5: CONSTRUCTION EMISSIONS SUMMARY (1 OF 2)

Construction Emissions						
Year	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Summer						
2026	3.40	30.20	29.00	0.05	1.63	1.23
2027	4.39	37.20	55.90	0.09	6.06	2.66
2028	3.54	21.30	53.90	0.06	5.99	1.87
2029	18.20	21.70	58.50	0.07	6.90	2.06
2030	18.80	27.40	67.40	0.08	7.28	2.28

TABLE 3-5: CONSTRUCTION EMISSIONS SUMMARY (2 OF 2)

Construction Emissions						
Year	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Winter						
2026	5.11	45.60	41.70	0.07	10.10	5.77
2027	4.86	43.20	43.00	0.09	9.95	5.60
2028	3.29	21.70	41.70	0.07	5.99	1.87
2029	17.80	22.00	45.10	0.07	6.90	2.06
2030	18.50	27.70	54.30	0.08	7.28	2.28
Maximum Daily Emissions	18.80	45.60	67.40	0.09	10.10	5.77
SCAQMD Regional Thresholds	75	100	550	150	150	55
Threshold Exceeded?	NO	NO	NO	NO	NO	NO

Source: CalEEMod construction-source (unmitigated) emissions are presented in Appendix 3.1.

3.5 OPERATIONAL EMISSIONS

Operational activities associated with the Project would result in emissions of VOCs, NO_X, SO_X, CO, PM_{10}, and $PM_{2.5}$. Operational emissions are expected from the following primary sources:

- Mobile Source Emissions;
- Area Source Emissions; and
- Energy Source Emissions.

3.5.1 Mobile Source Emissions

The Project related operational air quality emissions derive primarily from vehicle trips generated by the Project, including employee and visitor/attendee trips associated with the proposed use. Trip characteristics available from the *COVA Traffic Impact Analysis* were utilized in this analysis (16).

Fugitive Dust Related to Vehicular Travel

Vehicles traveling on paved roads would be a source of fugitive emissions due to the generation of road dust inclusive of brake and tire wear particulates. The emissions estimate for travel on paved roads was calculated using CalEEMod.

3.5.2 Area Source Emissions

Architectural Coatings

Over a period of time the buildings that are part of this Project would require maintenance and would therefore produce emissions resulting from the evaporation of solvents contained in paints, varnishes, primers, and other surface coatings. The emissions associated with architectural coatings were calculated using CalEEMod.

Consumer Products

Consumer products include, but are not limited to, detergents, cleaning compounds, polishes, personal care products, and lawn and garden products. Many of these products contain organic

compounds which when released in the atmosphere can react to form ozone and other photochemically reactive pollutants. The emissions associated with use of consumer products were calculated based on defaults provided within CalEEMod.

Landscape Maintenance Equipment

Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shedders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the Project. It should be noted that on October 9, 2021, Governor Gavin Newsom signed AB 1346. The bill aims to ban the sale of new gasoline-powered equipment under 25 gross horsepower (known as small off-road engines [SOREs]) by January 1, 2024, which is now in effect. However, for purposes of analysis, the emissions associated with landscape maintenance equipment were calculated based on assumptions provided in CalEEMod, and do not incorporate the emissions reductions that would be realized from implementation of AB 1346.

3.5.3 Energy Source Emissions

Combustion Emissions Associated with Electricity and Natural Gas

Electricity and natural gas are used by almost every project. Criteria pollutant emissions are emitted through the generation of electricity. However, because electrical generating facilities for the Project area are located either outside the region (state) or offset through the use of pollution credits (RECLAIM) for generation within the SSAB, criteria pollutant emissions from offsite generation of electricity are excluded from the evaluation of significance. Natural gas and electricity usage associated with the Project were calculated by CalEEMod using default parameters.

3.5.4 Operational Emissions Summary

Operational activities for summer and winter scenarios are presented in Table 3-6. Detailed operation model outputs for the Project are presented in Appendix 3.1. As shown in Table 3-6, the Project would not exceed the numerical thresholds of significance established by the SCAQMD for emissions of any criteria pollutant. As such, operational impacts would be considered less-than-significant.

TABLE 3-6: SUMMARY OF PEAK OPERATIONAL EMISSIONS (1 OF 2)

Operational Emissions						
Source	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Summer						
Mobile	6.42	4.00	99.30	0.23	23.20	5.89
Area	24.80	0.33	36.30	0.00	0.03	0.03
Energy	0.17	3.05	2.56	0.02	0.23	0.23
Maximum Daily Emissions	31.39	7.38	138.16	0.25	23.46	6.15
SCAQMD Regional Thresholds	55	55	550	150	150	55
Threshold Exceeded?	NO	NO	NO	NO	NO	NO

TABLE 3-6: SUMMARY OF PEAK OPERATIONAL EMISSIONS (2 OF 2)

Operational Emissions						
Source	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Winter						
Mobile	5.47	4.44	63.30	0.20	23.20	5.89
Area	20.60	0.00	0.00	0.00	0.00	0.00
Energy	0.17	3.05	2.56	0.02	0.23	0.23
Maximum Daily Emissions	26.24	7.49	65.86	0.22	23.43	6.12
SCAQMD Regional Thresholds	55	55	550	150	150	55
Threshold Exceeded?	NO	NO	NO	NO	NO	NO

Source: CalEEMod operational-source (unmitigated) emissions are presented in Appendix 3.1.

3.6 LOCALIZED AIR QUALITY IMPACTS

3.6.1 Background on LST Development

The analysis makes use of methodology included in the SCAQMD *Final Localized Significance Threshold Methodology* (LST Methodology). The SCAQMD has established that localized impacts to air quality are significant if there is a potential to contribute or cause localized exceedances of the federal and/or state ambient air quality standards (NAAQS/CAAQS). Collectively, these are referred to as Localized Significance Thresholds (LSTs). The SCAQMD established LSTs in response to the SCAQMD Governing Board's Environmental Justice Initiative I-4.[3] LSTs represent the maximum emissions from a project that would not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest residence or sensitive receptor. The SCAQMD states that lead agencies can use the LSTs as another indicator of significance in its air quality impact analyses. LSTs were developed in response to environmental justice and health concerns raised by the public regarding exposure of individuals to criteria pollutants in local communities. To address the issue of localized significance, the SCAQMD adopted LSTs that show whether a project would cause or contribute to localized air quality impacts and thereby cause or contribute to potential localized adverse health effects. The analysis makes use of methodology included in the *LST Methodology* (17).

3.6.2 Emissions Considered

Based on SCAQMD's *LST Methodology*, emissions for concern during construction activities are on-site NO_X, CO, $PM_{2.5}$, and PM_{10}. The *LST Methodology* clearly states that "off-site mobile emissions from the Project should not be included in the emissions compared to LSTs (18)." As such, for purposes of the construction LST analysis, only emissions included in the CalEEMod "on-site" emissions outputs were considered.

[3] The purpose of SCAQMD's Environmental Justice program is to ensure that everyone has the right to equal protection from air pollution and fair access to the decision-making process that works to improve the quality of air within their communities. Further, the SCAQMD defines Environmental Justice as "…equitable environmental policymaking and enforcement to protect the health of all residents, regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographic location, from the health effects of air pollution."

3.6.3 Dispersion Modeling

In order to estimate localized pollutant concentrations resulting from Project construction, the SCAQMD-approved American Meteorological Society/EPA Regulatory Model (AERMOD) dispersion model was utilized. The modeling approach utilized is discussed as follows.

3.6.4 Sources

It should be noted that in order to model worst-case conditions, the highest daily peak on-site emissions resulting from overlapping construction activity were modeled. A ground level release height and a 1 meter (approximately 3.28 feet) initial vertical dimension (sigma z) were utilized for fugitive dust emissions of PM_{10} and $PM_{2.5}$ consistent with SCAQMD's LST guidance. In order to account for equipment exhaust emissions from NO_2, CO, PM_{10}, and $PM_{2.5}$ a release height of 5.0 meters was utilized consistent with SCAQMD's LST guidance.

3.6.5 Meteorological Data and Model Options

In order to account for meteorological conditions at the Project site, meteorological data from the SCAQMD's Desert Hot Springs Airport monitoring station was utilized, as this is the nearest station to the Project site for which meteorological data is available. Additionally, a receptor height of 2 meters and regulatory default options were utilized consistent with SCAQMD's LST guidance.

3.6.6 Receptors

As previously stated, LSTs represent the maximum emissions from a project that would not cause or contribute to an exceedance of the most stringent applicable NAAQS and CAAQS at the nearest residence or sensitive receptor. Receptor locations are off-site locations where individuals may be exposed to emissions from Project activities. Some people are especially sensitive to air pollution and are given special consideration when evaluating air quality impacts from projects. These groups of people include children, the elderly, and individuals with pre-existing respiratory or cardiovascular illness. Structures that house these persons or places where they gather are defined as "sensitive receptors". These structures typically include uses such as residences, hotels, and hospitals where an individual can remain for 24 hours. Consistent with the LST Methodology, the nearest land use to the Project site where an individual could remain for 24 hours has been used to determine construction and operational air quality impacts for emissions of PM_{10} and $PM_{2.5}$, since PM_{10} and $PM_{2.5}$ thresholds are based on a 24-hour averaging time.

Per the *LST Methodology*, commercial and industrial facilities are not included in the definition of sensitive receptor because employees and patrons do not typically remain onsite for a full 24 hours but are typically on-site for 8 hours or less. However, *LST Methodology* explicitly states that "*LSTs based on shorter averaging periods, such as the NO_2 and CO LSTs, could also be applied to receptors such as industrial or commercial facilities since it is reasonable to assume that a worker at these sites could be present for periods of one to eight hours* (18)." Therefore, any adjacent land use where an individual could remain for 1 or 8 hours, that is located at a closer distance to the Project site than the receptor used for PM_{10} and $PM_{2.5}$ analysis, must be considered to determine construction and operational LST air impacts for emissions of NO_2 and CO since these pollutants have an averaging time of 1 and 8 hours.

Receptors in the Project study area are described below and shown in Exhibit 3-A. Localized air quality impacts were evaluated at sensitive receptor land uses nearest the Project site. All distances are measured from the Project site boundary to the outdoor living areas (e.g., backyards) or at the building façade, whichever is closer to the Project site.

R1: Location R1 represents the existing residence at 83890 52nd Avenue, approximately 104 feet north of the Project site. Receptor R1 is placed at the building façade facing the Project site.

R2: Location R2 represents the existing residence at 84045 52nd Venue, approximately 130 feet east of the Project site Receptor R2 is placed in the private outdoor living area (backyard) facing the Project site.

R3: Location R3 represents the existing residence at 52815 Van Buren Street, approximately 59 feet south of the Project site. Receptor R3 is placed in the private outdoor living area (backyard) facing the Project site.

R4: Location R4 represents the existing residence, approximately 56 feet southwest of the Project site. Receptor R4 is placed at the building façade facing the Project site.

R5: Location R5 represents the existing residence at 53465 52nd Avenue, approximately 834 feet west of the Project site. Receptor R6 is placed at the building façade facing the Project site.

The SCAQMD recommends that the nearest sensitive receptor be considered when determining a Project's impact. The nearest land use where an individual could remain for 24 hours to the Project site has been used to determine localized construction and operational air quality impacts for emissions of PM_{10} and $PM_{2.5}$ (since PM_{10} and $PM_{2.5}$ thresholds are based on a 24-hour averaging time).

As previously stated, and consistent with LST Methodology, the nearest industrial/commercial use to the Project site is used to determine construction and operational LST air impacts for emissions of NO_X and CO as the averaging periods for these pollutants are shorter (8 hours or less) and it is reasonable to assumed that an individual could be present at these sites for periods of one to 8 hours.

3.6.7 Construction-Source Localized Emissions

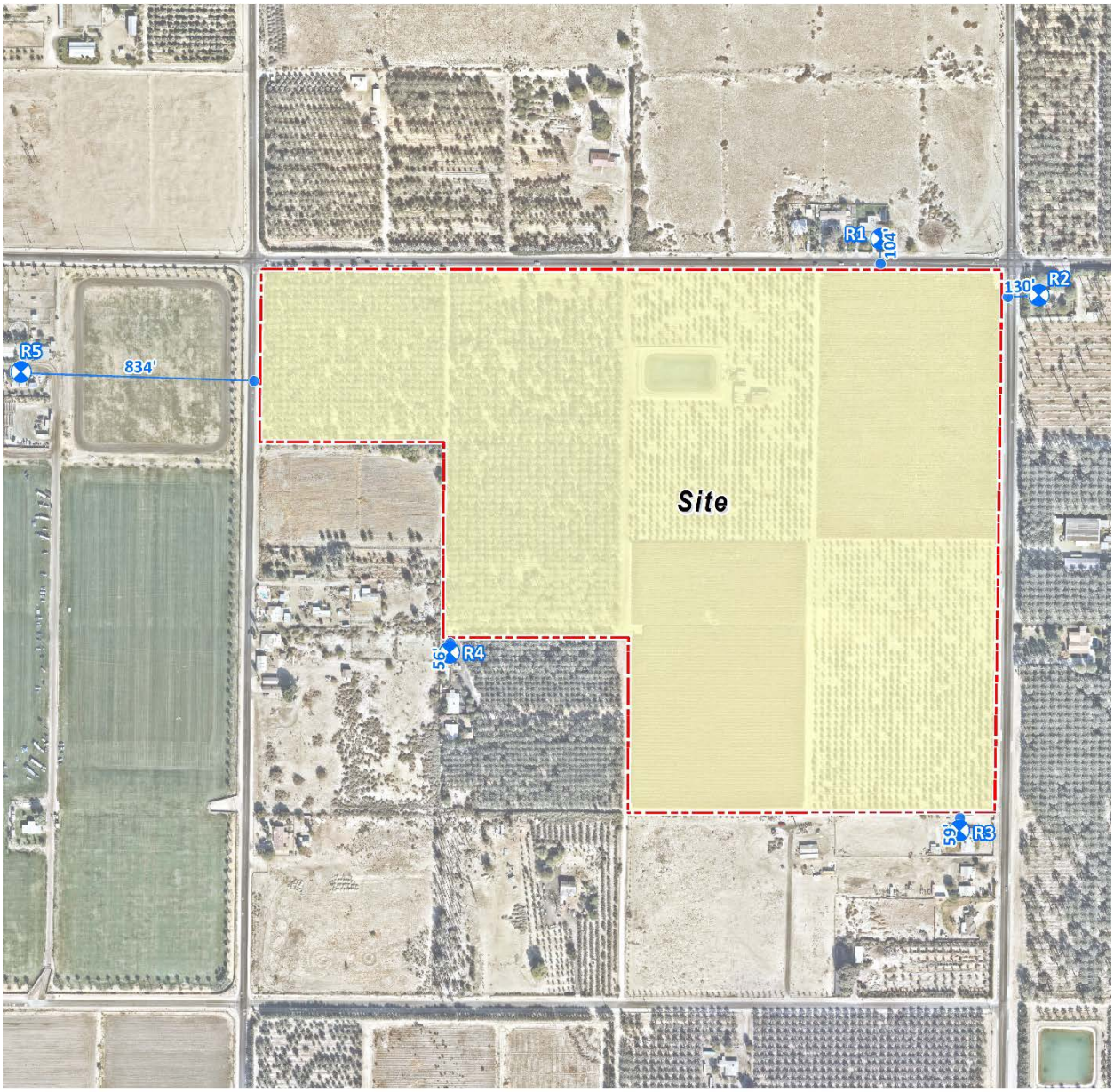
Emissions during the peak construction activity will not exceed the SCAQMD's localized significance thresholds at the maximally exposed receptor location, as illustrated in Table 3-7. All other modeled locations in the study area would experience lower concentrations, resulting in a reduced impact. As such, the Project's localized impacts during construction activity would be less than significant.

TABLE 3-7: CONSTRUCTION LOCALIZED SIGNIFICANCE SUMMARY

Peak Construction	CO		NO_2	PM_{10}	$PM_{2.5}$
	Averaging Time				
	1-Hour	8-Hours	1-Hour	24-Hours	24-Hours
Peak Day Localized Emissions	0.02	0.01	0.02	1.81	0.99
Background Concentration [A]	1.10	0.80	0.038		
Total Concentration	1.12	0.81	0.05	1.81	0.99
SCAQMD Localized Significance Threshold	20	9	0.18	10.4	10.4
Threshold Exceeded?	NO	NO	NO	NO	NO

[A] Highest concentration from the last three years of available data.
Notes: PM_{10} and $PM_{2.5}$ concentrations are expressed in µg/m³. All others are expressed in ppm.
Based on SCAQMD's LST Methodology, background concentrations are considered only for CO and NO_2.

EXHIBIT 3-A: RECEPTOR LOCATIONS



3.6.8 Operational-Source Localized Emissions

As previously stated, the total development of the Project is to consist of 165 two-story SFR and 244 condo hotel units. The development includes a crystal lagoon, and other residential amenities including restaurants, a beach club, event space, pop-up shops, outdoor amphitheater, pools, recreation areas and kids play spaces.

According to SCAQMD LST methodology, LSTs would apply to the operational phase of a proposed project, if the project includes stationary sources, or attracts mobile sources that may spend long periods queuing and idling at the site (e.g., transfer facilities and warehouse buildings). The proposed Project does not include such uses, and thus, due to the lack of significant stationary source emissions, no long-term localized significance threshold analysis is needed.

3.7 CO "Hot Spot" Analysis

A CO hotspot is defined as a localized concentration of carbon monoxide exceeding the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm. At the time the most recent CEQA Air Quality Handbook (1993) was published by SCAQMD, the air basin was designated as non-attainment, requiring projects to perform hotspot analyses to ensure they did not worsen the existing conditions. Over the last two decades, background CO concentrations have been significantly reduced due to regulatory controls on tailpipe emissions, which have culminated in the air basin achieving attainment status for CO.

The 2003 AQMP's findings underscore that CO hotspots are highly unlikely due to the reduced background concentrations and the effectiveness of California's air quality management strategies. The substantial reduction in CO levels from the vehicle fleet and the state's attainment status for CO further diminish the need for detailed microscale hotspot analyses, reinforcing that existing monitoring and regulatory frameworks adequately address potential air quality concerns.

In 2003, the SCAQMD as part of its AQMP development process, prepared modeling to determine the potential for CO Hotspots at the four busiest intersections in the air basin. As summarized in the 2003 AQMP, even at one of the busiest intersections at that time, only 0.7 ppm of CO is attributable to vehicular traffic and the remaining 7.7 ppm were due to ambient background conditions. As shown on Table 2-5 in this report, the background 1-hour and 8-hour concentrations are well below the applicable AAQS. The 2003 AQMP's findings underscore that CO hotspots are highly unlikely due to the reduced background concentrations and the effectiveness of California's air quality management strategies. The substantial reduction in CO levels from the vehicle fleet and the state's attainment status for CO further diminish the need for detailed microscale hotspot analyses, reinforcing that existing monitoring and regulatory frameworks adequately address potential air quality concerns.

As such, Project-related traffic at any intersections in the vicinity of the Project would not cause or contribute to a CO hotspot since the background concentrations are low and any contribution from Project traffic would be negligible.

3.8 AQMP

The Project site is located within the SSAB and is subject to SCAQMD's 2022 AQMP and the 2003 Coachella Valley PM_{10} SIP. The SCAQMD has jurisdiction over an approximately 10,743 square-mile area consisting of the four-county Basin and the Los Angeles County and Riverside County portions

of what use to be referred to as the Southeast Desert Air Basin. In these areas, the SCAQMD is principally responsible for air pollution control, and works directly with the Southern California Association of Governments (SCAG), county transportation commissions, local governments, as well as state and federal agencies to reduce emissions from stationary, mobile, and indirect sources to meet state and federal ambient air quality standards.

Currently, these state and federal air quality standards are exceeded in most parts of the SSAB. In response, the SCAQMD has adopted a series of AQMPs to meet the state and federal ambient air quality standards. AQMPs are updated regularly in order to more effectively reduce emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy.

In December 2022, the SCAQMD released the *Final 2022 AQMP* (*2022 AQMP*). The *2022 AQMP* continues to evaluate current integrated strategies and control measures to meet the NAAQS, as well as explore new and innovative methods to reach its goals. Some of these approaches include utilizing incentive programs, recognizing existing co-benefit programs from other sectors, and developing a strategy with fair-share reductions at the federal, state, and local levels (19). Similar to the 2016 AQMP, the *2022 AQMP* incorporates scientific and technological information and planning assumptions, including the *2020-2045 RTP/SCS*, a planning document that supports the integration of land use and transportation to help the region meet the federal CAA requirements (20). The Project's consistency with the AQMP will be determined using the *2022 AQMP* as discussed below.

SCAG adopted the 2020-*2045 Regional Transportation Plan/Sustainable Communities Strategy* (2020-2045 RTP/SCS), a planning document that supports the integration of land use and transportation to help the region meet the federal metropolitan planning organization (MPO) requirements under the Sustainable communities and Climate Protection Act. It should be noted that although the 2024-2050 RTP was released after approval of the 2022 AQMP, the 2022 AQMP is reliant in part upon the general plan land use designations.

Criteria for determining consistency with the AQMP are defined in Chapter 12, Section 12.2 and Section 12.3 of the *1993 CEQA Handbook* (21). These indicators are discussed below:

3.8.1 Consistency Criterion No. 1

Potential to result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

The violations that Consistency Criterion No. 1 refer to are the CAAQS and NAAQS. CAAQS and NAAQS violations would occur if regional or localized significance thresholds were exceeded.

Construction Impacts – Consistency Criterion 1

As evaluated, the Project's localized and regional construction-source emissions would not exceed applicable regional significance threshold and LST thresholds. As such, a less than significant impact is expected.

Operational Impacts – Consistency Criterion 1

As evaluated, the Project's localized and regional operation-source emissions would not exceed applicable regional significance threshold and LST thresholds. As such, a less than significant impact is expected.

On the basis of the preceding discussion, the Project is determined to be consistent with the first criterion.

3.8.2 Consistency Criterion No. 2

Potential to exceed the assumptions in the AQMP based on the years of Project build-out phase.

The *2022 AQMP* demonstrates that the applicable ambient air quality standards can be achieved within the timeframes required under federal law. Growth projections from local general plans adopted by cities in the district are provided to the SCAG, which develops regional growth forecasts, which are then used to develop future air quality forecasts for the AQMP. Development consistent with the growth projections in City of Coachella General Plan is considered to be consistent with the AQMP.

Construction Impacts – Consistency Criterion 2

Peak day emissions generated by construction activities are largely independent of land use assignments but rather are a function of development scope and maximum area of disturbance. Irrespective of the site's land use designation, development of the site to its maximum potential would likely occur, with disturbance of the entire site occurring during construction activities. As such, when considering that no emissions thresholds will be exceeded, a less than significant impact would result.

Operational Impacts – Consistency Criterion 2

The proposed Project consists of 409 units: 165 two-story SFR and 244 condo hotel units, a crystal lagoon, and other residential amenities including restaurants, a beach club, event space, pop-up shops, outdoor amphitheater, pools, recreation areas and kids play spaces. These uses are consistent with the City of Coachella General Plan designates the Project site as "Regional Retail District" land uses and "Regional Commercial" zoning uses.

The Regional Retail District designation provides opportunities for a wide range of shopping and entertainment in a variety of urban and suburban formats. These include regional shopping centers, mixed destination centers or similar uses. The uses allowed in this designation will cater to regional clientele and provide a unique amenity to all residents of the Coachella Valley and an important revenue source for the City. The primary purpose of the District is to provide for commercial opportunities, with residential uses supporting the retail environment.

The Regional Commercial zoning designation is intended to provide for and encourage a wide range of shopping and entertainment in a variety of urban and suburban formats. These include regional shopping centers, mixed destination centers or similar uses. The uses allowed in this zone will cater to regional clientele and provide a unique amenity to all residents of the Coachella Valley and an important revenue source for the City. Implementing the Regional Retail land use designation in the

General Plan, the primary purpose of the zone is to provide for commercial opportunities, with residential uses supporting the retail environment.

In conclusion, the proposed is consistent with the City's development intensities allowed under the existing designations. Further, the Project on an individual basis does not have an impact and as such, the proposed Project would not conflict with the goals and objectives of the AQMP. Furthermore, the Project, as evaluated herein would not exceed the regional or localized air quality significance thresholds.

On the basis of the preceding discussion, the Project is determined to be consistent with the second criterion.

AQMP Consistency Conclusion

Project would not have the potential to result in or cause NAAQS or CAAQS violations. The Project would not exceed the regional or localized construction and operational thresholds, and the Project's development intensity is consistent with the development intensities allowed within the General Plan as previously stated. As such, the Project is therefore considered to be consistent with the AQMP.

3.9 Potential Impacts to Sensitive Receptors

The potential impact of Project-generated air pollutant emissions at sensitive receptors has also been considered. Results of the LST analysis indicate that the Project would not exceed the SCAQMD localized significance thresholds during construction. Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations during Project construction.

Additionally, the Project would not exceed the SCAQMD localized significance thresholds during operational activity. Further Project traffic would not create or result in a CO "hotspot." Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations as the result of Project operations.

3.9.1 Friant Ranch Case

In December 2018, in the case of *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, the California Supreme Court held that an Environmental Impact Report's (EIR) air quality analysis must meaningfully connect the identified air quality impacts to the human health consequences of those impacts, or meaningfully explain why that analysis cannot be provided.

Most local agencies, including the City of Coachella, lack the data to do their own assessment of potential health impacts from criteria air pollutant emissions, as would be required to establish customized, locally-specific thresholds of significance based on potential health impacts from an individual development project. The use of national or "generic" data to fill the gap of missing local data would not yield accurate results because such data does not capture local air patterns, local background conditions, or local population characteristics, all of which play a role in how a population experiences air pollution. Because it is impracticable to accurately isolate the exact cause of a human disease (for example, the role a particular air pollutant plays compared to the role of other allergens and genetics in causing asthma), existing scientific tools cannot accurately estimate health impacts of the Project's air emissions without undue speculation. Instead, readers are

directed to the Project's air quality impact analysis above, which provides extensive information concerning the quantifiable and non-quantifiable health risks related to the Project's construction and long-term operation.

Notwithstanding, this AQIA does evaluate the proposed Project's localized impact to air quality for emissions of CO, NO_X, PM_{10}, and $PM_{2.5}$ by comparing the proposed Project's on-site emissions to the SCAQMD's applicable LST thresholds. The LST analysis above determined that the Project would not result in emissions exceeding SCAQMD's LSTs. Therefore, the proposed Project would not be expected to exceed the most stringent applicable federal or state ambient air quality standards for emissions of CO, NO_X, PM_{10}, and $PM_{2.5}$.

As the Project's emissions would comply with federal, state, and local air quality standards, the proposed Project's emissions are not sufficiently high enough to use a regional modeling program to correlate health effects on a basin-wide level and would not provide a reliable indicator of health effects if modeled.

3.10 Odors

The potential for the Project to generate objectionable odors has also been considered. Land uses generally associated with odor complaints include:

- Agricultural uses (livestock and farming)
- Wastewater treatment plants
- Food processing plants
- Chemical plants
- Composting operations
- Refineries
- Landfills
- Dairies
- Fiberglass molding facilities

The Project does not contain land uses typically associated with emitting objectionable odors. Potential odor sources associated with the proposed Project may result from construction equipment exhaust and the application of asphalt and architectural coatings during construction activities and the temporary storage of typical solid waste (refuse) associated with the proposed Project's (long-term operational) uses. Standard construction requirements would minimize odor impacts from construction. The construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction and is thus considered less than significant. It is expected that Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with current solid waste regulations. The proposed Project would also be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. Therefore, odors and other emissions (such as those leading to odors) associated with construction and operations activities of the proposed Project would be less than significant and no mitigation is required (22).

3.11 Cumulative Impacts

As previously shown in Table 2-4, the CAAQS designates the Project site as nonattainment for O_3 PM_{10}, and $PM_{2.5}$ while the NAAQS designates the Project site as nonattainment for O_3 and $PM_{2.5}$. The SCAQMD has published a report on how to address cumulative impacts from air pollution: *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution* (23). In this report the SCAQMD clearly states (Page D-3):

> *"…the SCAQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR. The only case where the significance thresholds for project specific and cumulative impacts differ is the Hazard Index (HI) significance threshold for TAC emissions. The project specific (project increment) significance threshold is HI > 1.0 while the cumulative (facility-wide) is HI > 3.0. It should be noted that the HI is only one of three TAC emission significance thresholds considered (when applicable) in a CEQA analysis. The other two are the maximum individual cancer risk (MICR) and the cancer burden, both of which use the same significance thresholds (MICR of 10 in 1 million and cancer burden of 0.5) for project specific and cumulative impacts.*
>
> *Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant."*

Therefore, this analysis assumes that individual projects that do not generate operational or construction emissions that exceed the SCAQMD's recommended daily thresholds for project-specific impacts would also not cause a cumulatively considerable increase in emissions for those pollutants for which SSAB is in nonattainment, and, therefore, would not be considered to have a significant, adverse air quality impact. Conversely, project-level construction and operational emissions that exceed SCAQMD thresholds would be considered cumulatively considerable. SCAQMD's thresholds of significance for project-specific direct and cumulatively-considerable impacts have clearly been successful, as application of these thresholds has led to significant air quality improvements throughout the SSAB.

Construction-Source Emission Impacts

The Project-specific evaluation of emissions presented in the preceding analysis demonstrates that proposed Project construction-source air pollutant emissions would not result in exceedances of regional thresholds. Therefore, proposed Project construction-source emissions would be considered less than significant on a Project-specific and cumulative basis.

Operational-Source Emission Impacts

The Project-specific evaluation of emissions presented in the preceding analysis demonstrates that proposed Project operation-source air pollutant emissions would not result in exceedances of regional thresholds. Therefore, the proposed Project operation-source emissions would be considered less than significant on a project-specific and cumulative basis.

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5 CERTIFICATION

The contents of this air study report represent an accurate depiction of the environmental impacts associated with the proposed COVA Project. The information contained in this air quality impact assessment report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at hqureshi@urbanxroads.com.

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Newport Beach, CA 92658
hqureshi@urbanxroads.com

Education

Master of Science in Environmental Studies
California State University, Fullerton • May, 2010
Bachelor of Arts in Environmental Analysis and Design
University of California, Irvine • June, 2006

Professional Affiliations

AEP – Association of Environmental Professionals
AWMA – Air and Waste Management Association
ASTM – American Society for Testing and Materials

Professional Certifications

Planned Communities and Urban Infill – Urban Land Institute • June, 2011
Indoor Air Quality and Industrial Hygiene – EMSL Analytical • April, 2008
Principles of Ambient Air Monitoring – CARB • August, 2007
AB2588 Regulatory Standards – Trinity Consultants • November, 2006
Air Dispersion Modeling – Lakes Environmental • June, 2006

APPENDIX 2.1:

STATE/FEDERAL ATTAINMENT STATUS OF CRITERIA POLLUTANTS

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APPENDIX 3.1:

CALEEMOD EMISSIONS MODEL OUTPUTS

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APPENDIX 3.2:

AERMOD OUTPUTS

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**
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**
** AERMOD Input Produced by:
** AERMOD View Ver. 13.0.0
** Lakes Environmental Software Inc.
** Date: 7/18/2025
** File: C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 Const
co.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02
   MODELOPT DFAULT CONC
   AVERTIME 1 8
   URBANOPT 2492442 Riverside_County
   POLLUTID CO
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "16552-02 Const co.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     573500.180  3725886.220      -15.810
   LOCATION VOL2         VOLUME     573500.381  3725789.820      -16.120
   LOCATION VOL3         VOLUME     573597.602  3725886.190      -16.050
   LOCATION VOL4         VOLUME     573597.803  3725789.790      -16.360
   LOCATION VOL5         VOLUME     573694.930  3725886.254      -16.110
   LOCATION VOL6         VOLUME     573695.131  3725789.853      -16.280
   LOCATION VOL7         VOLUME     573792.553  3725789.824      -16.410
   LOCATION VOL8         VOLUME     573792.352  3725886.224      -16.330
   LOCATION VOL9         VOLUME     573890.171  3725886.254      -15.450
   LOCATION VOL10        VOLUME     573890.372  3725789.853      -15.750
   LOCATION VOL11        VOLUME     573987.794  3725789.824      -15.210
   LOCATION VOL12        VOLUME     573987.593  3725886.224      -15.520
   LOCATION VOL13        VOLUME     574085.292  3725886.133      -15.630
   LOCATION VOL14        VOLUME     574085.493  3725789.733      -15.890
   LOCATION VOL15        VOLUME     574182.915  3725789.703      -16.000
   LOCATION VOL16        VOLUME     574182.714  3725886.103      -15.750
   LOCATION VOL17        VOLUME     573695.175  3725695.674      -16.510
   LOCATION VOL18        VOLUME     573695.376  3725599.274      -16.700
   LOCATION VOL19        VOLUME     573792.799  3725599.244      -16.820
   LOCATION VOL20        VOLUME     573792.597  3725695.644      -16.620
   LOCATION VOL21        VOLUME     573890.309  3725695.354      -16.590
   LOCATION VOL22        VOLUME     573890.510  3725598.954      -16.930
   LOCATION VOL23        VOLUME     573987.932  3725598.925      -17.030
   LOCATION VOL24        VOLUME     573987.731  3725695.325      -16.730
   LOCATION VOL25        VOLUME     574085.442  3725695.035      -16.760
   LOCATION VOL26        VOLUME     574085.643  3725598.635      -17.100
   LOCATION VOL27        VOLUME     574183.066  3725598.605      -17.220
   LOCATION VOL28        VOLUME     574182.864  3725695.005      -16.880
   LOCATION VOL29        VOLUME     573895.419  3725502.137      -17.650
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   LOCATION VOL30        VOLUME     573895.620  3725405.737      -18.290
   LOCATION VOL31        VOLUME     573993.042  3725405.707      -18.630
   LOCATION VOL32        VOLUME     573992.841  3725502.107      -17.860
   LOCATION VOL33        VOLUME     574085.442  3725503.095      -17.950
   LOCATION VOL34        VOLUME     574085.643  3725406.695      -18.800
   LOCATION VOL35        VOLUME     574183.066  3725406.665      -18.970
   LOCATION VOL36        VOLUME     574182.864  3725503.066      -18.220
** Source Parameters **
   SRCPARAM VOL1         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL2         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL3         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL4         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL5         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL6         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL7         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL8         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL9         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL10        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL11        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL12        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL13        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL14        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL15        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL16        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL17        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL18        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL19        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL20        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL21        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL22        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL23        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL24        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL25        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL26        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL27        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL28        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL29        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL30        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL31        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL32        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL33        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL34        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL35        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL36        0.0177278428     5.000    22.640     1.400
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL2         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL6         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL11        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL12        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
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   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL24        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL28        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
****************************************
```

```
**
**
RE STARTING
   INCLUDED "16552-02 Const co.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE ..\KTRM_V11_trimmed.sfc
   PROFFILE ..\KTRM_V11_trimmed.PFL
   SURFDATA 3104 2017
   UAIRDATA 3190 2017
   PROFBASE -36.04 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
   RECTABLE 8 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "16552-02 Const co.AD\01H1GALL.PLT" 31
   PLOTFILE 8 ALL 1ST "16552-02 Const co.AD\08H1GALL.PLT" 32
   SUMMFILE "16552-02 Const co.sum"
OU FINISHED
**
**************************************
** Project Parameters
**************************************
** PROJCTN  CoordinateSystemUTM
** DESCPTN  UTM: Universal Transverse Mercator
** DATUM    North American Datum 1983
** DTMRGN   CONUS
** UNITS    m
** ZONE     11
** ZONEINX  0
**

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**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 13.0.0
** Lakes Environmental Software Inc.
** Date: 7/18/2025
** File: C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 Const
co.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02
   MODELOPT DFAULT CONC
   AVERTIME 1 8
   URBANOPT 2492442 Riverside_County
   POLLUTID CO
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "16552-02 Const co.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     573500.180  3725886.220      -15.810
   LOCATION VOL2         VOLUME     573500.381  3725789.820      -16.120
   LOCATION VOL3         VOLUME     573597.602  3725886.190      -16.050
   LOCATION VOL4         VOLUME     573597.803  3725789.790      -16.360
   LOCATION VOL5         VOLUME     573694.930  3725886.254      -16.110
   LOCATION VOL6         VOLUME     573695.131  3725789.853      -16.280
   LOCATION VOL7         VOLUME     573792.553  3725789.824      -16.410
   LOCATION VOL8         VOLUME     573792.352  3725886.224      -16.330
   LOCATION VOL9         VOLUME     573890.171  3725886.254      -15.450
   LOCATION VOL10        VOLUME     573890.372  3725789.853      -15.750
   LOCATION VOL11        VOLUME     573987.794  3725789.824      -15.210
   LOCATION VOL12        VOLUME     573987.593  3725886.224      -15.520
   LOCATION VOL13        VOLUME     574085.292  3725886.133      -15.630
   LOCATION VOL14        VOLUME     574085.493  3725789.733      -15.890
   LOCATION VOL15        VOLUME     574182.915  3725789.703      -16.000
   LOCATION VOL16        VOLUME     574182.714  3725886.103      -15.750
   LOCATION VOL17        VOLUME     573695.175  3725695.674      -16.510
   LOCATION VOL18        VOLUME     573695.376  3725599.274      -16.700
   LOCATION VOL19        VOLUME     573792.799  3725599.244      -16.820
   LOCATION VOL20        VOLUME     573792.597  3725695.644      -16.620
   LOCATION VOL21        VOLUME     573890.309  3725695.354      -16.590
   LOCATION VOL22        VOLUME     573890.510  3725598.954      -16.930
   LOCATION VOL23        VOLUME     573987.932  3725598.925      -17.030
   LOCATION VOL24        VOLUME     573987.731  3725695.325      -16.730
   LOCATION VOL25        VOLUME     574085.442  3725695.035      -16.760
   LOCATION VOL26        VOLUME     574085.643  3725598.635      -17.100
   LOCATION VOL27        VOLUME     574183.066  3725598.605      -17.220
   LOCATION VOL28        VOLUME     574182.864  3725695.005      -16.880
   LOCATION VOL29        VOLUME     573895.419  3725502.137      -17.650
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   LOCATION VOL30        VOLUME     573895.620  3725405.737      -18.290
   LOCATION VOL31        VOLUME     573993.042  3725405.707      -18.630
   LOCATION VOL32        VOLUME     573992.841  3725502.107      -17.860
   LOCATION VOL33        VOLUME     574085.442  3725503.095      -17.950
   LOCATION VOL34        VOLUME     574085.643  3725406.695      -18.800
   LOCATION VOL35        VOLUME     574183.066  3725406.665      -18.970
   LOCATION VOL36        VOLUME     574182.864  3725503.066      -18.220
** Source Parameters **
   SRCPARAM VOL1         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL2         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL3         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL4         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL5         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL6         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL7         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL8         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL9         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL10        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL11        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL12        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL13        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL14        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL15        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL16        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL17        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL18        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL19        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL20        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL21        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL22        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL23        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL24        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL25        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL26        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL27        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL28        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL29        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL30        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL31        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL32        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL33        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL34        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL35        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL36        0.0177278428     5.000    22.640     1.400
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL2         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL6         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL11        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL12        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
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   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL24        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL28        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

```
** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
****************************************
```

```
**
**
RE STARTING
   INCLUDED "16552-02 Const co.rou"
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
ME STARTING
   SURFFILE ..\KTRM_V11_trimmed.sfc
   PROFFILE ..\KTRM_V11_trimmed.PFL
   SURFDATA 3104 2017
   UAIRDATA 3190 2017
   PROFBASE -36.04 METERS
ME FINISHED
**
****************************************
** AERMOD Output Pathway
****************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
   RECTABLE 8 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "16552-02 Const co.AD\01H1GALL.PLT" 31
   PLOTFILE 8 ALL 1ST "16552-02 Const co.AD\08H1GALL.PLT" 32
   SUMMFILE "16552-02 Const co.sum"
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            3 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W340     676       PRBASE: Possible Error in PROFBASE Input:  Value is < 0
 PROFBASE
 ME W186     677       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold
 used           0.50
 ME W187     677       MEOPEN: ADJ_U* Option for Stable Low Winds used in
 AERMET

 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************

FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                   ***
 11:19:19

```

```
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                        ***     MODEL SETUP OPTIONS SUMMARY        ***
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - -

** Model Options Selected:
     * Model Uses Regulatory DEFAULT Options
     * Model Is Setup For Calculation of Average CONCentration Values.
     * NO GAS DEPOSITION Data Provided.
     * NO PARTICLE DEPOSITION Data Provided.
     * Model Uses NO DRY DEPLETION. DDPLETE  =  F
     * Model Uses NO WET DEPLETION. WETDPLT  =  F
     * Stack-tip Downwash.
     * Model Accounts for ELEVated Terrain Effects.
     * Use Calms Processing Routine.
     * Use Missing Data Processing Routine.
     * No Exponential Decay.
     * Model Uses URBAN Dispersion Algorithm for the SBL for    36 Source(s),
       for Total of    1 Urban Area(s):
  Urban Population =   2492442.0 ;  Urban Roughness Length =  1.000 m
     * Urban Roughness Length of 1.0 Meter Used.
     * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
     * CCVR_Sub - Meteorological data includes CCVR substitutions
     * TEMP_Sub - Meteorological data includes TEMP substitutions
     * Model Accepts FLAGPOLE Receptor . Heights.
     * The User Specified a Pollutant Type of: CO

**Model Calculates  2 Short Term Average(s) of:   1-HR   8-HR

**This Run Includes:     36 Source(s);       1 Source Group(s); and      22 Receptor(s)

               with:      0 POINT(s), including
                          0 POINTCAP(s) and      0 POINTHOR(s)
                and:     36 VOLUME source(s)
                and:      0 AREA type source(s)
                and:      0 LINE source(s)
                and:      0 RLINE/RLINEXT source(s)
                and:      0 OPENPIT source(s)
                and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                and:      0 SWPOINT source(s)


**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date:  22112

**Output Options Selected:
         Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
         Keyword)
         Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
         Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                m for Missing Hours
                                                                b for Both Calm and
                                                                Missing Hours

**Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =   -36.04 ;  Decay Coef.
=    0.000     ;  Rot. Angle =     0.0
                  Emission Units = GRAMS/SEC                                ;  Emission
                  Rate Unit Factor =   0.10000E+07
                  Output Units   = MICROGRAMS/M**3

**Approximate Storage Requirements of Model =      3.5 MB of RAM.
```

**Input Runstream File:
aermod.inp

**Output Print File:
aermod.out

**Detailed Error/Message File: 16552-02 Const co.err
**File for Summary of Results: 16552-02 Const co.sum
FF *** AERMOD - VERSION 24142 *** *** C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 *** 07/18/25
*** AERMET - VERSION 22112 ***
*** ***
11:19:19

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER EMISSION RATE INIT. PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	AIRCRAFT BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	SZ	SOURCE SCALAR VARY BY
VOL1	0	0.17728E-01	573500.2	3725886.2	-15.8	5.00	22.64	1.40	YES HRDOW
VOL2	0	0.17728E-01	573500.4	3725789.8	-16.1	5.00	22.64	1.40	YES HRDOW
VOL3	0	0.17728E-01	573597.6	3725886.2	-16.1	5.00	22.64	1.40	YES HRDOW
VOL4	0	0.17728E-01	573597.8	3725789.8	-16.4	5.00	22.64	1.40	YES HRDOW
VOL5	0	0.17728E-01	573694.9	3725886.3	-16.1	5.00	22.64	1.40	YES HRDOW
VOL6	0	0.17728E-01	573695.1	3725789.9	-16.3	5.00	22.64	1.40	YES HRDOW
VOL7	0	0.17728E-01	573792.6	3725789.8	-16.4	5.00	22.64	1.40	YES HRDOW
VOL8	0	0.17728E-01	573792.4	3725886.2	-16.3	5.00	22.64	1.40	YES HRDOW
VOL9	0	0.17728E-01	573890.2	3725886.3	-15.5	5.00	22.64	1.40	YES HRDOW
VOL10	0	0.17728E-01	573890.4	3725789.9	-15.8	5.00	22.64	1.40	YES HRDOW
VOL11	0	0.17728E-01	573987.8	3725789.8	-15.2	5.00	22.64	1.40	YES HRDOW
VOL12	0	0.17728E-01	573987.6	3725886.2	-15.5	5.00	22.64	1.40	YES HRDOW
VOL13	0	0.17728E-01	574085.3	3725886.1	-15.6	5.00	22.64	1.40	YES HRDOW
VOL14	0	0.17728E-01	574085.5	3725789.7	-15.9	5.00	22.64	1.40	YES HRDOW
VOL15	0	0.17728E-01	574182.9	3725789.7	-16.0	5.00	22.64	1.40	YES HRDOW
VOL16	0	0.17728E-01	574182.7	3725886.1	-15.8	5.00	22.64	1.40	YES HRDOW
VOL17	0	0.17728E-01	573695.2	3725695.7	-16.5	5.00	22.64		

```
      1.40     YES   HRDOW            NO
816   VOL18            0   0.17728E-01  573695.4 3725599.3   -16.7     5.00    22.64
      1.40     YES   HRDOW            NO
817   VOL19            0   0.17728E-01  573792.8 3725599.2   -16.8     5.00    22.64
      1.40     YES   HRDOW            NO
818   VOL20            0   0.17728E-01  573792.6 3725695.6   -16.6     5.00    22.64
      1.40     YES   HRDOW            NO
819   VOL21            0   0.17728E-01  573890.3 3725695.4   -16.6     5.00    22.64
      1.40     YES   HRDOW            NO
820   VOL22            0   0.17728E-01  573890.5 3725599.0   -16.9     5.00    22.64
      1.40     YES   HRDOW            NO
821   VOL23            0   0.17728E-01  573987.9 3725598.9   -17.0     5.00    22.64
      1.40     YES   HRDOW            NO
822   VOL24            0   0.17728E-01  573987.7 3725695.3   -16.7     5.00    22.64
      1.40     YES   HRDOW            NO
823   VOL25            0   0.17728E-01  574085.4 3725695.0   -16.8     5.00    22.64
      1.40     YES   HRDOW            NO
824   VOL26            0   0.17728E-01  574085.6 3725598.6   -17.1     5.00    22.64
      1.40     YES   HRDOW            NO
825   VOL27            0   0.17728E-01  574183.1 3725598.6   -17.2     5.00    22.64
      1.40     YES   HRDOW            NO
826   VOL28            0   0.17728E-01  574182.9 3725695.0   -16.9     5.00    22.64
      1.40     YES   HRDOW            NO
827   VOL29            0   0.17728E-01  573895.4 3725502.1   -17.7     5.00    22.64
      1.40     YES   HRDOW            NO
828   VOL30            0   0.17728E-01  573895.6 3725405.7   -18.3     5.00    22.64
      1.40     YES   HRDOW            NO
829   VOL31            0   0.17728E-01  573993.0 3725405.7   -18.6     5.00    22.64
      1.40     YES   HRDOW            NO
830   VOL32            0   0.17728E-01  573992.8 3725502.1   -17.9     5.00    22.64
      1.40     YES   HRDOW            NO
831   VOL33            0   0.17728E-01  574085.4 3725503.1   -17.9     5.00    22.64
      1.40     YES   HRDOW            NO
832   VOL34            0   0.17728E-01  574085.6 3725406.7   -18.8     5.00    22.64
      1.40     YES   HRDOW            NO
833   VOL35            0   0.17728E-01  574183.1 3725406.7   -19.0     5.00    22.64
      1.40     YES   HRDOW            NO
834   VOL36            0   0.17728E-01  574182.9 3725503.1   -18.2     5.00    22.64
      1.40     YES   HRDOW            NO
835   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***       07/18/25
836    *** AERMET - VERSION  22112 ***
       ***                                                                ***
       11:19:19
837
                                  PAGE   3
838    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
839
840
841                                          *** SOURCE IDs DEFINING SOURCE GROUPS ***
842
843    SRCGROUP ID                                          SOURCE IDs
844    -----------                                          ----------
845
846
847     ALL         VOL1        , VOL2        , VOL3        , VOL4        , VOL5        ,
       VOL6         , VOL7         , VOL8         ,
848
849                 VOL9        , VOL10       , VOL11       , VOL12       , VOL13       ,
                    VOL14       , VOL15       , VOL16       ,
850
851                 VOL17       , VOL18       , VOL19       , VOL20       , VOL21       ,
                    VOL22       , VOL23       , VOL24       ,
852
853                 VOL25       , VOL26       , VOL27       , VOL28       , VOL29       ,
                    VOL30       , VOL31       , VOL32       ,
```

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854
855              VOL33       , VOL34       , VOL35       , VOL36       ,
856 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
    Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
857  *** AERMET - VERSION  22112 ***
     ***                                                              ***
     11:19:19
858
                                PAGE   4
859  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
860
861
862                                        *** SOURCE IDs DEFINED AS URBAN SOURCES ***
863
864   URBAN ID   URBAN POP                                    SOURCE IDs
865   --------   ---------                                    ----------
866
867
868               2492442.   VOL1        , VOL2        , VOL3        , VOL4        ,
                  VOL5        , VOL6        , VOL7        ,
869  VOL8        ,
870
871              VOL9        , VOL10       , VOL11       , VOL12       , VOL13       ,
                 VOL14       , VOL15       , VOL16       ,
872
873              VOL17       , VOL18       , VOL19       , VOL20       , VOL21       ,
                 VOL22       , VOL23       , VOL24       ,
874
875              VOL25       , VOL26       , VOL27       , VOL28       , VOL29       ,
                 VOL30       , VOL31       , VOL32       ,
876
877              VOL33       , VOL34       , VOL35       , VOL36       ,
878 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
    Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
879  *** AERMET - VERSION  22112 ***
     ***                                                              ***
     11:19:19
880
                                PAGE   5
881  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
882
883                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                       WEEK (HRDOW) *
884
885  SOURCE ID = VOL1         ; SOURCE TYPE = VOLUME   :
886   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
     SCALAR   HOUR   SCALAR   HOUR   SCALAR
887  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
     - - - - - - - - - - - - - - - - - - - -
888                                                DAY OF WEEK = WEEKDAY
889     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
        .0000E+00    7  .1000E+01    8  .1000E+01
890     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
        .1000E+01   15  .0000E+00   16  .0000E+00
891    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
       .0000E+00   23  .0000E+00   24  .0000E+00
892                                                DAY OF WEEK = SATURDAY
893     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
        .0000E+00    7  .0000E+00    8  .0000E+00
894     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
        .0000E+00   15  .0000E+00   16  .0000E+00
895    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
       .0000E+00   23  .0000E+00   24  .0000E+00
896                                                DAY OF WEEK = SUNDAY
897     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
        .0000E+00    7  .0000E+00    8  .0000E+00
```

```
898       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
899       17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
          .0000E+00   23  .0000E+00   24  .0000E+00
900   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
901    *** AERMET - VERSION  22112 ***
       ***                                                                ***
       11:19:19
902
                                  PAGE   6
903    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
904
905                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
906
907    SOURCE ID = VOL2         ; SOURCE TYPE = VOLUME   :
908     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
909    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
910                                              DAY OF WEEK = WEEKDAY
911       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
912       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
913       17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
914                                              DAY OF WEEK = SATURDAY
915       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
916       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
917       17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
918                                              DAY OF WEEK = SUNDAY
919       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
920       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
921       17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
922   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
923    *** AERMET - VERSION  22112 ***
       ***                                                                ***
       11:19:19
924
                                  PAGE   7
925    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
926
927                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
928
929    SOURCE ID = VOL3         ; SOURCE TYPE = VOLUME   :
930     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
931    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
932                                              DAY OF WEEK = WEEKDAY
933       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
934       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
935       17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
          .0000E+00   23  .0000E+00   24  .0000E+00
```

```
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:19:19

                            PAGE   8
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL4         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:19:19

                            PAGE   9
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL5         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   H
```

```
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - -
```

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      11:19:19
1012
                                  PAGE  11
1013  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1014
1015                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1016
1017  SOURCE ID = VOL7         ; SOURCE TYPE = VOLUME   :
1018   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1019  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1020                                                DAY OF WEEK = WEEKDAY
1021     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
1022     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
1023    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1024                                                DAY OF WEEK = SATURDAY
1025     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1026     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1027    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1028                                                DAY OF WEEK = SUNDAY
1029     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1030     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1031    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1032  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1033   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       11:19:19
1034
                                  PAGE  12
1035  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1036
1037                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1038
1039  SOURCE ID = VOL8         ; SOURCE TYPE = VOLUME   :
1040   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1041  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1042                                                DAY OF WEEK = WEEKDAY
1043     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
1044     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
1045    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1046                                                DAY OF WEEK = SATURDAY
1047     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1048     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1049    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1050                                                DAY OF WEEK = SUNDAY
```

```
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:19:19

                              PAGE  13
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL9         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
     .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:19:19

                              PAGE  14
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL10        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
     .1000E+01   15  .0000E+00   16  .0000E+00
```

```
1089      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1090                                              DAY OF WEEK = SATURDAY
1091       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1092       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1093      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1094                                              DAY OF WEEK = SUNDAY
1095       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1096       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1097      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1098  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1099   *** AERMET - VERSION  22112 ***
       ***                                                                  ***
       11:19:19
1100
                                PAGE  15
1101   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1102
1103                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
1104
1105   SOURCE ID = VOL11        ; SOURCE TYPE = VOLUME   :
1106    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1107  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1108                                              DAY OF WEEK = WEEKDAY
1109       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1110       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
1111      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1112                                              DAY OF WEEK = SATURDAY
1113       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1114       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1115      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1116                                              DAY OF WEEK = SUNDAY
1117       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1118       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1119      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1120  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1121   *** AERMET - VERSION  22112 ***
       ***                                                                  ***
       11:19:19
1122
                                PAGE  16
1123   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1124
1125                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
1126
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 SOURCE ID = VOL12        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:19:19

                            PAGE  17
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL13        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
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1165    *** AERMET - VERSION  22112 ***
        ***                                                                    ***
        11:19:19
1166
                                    PAGE  18
1167    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1168
1169                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1170
1171    SOURCE ID = VOL14        ; SOURCE TYPE = VOLUME   :
1172     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1173    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - - -
1174                                                DAY OF WEEK = WEEKDAY
1175       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1176       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1177      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1178                                                DAY OF WEEK = SATURDAY
1179       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1180       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1181      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1182                                                DAY OF WEEK = SUNDAY
1183       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1184       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1185      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1186    FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
        Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1187     *** AERMET - VERSION  22112 ***
         ***                                                                   ***
         11:19:19
1188
                                    PAGE  19
1189    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1190
1191                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1192
1193     SOURCE ID = VOL15        ; SOURCE TYPE = VOLUME   :
1194      HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1195    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - - -
1196                                                DAY OF WEEK = WEEKDAY
1197       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1198       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1199      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1200                                                DAY OF WEEK = SATURDAY
1201       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1202       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1203      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
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      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
      .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:19:19

                            PAGE  20
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL16        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .1000E+01    8  .1000E+01
       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:19:19

                            PAGE  21
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL17        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
      .0000E+00    7  .1000E+01    8  .1000E+01
```

```
1242       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1243      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1244                                              DAY OF WEEK = SATURDAY
1245       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1246       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1247      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1248                                              DAY OF WEEK = SUNDAY
1249       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1250       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1251      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1252  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1253   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       11:19:19
1254
                                  PAGE  22
1255   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1256
1257                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
1258
1259   SOURCE ID = VOL18        ; SOURCE TYPE = VOLUME   :
1260    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1261   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1262                                              DAY OF WEEK = WEEKDAY
1263       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1264       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1265      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1266                                              DAY OF WEEK = SATURDAY
1267       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1268       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1269      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1270                                              DAY OF WEEK = SUNDAY
1271       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1272       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1273      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1274  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1275   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       11:19:19
1276
                                  PAGE  23
1277   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1278
1279                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY O
```

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                    WEEK (HRDOW) *
1280
1281   SOURCE ID = VOL19        ; SOURCE TYPE = VOLUME   :
1282    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
        SCALAR   HOUR   SCALAR   HOUR   SCALAR
1283   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1284                                              DAY OF WEEK = WEEKDAY
1285      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1286      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
1287     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1288                                              DAY OF WEEK = SATURDAY
1289      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1290      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1291     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1292                                              DAY OF WEEK = SUNDAY
1293      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1294      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1295     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1296   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
       Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1297    *** AERMET - VERSION  22112 ***
        ***                                                                    ***
        11:19:19
1298
                                  PAGE  24
1299   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1300
1301                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1302
1303   SOURCE ID = VOL20        ; SOURCE TYPE = VOLUME   :
1304    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
        SCALAR   HOUR   SCALAR   HOUR   SCALAR
1305   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1306                                              DAY OF WEEK = WEEKDAY
1307      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1308      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
1309     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1310                                              DAY OF WEEK = SATURDAY
1311      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1312      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1313     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1314                                              DAY OF WEEK = SUNDAY
1315      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1316      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1317     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
          .0000E+00   23  .0000E+00   24  .0000E+00
```

```
1318  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1319   *** AERMET - VERSION  22112 ***
       ***                                                                ***
       11:19:19
1320
                                  PAGE  25
1321   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1322
1323                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1324
1325   SOURCE ID = VOL21        ; SOURCE TYPE = VOLUME   :
1326    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1327   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1328                                              DAY OF WEEK = WEEKDAY
1329      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1330      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
1331     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1332                                              DAY OF WEEK = SATURDAY
1333      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1334      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1335     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1336                                              DAY OF WEEK = SUNDAY
1337      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1338      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1339     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1340  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1341   *** AERMET - VERSION  22112 ***
       ***                                                                ***
       11:19:19
1342
                                  PAGE  26
1343   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1344
1345                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1346
1347   SOURCE ID = VOL22        ; SOURCE TYPE = VOLUME   :
1348    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1349   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1350                                              DAY OF WEEK = WEEKDAY
1351      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1352      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
1353     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1354                                              DAY OF WEEK = SATURDAY
1355      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1356      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
```

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      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
      .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:19:19

                            PAGE  27
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL23        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:19:19

                            PAGE  28
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL24        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
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1395      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1396      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
1397     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1398                                              DAY OF WEEK = SATURDAY
1399      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1400      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1401     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1402                                              DAY OF WEEK = SUNDAY
1403      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1404      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1405     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1406 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
     Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1407  *** AERMET - VERSION  22112 ***
      ***                                                                    ***
      11:19:19
1408
                                PAGE  29
1409  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1410
1411                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1412
1413  SOURCE ID = VOL25        ; SOURCE TYPE = VOLUME   :
1414   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
      SCALAR   HOUR   SCALAR   HOUR   SCALAR
1415  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1416                                              DAY OF WEEK = WEEKDAY
1417      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1418      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
1419     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1420                                              DAY OF WEEK = SATURDAY
1421      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1422      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1423     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1424                                              DAY OF WEEK = SUNDAY
1425      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1426      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1427     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1428 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
     Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1429  *** AERMET - VERSION  22112 ***
      ***                                                                    ***
      11:19:19
1430
                                PAGE  30
1431  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
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1432
1433                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1434
1435    SOURCE ID = VOL26        ; SOURCE TYPE = VOLUME   :
1436     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1437    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1438                                                DAY OF WEEK = WEEKDAY
1439       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1440       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1441      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1442                                                DAY OF WEEK = SATURDAY
1443       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1444       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1445      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1446                                                DAY OF WEEK = SUNDAY
1447       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1448       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1449      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1450    FE *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
        Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1451     *** AERMET - VERSION  22112 ***
         ***                                                                    ***
         11:19:19
1452
                                    PAGE  31
1453    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1454
1455                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1456
1457    SOURCE ID = VOL27        ; SOURCE TYPE = VOLUME   :
1458     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1459    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1460                                                DAY OF WEEK = WEEKDAY
1461       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1462       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1463      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1464                                                DAY OF WEEK = SATURDAY
1465       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1466       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1467      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1468                                                DAY OF WEEK = SUNDAY
1469       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1470       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
           .0000E+00   15  .0000E+00   16  .0000E+00
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1471      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1472   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
       Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1473    *** AERMET - VERSION  22112 ***
        ***                                                                  ***
        11:19:19
1474
                                    PAGE  32
1475    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1476
1477                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1478
1479    SOURCE ID = VOL28        ; SOURCE TYPE = VOLUME   :
1480     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1481    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1482                                                DAY OF WEEK = WEEKDAY
1483       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1484       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
1485      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1486                                                DAY OF WEEK = SATURDAY
1487       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1488       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1489      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1490                                                DAY OF WEEK = SUNDAY
1491       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1492       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1493      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1494   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
       Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1495    *** AERMET - VERSION  22112 ***
        ***                                                                  ***
        11:19:19
1496
                                    PAGE  33
1497    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1498
1499                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1500
1501    SOURCE ID = VOL29        ; SOURCE TYPE = VOLUME   :
1502     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1503    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1504                                                DAY OF WEEK = WEEKDAY
1505       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1506       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
1507      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1508                                                DAY OF WEEK = SATURDAY
1509       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
```

```
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
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                              PAGE  34
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL30        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:19:19

                              PAGE  35
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL31        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
```

```
- - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:19:19

                            PAGE  36
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                  WEEK (HRDOW) *

 SOURCE ID = VOL32        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:19:19
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                                PAGE  37
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                  WEEK (HRDOW) *

SOURCE ID = VOL33        ; SOURCE TYPE = VOLUME   :
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
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                                PAGE  38
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                  WEEK (HRDOW) *

SOURCE ID = VOL34        ; SOURCE TYPE = VOLUME   :
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
   .0000E+00    7  .0000E+00    8  .0000E+00
```

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1624       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1625      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
           .0000E+00   23  .0000E+00   24  .0000E+00
1626  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1627   *** AERMET - VERSION  22112 ***
       ***                                                                  ***
       11:19:19
1628
                                  PAGE  39
1629   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1630
1631                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1632
1633   SOURCE ID = VOL35        ; SOURCE TYPE = VOLUME   :
1634    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1635   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1636                                                DAY OF WEEK = WEEKDAY
1637       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1638       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1639      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1640                                                DAY OF WEEK = SATURDAY
1641       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1642       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1643      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1644                                                DAY OF WEEK = SUNDAY
1645       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1646       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1647      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1648  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1649   *** AERMET - VERSION  22112 ***
       ***                                                                  ***
       11:19:19
1650
                                  PAGE  40
1651   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1652
1653                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1654
1655   SOURCE ID = VOL36        ; SOURCE TYPE = VOLUME   :
1656    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1657   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1658                                                DAY OF WEEK = WEEKDAY
1659       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1660       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1661      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
           .0000E+00   23  .0000E+00   24  .0000E+00
```

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                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:19:19

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                        *** DISCRETE CARTESIAN RECEPTORS ***
                                      (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                   (METERS)

     ( 574106.6, 3725973.2,     -15.2,    2651.3,       2.0);         ( 574279.0,
     3725910.5,     -15.9,    2651.3,       2.0);
     ( 574204.4, 3725350.5,     -19.1,    2651.3,       2.0);         ( 573655.6,
     3725533.6,     -16.7,    2651.3,       2.0);
     ( 573199.4, 3725824.6,     -14.8,    2651.3,       2.0);         ( 573815.9,
     3726049.2,     -13.7,    2651.3,       2.0);
     ( 574057.4, 3725989.2,     -14.7,    2651.3,       2.0);         ( 574023.1,
     3725980.7,     -14.6,    2651.3,       2.0);
     ( 574346.5, 3725650.9,     -17.5,    2651.3,       2.0);         ( 574313.0,
     3725545.0,     -17.4,    2651.3,       2.0);
     ( 574206.8, 3725308.8,     -19.7,    2651.3,       2.0);         ( 574038.4,
     3725331.2,     -18.7,    2651.3,       2.0);
     ( 574209.1, 3725258.2,     -19.7,    2651.3,       2.0);         ( 573785.2,
     3725289.0,     -17.4,    2651.3,       2.0);
     ( 573482.6, 3725346.8,     -16.6,    2651.3,       2.0);         ( 573666.9,
     3725489.5,     -17.0,    2651.3,       2.0);
     ( 573580.6, 3725595.5,     -16.2,    2651.3,       2.0);         ( 573477.6,
     3725543.7,     -16.2,    2651.3,       2.0);
     ( 573474.2, 3725503.2,     -16.5,    2651.3,       2.0);         ( 573229.4,
     3725847.4,     -14.7,    2651.3,       2.0);
     ( 573040.9, 3725971.2,     -13.5,    2651.3,       2.0);         ( 573120.2,
     3725973.9,     -13.8,    2651.3,       2.0);
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:19:19

                            PAGE  42
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                        *** METEOROLOGICAL DAYS SELECTED FOR
                                        PROCESSING ***
                                                   (1=YES; 0=NO)

           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
           1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
           1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
```

```
1700              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                  1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1701              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1
                  1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1702              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                  1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1703              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                  1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1704              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                  1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1705              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1706
1707                  NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT
                      IS INCLUDED IN THE DATA FILE.
1708
1709
1710
1711                                  *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED
                                      CATEGORIES ***
1712                                                  (METERS/SEC)
1713
1714                                                 1.54,   3.09,   5.14,   8.23,  10.80,
1715  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1716   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       11:19:19
1717
                                    PAGE  43
1718   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1719
1720                                  *** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA
                                      ***
1721
1722       Surface file:
           ..\KTRM_V11_trimmed.sfc
           Met Version:  22112
1723       Profile file:
           ..\KTRM_V11_trimmed.PFL
1724       Surface format:
           FREE

1725       Profile format:
           FREE

1726       Surface station no.:     3104                 Upper air station no.:     3190
1727                       Name: UNKNOWN                                  Name:
                           UNKNOWN
1728                       Year:   2017                                   Year:   2017
1729
1730    First 24 hours of scalar data
1731    YR MO DY JDY HR     H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALBEDO
        REF WS   WD     HT  REF TA     HT
1732  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - -
1733    17 01 01   1 01  -21.0  0.211 -9.000 -9.000 -999.  233.     49.1  0.06   2.53   1.00
        2.86  321.   10.1  284.8    2.0
1734    17 01 01   1 02  -48.7  0.490 -9.000 -9.000 -999.  824.    264.4  0.14   2.53   1.00
        5.36  358.   10.1  285.3    2.0
1735    17 01 01   1 03  -39.8  0.400 -9.000 -9.000 -999.  613.    175.9  0.06   2.53   1.00
        5.36  294.   10.1  284.8    2.0
1736    17 01 01   1 04  -47.4  0.477 -9.000 -9.000 -999.  790.    250.2  0.14   2.53   1.00
        5.22  335.   10.1  284.8    2.0
1737    17 01 01   1 05  -55.1  0.554 -9.000 -9.000 -999.  987.    337.1  0.06   2.53   1.00
        7.20  327.   10.1  284.2    2.0
1738    17 01 01   1 06  -30.8  0.309 -9.000 -9.000 -999.  472.    104.8  0.14   2.53   1
```

```
      3.44  335.   10.1  283.8    2.0
1739  17 01 01   1 07  -15.6  0.170 -9.000 -9.000 -999.  191.     31.7  0.06   2.53
      2.33  329.   10.1  283.8    2.0
1740  17 01 01   1 08   -7.2  0.185 -9.000 -9.000 -999.  191.     79.0  0.06   2.53   0.50
      2.47  326.   10.1  285.3    2.0
1741  17 01 01   1 09   46.3  0.265  0.707  0.005  276.  326.    -36.1  0.06   2.53   0.31
      3.00  303.   10.1  285.9    2.0
1742  17 01 01   1 10  113.8  0.336  1.418  0.005  907.  468.    -30.2  0.06   2.53   0.24
      3.76  300.   10.1  288.1    2.0
1743  17 01 01   1 11  159.2  0.526  1.708  0.005 1133.  915.    -82.7  0.06   2.53   0.22
      6.27  311.   10.1  289.2    2.0
1744  17 01 01   1 12  179.8  0.454  1.860  0.005 1296.  739.    -47.0  0.06   2.53   0.21
      5.24  315.   10.1  289.8    2.0
1745  17 01 01   1 13  175.0  0.302  1.886  0.005 1387.  416.    -14.2  0.06   2.53   0.21
      3.20  297.   10.1  290.3    2.0
1746  17 01 01   1 14  145.9  0.251  1.851  0.005 1573.  302.     -9.7  0.06   2.53   0.23
      2.50  322.   10.1  292.0    2.0
1747  17 01 01   1 15   91.5  0.235  1.599  0.005 1617.  273.    -12.8  0.06   2.53   0.26
      2.42  316.   10.1  291.4    2.0
1748  17 01 01   1 16   18.8  0.259  0.950  0.005 1643.  316.    -83.0  0.14   2.53   0.36
      2.57  338.   10.1  291.4    2.0
1749  17 01 01   1 17  -41.4  0.440 -9.000 -9.000 -999.  701.    213.3  0.14   2.53   0.66
      4.83  344.   10.1  288.8    2.0
1750  17 01 01   1 18  -40.2  0.408 -9.000 -9.000 -999.  626.    182.7  0.14   2.53   1.00
      4.49  356.   10.1  287.5    2.0
1751  17 01 01   1 19  -33.3  0.337 -9.000 -9.000 -999.  473.    124.8  0.14   2.53   1.00
      3.74  352.   10.1  287.0    2.0
1752  17 01 01   1 20  -19.3  0.194 -9.000 -9.000 -999.  219.     41.4  0.06   2.53   1.00
      2.64  326.   10.1  285.3    2.0
1753  17 01 01   1 21  -29.0  0.291 -9.000 -9.000 -999.  377.     93.2  0.14   2.53   1.00
      3.25  336.   10.1  285.3    2.0
1754  17 01 01   1 22  -11.2  0.142 -9.000 -9.000 -999.  145.     23.3  0.06   2.53   1.00
      2.01  272.   10.1  283.8    2.0
1755  17 01 01   1 23  -25.8  0.259 -9.000 -9.000 -999.  316.     73.6  0.06   2.53   1.00
      3.47  301.   10.1  285.9    2.0
1756  17 01 01   1 24  -13.9  0.162 -9.000 -9.000 -999.  161.     29.0  0.09   2.53   1.00
      2.05  250.   10.1  283.1    2.0
1757
1758
1759   First hour of profile data
1760   YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
1761   17 01 01 01   10.1 1  321.    2.86   284.9   99.0  -99.00  -99.00
1762
1763   F indicates top of profile (=1) or below (=0)
1764 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
     Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***       07/18/25
1765   *** AERMET - VERSION  22112 ***
       ***                                                              ***
       11:19:19
1766
                                  PAGE  44
1767   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1768
1769                              *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION   VALUES
                                  FOR SOURCE GROUP:  ALL      ***
1770                                  INCLUDING SOURCE(S):     VOL1        , VOL2        ,
                                      VOL3        , VOL4        , VOL5        ,
1771                  VOL6        , VOL7        , VOL8        , VOL9        , VOL10       ,
                      VOL11       , VOL12       , VOL13       ,
1772                  VOL14       , VOL15       , VOL16       , VOL17       , VOL18       ,
                      VOL19       , VOL20       , VOL21       ,
1773                  VOL22       , VOL23       , VOL24       , VOL25       , VOL26       ,
                      VOL27       , VOL28       ,  . . .      ,
1774
1775                                        *** DISCRETE CARTESIAN RECEPTOR POINTS
1776
```

```
                                    ** CONC OF CO       IN
                                    MICROGRAMS/M**3

     X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
     Y-COORD (M)        CONC     (YYMMDDHH)
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - -
       574106.64   3725973.24       18.78731  (17011107)               574278.99
       3725910.47       17.73112  (21011407)
       574204.36   3725350.47       28.29159  (19011407)               573655.61
       3725533.56       19.08660  (18020107)
       573199.43   3725824.57        8.86063  (17012308)               573815.91
       3726049.22       14.24122  (18022207)
       574057.43   3725989.22       18.08834  (21012507)               574023.10
       3725980.72       18.83159  (21012507)
       574346.45   3725650.86       19.48433  (21020107)               574312.95
       3725545.02       21.36397  (19012807)
       574206.77   3725308.84       22.37394  (19011407)               574038.43
       3725331.17       24.62753  (18010307)
       574209.11   3725258.17       18.53320  (18010307)               573785.25
       3725289.00       10.50195  (21020407)
       573482.56   3725346.84        8.25413  (22020307)               573666.90
       3725489.52       14.83961  (21012208)
       573580.56   3725595.53       18.54312  (18020107)               573477.56
       3725543.69       12.75618  (18020107)
       573474.22   3725503.19       11.91953  (22020307)               573229.37
       3725847.44        9.13853  (21122808)
       573040.93   3725971.18        7.24435  (17101907)               573120.15
       3725973.92        7.17318  (17101907)
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***       07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                            ***
 11:19:19

                            PAGE  45
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                            *** THE   1ST HIGHEST  8-HR AVERAGE CONCENTRATION   VALUES
                            FOR SOURCE GROUP:  ALL      ***
                                INCLUDING SOURCE(S):     VOL1        , VOL2        ,
                                VOL3        , VOL4        , VOL5        ,
               VOL6        , VOL7        , VOL8        , VOL9        , VOL10       ,
               VOL11       , VOL12       , VOL13       ,
               VOL14       , VOL15       , VOL16       , VOL17       , VOL18       ,
               VOL19       , VOL20       , VOL21       ,
               VOL22       , VOL23       , VOL24       , VOL25       , VOL26       ,
               VOL27       , VOL28       ,  . . .      ,

                                  *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                    ** CONC OF CO       IN
                                    MICROGRAMS/M**3                          **

     X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
     Y-COORD (M)        CONC     (YYMMDDHH)
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - -
       574106.64   3725973.24       5.16848c (21012208)               574278.99
       3725910.47       4.47270c (21012208)
       574204.36   3725350.47       8.56813  (17011316)               573655.61
       3725533.56       4.81963c (21012208)
       573199.43   3725824.57       1.75152  (21122808)               573815.91
       3726049.22       3.24833c (21012208)
       574057.43   3725989.22       4.74617c (21012208)               574023.10
       3725980.72       5.14300c (21012208)
```

```
574346.45   3725650.86        4.16504  (22120508)                574312.95
3725545.02        4.83607  (22120508)
574206.77   3725308.84        5.62904m (22122108)                574038.4
3725331.17        6.52760m (22122108)
574209.11   3725258.17        4.61599m (22122108)                573785.25
3725289.00        2.64395c (21012208)
573482.56   3725346.84        1.54869c (21012208)                573666.90
3725489.52        3.91923c (21012208)
573580.56   3725595.53        4.02212c (21012208)                573477.56
3725543.69        2.35208  (17010608)
573474.22   3725503.19        2.11077c (21012208)                573229.37
3725847.44        1.84603  (21122808)
573040.93   3725971.18        1.38293  (21120908)                573120.15
3725973.92        1.65170  (21120908)
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                ***
 11:19:19

                              PAGE  46
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                          *** THE SUMMARY OF HIGHEST  1-HR RESULTS
                                          ***


                                   ** CONC OF CO       IN
                                   MICROGRAMS/M**3                          **


                                                  DATE

                                                    NETWORK
GROUP ID                           AVERAGE CONC     (YYMMDDHH)             RECEPTOR  (XR,
YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS      28.29159  ON 19011407: AT (  574204.36,
3725350.47,   -19.13,  2651.27,    2.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                ***
 11:19:19

                              PAGE  47
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                          *** THE SUMMARY OF HIGHEST  8-HR RESULTS
                                          ***


                                   ** CONC OF CO       IN
                                   MICROGRAMS/M**3                          **


                                                  DATE
```

```
                                                                NETWORK
GROUP ID                          AVERAGE CONC     (YYMMDDHH)             RECEPTOR (X, Y,
YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS       8.56813  ON 17011316: AT (  574204.36,
3725350.47,   -19.13,  2651.27,    2.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:19:19

                             PAGE  48
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of          251 Warning Message(s)
 A Total of         1671 Informational Message(s)

 A Total of        43800 Hours Were Processed

 A Total of          763 Calm Hours Identified

 A Total of          908 Missing Hours Identified (  2.07 Percent)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W340     676       PRBASE: Possible Error in PROFBASE Input:  Value is < 0
 PROFBASE
 ME W186     677       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold
 used           0.50
 ME W187     677       MEOPEN: ADJ_U* Option for Stable Low Winds used in
 AERMET
 CN W733      56         AVER: 8-hr avg, < 6 hours of data, calms policy used.
 2017010308
 CN W733     232         AVER: 8-hr avg, < 6 hours of data, calms policy used.
 2017011016
 CN W733    1168         AVER: 8-hr avg, < 6 hours of data, calms policy used.
 2017021816
 CN W733    1960         AVER: 8-hr avg, < 6 hours of data, calms policy used.
 2017032316
 CN W733    1984         AVER: 8-hr avg, < 6 hours of data, calms policy used.
 2017032416
 CN W733    2000         AVER: 8-hr avg, < 6 hours of data, calms policy used.
 2017032508
 CN W733    2032         AVER: 8-hr avg, < 6 hours of data, calms policy used.
 2017032616
 CN W733    2184         AVER: 8-hr avg, < 6 hours of data, calms policy used.
 2017040124
 CN W733    3832         AVER: 8-hr avg, < 6 hours of data, calms policy used.
```

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      2017060916
1899  CN W733    5128        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017080216
1900  CN W733    5568        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017082024
1901  CN W733    5632        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017082316
1902  CN W733    6040        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017090916
1903  CN W733    6048        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017090924
1904  CN W733    6136        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017091316
1905  CN W733    6304        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017092016
1906  CN W733    6496        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017092816
1907  CN W733    6784        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017101016
1908  CN W733    6904        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017101516
1909  CN W733    6960        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017101724
1910  CN W733    6968        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017101808
1911  CN W733    8728        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017123016
1912  CN W733    8736        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017123024
1913  CN W733    9096        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018011424
1914  CN W733    9480        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018013024
1915  CN W733    9704        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018020908
1916  CN W733    9784        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018021216
1917  CN W733    9824        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018021408
1918  CN W733    9904        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018021716
1919  CN W733    9992        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018022108
1920  CN W733   10040        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018022308
1921  CN W733   10072        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018022416
1922  CN W733   10096        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018022516
1923  CN W733   10200        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018030124
1924  CN W733   10232        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018030308
1925  CN W733   10328        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018030708
1926  CN W733   10352        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018030808
1927  CN W733   10360        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018030816
1928  CN W733   10368        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018030824
1929  CN W733   10448        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018031208
1930  CN W733   10456        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018031216
1931  CN W733   10624        AVER: 8-hr avg, < 6 hours of data, calms policy used.
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2018031916
1932 CN W733 12392 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2018060108
1933 CN W733 12400 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2018060116
1934 CN W733 14488 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2018082716
1935 CN W733 15888 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2018102424
1936 CN W733 15896 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2018102508
1937 CN W733 16392 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2018111424
1938 CN W733 16696 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2018112716
1939 CN W733 16704 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2018112724
1940 CN W733 16712 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2018112808
1941 CN W733 16720 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2018112816
1942 CN W733 18544 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019021216
1943 CN W733 18904 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019022716
1944 CN W733 18952 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019030116
1945 CN W733 19048 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019030516
1946 CN W733 19056 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019030524
1947 CN W733 19136 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019030908
1948 CN W733 19168 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019031016
1949 CN W733 19192 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019031116
1950 CN W733 19208 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019031208
1951 CN W733 19216 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019031216
1952 CN W733 19336 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019031716
1953 CN W733 19376 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019031908
1954 CN W733 19408 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019032016
1955 CN W733 19424 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019032108
1956 CN W733 19432 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019032116
1957 CN W733 19456 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019032216
1958 CN W733 19480 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019032316
1959 CN W733 19504 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019032416
1960 CN W733 19512 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019032424
1961 CN W733 19528 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019032516
1962 CN W733 19552 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019032616
1963 CN W733 19560 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019032624
1964 CN W733 19568 AVER: 8-hr avg, < 6 hours of data, calms policy used.

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      2019032708
1965  CN W733   19576        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019032716
1966  CN W733   19648        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019033016
1967  CN W733   19656        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019033024
1968  CN W733   20000        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019041408
1969  CN W733   20080        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019041716
1970  CN W733   20096        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019041808
1971  CN W733   20104        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019041816
1972  CN W733   20320        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019042716
1973  CN W733   20344        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019042816
1974  CN W733   20416        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019050116
1975  CN W733   20560        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019050716
1976  CN W733   20704        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019051316
1977  CN W733   20712        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019051324
1978  CN W733   20784        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019051624
1979  CN W733   20840        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019051908
1980  CN W733   20848        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019051916
1981  CN W733   20856        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019051924
1982  CN W733   20936        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019052308
1983  CN W733   21232        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019060416
1984  CN W733   21256        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019060516
1985  CN W733   21296        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019060708
1986  CN W733   21328        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019060816
1987  CN W733   21360        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019060924
1988  CN W733   21584        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019061908
1989  CN W733   21592        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019061916
1990  CN W733   21704        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019062408
1991  CN W733   21712        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019062416
1992  CN W733   21752        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019062608
1993  CN W733   21880        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019070116
1994  CN W733   21904        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019070216
1995  CN W733   21976        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019070516
1996  CN W733   22016        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019070708
1997  CN W733   22064        AVER: 8-hr avg, < 6 hours of data, calms policy used.
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      2019070908
1998  CN W733   22072        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019070916
1999  CN W733   22120        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019071116
2000  CN W733   22184        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019071408
2001  CN W733   22192        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019071416
2002  CN W733   22840        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019081016
2003  CN W733   23192        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019082508
2004  CN W733   23392        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019090216
2005  CN W733   23416        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019090316
2006  CN W733   23488        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019090616
2007  CN W733   23536        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019090816
2008  CN W733   23560        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019090916
2009  CN W733   23672        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019091408
2010  CN W733   23696        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019091508
2011  CN W733   23752        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019091716
2012  CN W733   23896        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019092316
2013  CN W733   23992        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019092716
2014  CN W733   24016        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019092816
2015  CN W733   24040        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019092916
2016  CN W733   24200        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019100608
2017  CN W733   24208        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019100616
2018  CN W733   24216        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019100624
2019  CN W733   24248        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019100808
2020  CN W733   24280        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019100916
2021  CN W733   24400        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019101416
2022  CN W733   24448        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019101616
2023  CN W733   24568        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019102116
2024  CN W733   24808        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019103116
2025  CN W733   25576        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019120216
2026  CN W733   26280        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019123124
2027  MX W450   26281      CHKDAT: Record Out of Sequence in Meteorological File at:
      21010101
2028  MX W450   26281      CHKDAT: Record Out of Sequence in Meteorological File at:    1
      year gap
2029  CN W733   26488        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021010916
2030  CN W733   26512        AVER: 8-hr avg, < 6 hours of data, calms policy used.
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      2021011016
2031  CN W733   26536        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021011116
2032  CN W733   26560        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021011216
2033  CN W733   26776        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021012116
2034  CN W733   26792        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021012208
2035  CN W733   26824        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021012316
2036  CN W733   26848        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021012416
2037  CN W733   26872        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021012516
2038  CN W733   26992        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021013016
2039  CN W733   27000        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021013024
2040  CN W733   27016        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021013116
2041  CN W733   27024        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021013124
2042  CN W733   27176        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021020708
2043  CN W733   28024        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021031416
2044  CN W733   28216        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021032216
2045  CN W733   28408        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021033016
2046  CN W733   28504        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021040316
2047  CN W733   28576        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021040616
2048  CN W733   28624        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021040816
2049  CN W733   28664        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021041008
2050  CN W733   28672        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021041016
2051  CN W733   28712        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021041208
2052  CN W733   28960        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021042216
2053  CN W733   28984        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021042316
2054  CN W733   29008        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021042416
2055  CN W733   29960        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021060308
2056  CN W733   29968        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021060316
2057  CN W733   30056        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021060708
2058  CN W733   30064        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021060716
2059  CN W733   30400        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021062116
2060  CN W733   30496        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021062516
2061  CN W733   30568        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021062816
2062  CN W733   30752        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021070608
2063  CN W733   30760        AVER: 8-hr avg, < 6 hours of data, calms policy used.
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      2021070616
2064  CN W733   30792        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021070724
2065  CN W733   30800        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021070808
2066  CN W733   30808        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021070816
2067  CN W733   31496        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021080608
2068  CN W733   31504        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021080616
2069  CN W733   31544        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021080808
2070  CN W733   31552        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021080816
2071  CN W733   31624        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021081116
2072  CN W733   31648        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021081216
2073  CN W733   31728        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021081524
2074  CN W733   32128        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021090116
2075  CN W733   32992        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021100716
2076  CN W733   33016        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021100816
2077  CN W733   33040        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021100916
2078  CN W733   34544        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021121108
2079  CN W733   34568        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021121208
2080  CN W733   34584        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021121224
2081  CN W733   34592        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021121308
2082  CN W733   34664        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021121608
2083  CN W733   35104        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022010316
2084  CN W733   35800        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022020116
2085  CN W733   36328        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022022316
2086  CN W733   36648        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022030824
2087  CN W733   37192        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022033116
2088  CN W733   37264        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022040316
2089  CN W733   37792        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022042516
2090  CN W733   37960        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022050216
2091  CN W733   38248        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022051416
2092  CN W733   38512        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022052516
2093  CN W733   38960        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022061308
2094  CN W733   38968        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022061316
2095  CN W733   38992        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022061416
2096  CN W733   39272        AVER: 8-hr avg, < 6 hours of data, calms policy used.
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2022062608
2097 CN W733 40384 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022081116
2098 CN W733 40928 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022090308
2099 CN W733 40960 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022090416
2100 CN W733 41080 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022090916
2101 CN W733 41088 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022090924
2102 CN W733 41096 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022091008
2103 CN W733 41104 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022091016
2104 CN W733 41112 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022091024
2105 CN W733 41120 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022091108
2106 CN W733 41152 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022091216
2107 CN W733 41224 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022091516
2108 CN W733 41392 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022092216
2109 CN W733 41400 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022092224
2110 CN W733 41408 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022092308
2111 CN W733 41544 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022092824
2112 CN W733 41552 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022092908
2113 CN W733 42616 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022111216
2114 CN W733 42632 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022111308
2115 CN W733 42640 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022111316
2116 CN W733 42664 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022111416
2117 CN W733 42688 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022111516
2118 CN W733 42736 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022111716
2119 CN W733 42808 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022112016
2120 CN W733 42880 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022112316
2121 CN W733 42888 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022112324
2122 CN W733 42896 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022112408
2123 CN W733 42968 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022112708
2124 CN W733 43104 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022120224
2125 CN W733 43120 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022120316
2126 CN W733 43216 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022120716
2127 CN W733 43256 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022120908
2128 CN W733 43264 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022120916
2129 CN W733 43272 AVER: 8-hr avg, < 6 hours of data, calms policy used.

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      2022120924
2130  CN W733   43280         AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022121008
2131  CN W733   43288         AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022121016
2132  CN W733   43448         AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022121708
2133  CN W733   43512         AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022121924
2134  CN W733   43520         AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022122008
2135  CN W733   43704         AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022122724
2136  CN W733   43728         AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022122824
2137  CN W733   43736         AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022122908
2138
2139     ************************************
2140     *** AERMOD Finishes Successfully ***
2141     ************************************
2142
2143
```

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**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 13.0.0
** Lakes Environmental Software Inc.
** Date: 7/17/2025
** File: C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const NOx\16552-02 Const
NOx.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02
   MODELOPT DFAULT CONC
   AVERTIME 1
   URBANOPT 2492442 Riverside_County
   POLLUTID NOX
   RUNORNOT RUN
   ERRORFIL "16552-02 Const NOx.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     573500.180  3725886.220      -15.810
   LOCATION VOL2         VOLUME     573500.381  3725789.820      -16.120
   LOCATION VOL3         VOLUME     573597.602  3725886.190      -16.050
   LOCATION VOL4         VOLUME     573597.803  3725789.790      -16.360
   LOCATION VOL5         VOLUME     573694.930  3725886.254      -16.110
   LOCATION VOL6         VOLUME     573695.131  3725789.853      -16.280
   LOCATION VOL7         VOLUME     573792.553  3725789.824      -16.410
   LOCATION VOL8         VOLUME     573792.352  3725886.224      -16.330
   LOCATION VOL9         VOLUME     573890.171  3725886.254      -15.450
   LOCATION VOL10        VOLUME     573890.372  3725789.853      -15.750
   LOCATION VOL11        VOLUME     573987.794  3725789.824      -15.210
   LOCATION VOL12        VOLUME     573987.593  3725886.224      -15.520
   LOCATION VOL13        VOLUME     574085.292  3725886.133      -15.630
   LOCATION VOL14        VOLUME     574085.493  3725789.733      -15.890
   LOCATION VOL15        VOLUME     574182.915  3725789.703      -16.000
   LOCATION VOL16        VOLUME     574182.714  3725886.103      -15.750
   LOCATION VOL17        VOLUME     573695.175  3725695.674      -16.510
   LOCATION VOL18        VOLUME     573695.376  3725599.274      -16.700
   LOCATION VOL19        VOLUME     573792.799  3725599.244      -16.820
   LOCATION VOL20        VOLUME     573792.597  3725695.644      -16.620
   LOCATION VOL21        VOLUME     573890.309  3725695.354      -16.590
   LOCATION VOL22        VOLUME     573890.510  3725598.954      -16.930
   LOCATION VOL23        VOLUME     573987.932  3725598.925      -17.030
   LOCATION VOL24        VOLUME     573987.731  3725695.325      -16.730
   LOCATION VOL25        VOLUME     574085.442  3725695.035      -16.760
   LOCATION VOL26        VOLUME     574085.643  3725598.635      -17.100
   LOCATION VOL27        VOLUME     574183.066  3725598.605      -17.220
   LOCATION VOL28        VOLUME     574182.864  3725695.005      -16.880
   LOCATION VOL29        VOLUME     573895.419  3725502.137      -17.650
   LOCATION VOL30        VOLUME     573895.620  3725405.737      -18.290
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   LOCATION VOL31        VOLUME     573993.042  3725405.707      -18.630
   LOCATION VOL32        VOLUME     573992.841  3725502.107      -17.860
   LOCATION VOL33        VOLUME     574085.442  3725503.095      -17.950
   LOCATION VOL34        VOLUME     574085.643  3725406.695      -18.800
   LOCATION VOL35        VOLUME     574183.066  3725406.665      -18.970
   LOCATION VOL36        VOLUME     574182.864  3725503.066      -18.220
** Source Parameters **
   SRCPARAM VOL1         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL2         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL3         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL4         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL5         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL6         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL7         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL8         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL9         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL10        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL11        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL12        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL13        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL14        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL15        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL16        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL17        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL18        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL19        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL20        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL21        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL22        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL23        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL24        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL25        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL26        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL27        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL28        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL29        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL30        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL31        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL32        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL33        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL34        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL35        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL36        0.0198417491     5.000    22.640     1.400
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL2         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL6         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
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   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL11        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL12        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL24        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL28        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
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   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
```

```
**
RE STARTING
   INCLUDED "16552-02 Const NOx.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE ..\KTRM_V11_trimmed.sfc
   PROFFILE ..\KTRM_V11_trimmed.PFL
   SURFDATA 3104 2017
   UAIRDATA 3190 2017
   PROFBASE -36.04 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "16552-02 CONST NOX.AD\01H1GALL.PLT" 31
   SUMMFILE "16552-02 Const NOx.sum"
OU FINISHED
**
**************************************
** Project Parameters
**************************************
** PROJCTN  CoordinateSystemUTM
** DESCPTN  UTM: Universal Transverse Mercator
** DATUM    North American Datum 1983
** DTMRGN   CONUS
** UNITS    m
** ZONE     11
** ZONEINX  0
**

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**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 13.0.0
** Lakes Environmental Software Inc.
** Date: 7/17/2025
** File: C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const NOx\16552-02 Const
NOx.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02
   MODELOPT DFAULT CONC
   AVERTIME 1
   URBANOPT 2492442 Riverside_County
   POLLUTID NOX
   RUNORNOT RUN
   ERRORFIL "16552-02 Const NOx.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     573500.180  3725886.220      -15.810
   LOCATION VOL2         VOLUME     573500.381  3725789.820      -16.120
   LOCATION VOL3         VOLUME     573597.602  3725886.190      -16.050
   LOCATION VOL4         VOLUME     573597.803  3725789.790      -16.360
   LOCATION VOL5         VOLUME     573694.930  3725886.254      -16.110
   LOCATION VOL6         VOLUME     573695.131  3725789.853      -16.280
   LOCATION VOL7         VOLUME     573792.553  3725789.824      -16.410
   LOCATION VOL8         VOLUME     573792.352  3725886.224      -16.330
   LOCATION VOL9         VOLUME     573890.171  3725886.254      -15.450
   LOCATION VOL10        VOLUME     573890.372  3725789.853      -15.750
   LOCATION VOL11        VOLUME     573987.794  3725789.824      -15.210
   LOCATION VOL12        VOLUME     573987.593  3725886.224      -15.520
   LOCATION VOL13        VOLUME     574085.292  3725886.133      -15.630
   LOCATION VOL14        VOLUME     574085.493  3725789.733      -15.890
   LOCATION VOL15        VOLUME     574182.915  3725789.703      -16.000
   LOCATION VOL16        VOLUME     574182.714  3725886.103      -15.750
   LOCATION VOL17        VOLUME     573695.175  3725695.674      -16.510
   LOCATION VOL18        VOLUME     573695.376  3725599.274      -16.700
   LOCATION VOL19        VOLUME     573792.799  3725599.244      -16.820
   LOCATION VOL20        VOLUME     573792.597  3725695.644      -16.620
   LOCATION VOL21        VOLUME     573890.309  3725695.354      -16.590
   LOCATION VOL22        VOLUME     573890.510  3725598.954      -16.930
   LOCATION VOL23        VOLUME     573987.932  3725598.925      -17.030
   LOCATION VOL24        VOLUME     573987.731  3725695.325      -16.730
   LOCATION VOL25        VOLUME     574085.442  3725695.035      -16.760
   LOCATION VOL26        VOLUME     574085.643  3725598.635      -17.100
   LOCATION VOL27        VOLUME     574183.066  3725598.605      -17.220
   LOCATION VOL28        VOLUME     574182.864  3725695.005      -16.880
   LOCATION VOL29        VOLUME     573895.419  3725502.137      -17.650
   LOCATION VOL30        VOLUME     573895.620  3725405.737      -18.290
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   LOCATION VOL31        VOLUME     573993.042  3725405.707      -18.630
   LOCATION VOL32        VOLUME     573992.841  3725502.107      -17.860
   LOCATION VOL33        VOLUME     574085.442  3725503.095      -17.950
   LOCATION VOL34        VOLUME     574085.643  3725406.695      -18.800
   LOCATION VOL35        VOLUME     574183.066  3725406.665      -18.970
   LOCATION VOL36        VOLUME     574182.864  3725503.066      -18.220
** Source Parameters **
   SRCPARAM VOL1         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL2         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL3         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL4         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL5         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL6         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL7         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL8         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL9         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL10        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL11        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL12        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL13        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL14        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL15        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL16        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL17        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL18        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL19        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL20        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL21        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL22        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL23        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL24        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL25        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL26        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL27        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL28        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL29        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL30        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL31        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL32        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL33        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL34        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL35        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL36        0.0198417491     5.000    22.640     1.400
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL2         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL6         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
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   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL11        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL12        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL24        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL28        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
```

```
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
****************************************
**
```

```
**
RE STARTING
   INCLUDED "16552-02 Const NOx.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE ..\KTRM_V11_trimmed.sfc
   PROFFILE ..\KTRM_V11_trimmed.PFL
   SURFDATA 3104 2017
   UAIRDATA 3190 2017
   PROFBASE -36.04 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "16552-02 CONST NOX.AD\01H1GALL.PLT" 31
   SUMMFILE "16552-02 Const NOx.sum"
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            3 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
              ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W340     675       PRBASE: Possible Error in PROFBASE Input:  Value is < 0
 PROFBASE
 ME W186     676       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold
 used           0.50
 ME W187     676       MEOPEN: ADJ_U* Option for Stable Low Winds used in
 AERMET

 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************

FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:03:55

                              PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
```

```
                                        ***     MODEL SETUP OPTIONS SUMMARY       ***
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - -

** Model Options Selected:
     * Model Uses Regulatory DEFAULT Options
     * Model Is Setup For Calculation of Average CONCentration Values.
     * NO GAS DEPOSITION Data Provided.
     * NO PARTICLE DEPOSITION Data Provided.
     * Model Uses NO DRY DEPLETION. DDPLETE  =  F
     * Model Uses NO WET DEPLETION. WETDPLT  =  F
     * Stack-tip Downwash.
     * Model Accounts for ELEVated Terrain Effects.
     * Use Calms Processing Routine.
     * Use Missing Data Processing Routine.
     * No Exponential Decay.
     * Model Uses URBAN Dispersion Algorithm for the SBL for    36 Source(s),
       for Total of    1 Urban Area(s):
  Urban Population =   2492442.0 ;  Urban Roughness Length =  1.000 m
     * Urban Roughness Length of 1.0 Meter Used.
     * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
     * CCVR_Sub - Meteorological data includes CCVR substitutions
     * TEMP_Sub - Meteorological data includes TEMP substitutions
     * Model Assumes No FLAGPOLE Receptor Heights.
     * The User Specified a Pollutant Type of: NOX

**Model Calculates  1 Short Term Average(s) of:   1-HR

**This Run Includes:     36 Source(s);       1 Source Group(s); and      22 Receptor(s)

               with:      0 POINT(s), including
                          0 POINTCAP(s) and      0 POINTHOR(s)
                and:     36 VOLUME source(s)
                and:      0 AREA type source(s)
                and:      0 LINE source(s)
                and:      0 RLINE/RLINEXT source(s)
                and:      0 OPENPIT source(s)
                and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                and:      0 SWPOINT source(s)


**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date:  22112

**Output Options Selected:
         Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
         Keyword)
         Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
         Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                m for Missing Hours
                                                                b for Both Calm and
                                                                Missing Hours

**Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =   -36.04 ;  Decay Coef.
=    0.000     ;  Rot. Angle =     0.0
                  Emission Units = GRAMS/SEC                                ;  Emission
                  Rate Unit Factor =   0.10000E+07
                  Output Units   = MICROGRAMS/M**3

**Approximate Storage Requirements of Model =      3.5 MB of RAM.

**Input Runstream File:
aermod.inp
```

```
**Output Print File:
aermod.out

**Detailed Error/Message File:   16552-02 Const
NOx.err
**File for Summary of Results:   16552-02 Const
NOx.sum
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***       07/17/25
*** AERMET - VERSION  22112 ***
***                                                                  ***
11:03:55

                              PAGE   2
*** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


                                                *** VOLUME SOURCE DATA ***

                NUMBER EMISSION RATE                      BASE    RELEASE    INIT.
                INIT.   URBAN  EMISSION RATE   AIRCRAFT
  SOURCE         PART.  (GRAMS/SEC)     X        Y      ELEV.   HEIGHT      SY
  SZ     SOURCE  SCALAR VARY
    ID           CATS.               (METERS) (METERS) (METERS) (METERS) (METERS)
    (METERS)              BY
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - -

VOL1             0   0.19842E-01  573500.2 3725886.2   -15.8     5.00    22.64
1.40     YES   HRDOW            NO
VOL2             0   0.19842E-01  573500.4 3725789.8   -16.1     5.00    22.64
1.40     YES   HRDOW            NO
VOL3             0   0.19842E-01  573597.6 3725886.2   -16.1     5.00    22.64
1.40     YES   HRDOW            NO
VOL4             0   0.19842E-01  573597.8 3725789.8   -16.4     5.00    22.64
1.40     YES   HRDOW            NO
VOL5             0   0.19842E-01  573694.9 3725886.3   -16.1     5.00    22.64
1.40     YES   HRDOW            NO
VOL6             0   0.19842E-01  573695.1 3725789.9   -16.3     5.00    22.64
1.40     YES   HRDOW            NO
VOL7             0   0.19842E-01  573792.6 3725789.8   -16.4     5.00    22.64
1.40     YES   HRDOW            NO
VOL8             0   0.19842E-01  573792.4 3725886.2   -16.3     5.00    22.64
1.40     YES   HRDOW            NO
VOL9             0   0.19842E-01  573890.2 3725886.3   -15.5     5.00    22.64
1.40     YES   HRDOW            NO
VOL10            0   0.19842E-01  573890.4 3725789.9   -15.8     5.00    22.64
1.40     YES   HRDOW            NO
VOL11            0   0.19842E-01  573987.8 3725789.8   -15.2     5.00    22.64
1.40     YES   HRDOW            NO
VOL12            0   0.19842E-01  573987.6 3725886.2   -15.5     5.00    22.64
1.40     YES   HRDOW            NO
VOL13            0   0.19842E-01  574085.3 3725886.1   -15.6     5.00    22.64
1.40     YES   HRDOW            NO
VOL14            0   0.19842E-01  574085.5 3725789.7   -15.9     5.00    22.64
1.40     YES   HRDOW            NO
VOL15            0   0.19842E-01  574182.9 3725789.7   -16.0     5.00    22.64
1.40     YES   HRDOW            NO
VOL16            0   0.19842E-01  574182.7 3725886.1   -15.8     5.00    22.64
1.40     YES   HRDOW            NO
VOL17            0   0.19842E-01  573695.2 3725695.7   -16.5     5.00    22.64
1.40     YES   HRDOW            NO
VOL18            0   0.19842E-01  573695.4 3725599.3   -16.7     5.00    22.64
1.40     YES   HRDOW            NO
```

```
814   VOL19            0   0.19842E-01  573792.8 3725599.2   -16.8     5.00    22.64
      1.40     YES   HRDOW            NO
815   VOL20            0   0.19842E-01  573792.6 3725695.6   -16.6     5.00    22.64
      1.40     YES   HRDOW            NO
816   VOL21            0   0.19842E-01  573890.3 3725695.4   -16.6     5.00    22.64
      1.40     YES   HRDOW            NO
817   VOL22            0   0.19842E-01  573890.5 3725599.0   -16.9     5.00    22.64
      1.40     YES   HRDOW            NO
818   VOL23            0   0.19842E-01  573987.9 3725598.9   -17.0     5.00    22.64
      1.40     YES   HRDOW            NO
819   VOL24            0   0.19842E-01  573987.7 3725695.3   -16.7     5.00    22.64
      1.40     YES   HRDOW            NO
820   VOL25            0   0.19842E-01  574085.4 3725695.0   -16.8     5.00    22.64
      1.40     YES   HRDOW            NO
821   VOL26            0   0.19842E-01  574085.6 3725598.6   -17.1     5.00    22.64
      1.40     YES   HRDOW            NO
822   VOL27            0   0.19842E-01  574183.1 3725598.6   -17.2     5.00    22.64
      1.40     YES   HRDOW            NO
823   VOL28            0   0.19842E-01  574182.9 3725695.0   -16.9     5.00    22.64
      1.40     YES   HRDOW            NO
824   VOL29            0   0.19842E-01  573895.4 3725502.1   -17.7     5.00    22.64
      1.40     YES   HRDOW            NO
825   VOL30            0   0.19842E-01  573895.6 3725405.7   -18.3     5.00    22.64
      1.40     YES   HRDOW            NO
826   VOL31            0   0.19842E-01  573993.0 3725405.7   -18.6     5.00    22.64
      1.40     YES   HRDOW            NO
827   VOL32            0   0.19842E-01  573992.8 3725502.1   -17.9     5.00    22.64
      1.40     YES   HRDOW            NO
828   VOL33            0   0.19842E-01  574085.4 3725503.1   -17.9     5.00    22.64
      1.40     YES   HRDOW            NO
829   VOL34            0   0.19842E-01  574085.6 3725406.7   -18.8     5.00    22.64
      1.40     YES   HRDOW            NO
830   VOL35            0   0.19842E-01  574183.1 3725406.7   -19.0     5.00    22.64
      1.40     YES   HRDOW            NO
831   VOL36            0   0.19842E-01  574182.9 3725503.1   -18.2     5.00    22.64
      1.40     YES   HRDOW            NO
832   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
833    *** AERMET - VERSION  22112 ***
       ***                                                                ***
       11:03:55
834
                                PAGE   3
835    *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
836
837
838                                          *** SOURCE IDs DEFINING SOURCE GROUPS ***
839
840    SRCGROUP ID                                          SOURCE IDs
841    -----------                                          ----------
842
843
844     ALL        VOL1        , VOL2        , VOL3        , VOL4        , VOL5        ,
       VOL6        , VOL7        , VOL8        ,
845
846                VOL9        , VOL10       , VOL11       , VOL12       , VOL13       ,
                   VOL14       , VOL15       , VOL16       ,
847
848                VOL17       , VOL18       , VOL19       , VOL20       , VOL21       ,
                   VOL22       , VOL23       , VOL24       ,
849
850                VOL25       , VOL26       , VOL27       , VOL28       , VOL29       ,
                   VOL30       , VOL31       , VOL32       ,
851
852                VOL33       , VOL34       , VOL35       , VOL36       ,
853   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
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     Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
854   *** AERMET - VERSION  22112 ***
      ***                                                              ***
      11:03:55
855
                                PAGE   4
856   *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
857
858
859                                        *** SOURCE IDs DEFINED AS URBAN SOURCES ***
860
861    URBAN ID   URBAN POP                                    SOURCE IDs
862    --------   ---------                                    ----------
863
864
865                2492442.   VOL1        , VOL2        , VOL3        , VOL4        ,
                   VOL5        , VOL6        , VOL7        ,
866   VOL8        ,
867
868               VOL9        , VOL10       , VOL11       , VOL12       , VOL13       ,
                  VOL14       , VOL15       , VOL16       ,
869
870               VOL17       , VOL18       , VOL19       , VOL20       , VOL21       ,
                  VOL22       , VOL23       , VOL24       ,
871
872               VOL25       , VOL26       , VOL27       , VOL28       , VOL29       ,
                  VOL30       , VOL31       , VOL32       ,
873
874               VOL33       , VOL34       , VOL35       , VOL36       ,
875   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
     Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
876   *** AERMET - VERSION  22112 ***
      ***                                                              ***
      11:03:55
877
                                PAGE   5
878   *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
879
880                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                       WEEK (HRDOW) *
881
882    SOURCE ID = VOL1         ; SOURCE TYPE = VOLUME   :
883     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
884   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
885                                                  DAY OF WEEK = WEEKDAY
886      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
887      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
888     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
889                                                  DAY OF WEEK = SATURDAY
890      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
891      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
892     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
893                                                  DAY OF WEEK = SUNDAY
894      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
895      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
896     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
```

```
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                ***
 11:03:55

                              PAGE   6
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL2         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                             DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                ***
 11:03:55

                              PAGE   7
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL3         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                             DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
    .0000E+00    7  .0000E+00    8  .0000E+00
```

```
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00

                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:03:55

                            PAGE   8
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL4         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - -

                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
     .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00

                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00

                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:03:55

                            PAGE   9
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL5         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - -
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```
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:03:55

                            PAGE  10
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL6         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:03:55

                            PAGE  11
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*** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                  WEEK (HRDOW) *

SOURCE ID = VOL7         ; SOURCE TYPE = VOLUME   :
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***       07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:03:55

                            PAGE  12
*** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                  WEEK (HRDOW) *

SOURCE ID = VOL8         ; SOURCE TYPE = VOLUME   :
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
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      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:03:55

                              PAGE  13
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL9         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                             DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
     .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
    .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
    .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
    .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:03:55

                              PAGE  14
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL10        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                             DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
     .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
    .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SATURDAY
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1088       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1089       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1090      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1091                                              DAY OF WEEK = SUNDAY
1092       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1093       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1094      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1095   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
       Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
1096    *** AERMET - VERSION  22112 ***
        ***                                                                  ***
        11:03:55
1097
                                  PAGE  15
1098    *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
1099
1100                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1101
1102    SOURCE ID = VOL11        ; SOURCE TYPE = VOLUME   :
1103     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1104    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1105                                              DAY OF WEEK = WEEKDAY
1106       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1107       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1108      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1109                                              DAY OF WEEK = SATURDAY
1110       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1111       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1112      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1113                                              DAY OF WEEK = SUNDAY
1114       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1115       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1116      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1117   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
       Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
1118    *** AERMET - VERSION  22112 ***
        ***                                                                  ***
        11:03:55
1119
                                  PAGE  16
1120    *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
1121
1122                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1123
1124    SOURCE ID = VOL12        ; SOURCE TYPE = VOLUME   :
1125     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   H
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
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- - - -
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                                PAGE  18
*** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                  WEEK (HRDOW) *

SOURCE ID = VOL14        ; SOURCE TYPE = VOLUME   :
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***       07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:03:55

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*** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                  WEEK (HRDOW) *

SOURCE ID = VOL15        ; SOURCE TYPE = VOLUME   :
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
```

```
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
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                              PAGE  20
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL16        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
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                              PAGE  21
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL17        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
```

```
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
      .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:03:55

                              PAGE  22
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL18        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .1000E+01    8  .1000E+01
       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
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                              PAGE  23
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL19        ; SOURCE TYPE = VOLUME   :
```

```
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
  .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:03:55

                            PAGE  24
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL20        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
  .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
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      ***                                                                    ***
      11:03:55
1317
                                  PAGE  25
1318  *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
1319
1320                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1321
1322  SOURCE ID = VOL21        ; SOURCE TYPE = VOLUME   :
1323   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1324  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1325                                                 DAY OF WEEK = WEEKDAY
1326     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
1327     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
1328    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1329                                                 DAY OF WEEK = SATURDAY
1330     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1331     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1332    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1333                                                 DAY OF WEEK = SUNDAY
1334     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1335     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1336    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1337  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
1338   *** AERMET - VERSION  22112 ***
       ***                                                                   ***
       11:03:55
1339
                                  PAGE  26
1340  *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
1341
1342                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1343
1344   SOURCE ID = VOL22        ; SOURCE TYPE = VOLUME   :
1345    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
        SCALAR   HOUR   SCALAR   HOUR   SCALAR
1346  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1347                                                 DAY OF WEEK = WEEKDAY
1348     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
1349     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
1350    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1351                                                 DAY OF WEEK = SATURDAY
1352     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1353     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1354    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
        .0000E+00   23  .0000E+00   24  .0000E+00
```

```
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:03:55

                              PAGE  27
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL23        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:03:55

                              PAGE  28
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL24        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
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      .1000E+01   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
      .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:03:55

                            PAGE  29
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL25        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .1000E+01    8  .1000E+01
       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
       .1000E+01   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:03:55

                            PAGE  30
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY O
                   WEEK (HRDOW) *
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1431
1432  SOURCE ID = VOL26        ; SOURCE TYPE = VOLUME   :
1433   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1434  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1435                                              DAY OF WEEK = WEEKDAY
1436     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
1437     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
1438    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1439                                              DAY OF WEEK = SATURDAY
1440     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1441     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1442    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1443                                              DAY OF WEEK = SUNDAY
1444     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1445     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1446    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1447  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
1448   *** AERMET - VERSION  22112 ***
       ***                                                                  ***
       11:03:55
1449
                                PAGE  31
1450   *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
1451
1452                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1453
1454  SOURCE ID = VOL27        ; SOURCE TYPE = VOLUME   :
1455   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1456  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1457                                              DAY OF WEEK = WEEKDAY
1458     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
1459     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
1460    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1461                                              DAY OF WEEK = SATURDAY
1462     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1463     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1464    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1465                                              DAY OF WEEK = SUNDAY
1466     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1467     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1468    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1469  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
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* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL28 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL29 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00

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1508      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1509                                          DAY OF WEEK = SUNDAY
1510       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1511       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1512      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1513  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
1514   *** AERMET - VERSION  22112 ***
       ***                                                                  ***
       11:03:55
1515
                                  PAGE  34
1516   *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
1517
1518                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1519
1520   SOURCE ID = VOL30        ; SOURCE TYPE = VOLUME   :
1521    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1522   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1523                                          DAY OF WEEK = WEEKDAY
1524       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1525       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
1526      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1527                                          DAY OF WEEK = SATURDAY
1528       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1529       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1530      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1531                                          DAY OF WEEK = SUNDAY
1532       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1533       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1534      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1535  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
1536   *** AERMET - VERSION  22112 ***
       ***                                                                  ***
       11:03:55
1537
                                  PAGE  35
1538   *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
1539
1540                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1541
1542   SOURCE ID = VOL31        ; SOURCE TYPE = VOLUME   :
1543    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1544   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1545                                          DAY OF WEEK = WEEKDAY
1546       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
```

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      .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
      .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:03:55

                             PAGE  36
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL32        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:03:55

                             PAGE  37
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
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1584                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1585
1586    SOURCE ID = VOL33        ; SOURCE TYPE = VOLUME   :
1587     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1588    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1589                                                DAY OF WEEK = WEEKDAY
1590       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1591       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1592      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1593                                                DAY OF WEEK = SATURDAY
1594       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1595       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1596      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1597                                                DAY OF WEEK = SUNDAY
1598       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1599       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1600      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1601    FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
        Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
1602     *** AERMET - VERSION  22112 ***
         ***                                                                    ***
         11:03:55
1603
                                  PAGE  38
1604    *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
1605
1606                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1607
1608    SOURCE ID = VOL34        ; SOURCE TYPE = VOLUME   :
1609     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1610    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1611                                                DAY OF WEEK = WEEKDAY
1612       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1613       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1614      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1615                                                DAY OF WEEK = SATURDAY
1616       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1617       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1618      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1619                                                DAY OF WEEK = SUNDAY
1620       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1621       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1622      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
```

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   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                ***
 11:03:55

                              PAGE  39
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL35        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                ***
 11:03:55

                              PAGE  40
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL36        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
    .0000E+00    7  .0000E+00    8  .0000E+00
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      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00

                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:03:55

                            PAGE  41
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                        *** DISCRETE CARTESIAN RECEPTORS ***
                                      (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                (METERS)

     ( 574106.6, 3725973.2,     -15.2,    2651.3,       0.0);         ( 574279.0,
     3725910.5,     -15.9,    2651.3,       0.0);
     ( 574204.4, 3725350.5,     -19.1,    2651.3,       0.0);         ( 573655.6,
     3725533.6,     -16.7,    2651.3,       0.0);
     ( 573199.4, 3725824.6,     -14.8,    2651.3,       0.0);         ( 573815.9,
     3726049.2,     -13.7,    2651.3,       0.0);
     ( 574057.4, 3725989.2,     -14.7,    2651.3,       0.0);         ( 574023.1,
     3725980.7,     -14.6,    2651.3,       0.0);
     ( 574346.5, 3725650.9,     -17.5,    2651.3,       0.0);         ( 574313.0,
     3725545.0,     -17.4,    2651.3,       0.0);
     ( 574206.8, 3725308.8,     -19.7,    2651.3,       0.0);         ( 574038.4,
     3725331.2,     -18.7,    2651.3,       0.0);
     ( 574209.1, 3725258.2,     -19.7,    2651.3,       0.0);         ( 573785.2,
     3725289.0,     -17.4,    2651.3,       0.0);
     ( 573482.6, 3725346.8,     -16.6,    2651.3,       0.0);         ( 573666.9,
     3725489.5,     -17.0,    2651.3,       0.0);
     ( 573580.6, 3725595.5,     -16.2,    2651.3,       0.0);         ( 573477.6,
     3725543.7,     -16.2,    2651.3,       0.0);
     ( 573474.2, 3725503.2,     -16.5,    2651.3,       0.0);         ( 573229.4,
     3725847.4,     -14.7,    2651.3,       0.0);
     ( 573040.9, 3725971.2,     -13.5,    2651.3,       0.0);         ( 573120.2,
     3725973.9,     -13.8,    2651.3,       0.0);
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:03:55

                            PAGE  42
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                        *** METEOROLOGICAL DAYS SELECTED FOR
                                        PROCESSING ***
                                                (1=YES; 0=NO)

           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
           1 1 1 1 1   1 1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
           1 1 1 1 1   1 1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
           1 1 1 1 1   1 1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
```

```
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1699            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1700            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1701            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1702            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1703
1704                NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT
                    IS INCLUDED IN THE DATA FILE.
1705
1706
1707
1708                                    *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED
                                        CATEGORIES ***
1709                                                    (METERS/SEC)
1710
1711                                                 1.54,   3.09,   5.14,   8.23,  10.80,
1712    FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
        Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
1713     *** AERMET - VERSION  22112 ***
         ***                                                                    ***
         11:03:55
1714
                                    PAGE  43
1715     *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
1716
1717                                    *** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA
                                        ***
1718
1719       Surface file:
           ..\KTRM_V11_trimmed.sfc
           Met Version:  22112
1720       Profile file:
           ..\KTRM_V11_trimmed.PFL
1721       Surface format:
           FREE

1722       Profile format:
           FREE

1723       Surface station no.:     3104                  Upper air station no.:     3190
1724                       Name: UNKNOWN                                  Name:
                           UNKNOWN
1725                       Year:   2017                                   Year:   2017
1726
1727     First 24 hours of scalar data
1728     YR MO DY JDY HR     H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALBEDO
         REF WS   WD     HT  REF TA     HT
1729    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - -
1730     17 01 01   1 01  -21.0  0.211 -9.000 -9.000 -999.  233.     49.1  0.06   2.53   1.00
         2.86  321.   10.1  284.8    2.0
1731     17 01 01   1 02  -48.7  0.490 -9.000 -9.000 -999.  824.    264.4  0.14   2.53   1.00
         5.36  358.   10.1  285.3    2.0
1732     17 01 01   1 03  -39.8  0.400 -9.000 -9.000 -999.  613.    175.9  0.06   2.53   1.00
         5.36  294.   10.1  284.8    2.0
1733     17 01 01   1 04  -47.4  0.477 -9.000 -9.000 -999.  790.    250.2  0.14   2.53   1.00
         5.22  335.   10.1  284.8    2.0
1734     17 01 01   1 05  -55.1  0.554 -9.000 -9.000 -999.  987.    337.1  0.06   2.53   1.00
         7.20  327.   10.1  284.2    2.0
1735     17 01 01   1 06  -30.8  0.309 -9.000 -9.000 -999.  472.    104.8  0.14   2.53   1.00
         3.44  335.   10.1  283.8    2.0
1736     17 01 01   1 07  -15.6  0.170 -9.000 -9.000 -999.  191.     31.7  0.06   2.53   1
         2.33  329.   10.1  283.8    2.0
```

```
17 01 01   1 08   -7.2  0.185 -9.000 -9.000 -999.  191.     79.0  0.06   2.53   0.50
2.47  326.   10.1  285.3    2.0
17 01 01   1 09   46.3  0.265  0.707  0.005  276.  326.    -36.1  0.06   2.53
3.00  303.   10.1  285.9    2.0
17 01 01   1 10  113.8  0.336  1.418  0.005  907.  468.    -30.2  0.06   2.53   0.24
3.76  300.   10.1  288.1    2.0
17 01 01   1 11  159.2  0.526  1.708  0.005 1133.  915.    -82.7  0.06   2.53   0.22
6.27  311.   10.1  289.2    2.0
17 01 01   1 12  179.8  0.454  1.860  0.005 1296.  739.    -47.0  0.06   2.53   0.21
5.24  315.   10.1  289.8    2.0
17 01 01   1 13  175.0  0.302  1.886  0.005 1387.  416.    -14.2  0.06   2.53   0.21
3.20  297.   10.1  290.3    2.0
17 01 01   1 14  145.9  0.251  1.851  0.005 1573.  302.     -9.7  0.06   2.53   0.23
2.50  322.   10.1  292.0    2.0
17 01 01   1 15   91.5  0.235  1.599  0.005 1617.  273.    -12.8  0.06   2.53   0.26
2.42  316.   10.1  291.4    2.0
17 01 01   1 16   18.8  0.259  0.950  0.005 1643.  316.    -83.0  0.14   2.53   0.36
2.57  338.   10.1  291.4    2.0
17 01 01   1 17  -41.4  0.440 -9.000 -9.000 -999.  701.    213.3  0.14   2.53   0.66
4.83  344.   10.1  288.8    2.0
17 01 01   1 18  -40.2  0.408 -9.000 -9.000 -999.  626.    182.7  0.14   2.53   1.00
4.49  356.   10.1  287.5    2.0
17 01 01   1 19  -33.3  0.337 -9.000 -9.000 -999.  473.    124.8  0.14   2.53   1.00
3.74  352.   10.1  287.0    2.0
17 01 01   1 20  -19.3  0.194 -9.000 -9.000 -999.  219.     41.4  0.06   2.53   1.00
2.64  326.   10.1  285.3    2.0
17 01 01   1 21  -29.0  0.291 -9.000 -9.000 -999.  377.     93.2  0.14   2.53   1.00
3.25  336.   10.1  285.3    2.0
17 01 01   1 22  -11.2  0.142 -9.000 -9.000 -999.  145.     23.3  0.06   2.53   1.00
2.01  272.   10.1  283.8    2.0
17 01 01   1 23  -25.8  0.259 -9.000 -9.000 -999.  316.     73.6  0.06   2.53   1.00
3.47  301.   10.1  285.9    2.0
17 01 01   1 24  -13.9  0.162 -9.000 -9.000 -999.  161.     29.0  0.09   2.53   1.00
2.05  250.   10.1  283.1    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 17 01 01 01   10.1 1  321.    2.86   284.9   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***       07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                ***
 11:03:55

                            PAGE  44
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                            *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION   VALUES
                            FOR SOURCE GROUP:  ALL      ***
                                INCLUDING SOURCE(S):     VOL1        , VOL2        ,
                                VOL3        , VOL4        , VOL5        ,
                VOL6        , VOL7        , VOL8        , VOL9        , VOL10       ,
                VOL11       , VOL12       , VOL13       ,
                VOL14       , VOL15       , VOL16       , VOL17       , VOL18       ,
                VOL19       , VOL20       , VOL21       ,
                VOL22       , VOL23       , VOL24       , VOL25       , VOL26       ,
                VOL27       , VOL28       ,  . . .      ,

                                      *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                   ** CONC OF NOX      IN
                                   MICROGRAMS/M**3                          **
```

```
      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
      Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - - -
       574106.64   3725973.24       20.70119  (17011107)               574278.99
       3725910.47       19.97032  (21011407)
       574204.36   3725350.47       31.58154  (19011407)               573655.61
       3725533.56       21.50832  (18020107)
       573199.43   3725824.57       10.02977  (17012308)               573815.91
       3726049.22       14.08038  (21012208)
       574057.43   3725989.22       19.10538  (21012507)               574023.10
       3725980.72       20.65501  (21012208)
       574346.45   3725650.86       21.73411  (21020107)               574312.95
       3725545.02       23.97684  (19012807)
       574206.77   3725308.84       24.76695  (19011407)               574038.43
       3725331.17       27.57043  (18010307)
       574209.11   3725258.17       20.56718  (18010307)               573785.25
       3725289.00       11.78940  (21020407)
       573482.56   3725346.84        9.25841  (22020307)               573666.90
       3725489.52       16.61871  (21012208)
       573580.56   3725595.53       20.88878  (18020107)               573477.56
       3725543.69       14.31826  (18020107)
       573474.22   3725503.19       13.37444  (22020307)               573229.37
       3725847.44       10.33249  (21122808)
       573040.93   3725971.18        6.19585  (17101907)               573120.15
       3725973.92        7.05413  (21121408)
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:03:55

                            PAGE  45
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                          *** THE SUMMARY OF HIGHEST  1-HR RESULTS
                                          ***


                               ** CONC OF NOX      IN
                               MICROGRAMS/M**3                        **


                                                 DATE

                                                  NETWORK
GROUP ID                          AVERAGE CONC     (YYMMDDHH)             RECEPTOR  (XR,
YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS      31.58154  ON 19011407: AT (  574204.36,
3725350.47,   -19.13,  2651.27,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:03:55

                            PAGE  46
```

```
*** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

*** Message Summary : AERMOD Model Execution ***

 --------- Summary of Total Messages --------

A Total of            0 Fatal Error Message(s)
A Total of            5 Warning Message(s)
A Total of         1671 Informational Message(s)

A Total of        43800 Hours Were Processed

A Total of          763 Calm Hours Identified

A Total of          908 Missing Hours Identified (  2.07 Percent)


   ******** FATAL ERROR MESSAGES ********
              ***  NONE  ***


   ********   WARNING MESSAGES   ********
ME W340     675       PRBASE: Possible Error in PROFBASE Input:  Value is < 0
PROFBASE
ME W186     676       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold
used           0.50
ME W187     676       MEOPEN: ADJ_U* Option for Stable Low Winds used in
AERMET
MX W450   26281       CHKDAT: Record Out of Sequence in Meteorological File at:
21010101
MX W450   26281       CHKDAT: Record Out of Sequence in Meteorological File at:    1
year gap

   ***********************************
   *** AERMOD Finishes Successfully ***
   ***********************************
```

```
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 13.0.0
** Lakes Environmental Software Inc.
** Date: 11/4/2025
** File: C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const PM25\16552-02 Const PM25.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02
   MODELOPT DFAULT CONC
   AVERTIME 24
   URBANOPT 2492442 Riverside_County
   POLLUTID PM_2.5
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "16552-02 Const PM25.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     573500.180  3725886.220      -15.810
   LOCATION VOL2         VOLUME     573500.381  3725789.820      -16.120
   LOCATION VOL3         VOLUME     573597.602  3725886.190      -16.050
   LOCATION VOL4         VOLUME     573597.803  3725789.790      -16.360
   LOCATION VOL5         VOLUME     573694.930  3725886.254      -16.110
   LOCATION VOL6         VOLUME     573695.131  3725789.853      -16.280
   LOCATION VOL7         VOLUME     573792.553  3725789.824      -16.410
   LOCATION VOL8         VOLUME     573792.352  3725886.224      -16.330
   LOCATION VOL9         VOLUME     573890.171  3725886.254      -15.450
   LOCATION VOL10        VOLUME     573890.372  3725789.853      -15.750
   LOCATION VOL11        VOLUME     573987.794  3725789.824      -15.210
   LOCATION VOL12        VOLUME     573987.593  3725886.224      -15.520
   LOCATION VOL13        VOLUME     574085.292  3725886.133      -15.630
   LOCATION VOL14        VOLUME     574085.493  3725789.733      -15.890
   LOCATION VOL15        VOLUME     574182.915  3725789.703      -16.000
   LOCATION VOL16        VOLUME     574182.714  3725886.103      -15.750
   LOCATION VOL17        VOLUME     573695.175  3725695.674      -16.510
   LOCATION VOL18        VOLUME     573695.376  3725599.274      -16.700
   LOCATION VOL19        VOLUME     573792.799  3725599.244      -16.820
   LOCATION VOL20        VOLUME     573792.597  3725695.644      -16.620
   LOCATION VOL21        VOLUME     573890.309  3725695.354      -16.590
   LOCATION VOL22        VOLUME     573890.510  3725598.954      -16.930
   LOCATION VOL23        VOLUME     573987.932  3725598.925      -17.030
   LOCATION VOL24        VOLUME     573987.731  3725695.325      -16.730
   LOCATION VOL25        VOLUME     574085.442  3725695.035      -16.760
   LOCATION VOL26        VOLUME     574085.643  3725598.635      -17.100
   LOCATION VOL27        VOLUME     574183.066  3725598.605      -17.220
   LOCATION VOL28        VOLUME     574182.864  3725695.005      -16.880
   LOCATION VOL29        VOLUME     573895.419  3725502.137      -17.650
```

```
   LOCATION VOL30        VOLUME     573895.620  3725405.737      -18.290
   LOCATION VOL31        VOLUME     573993.042  3725405.707      -18.630
   LOCATION VOL32        VOLUME     573992.841  3725502.107      -17.860
   LOCATION VOL33        VOLUME     574085.442  3725503.095      -17.950
   LOCATION VOL34        VOLUME     574085.643  3725406.695      -18.800
   LOCATION VOL35        VOLUME     574183.066  3725406.665      -18.970
   LOCATION VOL36        VOLUME     574182.864  3725503.066      -18.220
   LOCATION PAREA1       AREAPOLY   573452.368  3725934.831      -15.220
** Source Parameters **
   SRCPARAM VOL1         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL2         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL3         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL4         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL5         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL6         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL7         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL8         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL9         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL10        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL11        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL12        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL13        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL14        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL15        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL16        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL17        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL18        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL19        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL20        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL21        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL22        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL23        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL24        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL25        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL26        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL27        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL28        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL29        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL30        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL31        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL32        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL33        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL34        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL35        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL36        0.0009250105     5.000    22.640     1.400
   SRCPARAM PAREA1       1.6792E-07     0.000         8     1.000
   AREAVERT PAREA1       573452.368 3725934.831 574231.065 3725933.083
   AREAVERT PAREA1       574231.939 3725360.640 573845.649 3725358.018
   AREAVERT PAREA1       573845.649 3725549.415 573646.387 3725552.911
   AREAVERT PAREA1       573645.513 3725741.686 573451.494 3725741.686
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

```
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL2         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL6         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL11        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL12        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
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   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

```
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL24        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
```

```
   EMISFACT VOL28        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

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   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

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** WeekDays:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED "16552-02 Const PM25.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE ..\KTRM_V11_trimmed.sfc
   PROFFILE ..\KTRM_V11_trimmed.PFL
   SURFDATA 3104 2017
   UAIRDATA 3190 2017
   PROFBASE -36.04 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 24 ALL 1ST "16552-02 CONST PM25.AD\24H1GALL.PLT" 31
   SUMMFILE "16552-02 Const PM25.sum"
OU FINISHED
**
**************************************
** Project Parameters
**************************************
** PROJCTN  CoordinateSystemUTM
** DESCPTN  UTM: Universal Transverse Mercator
** DATUM    North American Datum 1983
** DTMRGN   CONUS
** UNITS    m
** ZONE     11
** ZONEINX  0
**
```

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**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 13.0.0
** Lakes Environmental Software Inc.
** Date: 7/18/2025
** File: C:\Users\Alyssa Barnett\Desktop\HRA\16552\16652-02 Const PM10\16652-02 Const PM10.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02
   MODELOPT DFAULT CONC
   AVERTIME 24
   URBANOPT 2492442 Riverside_County
   POLLUTID PM_10
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "16652-02 Const PM10.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     573500.180  3725886.220      -15.810
   LOCATION VOL2         VOLUME     573500.381  3725789.820      -16.120
   LOCATION VOL3         VOLUME     573597.602  3725886.190      -16.050
   LOCATION VOL4         VOLUME     573597.803  3725789.790      -16.360
   LOCATION VOL5         VOLUME     573694.930  3725886.254      -16.110
   LOCATION VOL6         VOLUME     573695.131  3725789.853      -16.280
   LOCATION VOL7         VOLUME     573792.553  3725789.824      -16.410
   LOCATION VOL8         VOLUME     573792.352  3725886.224      -16.330
   LOCATION VOL9         VOLUME     573890.171  3725886.254      -15.450
   LOCATION VOL10        VOLUME     573890.372  3725789.853      -15.750
   LOCATION VOL11        VOLUME     573987.794  3725789.824      -15.210
   LOCATION VOL12        VOLUME     573987.593  3725886.224      -15.520
   LOCATION VOL13        VOLUME     574085.292  3725886.133      -15.630
   LOCATION VOL14        VOLUME     574085.493  3725789.733      -15.890
   LOCATION VOL15        VOLUME     574182.915  3725789.703      -16.000
   LOCATION VOL16        VOLUME     574182.714  3725886.103      -15.750
   LOCATION VOL17        VOLUME     573695.175  3725695.674      -16.510
   LOCATION VOL18        VOLUME     573695.376  3725599.274      -16.700
   LOCATION VOL19        VOLUME     573792.799  3725599.244      -16.820
   LOCATION VOL20        VOLUME     573792.597  3725695.644      -16.620
   LOCATION VOL21        VOLUME     573890.309  3725695.354      -16.590
   LOCATION VOL22        VOLUME     573890.510  3725598.954      -16.930
   LOCATION VOL23        VOLUME     573987.932  3725598.925      -17.030
   LOCATION VOL24        VOLUME     573987.731  3725695.325      -16.730
   LOCATION VOL25        VOLUME     574085.442  3725695.035      -16.760
   LOCATION VOL26        VOLUME     574085.643  3725598.635      -17.100
   LOCATION VOL27        VOLUME     574183.066  3725598.605      -17.220
   LOCATION VOL28        VOLUME     574182.864  3725695.005      -16.880
   LOCATION VOL29        VOLUME     573895.419  3725502.137      -17.650
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   LOCATION VOL30        VOLUME     573895.620  3725405.737      -18.290
   LOCATION VOL31        VOLUME     573993.042  3725405.707      -18.630
   LOCATION VOL32        VOLUME     573992.841  3725502.107      -17.860
   LOCATION VOL33        VOLUME     574085.442  3725503.095      -17.950
   LOCATION VOL34        VOLUME     574085.643  3725406.695      -18.800
   LOCATION VOL35        VOLUME     574183.066  3725406.665      -18.970
   LOCATION VOL36        VOLUME     574182.864  3725503.066      -18.220
   LOCATION PAREA1       AREAPOLY   573452.368  3725934.831      -15.220
** Source Parameters **
   SRCPARAM VOL1         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL2         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL3         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL4         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL5         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL6         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL7         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL8         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL9         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL10        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL11        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL12        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL13        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL14        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL15        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL16        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL17        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL18        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL19        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL20        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL21        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL22        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL23        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL24        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL25        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL26        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL27        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL28        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL29        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL30        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL31        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL32        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL33        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL34        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL35        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL36        0.0010054462     5.000    22.640     1.400
   SRCPARAM PAREA1       3.5229E-07     0.000         8     1.000
   AREAVERT PAREA1       573452.368 3725934.831 574231.065 3725933.083
   AREAVERT PAREA1       574231.939 3725360.640 573845.649 3725358.018
   AREAVERT PAREA1       573845.649 3725549.415 573646.387 3725552.911
   AREAVERT PAREA1       573645.513 3725741.686 573451.494 3725741.686
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL2         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL6         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL11        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL12        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
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   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL24        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL28        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED "16652-02 Const PM10.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE ..\KTRM_V11_trimmed.sfc
   PROFFILE ..\KTRM_V11_trimmed.PFL
   SURFDATA 3104 2017
   UAIRDATA 3190 2017
   PROFBASE -36.04 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 24 ALL 1ST "16652-02 CONST PM10.AD\24H1GALL.PLT" 31
   SUMMFILE "16652-02 Const PM10.sum"
OU FINISHED
**
**************************************
** Project Parameters
**************************************
** PROJCTN  CoordinateSystemUTM
** DESCPTN  UTM: Universal Transverse Mercator
** DATUM    North American Datum 1983
** DTMRGN   CONUS
** UNITS    m
** ZONE     11
** ZONEINX  0
**
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**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 13.0.0
** Lakes Environmental Software Inc.
** Date: 11/4/2025
** File: C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const PM25\16552-02 Const
PM25.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02
   MODELOPT DFAULT CONC
   AVERTIME 24
   URBANOPT 2492442 Riverside_County
   POLLUTID PM_2.5
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "16552-02 Const PM25.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     573500.180  3725886.220      -15.810
   LOCATION VOL2         VOLUME     573500.381  3725789.820      -16.120
   LOCATION VOL3         VOLUME     573597.602  3725886.190      -16.050
   LOCATION VOL4         VOLUME     573597.803  3725789.790      -16.360
   LOCATION VOL5         VOLUME     573694.930  3725886.254      -16.110
   LOCATION VOL6         VOLUME     573695.131  3725789.853      -16.280
   LOCATION VOL7         VOLUME     573792.553  3725789.824      -16.410
   LOCATION VOL8         VOLUME     573792.352  3725886.224      -16.330
   LOCATION VOL9         VOLUME     573890.171  3725886.254      -15.450
   LOCATION VOL10        VOLUME     573890.372  3725789.853      -15.750
   LOCATION VOL11        VOLUME     573987.794  3725789.824      -15.210
   LOCATION VOL12        VOLUME     573987.593  3725886.224      -15.520
   LOCATION VOL13        VOLUME     574085.292  3725886.133      -15.630
   LOCATION VOL14        VOLUME     574085.493  3725789.733      -15.890
   LOCATION VOL15        VOLUME     574182.915  3725789.703      -16.000
   LOCATION VOL16        VOLUME     574182.714  3725886.103      -15.750
   LOCATION VOL17        VOLUME     573695.175  3725695.674      -16.510
   LOCATION VOL18        VOLUME     573695.376  3725599.274      -16.700
   LOCATION VOL19        VOLUME     573792.799  3725599.244      -16.820
   LOCATION VOL20        VOLUME     573792.597  3725695.644      -16.620
   LOCATION VOL21        VOLUME     573890.309  3725695.354      -16.590
   LOCATION VOL22        VOLUME     573890.510  3725598.954      -16.930
   LOCATION VOL23        VOLUME     573987.932  3725598.925      -17.030
   LOCATION VOL24        VOLUME     573987.731  3725695.325      -16.730
   LOCATION VOL25        VOLUME     574085.442  3725695.035      -16.760
   LOCATION VOL26        VOLUME     574085.643  3725598.635      -17.100
   LOCATION VOL27        VOLUME     574183.066  3725598.605      -17.220
   LOCATION VOL28        VOLUME     574182.864  3725695.005      -16.880
   LOCATION VOL29        VOLUME     573895.419  3725502.137      -17.650
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   LOCATION VOL30        VOLUME     573895.620  3725405.737      -18.290
   LOCATION VOL31        VOLUME     573993.042  3725405.707      -18.630
   LOCATION VOL32        VOLUME     573992.841  3725502.107      -17.860
   LOCATION VOL33        VOLUME     574085.442  3725503.095      -17.950
   LOCATION VOL34        VOLUME     574085.643  3725406.695      -18.800
   LOCATION VOL35        VOLUME     574183.066  3725406.665      -18.970
   LOCATION VOL36        VOLUME     574182.864  3725503.066      -18.220
   LOCATION PAREA1       AREAPOLY   573452.368  3725934.831      -15.220
** Source Parameters **
   SRCPARAM VOL1         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL2         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL3         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL4         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL5         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL6         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL7         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL8         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL9         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL10        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL11        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL12        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL13        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL14        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL15        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL16        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL17        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL18        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL19        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL20        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL21        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL22        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL23        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL24        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL25        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL26        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL27        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL28        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL29        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL30        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL31        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL32        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL33        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL34        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL35        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL36        0.0009250105     5.000    22.640     1.400
   SRCPARAM PAREA1       1.6792E-07     0.000         8     1.000
   AREAVERT PAREA1       573452.368 3725934.831 574231.065 3725933.083
   AREAVERT PAREA1       574231.939 3725360.640 573845.649 3725358.018
   AREAVERT PAREA1       573845.649 3725549.415 573646.387 3725552.911
   AREAVERT PAREA1       573645.513 3725741.686 573451.494 3725741.686
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL2         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL6         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL11        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL12        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
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   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL24        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL28        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

```
** WeekDays:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED "16552-02 Const PM25.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE ..\KTRM_V11_trimmed.sfc
   PROFFILE ..\KTRM_V11_trimmed.PFL
   SURFDATA 3104 2017
   UAIRDATA 3190 2017
   PROFBASE -36.04 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 24 ALL 1ST "16552-02 CONST PM25.AD\24H1GALL.PLT" 31
   SUMMFILE "16552-02 Const PM25.sum"
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            3 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***

```

```
   ********   WARNING MESSAGES   ********
 ME W340     697       PRBASE: Possible Error in PROFBASE Input:  Value is < 0
 PROFBASE
 ME W186     698       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold
 used           0.50
 ME W187     698       MEOPEN: ADJ_U* Option for Stable Low Winds used in
 AERMET

 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************

FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 17:01:41

                            PAGE   1
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                        ***     MODEL SETUP OPTIONS SUMMARY       ***
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - -

** Model Options Selected:
     * Model Uses Regulatory DEFAULT Options
     * Model Is Setup For Calculation of Average CONCentration Values.
     * NO GAS DEPOSITION Data Provided.
     * NO PARTICLE DEPOSITION Data Provided.
     * Model Uses NO DRY DEPLETION. DDPLETE  =  F
     * Model Uses NO WET DEPLETION. WETDPLT  =  F
     * Stack-tip Downwash.
     * Model Accounts for ELEVated Terrain Effects.
     * Use Calms Processing Routine.
     * Use Missing Data Processing Routine.
     * No Exponential Decay.
     * Model Uses URBAN Dispersion Algorithm for the SBL for    37 Source(s),
       for Total of    1 Urban Area(s):
  Urban Population =   2492442.0 ;  Urban Roughness Length =  1.000 m
     * Urban Roughness Length of 1.0 Meter Used.
     * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
     * CCVR_Sub - Meteorological data includes CCVR substitutions
     * TEMP_Sub - Meteorological data includes TEMP substitutions
     * Model Accepts FLAGPOLE Receptor . Heights.
     * The User Specified a Pollutant Type of: PM_2.5

**Model Calculates  1 Short Term Average(s) of:  24-HR

**This Run Includes:     37 Source(s);       1 Source Group(s); and      22 Receptor(s)

               with:      0 POINT(s), including
                          0 POINTCAP(s) and      0 POINTHOR(s)
                and:     36 VOLUME source(s)
                and:      1 AREA type source(s)
                and:      0 LINE source(s)
                and:      0 RLINE/RLINEXT source(s)
                and:      0 OPENPIT source(s)
                and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                and:      0 SWPOINT source(s)


**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date:  22112
```

**Output Options Selected:
Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours
m for Missing Hours
b for Both Calm and Missing Hours

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = -36.04 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0
Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 3.6 MB of RAM.

**Input Runstream File:
aermod.inp

**Output Print File:
aermod.out

**Detailed Error/Message File: 16552-02 Const PM25.err
**File for Summary of Results: 16552-02 Const PM25.sum
FF *** AERMOD - VERSION 24142 *** *** C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 *** 11/04/25
*** AERMET - VERSION 22112 ***
*** ***
17:01:41

PAGE 2

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER EMISSION RATE INIT. PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	SZ (METERS)	SOURCE SCALAR VARY BY
VOL1	0	0.92501E-03	573500.2	3725886.2	-15.8	5.00	22.64	1.40	YES HRDOW
VOL2	0	0.92501E-03	573500.4	3725789.8	-16.1	5.00	22.64	1.40	YES HRDOW
VOL3	0	0.92501E-03	573597.6	3725886.2	-16.1	5.00	22.64	1.40	YES HRDOW
VOL4	0	0.92501E-03	573597.8	3725789.8	-16.4	5.00	22.64	1.40	YES HRDOW
VOL5	0	0.92501E-03	573694.9	3725886.3	-16.1	5.00	22.64	1.40	YES HRDOW
VOL6	0	0.92501E-03	573695.1	3725789.9	-16.3	5.00	22.64	1.40	YES HRDOW
VOL7	0	0.92501E-03	573792.6	3725789.8	-16.4	5.00	22.64	1.40	YES HRDOW

```
825   VOL8            0   0.92501E-03  573792.4 3725886.2   -16.3     5.00    22.64
      1.40     YES   HRDOW            NO
826   VOL9            0   0.92501E-03  573890.2 3725886.3   -15.5     5.00    22.64
      1.40     YES   HRDOW            NO
827   VOL10           0   0.92501E-03  573890.4 3725789.9   -15.8     5.00    22.64
      1.40     YES   HRDOW            NO
828   VOL11           0   0.92501E-03  573987.8 3725789.8   -15.2     5.00    22.64
      1.40     YES   HRDOW            NO
829   VOL12           0   0.92501E-03  573987.6 3725886.2   -15.5     5.00    22.64
      1.40     YES   HRDOW            NO
830   VOL13           0   0.92501E-03  574085.3 3725886.1   -15.6     5.00    22.64
      1.40     YES   HRDOW            NO
831   VOL14           0   0.92501E-03  574085.5 3725789.7   -15.9     5.00    22.64
      1.40     YES   HRDOW            NO
832   VOL15           0   0.92501E-03  574182.9 3725789.7   -16.0     5.00    22.64
      1.40     YES   HRDOW            NO
833   VOL16           0   0.92501E-03  574182.7 3725886.1   -15.8     5.00    22.64
      1.40     YES   HRDOW            NO
834   VOL17           0   0.92501E-03  573695.2 3725695.7   -16.5     5.00    22.64
      1.40     YES   HRDOW            NO
835   VOL18           0   0.92501E-03  573695.4 3725599.3   -16.7     5.00    22.64
      1.40     YES   HRDOW            NO
836   VOL19           0   0.92501E-03  573792.8 3725599.2   -16.8     5.00    22.64
      1.40     YES   HRDOW            NO
837   VOL20           0   0.92501E-03  573792.6 3725695.6   -16.6     5.00    22.64
      1.40     YES   HRDOW            NO
838   VOL21           0   0.92501E-03  573890.3 3725695.4   -16.6     5.00    22.64
      1.40     YES   HRDOW            NO
839   VOL22           0   0.92501E-03  573890.5 3725599.0   -16.9     5.00    22.64
      1.40     YES   HRDOW            NO
840   VOL23           0   0.92501E-03  573987.9 3725598.9   -17.0     5.00    22.64
      1.40     YES   HRDOW            NO
841   VOL24           0   0.92501E-03  573987.7 3725695.3   -16.7     5.00    22.64
      1.40     YES   HRDOW            NO
842   VOL25           0   0.92501E-03  574085.4 3725695.0   -16.8     5.00    22.64
      1.40     YES   HRDOW            NO
843   VOL26           0   0.92501E-03  574085.6 3725598.6   -17.1     5.00    22.64
      1.40     YES   HRDOW            NO
844   VOL27           0   0.92501E-03  574183.1 3725598.6   -17.2     5.00    22.64
      1.40     YES   HRDOW            NO
845   VOL28           0   0.92501E-03  574182.9 3725695.0   -16.9     5.00    22.64
      1.40     YES   HRDOW            NO
846   VOL29           0   0.92501E-03  573895.4 3725502.1   -17.7     5.00    22.64
      1.40     YES   HRDOW            NO
847   VOL30           0   0.92501E-03  573895.6 3725405.7   -18.3     5.00    22.64
      1.40     YES   HRDOW            NO
848   VOL31           0   0.92501E-03  573993.0 3725405.7   -18.6     5.00    22.64
      1.40     YES   HRDOW            NO
849   VOL32           0   0.92501E-03  573992.8 3725502.1   -17.9     5.00    22.64
      1.40     YES   HRDOW            NO
850   VOL33           0   0.92501E-03  574085.4 3725503.1   -17.9     5.00    22.64
      1.40     YES   HRDOW            NO
851   VOL34           0   0.92501E-03  574085.6 3725406.7   -18.8     5.00    22.64
      1.40     YES   HRDOW            NO
852   VOL35           0   0.92501E-03  574183.1 3725406.7   -19.0     5.00    22.64
      1.40     YES   HRDOW            NO
853   VOL36           0   0.92501E-03  574182.9 3725503.1   -18.2     5.00    22.64
      1.40     YES   HRDOW            NO
854   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***       11/04/25
855    *** AERMET - VERSION  22112 ***
       ***                                                          ***
       17:01:41
856
                                  PAGE   3
857    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
```

```
                                                     *** AREAPOLY SOURCE DATA ***

                NUMBER EMISSION RATE   LOCATION OF AREA  BASE     RELEASE  NUMBER
                INIT.   URBAN  EMISSION RATE    AIRCRAFT
  SOURCE         PART.  (GRAMS/SEC       X        Y      ELEV.    HEIGHT  OF VERTS.
  SZ     SOURCE  SCALAR VARY
    ID           CATS.   /METER**2)   (METERS) (METERS) (METERS) (METERS)
    (METERS)              BY
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - -

 PAREA1           0   0.16792E-06  573452.4 3725934.8   -15.2     0.00       8
 1.00     YES   HRDOW            NO
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 17:01:41

                              PAGE   4
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                        *** SOURCE IDs DEFINING SOURCE GROUPS ***

 SRCGROUP ID                                          SOURCE IDs
 -----------                                          ----------


  ALL        VOL1        , VOL2        , VOL3        , VOL4        , VOL5        ,
  VOL6        , VOL7        , VOL8        ,

             VOL9        , VOL10       , VOL11       , VOL12       , VOL13       ,
             VOL14       , VOL15       , VOL16       ,

             VOL17       , VOL18       , VOL19       , VOL20       , VOL21       ,
             VOL22       , VOL23       , VOL24       ,

             VOL25       , VOL26       , VOL27       , VOL28       , VOL29       ,
             VOL30       , VOL31       , VOL32       ,

             VOL33       , VOL34       , VOL35       , VOL36       , PAREA1      ,
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 17:01:41

                              PAGE   5
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                        *** SOURCE IDs DEFINED AS URBAN SOURCES ***

  URBAN ID   URBAN POP                                 SOURCE IDs
  --------   ---------                                 ----------


              2492442.   VOL1        , VOL2        , VOL3        , VOL4        ,
              VOL5        , VOL6        , VOL7        ,
 VOL8        ,

             VOL9        , VOL10       , VOL11       , VOL12       , VOL13       ,
             VOL14       , VOL15       , VOL16       ,
```

```
905
906              VOL17       , VOL18       , VOL19       , VOL20       , VOL21
                 VOL22       , VOL23       , VOL24       ,
907
908              VOL25       , VOL26       , VOL27       , VOL28       , VOL29       ,
                 VOL30       , VOL31       , VOL32       ,
909
910              VOL33       , VOL34       , VOL35       , VOL36       , PAREA1      ,
911  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
     Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
912   *** AERMET - VERSION  22112 ***
      ***                                                                    ***
      17:01:41
913
                                PAGE   6
914   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
915
916                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                      WEEK (HRDOW) *
917
918   SOURCE ID = VOL1         ; SOURCE TYPE = VOLUME   :
919    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
920   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
921                                              DAY OF WEEK = WEEKDAY
922      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
923      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
924     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
925                                              DAY OF WEEK = SATURDAY
926      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
927      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
928     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
929                                              DAY OF WEEK = SUNDAY
930      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
931      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
932     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
933  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
     Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
934   *** AERMET - VERSION  22112 ***
      ***                                                                    ***
      17:01:41
935
                                PAGE   7
936   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
937
938                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                      WEEK (HRDOW) *
939
940   SOURCE ID = VOL2         ; SOURCE TYPE = VOLUME   :
941    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
942   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
943                                              DAY OF WEEK = WEEKDAY
944      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
         .0000E+00    7  .1000E+01    8  .1000E+01
```

945 9 .1000E+01 10 .1000E+01 11 .1000E+01 12 .1000E+01 13 .1000E+01 14 .1000E+01 15 .0000E+00 16 .0000E+00
946 17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
947 DAY OF WEEK = SATURDAY
948 1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
949 9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
950 17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
951 DAY OF WEEK = SUNDAY
952 1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
953 9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
954 17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
955 FF *** AERMOD - VERSION 24142 *** *** C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 *** 11/04/25
956 *** AERMET - VERSION 22112 *** *** ***
17:01:41
957
PAGE 8
958 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*
959
960 * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *
961
962 SOURCE ID = VOL3 ; SOURCE TYPE = VOLUME :
963 HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR
964 - - -

```
                    WEEK (HRDOW) *
983
984   SOURCE ID = VOL4         ; SOURCE TYPE = VOLUME   :
985    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
986   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
987                                              DAY OF WEEK = WEEKDAY
988      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
989      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
990     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
991                                              DAY OF WEEK = SATURDAY
992      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
993      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
994     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
995                                              DAY OF WEEK = SUNDAY
996      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
997      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
998     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
999   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
1000   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       17:01:41
1001
                                  PAGE  10
1002   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1003
1004                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
1005
1006   SOURCE ID = VOL5         ; SOURCE TYPE = VOLUME   :
1007    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1008  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1009                                             DAY OF WEEK = WEEKDAY
1010     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
1011     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
1012    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1013                                             DAY OF WEEK = SATURDAY
1014     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1015     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1016    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1017                                             DAY OF WEEK = SUNDAY
1018     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1019     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1020    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
        .0000E+00   23  .0000E+00   24  .0000E+00
```

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 *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 17:01:41

                              PAGE  11
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL6         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -

                                          DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00

                                          DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00

                                          DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
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                              PAGE  12
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL7         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -

                                          DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00

                                          DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
```

```
 .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 17:01:41

                            PAGE  13
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL8         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
  .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 17:01:41

                            PAGE  14
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL9         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
```

```
1098       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1099       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1100      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1101                                              DAY OF WEEK = SATURDAY
1102       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1103       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1104      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1105                                              DAY OF WEEK = SUNDAY
1106       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1107       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1108      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1109  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
1110   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       17:01:41
1111
                                  PAGE  15
1112   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1113
1114                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
1115
1116   SOURCE ID = VOL10        ; SOURCE TYPE = VOLUME   :
1117    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1118   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1119                                              DAY OF WEEK = WEEKDAY
1120       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1121       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1122      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1123                                              DAY OF WEEK = SATURDAY
1124       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1125       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1126      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1127                                              DAY OF WEEK = SUNDAY
1128       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1129       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1130      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1131  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
1132   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       17:01:41
1133
                                  PAGE  16
1134   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
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1135
1136                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1137
1138    SOURCE ID = VOL11        ; SOURCE TYPE = VOLUME   :
1139     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1140    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1141                                                DAY OF WEEK = WEEKDAY
1142       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1143       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1144      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1145                                                DAY OF WEEK = SATURDAY
1146       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1147       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1148      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1149                                                DAY OF WEEK = SUNDAY
1150       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1151       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1152      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1153    FE *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
        Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
1154     *** AERMET - VERSION  22112 ***
         ***                                                                    ***
         17:01:41
1155
                                  PAGE  17
1156    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1157
1158                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1159
1160    SOURCE ID = VOL12        ; SOURCE TYPE = VOLUME   :
1161     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1162    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1163                                                DAY OF WEEK = WEEKDAY
1164       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1165       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1166      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1167                                                DAY OF WEEK = SATURDAY
1168       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1169       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1170      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1171                                                DAY OF WEEK = SUNDAY
1172       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1173       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
           .0000E+00   15  .0000E+00   16  .0000E+00
```

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   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                ***
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                              PAGE  18
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL13        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -

                                          DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00

                                          DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00

                                          DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                ***
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                              PAGE  19
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL14        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -

                                          DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00

                                          DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
```

```
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
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                             PAGE  20
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL15        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
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                             PAGE  21
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL16        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
```

```
- - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
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                            PAGE  22
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                  WEEK (HRDOW) *

 SOURCE ID = VOL17        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 17:01:41
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                                PAGE  23
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                  WEEK (HRDOW) *

SOURCE ID = VOL18        ; SOURCE TYPE = VOLUME   :
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
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*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                  WEEK (HRDOW) *

SOURCE ID = VOL19        ; SOURCE TYPE = VOLUME   :
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
   .0000E+00    7  .0000E+00    8  .0000E+00
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      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 17:01:41

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL20        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
     .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL21        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
     .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
     .0000E+00   23  .0000E+00   24  .0000E+00
```

```
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 17:01:41

                            PAGE  27
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL22        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 17:01:41

                            PAGE  28
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL23        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   H
```

```
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - -
```

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 17:01:41
1441
                                PAGE  30
1442  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1443
1444                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1445
1446  SOURCE ID = VOL25        ; SOURCE TYPE = VOLUME   :
1447   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1448  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1449                                                DAY OF WEEK = WEEKDAY
1450     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
1451     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
1452    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1453                                                DAY OF WEEK = SATURDAY
1454     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1455     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1456    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1457                                                DAY OF WEEK = SUNDAY
1458     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1459     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1460    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1461  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
1462   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       17:01:41
1463
                                PAGE  31
1464  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1465
1466                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1467
1468  SOURCE ID = VOL26        ; SOURCE TYPE = VOLUME   :
1469   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1470  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1471                                                DAY OF WEEK = WEEKDAY
1472     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
1473     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
1474    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1475                                                DAY OF WEEK = SATURDAY
1476     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1477     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1478    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1479                                                DAY OF WEEK = SUNDAY
```

```
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 17:01:41

                              PAGE  32
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL27        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
     .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 17:01:41

                              PAGE  33
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL28        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
     .1000E+01   15  .0000E+00   16  .0000E+00
```

```
1518      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1519                                          DAY OF WEEK = SATURDAY
1520       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1521       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1522      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1523                                          DAY OF WEEK = SUNDAY
1524       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1525       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1526      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1527  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
1528   *** AERMET - VERSION  22112 ***
       ***                                                                  ***
       17:01:41
1529
                                PAGE  34
1530   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1531
1532                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1533
1534   SOURCE ID = VOL29        ; SOURCE TYPE = VOLUME   :
1535    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1536  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - -
1537                                          DAY OF WEEK = WEEKDAY
1538       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1539       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
1540      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1541                                          DAY OF WEEK = SATURDAY
1542       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1543       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1544      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1545                                          DAY OF WEEK = SUNDAY
1546       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1547       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1548      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1549  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
1550   *** AERMET - VERSION  22112 ***
       ***                                                                  ***
       17:01:41
1551
                                PAGE  35
1552   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1553
1554                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1555
```

```
 SOURCE ID = VOL30        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 17:01:41

                            PAGE  36
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL31        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
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1594    *** AERMET - VERSION  22112 ***
        ***                                                                    ***
        17:01:41
1595
                                  PAGE  37
1596    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1597
1598                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1599
1600    SOURCE ID = VOL32        ; SOURCE TYPE = VOLUME   :
1601     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1602    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - - - -
1603                                                 DAY OF WEEK = WEEKDAY
1604       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1605       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1606      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1607                                                 DAY OF WEEK = SATURDAY
1608       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1609       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1610      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1611                                                 DAY OF WEEK = SUNDAY
1612       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1613       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1614      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1615    FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
        Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
1616     *** AERMET - VERSION  22112 ***
         ***                                                                   ***
         17:01:41
1617
                                  PAGE  38
1618    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1619
1620                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1621
1622     SOURCE ID = VOL33        ; SOURCE TYPE = VOLUME   :
1623     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1624    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - - - -
1625                                                 DAY OF WEEK = WEEKDAY
1626       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1627       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1628      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1629                                                 DAY OF WEEK = SATURDAY
1630       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1631       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1632      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
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      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
      .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 17:01:41

                            PAGE  39
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL34        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .1000E+01    8  .1000E+01
       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
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                            PAGE  40
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL35        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
      .0000E+00    7  .1000E+01    8  .1000E+01
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      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
     .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 17:01:41

                            PAGE  41
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL36        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
     .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 17:01:41

                            PAGE  42
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY O
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                    WEEK (HRDOW) *
1709
1710   SOURCE ID = PAREA1       ; SOURCE TYPE = AREAPOLY :
1711    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1712   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - -
1713                                                DAY OF WEEK = WEEKDAY
1714      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1715      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
1716     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1717                                                DAY OF WEEK = SATURDAY
1718      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1719      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1720     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1721                                                DAY OF WEEK = SUNDAY
1722      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1723      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1724     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1725   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
       Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
1726    *** AERMET - VERSION  22112 ***
        ***                                                                    ***
        17:01:41
1727
                                  PAGE  43
1728   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1729
1730                                          *** DISCRETE CARTESIAN RECEPTORS ***
1731                                        (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
1732                                                    (METERS)
1733
1734        ( 574106.6, 3725973.2,     -15.2,    2651.3,       2.0);         ( 574279.0,
          3725910.5,     -15.9,    2651.3,       2.0);
1735        ( 574204.4, 3725350.5,     -19.1,    2651.3,       2.0);         ( 573655.6,
          3725533.6,     -16.7,    2651.3,       2.0);
1736        ( 573199.4, 3725824.6,     -14.8,    2651.3,       2.0);         ( 573815.9,
          3726049.2,     -13.7,    2651.3,       2.0);
1737        ( 574057.4, 3725989.2,     -14.7,    2651.3,       2.0);         ( 574023.1,
          3725980.7,     -14.6,    2651.3,       2.0);
1738        ( 574346.5, 3725650.9,     -17.5,    2651.3,       2.0);         ( 574313.0,
          3725545.0,     -17.4,    2651.3,       2.0);
1739        ( 574206.8, 3725308.8,     -19.7,    2651.3,       2.0);         ( 574038.4,
          3725331.2,     -18.7,    2651.3,       2.0);
1740        ( 574209.1, 3725258.2,     -19.7,    2651.3,       2.0);         ( 573785.2,
          3725289.0,     -17.4,    2651.3,       2.0);
1741        ( 573482.6, 3725346.8,     -16.6,    2651.3,       2.0);         ( 573666.9,
          3725489.5,     -17.0,    2651.3,       2.0);
1742        ( 573580.6, 3725595.5,     -16.2,    2651.3,       2.0);         ( 573477.6,
          3725543.7,     -16.2,    2651.3,       2.0);
1743        ( 573474.2, 3725503.2,     -16.5,    2651.3,       2.0);         ( 573229.4,
          3725847.4,     -14.7,    2651.3,       2.0);
1744        ( 573040.9, 3725971.2,     -13.5,    2651.3,       2.0);         ( 573120.2,
          3725973.9,     -13.8,    2651.3,       2.0);
1745   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
       Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
1746    *** AERMET - VERSION  22112 ***
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      ***                                                                    ***
      17:01:41
1747
                                  PAGE  44
1748  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1749
1750                                          *** METEOROLOGICAL DAYS SELECTED FOR
                                              PROCESSING ***
1751                                                          (1=YES; 0=NO)
1752
1753            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1754            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1755            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1756            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1757            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1758            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1759            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1760            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1761
1762              NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT
                  IS INCLUDED IN THE DATA FILE.
1763
1764
1765
1766                              *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED
                                  CATEGORIES ***
1767                                                  (METERS/SEC)
1768
1769                                                1.54,   3.09,   5.14,   8.23,  10.80,
1770  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
1771   *** AERMET - VERSION  22112 ***
       ***                                                                   ***
       17:01:41
1772
                                  PAGE  45
1773   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1774
1775                                    *** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA
                                        ***
1776
1777        Surface file:
            ..\KTRM_V11_trimmed.sfc
            Met Version:  22112
1778        Profile file:
            ..\KTRM_V11_trimmed.PFL
1779        Surface format:
            FREE

1780        Profile format:
            FREE

1781        Surface station no.:     3104                  Upper air station no.:     3190
1782                       Name: UNKNOWN                                 Name:
                           UNKNOWN
1783                       Year:   2017                                  Year:   2017
1784
1785   First 24 hours of scalar data
1786   YR MO DY JDY HR     H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALBE
```

```
 REF WS   WD     HT  REF TA     HT
- - - -
```

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION ***
FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): VOL1 , VOL2 , VOL3 , VOL4 , VOL5 , VOL6 , VOL7 , VOL8 , VOL9 , VOL10 , VOL11 , VOL12 , VOL13 , VOL14 , VOL15 , VOL16 , VOL17 , VOL18 , VOL19 , VOL20 , VOL21 , VOL22 , VOL23 , VOL24 , VOL25 , VOL26 , VOL27 , VOL28 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_2.5 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
574106.64	3725973.24	0.54980	(19011724)	574278.99	3725910.47	0.40412	(19011724)
574204.36	3725350.47	0.99001c	(22122824)	573655.61	3725533.56	0.47706	(18122024)
573199.43	3725824.57	0.21111	(21122824)	573815.91	3726049.22	0.46398	(18011924)
574057.43	3725989.22	0.51145	(18011924)	574023.10	3725980.72	0.58547	(18011924)
574346.45	3725650.86	0.35963	(21123024)	574312.95	3725545.02	0.49025	(21123024)
574206.77	3725308.84	0.64145c	(22122824)	574038.43	3725331.17	0.76524	(18120624)
574209.11	3725258.17	0.48885c	(22122824)	573785.25	3725289.00	0.25374	(18122024)
573482.56	3725346.84	0.15016	(17010624)	573666.90	3725489.52	0.34603	(18122024)
573580.56	3725595.53	0.36177	(17010624)	573477.56	3725543.69	0.22673	(17010624)
573474.22	3725503.19	0.20434	(17010624)	573229.37	3725847.44	0.23057	(21122824)
573040.93	3725971.18	0.14591	(21122824)	573120.15	3725973.92	0.15038	(21122824)

*** THE SUMMARY OF HIGHEST 24-HR RESULTS ***

** CONC OF PM_2.5 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID

```
- - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS       0.99001c ON 22122824: AT (  574204.36,
3725350.47,   -19.13,  2651.27,    2.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 17:01:41

                            PAGE  48
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of           77 Warning Message(s)
 A Total of         1671 Informational Message(s)

 A Total of        43800 Hours Were Processed

 A Total of          763 Calm Hours Identified

 A Total of          908 Missing Hours Identified (  2.07 Percent)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W340     697       PRBASE: Possible Error in PROFBASE Input:  Value is < 0
 PROFBASE
 ME W186     698       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold
 used           0.50
 ME W187     698       MEOPEN: ADJ_U* Option for Stable Low Winds used in
 AERMET
 CN W732    1176         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2017021824
 CN W732    5136         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2017080224
 CN W732    6048         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2017090924
 CN W732    6792         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2017101024
 CN W732   10368         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2018030824
 CN W732   10464         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2018031224
 CN W732   10632         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2018031924
 CN W732   12408         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2018060124
 CN W732   16704         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2018112724
 CN W732   16728         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2018112824
 CN W732   18552         AVER: 24-hr avg, < 18 hours of data, calms policy used.
```

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      2019021224
1907  CN W732   19056         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019030524
1908  CN W732   19152         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019030924
1909  CN W732   19224         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019031224
1910  CN W732   19344         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019031724
1911  CN W732   19464         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019032224
1912  CN W732   19512         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019032424
1913  CN W732   19536         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019032524
1914  CN W732   19560         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019032624
1915  CN W732   19584         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019032724
1916  CN W732   19656         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019033024
1917  CN W732   20016         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019041424
1918  CN W732   20112         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019041824
1919  CN W732   20712         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019051324
1920  CN W732   20856         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019051924
1921  CN W732   22080         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019070924
1922  CN W732   22200         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019071424
1923  CN W732   22848         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019081024
1924  CN W732   23400         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019090224
1925  CN W732   24216         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019100624
1926  CN W732   24408         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019101424
1927  CN W732   24576         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019102124
1928  MX W450   26281       CHKDAT: Record Out of Sequence in Meteorological File at:
      21010101
1929  MX W450   26281       CHKDAT: Record Out of Sequence in Meteorological File at:    1
      year gap
1930  CN W732   26496         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021010924
1931  CN W732   26520         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021011024
1932  CN W732   26544         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021011124
1933  CN W732   26568         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021011224
1934  CN W732   26832         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021012324
1935  CN W732   26856         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021012424
1936  CN W732   26880         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021012524
1937  CN W732   27000         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021013024
1938  CN W732   27024         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021013124
1939  CN W732   27192         AVER: 24-hr avg, < 18 hours of data, calms policy used.
```

```
      2021020724
1940  CN W732   28032         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021031424
1941  CN W732   28416         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021033024
1942  CN W732   28512         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021040324
1943  CN W732   28680         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021041024
1944  CN W732   29976         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021060324
1945  CN W732   30072         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021060724
1946  CN W732   30408         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021062124
1947  CN W732   30768         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021070624
1948  CN W732   30816         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021070824
1949  CN W732   31512         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021080624
1950  CN W732   31560         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021080824
1951  CN W732   32136         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021090124
1952  CN W732   33024         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021100824
1953  CN W732   33048         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021100924
1954  CN W732   34584         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021121224
1955  CN W732   38256         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022051424
1956  CN W732   38976         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022061324
1957  CN W732   40392         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022081124
1958  CN W732   41088         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022090924
1959  CN W732   41112         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022091024
1960  CN W732   41160         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022091224
1961  CN W732   41400         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022092224
1962  CN W732   42624         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022111224
1963  CN W732   42648         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022111324
1964  CN W732   42672         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022111424
1965  CN W732   42696         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022111524
1966  CN W732   42888         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022112324
1967  CN W732   43128         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022120324
1968  CN W732   43272         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022120924
1969  CN W732   43296         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022121024
1970
1971     ***********************************
1972     *** AERMOD Finishes Successfully ***
1973     ***********************************
1974
```

```
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 13.0.0
** Lakes Environmental Software Inc.
** Date: 7/18/2025
** File: C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 Const
co.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02
   MODELOPT DFAULT CONC
   AVERTIME 1 8
   URBANOPT 2492442 Riverside_County
   POLLUTID CO
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "16552-02 Const co.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     573500.180  3725886.220      -15.810
   LOCATION VOL2         VOLUME     573500.381  3725789.820      -16.120
   LOCATION VOL3         VOLUME     573597.602  3725886.190      -16.050
   LOCATION VOL4         VOLUME     573597.803  3725789.790      -16.360
   LOCATION VOL5         VOLUME     573694.930  3725886.254      -16.110
   LOCATION VOL6         VOLUME     573695.131  3725789.853      -16.280
   LOCATION VOL7         VOLUME     573792.553  3725789.824      -16.410
   LOCATION VOL8         VOLUME     573792.352  3725886.224      -16.330
   LOCATION VOL9         VOLUME     573890.171  3725886.254      -15.450
   LOCATION VOL10        VOLUME     573890.372  3725789.853      -15.750
   LOCATION VOL11        VOLUME     573987.794  3725789.824      -15.210
   LOCATION VOL12        VOLUME     573987.593  3725886.224      -15.520
   LOCATION VOL13        VOLUME     574085.292  3725886.133      -15.630
   LOCATION VOL14        VOLUME     574085.493  3725789.733      -15.890
   LOCATION VOL15        VOLUME     574182.915  3725789.703      -16.000
   LOCATION VOL16        VOLUME     574182.714  3725886.103      -15.750
   LOCATION VOL17        VOLUME     573695.175  3725695.674      -16.510
   LOCATION VOL18        VOLUME     573695.376  3725599.274      -16.700
   LOCATION VOL19        VOLUME     573792.799  3725599.244      -16.820
   LOCATION VOL20        VOLUME     573792.597  3725695.644      -16.620
   LOCATION VOL21        VOLUME     573890.309  3725695.354      -16.590
   LOCATION VOL22        VOLUME     573890.510  3725598.954      -16.930
   LOCATION VOL23        VOLUME     573987.932  3725598.925      -17.030
   LOCATION VOL24        VOLUME     573987.731  3725695.325      -16.730
   LOCATION VOL25        VOLUME     574085.442  3725695.035      -16.760
   LOCATION VOL26        VOLUME     574085.643  3725598.635      -17.100
   LOCATION VOL27        VOLUME     574183.066  3725598.605      -17.220
   LOCATION VOL28        VOLUME     574182.864  3725695.005      -16.880
   LOCATION VOL29        VOLUME     573895.419  3725502.137      -17.650
```

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   LOCATION VOL30        VOLUME     573895.620  3725405.737      -18.290
   LOCATION VOL31        VOLUME     573993.042  3725405.707      -18.630
   LOCATION VOL32        VOLUME     573992.841  3725502.107      -17.860
   LOCATION VOL33        VOLUME     574085.442  3725503.095      -17.950
   LOCATION VOL34        VOLUME     574085.643  3725406.695      -18.800
   LOCATION VOL35        VOLUME     574183.066  3725406.665      -18.970
   LOCATION VOL36        VOLUME     574182.864  3725503.066      -18.220
** Source Parameters **
   SRCPARAM VOL1         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL2         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL3         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL4         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL5         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL6         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL7         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL8         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL9         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL10        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL11        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL12        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL13        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL14        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL15        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL16        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL17        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL18        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL19        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL20        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL21        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL22        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL23        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL24        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL25        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL26        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL27        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL28        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL29        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL30        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL31        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL32        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL33        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL34        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL35        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL36        0.0177278428     5.000    22.640     1.400
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
```

```
   EMISFACT VOL2         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL6         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL11        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL12        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
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   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
```

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   EMISFACT VOL24        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL28        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
****************************************
```

```
**
**
RE STARTING
   INCLUDED "16552-02 Const co.rou"
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
ME STARTING
   SURFFILE ..\KTRM_V11_trimmed.sfc
   PROFFILE ..\KTRM_V11_trimmed.PFL
   SURFDATA 3104 2017
   UAIRDATA 3190 2017
   PROFBASE -36.04 METERS
ME FINISHED
**
****************************************
** AERMOD Output Pathway
****************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
   RECTABLE 8 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "16552-02 Const co.AD\01H1GALL.PLT" 31
   PLOTFILE 8 ALL 1ST "16552-02 Const co.AD\08H1GALL.PLT" 32
   SUMMFILE "16552-02 Const co.sum"
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            3 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W340     676       PRBASE: Possible Error in PROFBASE Input:  Value is < 0
 PROFBASE
 ME W186     677       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold
 used           0.50
 ME W187     677       MEOPEN: ADJ_U* Option for Stable Low Winds used in
 AERMET

 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************

FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                   ***
 11:19:19

```

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** MODEL SETUP OPTIONS SUMMARY ***

- - - -

**Input Runstream File:
aermod.inp

**Output Print File:
aermod.out

**Detailed Error/Message File: 16552-02 Const co.err
**File for Summary of Results: 16552-02 Const co.sum
FF *** AERMOD - VERSION 24142 *** *** C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 *** 07/18/25
*** AERMET - VERSION 22112 ***
*** ***
11:19:19

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER EMISSION RATE INIT. PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	AIRCRAFT BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	SZ SOURCE SCALAR VARY BY
VOL1	0	0.17728E-01	573500.2	3725886.2	-15.8	5.00	22.64	1.40 YES HRDOW NO
VOL2	0	0.17728E-01	573500.4	3725789.8	-16.1	5.00	22.64	1.40 YES HRDOW NO
VOL3	0	0.17728E-01	573597.6	3725886.2	-16.1	5.00	22.64	1.40 YES HRDOW NO
VOL4	0	0.17728E-01	573597.8	3725789.8	-16.4	5.00	22.64	1.40 YES HRDOW NO
VOL5	0	0.17728E-01	573694.9	3725886.3	-16.1	5.00	22.64	1.40 YES HRDOW NO
VOL6	0	0.17728E-01	573695.1	3725789.9	-16.3	5.00	22.64	1.40 YES HRDOW NO
VOL7	0	0.17728E-01	573792.6	3725789.8	-16.4	5.00	22.64	1.40 YES HRDOW NO
VOL8	0	0.17728E-01	573792.4	3725886.2	-16.3	5.00	22.64	1.40 YES HRDOW NO
VOL9	0	0.17728E-01	573890.2	3725886.3	-15.5	5.00	22.64	1.40 YES HRDOW NO
VOL10	0	0.17728E-01	573890.4	3725789.9	-15.8	5.00	22.64	1.40 YES HRDOW NO
VOL11	0	0.17728E-01	573987.8	3725789.8	-15.2	5.00	22.64	1.40 YES HRDOW NO
VOL12	0	0.17728E-01	573987.6	3725886.2	-15.5	5.00	22.64	1.40 YES HRDOW NO
VOL13	0	0.17728E-01	574085.3	3725886.1	-15.6	5.00	22.64	1.40 YES HRDOW NO
VOL14	0	0.17728E-01	574085.5	3725789.7	-15.9	5.00	22.64	1.40 YES HRDOW NO
VOL15	0	0.17728E-01	574182.9	3725789.7	-16.0	5.00	22.64	1.40 YES HRDOW NO
VOL16	0	0.17728E-01	574182.7	3725886.1	-15.8	5.00	22.64	1.40 YES HRDOW NO
VOL17	0	0.17728E-01	573695.2	3725695.7	-16.5	5.00	22.64	

```
      1.40     YES   HRDOW            NO
816   VOL18            0   0.17728E-01  573695.4 3725599.3   -16.7     5.00    22.64
      1.40     YES   HRDOW            NO
817   VOL19            0   0.17728E-01  573792.8 3725599.2   -16.8     5.00    22.64
      1.40     YES   HRDOW            NO
818   VOL20            0   0.17728E-01  573792.6 3725695.6   -16.6     5.00    22.64
      1.40     YES   HRDOW            NO
819   VOL21            0   0.17728E-01  573890.3 3725695.4   -16.6     5.00    22.64
      1.40     YES   HRDOW            NO
820   VOL22            0   0.17728E-01  573890.5 3725599.0   -16.9     5.00    22.64
      1.40     YES   HRDOW            NO
821   VOL23            0   0.17728E-01  573987.9 3725598.9   -17.0     5.00    22.64
      1.40     YES   HRDOW            NO
822   VOL24            0   0.17728E-01  573987.7 3725695.3   -16.7     5.00    22.64
      1.40     YES   HRDOW            NO
823   VOL25            0   0.17728E-01  574085.4 3725695.0   -16.8     5.00    22.64
      1.40     YES   HRDOW            NO
824   VOL26            0   0.17728E-01  574085.6 3725598.6   -17.1     5.00    22.64
      1.40     YES   HRDOW            NO
825   VOL27            0   0.17728E-01  574183.1 3725598.6   -17.2     5.00    22.64
      1.40     YES   HRDOW            NO
826   VOL28            0   0.17728E-01  574182.9 3725695.0   -16.9     5.00    22.64
      1.40     YES   HRDOW            NO
827   VOL29            0   0.17728E-01  573895.4 3725502.1   -17.7     5.00    22.64
      1.40     YES   HRDOW            NO
828   VOL30            0   0.17728E-01  573895.6 3725405.7   -18.3     5.00    22.64
      1.40     YES   HRDOW            NO
829   VOL31            0   0.17728E-01  573993.0 3725405.7   -18.6     5.00    22.64
      1.40     YES   HRDOW            NO
830   VOL32            0   0.17728E-01  573992.8 3725502.1   -17.9     5.00    22.64
      1.40     YES   HRDOW            NO
831   VOL33            0   0.17728E-01  574085.4 3725503.1   -17.9     5.00    22.64
      1.40     YES   HRDOW            NO
832   VOL34            0   0.17728E-01  574085.6 3725406.7   -18.8     5.00    22.64
      1.40     YES   HRDOW            NO
833   VOL35            0   0.17728E-01  574183.1 3725406.7   -19.0     5.00    22.64
      1.40     YES   HRDOW            NO
834   VOL36            0   0.17728E-01  574182.9 3725503.1   -18.2     5.00    22.64
      1.40     YES   HRDOW            NO
835   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***       07/18/25
836    *** AERMET - VERSION  22112 ***
       ***                                                                ***
       11:19:19
837
                                  PAGE   3
838    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
839
840
841                                          *** SOURCE IDs DEFINING SOURCE GROUPS ***
842
843    SRCGROUP ID                                          SOURCE IDs
844    -----------                                          ----------
845
846
847     ALL         VOL1         , VOL2         , VOL3         , VOL4         , VOL5         ,
       VOL6         , VOL7         , VOL8         ,
848
849                 VOL9         , VOL10        , VOL11        , VOL12        , VOL13        ,
                    VOL14        , VOL15        , VOL16        ,
850
851                 VOL17        , VOL18        , VOL19        , VOL20        , VOL21        ,
                    VOL22        , VOL23        , VOL24        ,
852
853                 VOL25        , VOL26        , VOL27        , VOL28        , VOL29        ,
                    VOL30        , VOL31        , VOL32        ,
```

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854
855              VOL33       , VOL34       , VOL35       , VOL36       ,
856  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
     Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
857   *** AERMET - VERSION  22112 ***
      ***                                                              ***
      11:19:19
858
                                PAGE   4
859   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
860
861
862                                        *** SOURCE IDs DEFINED AS URBAN SOURCES ***
863
864    URBAN ID   URBAN POP                                    SOURCE IDs
865    --------   ---------                                    ----------
866
867
868                2492442.   VOL1        , VOL2        , VOL3        , VOL4        ,
                   VOL5        , VOL6        , VOL7        ,
869   VOL8        ,
870
871              VOL9        , VOL10       , VOL11       , VOL12       , VOL13       ,
                 VOL14       , VOL15       , VOL16       ,
872
873              VOL17       , VOL18       , VOL19       , VOL20       , VOL21       ,
                 VOL22       , VOL23       , VOL24       ,
874
875              VOL25       , VOL26       , VOL27       , VOL28       , VOL29       ,
                 VOL30       , VOL31       , VOL32       ,
876
877              VOL33       , VOL34       , VOL35       , VOL36       ,
878  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
     Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
879   *** AERMET - VERSION  22112 ***
      ***                                                              ***
      11:19:19
880
                                PAGE   5
881   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
882
883                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
884
885    SOURCE ID = VOL1         ; SOURCE TYPE = VOLUME   :
886     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
887    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
888                                                 DAY OF WEEK = WEEKDAY
889       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
890       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
891      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
892                                                 DAY OF WEEK = SATURDAY
893       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
894       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
895      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
896                                                 DAY OF WEEK = SUNDAY
897       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
          .0000E+00    7  .0000E+00    8  .0000E+00
```

```
898       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
899       17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
          .0000E+00   23  .0000E+00   24  .0000E+00
900   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
901    *** AERMET - VERSION  22112 ***
       ***                                                                ***
       11:19:19
902
                                  PAGE   6
903    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
904
905                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
906
907    SOURCE ID = VOL2         ; SOURCE TYPE = VOLUME   :
908     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
909    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
910                                              DAY OF WEEK = WEEKDAY
911       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
912       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
913       17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
914                                              DAY OF WEEK = SATURDAY
915       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
916       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
917       17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
918                                              DAY OF WEEK = SUNDAY
919       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
920       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
921       17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
922   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
923    *** AERMET - VERSION  22112 ***
       ***                                                                ***
       11:19:19
924
                                  PAGE   7
925    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
926
927                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
928
929    SOURCE ID = VOL3         ; SOURCE TYPE = VOLUME   :
930     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
931    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
932                                              DAY OF WEEK = WEEKDAY
933       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
934       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
935       17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
          .0000E+00   23  .0000E+00   24  .0000E+00
```

```
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:19:19

                            PAGE   8
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL4         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:19:19

                            PAGE   9
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL5         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   H
```

```
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - -
```

```
     11:19:19
1012
                                PAGE  11
1013  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1014
1015                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1016
1017  SOURCE ID = VOL7         ; SOURCE TYPE = VOLUME   :
1018   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1019  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1020                                                DAY OF WEEK = WEEKDAY
1021     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
1022     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
1023    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1024                                                DAY OF WEEK = SATURDAY
1025     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1026     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1027    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1028                                                DAY OF WEEK = SUNDAY
1029     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1030     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1031    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1032  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1033   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       11:19:19
1034
                                PAGE  12
1035  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1036
1037                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1038
1039  SOURCE ID = VOL8         ; SOURCE TYPE = VOLUME   :
1040   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1041  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1042                                                DAY OF WEEK = WEEKDAY
1043     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
1044     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
1045    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1046                                                DAY OF WEEK = SATURDAY
1047     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1048     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1049    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1050                                                DAY OF WEEK = SUNDAY
```

```
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:19:19

                              PAGE  13
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL9         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
  .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:19:19

                              PAGE  14
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL10        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
  .1000E+01   15  .0000E+00   16  .0000E+00
```

```
1089      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1090                                              DAY OF WEEK = SATURDAY
1091       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1092       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1093      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1094                                              DAY OF WEEK = SUNDAY
1095       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1096       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1097      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1098  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1099   *** AERMET - VERSION  22112 ***
       ***                                                                  ***
       11:19:19
1100
                                PAGE  15
1101   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1102
1103                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
1104
1105   SOURCE ID = VOL11        ; SOURCE TYPE = VOLUME   :
1106    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1107  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1108                                              DAY OF WEEK = WEEKDAY
1109       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1110       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
1111      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1112                                              DAY OF WEEK = SATURDAY
1113       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1114       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1115      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1116                                              DAY OF WEEK = SUNDAY
1117       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1118       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1119      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1120  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1121   *** AERMET - VERSION  22112 ***
       ***                                                                  ***
       11:19:19
1122
                                PAGE  16
1123   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1124
1125                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
1126
```

```
 SOURCE ID = VOL12        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:19:19

                            PAGE  17
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                  WEEK (HRDOW) *

 SOURCE ID = VOL13        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
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1165    *** AERMET - VERSION  22112 ***
        ***                                                                    ***
        11:19:19
1166
                                    PAGE  18
1167    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1168
1169                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1170
1171    SOURCE ID = VOL14        ; SOURCE TYPE = VOLUME   :
1172     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1173    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - - -
1174                                                DAY OF WEEK = WEEKDAY
1175       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1176       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1177      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1178                                                DAY OF WEEK = SATURDAY
1179       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1180       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1181      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1182                                                DAY OF WEEK = SUNDAY
1183       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1184       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1185      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1186    FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
        Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1187     *** AERMET - VERSION  22112 ***
         ***                                                                   ***
         11:19:19
1188
                                    PAGE  19
1189    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1190
1191                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1192
1193    SOURCE ID = VOL15        ; SOURCE TYPE = VOLUME   :
1194     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1195    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - - -
1196                                                DAY OF WEEK = WEEKDAY
1197       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1198       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1199      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1200                                                DAY OF WEEK = SATURDAY
1201       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1202       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1203      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
```

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      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
      .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:19:19

                            PAGE  20
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL16        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .1000E+01    8  .1000E+01
       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:19:19

                            PAGE  21
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL17        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
      .0000E+00    7  .1000E+01    8  .1000E+01
```

```
1242       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1243      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1244                                              DAY OF WEEK = SATURDAY
1245       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1246       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1247      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1248                                              DAY OF WEEK = SUNDAY
1249       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1250       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1251      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1252  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1253   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       11:19:19
1254
                                  PAGE  22
1255   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1256
1257                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
1258
1259   SOURCE ID = VOL18        ; SOURCE TYPE = VOLUME   :
1260    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1261   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1262                                              DAY OF WEEK = WEEKDAY
1263       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1264       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1265      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1266                                              DAY OF WEEK = SATURDAY
1267       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1268       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1269      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1270                                              DAY OF WEEK = SUNDAY
1271       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1272       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1273      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1274  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1275   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       11:19:19
1276
                                  PAGE  23
1277   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1278
1279                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY O
```

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                    WEEK (HRDOW) *
1280
1281   SOURCE ID = VOL19        ; SOURCE TYPE = VOLUME   :
1282    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
        SCALAR   HOUR   SCALAR   HOUR   SCALAR
1283   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1284                                              DAY OF WEEK = WEEKDAY
1285      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1286      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
1287     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1288                                              DAY OF WEEK = SATURDAY
1289      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1290      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1291     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1292                                              DAY OF WEEK = SUNDAY
1293      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1294      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1295     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1296   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
       Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1297    *** AERMET - VERSION  22112 ***
        ***                                                                    ***
        11:19:19
1298
                                  PAGE  24
1299   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1300
1301                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1302
1303   SOURCE ID = VOL20        ; SOURCE TYPE = VOLUME   :
1304    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
        SCALAR   HOUR   SCALAR   HOUR   SCALAR
1305   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1306                                              DAY OF WEEK = WEEKDAY
1307      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1308      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
1309     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1310                                              DAY OF WEEK = SATURDAY
1311      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1312      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1313     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1314                                              DAY OF WEEK = SUNDAY
1315      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1316      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1317     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
          .0000E+00   23  .0000E+00   24  .0000E+00
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 *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:19:19

                              PAGE  25
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL21        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                             DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:19:19

                              PAGE  26
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL22        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                             DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
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 .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:19:19

                            PAGE  27
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL23        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
  .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:19:19

                            PAGE  28
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL24        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
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1395      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1396      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
          .1000E+01   15  .0000E+00   16  .0000E+00
1397     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1398                                              DAY OF WEEK = SATURDAY
1399      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1400      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1401     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1402                                              DAY OF WEEK = SUNDAY
1403      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1404      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1405     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1406 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
     Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1407  *** AERMET - VERSION  22112 ***
      ***                                                                    ***
      11:19:19
1408
                                PAGE  29
1409  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1410
1411                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1412
1413  SOURCE ID = VOL25        ; SOURCE TYPE = VOLUME   :
1414   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
      SCALAR   HOUR   SCALAR   HOUR   SCALAR
1415  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1416                                              DAY OF WEEK = WEEKDAY
1417      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1418      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
1419     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1420                                              DAY OF WEEK = SATURDAY
1421      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1422      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1423     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1424                                              DAY OF WEEK = SUNDAY
1425      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1426      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1427     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1428 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
     Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1429  *** AERMET - VERSION  22112 ***
      ***                                                                    ***
      11:19:19
1430
                                PAGE  30
1431  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
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1432
1433                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1434
1435    SOURCE ID = VOL26        ; SOURCE TYPE = VOLUME   :
1436     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1437    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1438                                                DAY OF WEEK = WEEKDAY
1439       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1440       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1441      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1442                                                DAY OF WEEK = SATURDAY
1443       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1444       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1445      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1446                                                DAY OF WEEK = SUNDAY
1447       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1448       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1449      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1450    FE *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
        Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1451     *** AERMET - VERSION  22112 ***
         ***                                                                    ***
         11:19:19
1452
                                    PAGE  31
1453    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1454
1455                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1456
1457    SOURCE ID = VOL27        ; SOURCE TYPE = VOLUME   :
1458     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1459    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1460                                                DAY OF WEEK = WEEKDAY
1461       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1462       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1463      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1464                                                DAY OF WEEK = SATURDAY
1465       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1466       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1467      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1468                                                DAY OF WEEK = SUNDAY
1469       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1470       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
           .0000E+00   15  .0000E+00   16  .0000E+00
```

```
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                ***
 11:19:19

                            PAGE  32
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL28        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -

                                          DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00

                                          DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00

                                          DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                ***
 11:19:19

                            PAGE  33
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL29        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -

                                          DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00

                                          DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
```

```
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:19:19

                             PAGE  34
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL30        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:19:19

                             PAGE  35
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL31        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
```

```
- - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:19:19

                            PAGE  36
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                  WEEK (HRDOW) *

 SOURCE ID = VOL32        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:19:19
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                                PAGE  37
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                  WEEK (HRDOW) *

SOURCE ID = VOL33        ; SOURCE TYPE = VOLUME   :
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:19:19

                                PAGE  38
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                  WEEK (HRDOW) *

SOURCE ID = VOL34        ; SOURCE TYPE = VOLUME   :
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
   .0000E+00    7  .0000E+00    8  .0000E+00
```

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1624       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1625      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
           .0000E+00   23  .0000E+00   24  .0000E+00
1626  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1627   *** AERMET - VERSION  22112 ***
       ***                                                                  ***
       11:19:19
1628
                                  PAGE  39
1629   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1630
1631                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1632
1633   SOURCE ID = VOL35        ; SOURCE TYPE = VOLUME   :
1634    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1635   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1636                                              DAY OF WEEK = WEEKDAY
1637       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1638       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1639      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1640                                              DAY OF WEEK = SATURDAY
1641       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1642       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1643      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1644                                              DAY OF WEEK = SUNDAY
1645       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1646       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1647      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1648  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1649   *** AERMET - VERSION  22112 ***
       ***                                                                  ***
       11:19:19
1650
                                  PAGE  40
1651   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1652
1653                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1654
1655   SOURCE ID = VOL36        ; SOURCE TYPE = VOLUME   :
1656    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1657   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1658                                              DAY OF WEEK = WEEKDAY
1659       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1660       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1661      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
           .0000E+00   23  .0000E+00   24  .0000E+00
```

```
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:19:19

                            PAGE  41
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                        *** DISCRETE CARTESIAN RECEPTORS ***
                                      (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                   (METERS)

     ( 574106.6, 3725973.2,     -15.2,    2651.3,       2.0);         ( 574279.0,
     3725910.5,     -15.9,    2651.3,       2.0);
     ( 574204.4, 3725350.5,     -19.1,    2651.3,       2.0);         ( 573655.6,
     3725533.6,     -16.7,    2651.3,       2.0);
     ( 573199.4, 3725824.6,     -14.8,    2651.3,       2.0);         ( 573815.9,
     3726049.2,     -13.7,    2651.3,       2.0);
     ( 574057.4, 3725989.2,     -14.7,    2651.3,       2.0);         ( 574023.1,
     3725980.7,     -14.6,    2651.3,       2.0);
     ( 574346.5, 3725650.9,     -17.5,    2651.3,       2.0);         ( 574313.0,
     3725545.0,     -17.4,    2651.3,       2.0);
     ( 574206.8, 3725308.8,     -19.7,    2651.3,       2.0);         ( 574038.4,
     3725331.2,     -18.7,    2651.3,       2.0);
     ( 574209.1, 3725258.2,     -19.7,    2651.3,       2.0);         ( 573785.2,
     3725289.0,     -17.4,    2651.3,       2.0);
     ( 573482.6, 3725346.8,     -16.6,    2651.3,       2.0);         ( 573666.9,
     3725489.5,     -17.0,    2651.3,       2.0);
     ( 573580.6, 3725595.5,     -16.2,    2651.3,       2.0);         ( 573477.6,
     3725543.7,     -16.2,    2651.3,       2.0);
     ( 573474.2, 3725503.2,     -16.5,    2651.3,       2.0);         ( 573229.4,
     3725847.4,     -14.7,    2651.3,       2.0);
     ( 573040.9, 3725971.2,     -13.5,    2651.3,       2.0);         ( 573120.2,
     3725973.9,     -13.8,    2651.3,       2.0);
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:19:19

                            PAGE  42
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                        *** METEOROLOGICAL DAYS SELECTED FOR
                                        PROCESSING ***
                                                   (1=YES; 0=NO)

           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
           1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
           1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
```

```
1700              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                  1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1701              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1
                  1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1702              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                  1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1703              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                  1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1704              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                  1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1705              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1706
1707                  NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT
                      IS INCLUDED IN THE DATA FILE.
1708
1709
1710
1711                                  *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED
                                      CATEGORIES ***
1712                                                  (METERS/SEC)
1713
1714                                                 1.54,   3.09,   5.14,   8.23,  10.80,
1715  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1716   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       11:19:19
1717
                                    PAGE  43
1718   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1719
1720                                  *** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA
                                      ***
1721
1722       Surface file:
           ..\KTRM_V11_trimmed.sfc
           Met Version:  22112
1723       Profile file:
           ..\KTRM_V11_trimmed.PFL
1724       Surface format:
           FREE

1725       Profile format:
           FREE

1726       Surface station no.:     3104                Upper air station no.:     3190
1727                       Name: UNKNOWN                                  Name:
                           UNKNOWN
1728                       Year:   2017                                   Year:   2017
1729
1730    First 24 hours of scalar data
1731    YR MO DY JDY HR     H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALBEDO
        REF WS   WD     HT  REF TA     HT
1732  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - -
1733    17 01 01   1 01  -21.0  0.211 -9.000 -9.000 -999.  233.     49.1  0.06   2.53   1.00
        2.86  321.   10.1  284.8    2.0
1734    17 01 01   1 02  -48.7  0.490 -9.000 -9.000 -999.  824.    264.4  0.14   2.53   1.00
        5.36  358.   10.1  285.3    2.0
1735    17 01 01   1 03  -39.8  0.400 -9.000 -9.000 -999.  613.    175.9  0.06   2.53   1.00
        5.36  294.   10.1  284.8    2.0
1736    17 01 01   1 04  -47.4  0.477 -9.000 -9.000 -999.  790.    250.2  0.14   2.53   1.00
        5.22  335.   10.1  284.8    2.0
1737    17 01 01   1 05  -55.1  0.554 -9.000 -9.000 -999.  987.    337.1  0.06   2.53   1.00
        7.20  327.   10.1  284.2    2.0
1738    17 01 01   1 06  -30.8  0.309 -9.000 -9.000 -999.  472.    104.8  0.14   2.53   1
```

```
      3.44  335.   10.1  283.8    2.0
1739  17 01 01   1 07  -15.6  0.170 -9.000 -9.000 -999.  191.     31.7  0.06   2.53
      2.33  329.   10.1  283.8    2.0
1740  17 01 01   1 08   -7.2  0.185 -9.000 -9.000 -999.  191.     79.0  0.06   2.53   0.50
      2.47  326.   10.1  285.3    2.0
1741  17 01 01   1 09   46.3  0.265  0.707  0.005  276.  326.    -36.1  0.06   2.53   0.31
      3.00  303.   10.1  285.9    2.0
1742  17 01 01   1 10  113.8  0.336  1.418  0.005  907.  468.    -30.2  0.06   2.53   0.24
      3.76  300.   10.1  288.1    2.0
1743  17 01 01   1 11  159.2  0.526  1.708  0.005 1133.  915.    -82.7  0.06   2.53   0.22
      6.27  311.   10.1  289.2    2.0
1744  17 01 01   1 12  179.8  0.454  1.860  0.005 1296.  739.    -47.0  0.06   2.53   0.21
      5.24  315.   10.1  289.8    2.0
1745  17 01 01   1 13  175.0  0.302  1.886  0.005 1387.  416.    -14.2  0.06   2.53   0.21
      3.20  297.   10.1  290.3    2.0
1746  17 01 01   1 14  145.9  0.251  1.851  0.005 1573.  302.     -9.7  0.06   2.53   0.23
      2.50  322.   10.1  292.0    2.0
1747  17 01 01   1 15   91.5  0.235  1.599  0.005 1617.  273.    -12.8  0.06   2.53   0.26
      2.42  316.   10.1  291.4    2.0
1748  17 01 01   1 16   18.8  0.259  0.950  0.005 1643.  316.    -83.0  0.14   2.53   0.36
      2.57  338.   10.1  291.4    2.0
1749  17 01 01   1 17  -41.4  0.440 -9.000 -9.000 -999.  701.    213.3  0.14   2.53   0.66
      4.83  344.   10.1  288.8    2.0
1750  17 01 01   1 18  -40.2  0.408 -9.000 -9.000 -999.  626.    182.7  0.14   2.53   1.00
      4.49  356.   10.1  287.5    2.0
1751  17 01 01   1 19  -33.3  0.337 -9.000 -9.000 -999.  473.    124.8  0.14   2.53   1.00
      3.74  352.   10.1  287.0    2.0
1752  17 01 01   1 20  -19.3  0.194 -9.000 -9.000 -999.  219.     41.4  0.06   2.53   1.00
      2.64  326.   10.1  285.3    2.0
1753  17 01 01   1 21  -29.0  0.291 -9.000 -9.000 -999.  377.     93.2  0.14   2.53   1.00
      3.25  336.   10.1  285.3    2.0
1754  17 01 01   1 22  -11.2  0.142 -9.000 -9.000 -999.  145.     23.3  0.06   2.53   1.00
      2.01  272.   10.1  283.8    2.0
1755  17 01 01   1 23  -25.8  0.259 -9.000 -9.000 -999.  316.     73.6  0.06   2.53   1.00
      3.47  301.   10.1  285.9    2.0
1756  17 01 01   1 24  -13.9  0.162 -9.000 -9.000 -999.  161.     29.0  0.09   2.53   1.00
      2.05  250.   10.1  283.1    2.0
1757
1758
1759   First hour of profile data
1760   YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
1761   17 01 01 01   10.1 1  321.    2.86   284.9   99.0  -99.00  -99.00
1762
1763   F indicates top of profile (=1) or below (=0)
1764 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
     Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***       07/18/25
1765   *** AERMET - VERSION  22112 ***
       ***                                                              ***
       11:19:19
1766
                                  PAGE  44
1767   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1768
1769                              *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION   VALUES
                                  FOR SOURCE GROUP:  ALL      ***
1770                                  INCLUDING SOURCE(S):     VOL1        , VOL2        ,
                                      VOL3        , VOL4        , VOL5        ,
1771                  VOL6        , VOL7        , VOL8        , VOL9        , VOL10       ,
                      VOL11       , VOL12       , VOL13       ,
1772                  VOL14       , VOL15       , VOL16       , VOL17       , VOL18       ,
                      VOL19       , VOL20       , VOL21       ,
1773                  VOL22       , VOL23       , VOL24       , VOL25       , VOL26       ,
                      VOL27       , VOL28       ,  . . .      ,
1774
1775                                        *** DISCRETE CARTESIAN RECEPTOR POINTS
1776
```

```
                                    ** CONC OF CO       IN
                                    MICROGRAMS/M**3

     X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
     Y-COORD (M)        CONC     (YYMMDDHH)
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - -
       574106.64   3725973.24       18.78731  (17011107)               574278.99
       3725910.47       17.73112  (21011407)
       574204.36   3725350.47       28.29159  (19011407)               573655.61
       3725533.56       19.08660  (18020107)
       573199.43   3725824.57        8.86063  (17012308)               573815.91
       3726049.22       14.24122  (18022207)
       574057.43   3725989.22       18.08834  (21012507)               574023.10
       3725980.72       18.83159  (21012507)
       574346.45   3725650.86       19.48433  (21020107)               574312.95
       3725545.02       21.36397  (19012807)
       574206.77   3725308.84       22.37394  (19011407)               574038.43
       3725331.17       24.62753  (18010307)
       574209.11   3725258.17       18.53320  (18010307)               573785.25
       3725289.00       10.50195  (21020407)
       573482.56   3725346.84        8.25413  (22020307)               573666.90
       3725489.52       14.83961  (21012208)
       573580.56   3725595.53       18.54312  (18020107)               573477.56
       3725543.69       12.75618  (18020107)
       573474.22   3725503.19       11.91953  (22020307)               573229.37
       3725847.44        9.13853  (21122808)
       573040.93   3725971.18        7.24435  (17101907)               573120.15
       3725973.92        7.17318  (17101907)
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***       07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                            ***
 11:19:19

                            PAGE  45
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                            *** THE   1ST HIGHEST  8-HR AVERAGE CONCENTRATION   VALUES
                            FOR SOURCE GROUP:  ALL      ***
                                INCLUDING SOURCE(S):     VOL1        , VOL2        ,
                                VOL3        , VOL4        , VOL5        ,
               VOL6        , VOL7        , VOL8        , VOL9        , VOL10       ,
               VOL11       , VOL12       , VOL13       ,
               VOL14       , VOL15       , VOL16       , VOL17       , VOL18       ,
               VOL19       , VOL20       , VOL21       ,
               VOL22       , VOL23       , VOL24       , VOL25       , VOL26       ,
               VOL27       , VOL28       ,  . . .      ,

                                  *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                    ** CONC OF CO       IN
                                    MICROGRAMS/M**3                          **

     X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
     Y-COORD (M)        CONC     (YYMMDDHH)
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - -
       574106.64   3725973.24       5.16848c (21012208)               574278.99
       3725910.47       4.47270c (21012208)
       574204.36   3725350.47       8.56813  (17011316)               573655.61
       3725533.56       4.81963c (21012208)
       573199.43   3725824.57       1.75152  (21122808)               573815.91
       3726049.22       3.24833c (21012208)
       574057.43   3725989.22       4.74617c (21012208)               574023.10
       3725980.72       5.14300c (21012208)
```

```
574346.45   3725650.86        4.16504  (22120508)                574312.95
3725545.02        4.83607  (22120508)
574206.77   3725308.84        5.62904m (22122108)                574038.4
3725331.17        6.52760m (22122108)
574209.11   3725258.17        4.61599m (22122108)                573785.25
3725289.00        2.64395c (21012208)
573482.56   3725346.84        1.54869c (21012208)                573666.90
3725489.52        3.91923c (21012208)
573580.56   3725595.53        4.02212c (21012208)                573477.56
3725543.69        2.35208  (17010608)
573474.22   3725503.19        2.11077c (21012208)                573229.37
3725847.44        1.84603  (21122808)
573040.93   3725971.18        1.38293  (21120908)                573120.15
3725973.92        1.65170  (21120908)
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                ***
 11:19:19

                              PAGE  46
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                          *** THE SUMMARY OF HIGHEST  1-HR RESULTS
                                          ***


                                   ** CONC OF CO       IN
                                   MICROGRAMS/M**3                          **


                                                  DATE

                                                    NETWORK
GROUP ID                           AVERAGE CONC     (YYMMDDHH)             RECEPTOR  (XR,
YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS      28.29159  ON 19011407: AT (  574204.36,
3725350.47,   -19.13,  2651.27,    2.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                ***
 11:19:19

                              PAGE  47
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                          *** THE SUMMARY OF HIGHEST  8-HR RESULTS
                                          ***


                                   ** CONC OF CO       IN
                                   MICROGRAMS/M**3                          **


                                                  DATE
```

```
                                                                NETWORK
GROUP ID                          AVERAGE CONC     (YYMMDDHH)             RECEPTOR (X, Y,
YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS       8.56813  ON 17011316: AT (  574204.36,
3725350.47,   -19.13,  2651.27,    2.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:19:19

                             PAGE  48
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of          251 Warning Message(s)
 A Total of         1671 Informational Message(s)

 A Total of        43800 Hours Were Processed

 A Total of          763 Calm Hours Identified

 A Total of          908 Missing Hours Identified (  2.07 Percent)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W340     676       PRBASE: Possible Error in PROFBASE Input:  Value is < 0
 PROFBASE
 ME W186     677       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold
 used           0.50
 ME W187     677       MEOPEN: ADJ_U* Option for Stable Low Winds used in
 AERMET
 CN W733      56         AVER: 8-hr avg, < 6 hours of data, calms policy used.
 2017010308
 CN W733     232         AVER: 8-hr avg, < 6 hours of data, calms policy used.
 2017011016
 CN W733    1168         AVER: 8-hr avg, < 6 hours of data, calms policy used.
 2017021816
 CN W733    1960         AVER: 8-hr avg, < 6 hours of data, calms policy used.
 2017032316
 CN W733    1984         AVER: 8-hr avg, < 6 hours of data, calms policy used.
 2017032416
 CN W733    2000         AVER: 8-hr avg, < 6 hours of data, calms policy used.
 2017032508
 CN W733    2032         AVER: 8-hr avg, < 6 hours of data, calms policy used.
 2017032616
 CN W733    2184         AVER: 8-hr avg, < 6 hours of data, calms policy used.
 2017040124
 CN W733    3832         AVER: 8-hr avg, < 6 hours of data, calms policy used.
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      2017060916
1899  CN W733    5128        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017080216
1900  CN W733    5568        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017082024
1901  CN W733    5632        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017082316
1902  CN W733    6040        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017090916
1903  CN W733    6048        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017090924
1904  CN W733    6136        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017091316
1905  CN W733    6304        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017092016
1906  CN W733    6496        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017092816
1907  CN W733    6784        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017101016
1908  CN W733    6904        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017101516
1909  CN W733    6960        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017101724
1910  CN W733    6968        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017101808
1911  CN W733    8728        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017123016
1912  CN W733    8736        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017123024
1913  CN W733    9096        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018011424
1914  CN W733    9480        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018013024
1915  CN W733    9704        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018020908
1916  CN W733    9784        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018021216
1917  CN W733    9824        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018021408
1918  CN W733    9904        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018021716
1919  CN W733    9992        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018022108
1920  CN W733   10040        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018022308
1921  CN W733   10072        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018022416
1922  CN W733   10096        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018022516
1923  CN W733   10200        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018030124
1924  CN W733   10232        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018030308
1925  CN W733   10328        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018030708
1926  CN W733   10352        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018030808
1927  CN W733   10360        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018030816
1928  CN W733   10368        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018030824
1929  CN W733   10448        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018031208
1930  CN W733   10456        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018031216
1931  CN W733   10624        AVER: 8-hr avg, < 6 hours of data, calms policy used.
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      2018031916
1932  CN W733   12392        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018060108
1933  CN W733   12400        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018060116
1934  CN W733   14488        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018082716
1935  CN W733   15888        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018102424
1936  CN W733   15896        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018102508
1937  CN W733   16392        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018111424
1938  CN W733   16696        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018112716
1939  CN W733   16704        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018112724
1940  CN W733   16712        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018112808
1941  CN W733   16720        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018112816
1942  CN W733   18544        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019021216
1943  CN W733   18904        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019022716
1944  CN W733   18952        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019030116
1945  CN W733   19048        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019030516
1946  CN W733   19056        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019030524
1947  CN W733   19136        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019030908
1948  CN W733   19168        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019031016
1949  CN W733   19192        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019031116
1950  CN W733   19208        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019031208
1951  CN W733   19216        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019031216
1952  CN W733   19336        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019031716
1953  CN W733   19376        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019031908
1954  CN W733   19408        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019032016
1955  CN W733   19424        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019032108
1956  CN W733   19432        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019032116
1957  CN W733   19456        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019032216
1958  CN W733   19480        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019032316
1959  CN W733   19504        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019032416
1960  CN W733   19512        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019032424
1961  CN W733   19528        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019032516
1962  CN W733   19552        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019032616
1963  CN W733   19560        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019032624
1964  CN W733   19568        AVER: 8-hr avg, < 6 hours of data, calms policy used.
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      2019032708
1965  CN W733   19576        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019032716
1966  CN W733   19648        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019033016
1967  CN W733   19656        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019033024
1968  CN W733   20000        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019041408
1969  CN W733   20080        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019041716
1970  CN W733   20096        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019041808
1971  CN W733   20104        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019041816
1972  CN W733   20320        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019042716
1973  CN W733   20344        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019042816
1974  CN W733   20416        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019050116
1975  CN W733   20560        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019050716
1976  CN W733   20704        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019051316
1977  CN W733   20712        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019051324
1978  CN W733   20784        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019051624
1979  CN W733   20840        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019051908
1980  CN W733   20848        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019051916
1981  CN W733   20856        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019051924
1982  CN W733   20936        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019052308
1983  CN W733   21232        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019060416
1984  CN W733   21256        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019060516
1985  CN W733   21296        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019060708
1986  CN W733   21328        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019060816
1987  CN W733   21360        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019060924
1988  CN W733   21584        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019061908
1989  CN W733   21592        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019061916
1990  CN W733   21704        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019062408
1991  CN W733   21712        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019062416
1992  CN W733   21752        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019062608
1993  CN W733   21880        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019070116
1994  CN W733   21904        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019070216
1995  CN W733   21976        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019070516
1996  CN W733   22016        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019070708
1997  CN W733   22064        AVER: 8-hr avg, < 6 hours of data, calms policy used.
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      2019070908
1998  CN W733   22072        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019070916
1999  CN W733   22120        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019071116
2000  CN W733   22184        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019071408
2001  CN W733   22192        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019071416
2002  CN W733   22840        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019081016
2003  CN W733   23192        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019082508
2004  CN W733   23392        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019090216
2005  CN W733   23416        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019090316
2006  CN W733   23488        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019090616
2007  CN W733   23536        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019090816
2008  CN W733   23560        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019090916
2009  CN W733   23672        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019091408
2010  CN W733   23696        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019091508
2011  CN W733   23752        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019091716
2012  CN W733   23896        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019092316
2013  CN W733   23992        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019092716
2014  CN W733   24016        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019092816
2015  CN W733   24040        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019092916
2016  CN W733   24200        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019100608
2017  CN W733   24208        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019100616
2018  CN W733   24216        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019100624
2019  CN W733   24248        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019100808
2020  CN W733   24280        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019100916
2021  CN W733   24400        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019101416
2022  CN W733   24448        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019101616
2023  CN W733   24568        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019102116
2024  CN W733   24808        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019103116
2025  CN W733   25576        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019120216
2026  CN W733   26280        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019123124
2027  MX W450   26281      CHKDAT: Record Out of Sequence in Meteorological File at:
      21010101
2028  MX W450   26281      CHKDAT: Record Out of Sequence in Meteorological File at:    1
      year gap
2029  CN W733   26488        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021010916
2030  CN W733   26512        AVER: 8-hr avg, < 6 hours of data, calms policy used.
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      2021011016
2031  CN W733   26536        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021011116
2032  CN W733   26560        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021011216
2033  CN W733   26776        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021012116
2034  CN W733   26792        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021012208
2035  CN W733   26824        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021012316
2036  CN W733   26848        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021012416
2037  CN W733   26872        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021012516
2038  CN W733   26992        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021013016
2039  CN W733   27000        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021013024
2040  CN W733   27016        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021013116
2041  CN W733   27024        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021013124
2042  CN W733   27176        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021020708
2043  CN W733   28024        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021031416
2044  CN W733   28216        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021032216
2045  CN W733   28408        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021033016
2046  CN W733   28504        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021040316
2047  CN W733   28576        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021040616
2048  CN W733   28624        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021040816
2049  CN W733   28664        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021041008
2050  CN W733   28672        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021041016
2051  CN W733   28712        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021041208
2052  CN W733   28960        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021042216
2053  CN W733   28984        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021042316
2054  CN W733   29008        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021042416
2055  CN W733   29960        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021060308
2056  CN W733   29968        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021060316
2057  CN W733   30056        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021060708
2058  CN W733   30064        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021060716
2059  CN W733   30400        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021062116
2060  CN W733   30496        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021062516
2061  CN W733   30568        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021062816
2062  CN W733   30752        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021070608
2063  CN W733   30760        AVER: 8-hr avg, < 6 hours of data, calms policy used.
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      2021070616
2064  CN W733   30792        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021070724
2065  CN W733   30800        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021070808
2066  CN W733   30808        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021070816
2067  CN W733   31496        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021080608
2068  CN W733   31504        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021080616
2069  CN W733   31544        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021080808
2070  CN W733   31552        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021080816
2071  CN W733   31624        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021081116
2072  CN W733   31648        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021081216
2073  CN W733   31728        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021081524
2074  CN W733   32128        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021090116
2075  CN W733   32992        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021100716
2076  CN W733   33016        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021100816
2077  CN W733   33040        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021100916
2078  CN W733   34544        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021121108
2079  CN W733   34568        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021121208
2080  CN W733   34584        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021121224
2081  CN W733   34592        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021121308
2082  CN W733   34664        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021121608
2083  CN W733   35104        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022010316
2084  CN W733   35800        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022020116
2085  CN W733   36328        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022022316
2086  CN W733   36648        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022030824
2087  CN W733   37192        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022033116
2088  CN W733   37264        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022040316
2089  CN W733   37792        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022042516
2090  CN W733   37960        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022050216
2091  CN W733   38248        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022051416
2092  CN W733   38512        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022052516
2093  CN W733   38960        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022061308
2094  CN W733   38968        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022061316
2095  CN W733   38992        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022061416
2096  CN W733   39272        AVER: 8-hr avg, < 6 hours of data, calms policy used.
```

2022062608
2097 CN W733 40384 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022081116
2098 CN W733 40928 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022090308
2099 CN W733 40960 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022090416
2100 CN W733 41080 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022090916
2101 CN W733 41088 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022090924
2102 CN W733 41096 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022091008
2103 CN W733 41104 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022091016
2104 CN W733 41112 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022091024
2105 CN W733 41120 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022091108
2106 CN W733 41152 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022091216
2107 CN W733 41224 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022091516
2108 CN W733 41392 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022092216
2109 CN W733 41400 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022092224
2110 CN W733 41408 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022092308
2111 CN W733 41544 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022092824
2112 CN W733 41552 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022092908
2113 CN W733 42616 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022111216
2114 CN W733 42632 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022111308
2115 CN W733 42640 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022111316
2116 CN W733 42664 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022111416
2117 CN W733 42688 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022111516
2118 CN W733 42736 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022111716
2119 CN W733 42808 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022112016
2120 CN W733 42880 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022112316
2121 CN W733 42888 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022112324
2122 CN W733 42896 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022112408
2123 CN W733 42968 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022112708
2124 CN W733 43104 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022120224
2125 CN W733 43120 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022120316
2126 CN W733 43216 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022120716
2127 CN W733 43256 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022120908
2128 CN W733 43264 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022120916
2129 CN W733 43272 AVER: 8-hr avg, < 6 hours of data, calms policy used.

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      2022120924
2130  CN W733   43280         AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022121008
2131  CN W733   43288         AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022121016
2132  CN W733   43448         AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022121708
2133  CN W733   43512         AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022121924
2134  CN W733   43520         AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022122008
2135  CN W733   43704         AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022122724
2136  CN W733   43728         AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022122824
2137  CN W733   43736         AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022122908
2138
2139     ************************************
2140     *** AERMOD Finishes Successfully ***
2141     ************************************
2142
2143
```

```
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 13.0.0
** Lakes Environmental Software Inc.
** Date: 7/17/2025
** File: C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const NOx\16552-02 Const
NOx.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02
   MODELOPT DFAULT CONC
   AVERTIME 1
   URBANOPT 2492442 Riverside_County
   POLLUTID NOX
   RUNORNOT RUN
   ERRORFIL "16552-02 Const NOx.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     573500.180  3725886.220      -15.810
   LOCATION VOL2         VOLUME     573500.381  3725789.820      -16.120
   LOCATION VOL3         VOLUME     573597.602  3725886.190      -16.050
   LOCATION VOL4         VOLUME     573597.803  3725789.790      -16.360
   LOCATION VOL5         VOLUME     573694.930  3725886.254      -16.110
   LOCATION VOL6         VOLUME     573695.131  3725789.853      -16.280
   LOCATION VOL7         VOLUME     573792.553  3725789.824      -16.410
   LOCATION VOL8         VOLUME     573792.352  3725886.224      -16.330
   LOCATION VOL9         VOLUME     573890.171  3725886.254      -15.450
   LOCATION VOL10        VOLUME     573890.372  3725789.853      -15.750
   LOCATION VOL11        VOLUME     573987.794  3725789.824      -15.210
   LOCATION VOL12        VOLUME     573987.593  3725886.224      -15.520
   LOCATION VOL13        VOLUME     574085.292  3725886.133      -15.630
   LOCATION VOL14        VOLUME     574085.493  3725789.733      -15.890
   LOCATION VOL15        VOLUME     574182.915  3725789.703      -16.000
   LOCATION VOL16        VOLUME     574182.714  3725886.103      -15.750
   LOCATION VOL17        VOLUME     573695.175  3725695.674      -16.510
   LOCATION VOL18        VOLUME     573695.376  3725599.274      -16.700
   LOCATION VOL19        VOLUME     573792.799  3725599.244      -16.820
   LOCATION VOL20        VOLUME     573792.597  3725695.644      -16.620
   LOCATION VOL21        VOLUME     573890.309  3725695.354      -16.590
   LOCATION VOL22        VOLUME     573890.510  3725598.954      -16.930
   LOCATION VOL23        VOLUME     573987.932  3725598.925      -17.030
   LOCATION VOL24        VOLUME     573987.731  3725695.325      -16.730
   LOCATION VOL25        VOLUME     574085.442  3725695.035      -16.760
   LOCATION VOL26        VOLUME     574085.643  3725598.635      -17.100
   LOCATION VOL27        VOLUME     574183.066  3725598.605      -17.220
   LOCATION VOL28        VOLUME     574182.864  3725695.005      -16.880
   LOCATION VOL29        VOLUME     573895.419  3725502.137      -17.650
   LOCATION VOL30        VOLUME     573895.620  3725405.737      -18.290
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   LOCATION VOL31        VOLUME     573993.042  3725405.707      -18.630
   LOCATION VOL32        VOLUME     573992.841  3725502.107      -17.860
   LOCATION VOL33        VOLUME     574085.442  3725503.095      -17.950
   LOCATION VOL34        VOLUME     574085.643  3725406.695      -18.800
   LOCATION VOL35        VOLUME     574183.066  3725406.665      -18.970
   LOCATION VOL36        VOLUME     574182.864  3725503.066      -18.220
** Source Parameters **
   SRCPARAM VOL1         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL2         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL3         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL4         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL5         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL6         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL7         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL8         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL9         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL10        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL11        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL12        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL13        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL14        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL15        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL16        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL17        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL18        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL19        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL20        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL21        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL22        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL23        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL24        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL25        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL26        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL27        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL28        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL29        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL30        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL31        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL32        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL33        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL34        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL35        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL36        0.0198417491     5.000    22.640     1.400
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL2         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL6         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

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** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
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   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL11        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL12        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL24        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL28        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
```

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   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
```

```
**
RE STARTING
   INCLUDED "16552-02 Const NOx.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE ..\KTRM_V11_trimmed.sfc
   PROFFILE ..\KTRM_V11_trimmed.PFL
   SURFDATA 3104 2017
   UAIRDATA 3190 2017
   PROFBASE -36.04 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "16552-02 CONST NOX.AD\01H1GALL.PLT" 31
   SUMMFILE "16552-02 Const NOx.sum"
OU FINISHED
**
**************************************
** Project Parameters
**************************************
** PROJCTN  CoordinateSystemUTM
** DESCPTN  UTM: Universal Transverse Mercator
** DATUM    North American Datum 1983
** DTMRGN   CONUS
** UNITS    m
** ZONE     11
** ZONEINX  0
**

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**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 13.0.0
** Lakes Environmental Software Inc.
** Date: 7/17/2025
** File: C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const NOx\16552-02 Const
NOx.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02
   MODELOPT DFAULT CONC
   AVERTIME 1
   URBANOPT 2492442 Riverside_County
   POLLUTID NOX
   RUNORNOT RUN
   ERRORFIL "16552-02 Const NOx.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     573500.180  3725886.220      -15.810
   LOCATION VOL2         VOLUME     573500.381  3725789.820      -16.120
   LOCATION VOL3         VOLUME     573597.602  3725886.190      -16.050
   LOCATION VOL4         VOLUME     573597.803  3725789.790      -16.360
   LOCATION VOL5         VOLUME     573694.930  3725886.254      -16.110
   LOCATION VOL6         VOLUME     573695.131  3725789.853      -16.280
   LOCATION VOL7         VOLUME     573792.553  3725789.824      -16.410
   LOCATION VOL8         VOLUME     573792.352  3725886.224      -16.330
   LOCATION VOL9         VOLUME     573890.171  3725886.254      -15.450
   LOCATION VOL10        VOLUME     573890.372  3725789.853      -15.750
   LOCATION VOL11        VOLUME     573987.794  3725789.824      -15.210
   LOCATION VOL12        VOLUME     573987.593  3725886.224      -15.520
   LOCATION VOL13        VOLUME     574085.292  3725886.133      -15.630
   LOCATION VOL14        VOLUME     574085.493  3725789.733      -15.890
   LOCATION VOL15        VOLUME     574182.915  3725789.703      -16.000
   LOCATION VOL16        VOLUME     574182.714  3725886.103      -15.750
   LOCATION VOL17        VOLUME     573695.175  3725695.674      -16.510
   LOCATION VOL18        VOLUME     573695.376  3725599.274      -16.700
   LOCATION VOL19        VOLUME     573792.799  3725599.244      -16.820
   LOCATION VOL20        VOLUME     573792.597  3725695.644      -16.620
   LOCATION VOL21        VOLUME     573890.309  3725695.354      -16.590
   LOCATION VOL22        VOLUME     573890.510  3725598.954      -16.930
   LOCATION VOL23        VOLUME     573987.932  3725598.925      -17.030
   LOCATION VOL24        VOLUME     573987.731  3725695.325      -16.730
   LOCATION VOL25        VOLUME     574085.442  3725695.035      -16.760
   LOCATION VOL26        VOLUME     574085.643  3725598.635      -17.100
   LOCATION VOL27        VOLUME     574183.066  3725598.605      -17.220
   LOCATION VOL28        VOLUME     574182.864  3725695.005      -16.880
   LOCATION VOL29        VOLUME     573895.419  3725502.137      -17.650
   LOCATION VOL30        VOLUME     573895.620  3725405.737      -18.290
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   LOCATION VOL31        VOLUME     573993.042  3725405.707      -18.630
   LOCATION VOL32        VOLUME     573992.841  3725502.107      -17.860
   LOCATION VOL33        VOLUME     574085.442  3725503.095      -17.950
   LOCATION VOL34        VOLUME     574085.643  3725406.695      -18.800
   LOCATION VOL35        VOLUME     574183.066  3725406.665      -18.970
   LOCATION VOL36        VOLUME     574182.864  3725503.066      -18.220
** Source Parameters **
   SRCPARAM VOL1         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL2         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL3         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL4         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL5         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL6         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL7         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL8         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL9         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL10        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL11        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL12        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL13        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL14        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL15        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL16        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL17        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL18        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL19        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL20        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL21        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL22        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL23        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL24        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL25        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL26        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL27        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL28        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL29        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL30        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL31        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL32        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL33        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL34        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL35        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL36        0.0198417491     5.000    22.640     1.400
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL2         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL6         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
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   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL11        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL12        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL24        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL28        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
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   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
```

```
**
RE STARTING
   INCLUDED "16552-02 Const NOx.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE ..\KTRM_V11_trimmed.sfc
   PROFFILE ..\KTRM_V11_trimmed.PFL
   SURFDATA 3104 2017
   UAIRDATA 3190 2017
   PROFBASE -36.04 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "16552-02 CONST NOX.AD\01H1GALL.PLT" 31
   SUMMFILE "16552-02 Const NOx.sum"
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            3 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
              ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W340     675       PRBASE: Possible Error in PROFBASE Input:  Value is < 0
 PROFBASE
 ME W186     676       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold
 used           0.50
 ME W187     676       MEOPEN: ADJ_U* Option for Stable Low Winds used in
 AERMET

 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************

FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:03:55

                              PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
```

```
                                        ***     MODEL SETUP OPTIONS SUMMARY       ***
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - -

** Model Options Selected:
     * Model Uses Regulatory DEFAULT Options
     * Model Is Setup For Calculation of Average CONCentration Values.
     * NO GAS DEPOSITION Data Provided.
     * NO PARTICLE DEPOSITION Data Provided.
     * Model Uses NO DRY DEPLETION. DDPLETE  =  F
     * Model Uses NO WET DEPLETION. WETDPLT  =  F
     * Stack-tip Downwash.
     * Model Accounts for ELEVated Terrain Effects.
     * Use Calms Processing Routine.
     * Use Missing Data Processing Routine.
     * No Exponential Decay.
     * Model Uses URBAN Dispersion Algorithm for the SBL for    36 Source(s),
       for Total of    1 Urban Area(s):
  Urban Population =   2492442.0 ;  Urban Roughness Length =  1.000 m
     * Urban Roughness Length of 1.0 Meter Used.
     * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
     * CCVR_Sub - Meteorological data includes CCVR substitutions
     * TEMP_Sub - Meteorological data includes TEMP substitutions
     * Model Assumes No FLAGPOLE Receptor Heights.
     * The User Specified a Pollutant Type of: NOX

**Model Calculates  1 Short Term Average(s) of:   1-HR

**This Run Includes:     36 Source(s);       1 Source Group(s); and      22 Receptor(s)

               with:      0 POINT(s), including
                          0 POINTCAP(s) and      0 POINTHOR(s)
                and:     36 VOLUME source(s)
                and:      0 AREA type source(s)
                and:      0 LINE source(s)
                and:      0 RLINE/RLINEXT source(s)
                and:      0 OPENPIT source(s)
                and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                and:      0 SWPOINT source(s)


**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date:  22112

**Output Options Selected:
         Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
         Keyword)
         Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
         Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                m for Missing Hours
                                                                b for Both Calm and
                                                                Missing Hours

**Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =   -36.04 ;  Decay Coef.
=    0.000     ;  Rot. Angle =     0.0
                  Emission Units = GRAMS/SEC                                ;  Emission
                  Rate Unit Factor =   0.10000E+07
                  Output Units   = MICROGRAMS/M**3

**Approximate Storage Requirements of Model =      3.5 MB of RAM.

**Input Runstream File:
aermod.inp
```

```
779   **Output Print File:
      aermod.out
780
781   **Detailed Error/Message File:   16552-02 Const
      NOx.err
782   **File for Summary of Results:   16552-02 Const
      NOx.sum
783   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***       07/17/25
784   *** AERMET - VERSION  22112 ***
      ***                                                              ***
      11:03:55
785
                                  PAGE   2
786   *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
787
788
789                                                *** VOLUME SOURCE DATA ***
790
791                 NUMBER EMISSION RATE                      BASE    RELEASE    INIT.
                    INIT.   URBAN  EMISSION RATE   AIRCRAFT
792     SOURCE       PART.  (GRAMS/SEC)     X        Y      ELEV.   HEIGHT      SY
        SZ     SOURCE  SCALAR VARY
793       ID          CATS.               (METERS) (METERS) (METERS) (METERS) (METERS)
          (METERS)             BY
794   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - -
795
796   VOL1             0   0.19842E-01  573500.2 3725886.2   -15.8     5.00    22.64
      1.40     YES   HRDOW            NO
797   VOL2             0   0.19842E-01  573500.4 3725789.8   -16.1     5.00    22.64
      1.40     YES   HRDOW            NO
798   VOL3             0   0.19842E-01  573597.6 3725886.2   -16.1     5.00    22.64
      1.40     YES   HRDOW            NO
799   VOL4             0   0.19842E-01  573597.8 3725789.8   -16.4     5.00    22.64
      1.40     YES   HRDOW            NO
800   VOL5             0   0.19842E-01  573694.9 3725886.3   -16.1     5.00    22.64
      1.40     YES   HRDOW            NO
801   VOL6             0   0.19842E-01  573695.1 3725789.9   -16.3     5.00    22.64
      1.40     YES   HRDOW            NO
802   VOL7             0   0.19842E-01  573792.6 3725789.8   -16.4     5.00    22.64
      1.40     YES   HRDOW            NO
803   VOL8             0   0.19842E-01  573792.4 3725886.2   -16.3     5.00    22.64
      1.40     YES   HRDOW            NO
804   VOL9             0   0.19842E-01  573890.2 3725886.3   -15.5     5.00    22.64
      1.40     YES   HRDOW            NO
805   VOL10            0   0.19842E-01  573890.4 3725789.9   -15.8     5.00    22.64
      1.40     YES   HRDOW            NO
806   VOL11            0   0.19842E-01  573987.8 3725789.8   -15.2     5.00    22.64
      1.40     YES   HRDOW            NO
807   VOL12            0   0.19842E-01  573987.6 3725886.2   -15.5     5.00    22.64
      1.40     YES   HRDOW            NO
808   VOL13            0   0.19842E-01  574085.3 3725886.1   -15.6     5.00    22.64
      1.40     YES   HRDOW            NO
809   VOL14            0   0.19842E-01  574085.5 3725789.7   -15.9     5.00    22.64
      1.40     YES   HRDOW            NO
810   VOL15            0   0.19842E-01  574182.9 3725789.7   -16.0     5.00    22.64
      1.40     YES   HRDOW            NO
811   VOL16            0   0.19842E-01  574182.7 3725886.1   -15.8     5.00    22.64
      1.40     YES   HRDOW            NO
812   VOL17            0   0.19842E-01  573695.2 3725695.7   -16.5     5.00    22.64
      1.40     YES   HRDOW            NO
813   VOL18            0   0.19842E-01  573695.4 3725599.3   -16.7     5.00    22.64
      1.40     YES   HRDOW            NO
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814   VOL19            0   0.19842E-01  573792.8 3725599.2   -16.8     5.00    22.64
      1.40     YES   HRDOW            NO
815   VOL20            0   0.19842E-01  573792.6 3725695.6   -16.6     5.00    22.64
      1.40     YES   HRDOW            NO
816   VOL21            0   0.19842E-01  573890.3 3725695.4   -16.6     5.00    22.64
      1.40     YES   HRDOW            NO
817   VOL22            0   0.19842E-01  573890.5 3725599.0   -16.9     5.00    22.64
      1.40     YES   HRDOW            NO
818   VOL23            0   0.19842E-01  573987.9 3725598.9   -17.0     5.00    22.64
      1.40     YES   HRDOW            NO
819   VOL24            0   0.19842E-01  573987.7 3725695.3   -16.7     5.00    22.64
      1.40     YES   HRDOW            NO
820   VOL25            0   0.19842E-01  574085.4 3725695.0   -16.8     5.00    22.64
      1.40     YES   HRDOW            NO
821   VOL26            0   0.19842E-01  574085.6 3725598.6   -17.1     5.00    22.64
      1.40     YES   HRDOW            NO
822   VOL27            0   0.19842E-01  574183.1 3725598.6   -17.2     5.00    22.64
      1.40     YES   HRDOW            NO
823   VOL28            0   0.19842E-01  574182.9 3725695.0   -16.9     5.00    22.64
      1.40     YES   HRDOW            NO
824   VOL29            0   0.19842E-01  573895.4 3725502.1   -17.7     5.00    22.64
      1.40     YES   HRDOW            NO
825   VOL30            0   0.19842E-01  573895.6 3725405.7   -18.3     5.00    22.64
      1.40     YES   HRDOW            NO
826   VOL31            0   0.19842E-01  573993.0 3725405.7   -18.6     5.00    22.64
      1.40     YES   HRDOW            NO
827   VOL32            0   0.19842E-01  573992.8 3725502.1   -17.9     5.00    22.64
      1.40     YES   HRDOW            NO
828   VOL33            0   0.19842E-01  574085.4 3725503.1   -17.9     5.00    22.64
      1.40     YES   HRDOW            NO
829   VOL34            0   0.19842E-01  574085.6 3725406.7   -18.8     5.00    22.64
      1.40     YES   HRDOW            NO
830   VOL35            0   0.19842E-01  574183.1 3725406.7   -19.0     5.00    22.64
      1.40     YES   HRDOW            NO
831   VOL36            0   0.19842E-01  574182.9 3725503.1   -18.2     5.00    22.64
      1.40     YES   HRDOW            NO
832   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
833    *** AERMET - VERSION  22112 ***
       ***                                                                ***
       11:03:55
834
                                  PAGE   3
835    *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
836
837
838                                          *** SOURCE IDs DEFINING SOURCE GROUPS ***
839
840    SRCGROUP ID                                          SOURCE IDs
841    -----------                                          ----------
842
843
844     ALL        VOL1        , VOL2        , VOL3        , VOL4        , VOL5        ,
       VOL6        , VOL7        , VOL8        ,
845
846                VOL9        , VOL10       , VOL11       , VOL12       , VOL13       ,
                   VOL14       , VOL15       , VOL16       ,
847
848                VOL17       , VOL18       , VOL19       , VOL20       , VOL21       ,
                   VOL22       , VOL23       , VOL24       ,
849
850                VOL25       , VOL26       , VOL27       , VOL28       , VOL29       ,
                   VOL30       , VOL31       , VOL32       ,
851
852                VOL33       , VOL34       , VOL35       , VOL36       ,
853   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
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     Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
854   *** AERMET - VERSION  22112 ***
      ***                                                              ***
      11:03:55
855
                                PAGE   4
856   *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
857
858
859                                        *** SOURCE IDs DEFINED AS URBAN SOURCES ***
860
861    URBAN ID   URBAN POP                                    SOURCE IDs
862    --------   ---------                                    ----------
863
864
865                2492442.   VOL1        , VOL2        , VOL3        , VOL4        ,
                   VOL5        , VOL6        , VOL7        ,
866   VOL8        ,
867
868               VOL9        , VOL10       , VOL11       , VOL12       , VOL13       ,
                  VOL14       , VOL15       , VOL16       ,
869
870               VOL17       , VOL18       , VOL19       , VOL20       , VOL21       ,
                  VOL22       , VOL23       , VOL24       ,
871
872               VOL25       , VOL26       , VOL27       , VOL28       , VOL29       ,
                  VOL30       , VOL31       , VOL32       ,
873
874               VOL33       , VOL34       , VOL35       , VOL36       ,
875   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
     Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
876   *** AERMET - VERSION  22112 ***
      ***                                                              ***
      11:03:55
877
                                PAGE   5
878   *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
879
880                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                       WEEK (HRDOW) *
881
882   SOURCE ID = VOL1         ; SOURCE TYPE = VOLUME   :
883    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
884   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
885                                                DAY OF WEEK = WEEKDAY
886      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
887      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
888     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
889                                                DAY OF WEEK = SATURDAY
890      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
891      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
892     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
893                                                DAY OF WEEK = SUNDAY
894      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
895      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
896     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
```

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   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL2         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                ***
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                              PAGE   7
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL3         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
    .0000E+00    7  .0000E+00    8  .0000E+00
```

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      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00

                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL4         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - -

                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
     .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00

                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00

                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:03:55

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL5         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - -
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```
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
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*** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                  WEEK (HRDOW) *

 SOURCE ID = VOL6         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:03:55

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*** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                  WEEK (HRDOW) *

SOURCE ID = VOL7         ; SOURCE TYPE = VOLUME   :
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
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*** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                  WEEK (HRDOW) *

SOURCE ID = VOL8         ; SOURCE TYPE = VOLUME   :
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
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      .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:03:55

                              PAGE  13
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL9         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
    .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
    .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
    .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:03:55

                              PAGE  14
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL10        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
    .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
```

```
1088       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1089       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
           .0000E+00   15  .0000E+00   16  .0000E+00
1090      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1091                                              DAY OF WEEK = SUNDAY
1092       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1093       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1094      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1095   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
       Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
1096    *** AERMET - VERSION  22112 ***
        ***                                                                  ***
        11:03:55
1097
                                  PAGE  15
1098    *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
1099
1100                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1101
1102    SOURCE ID = VOL11        ; SOURCE TYPE = VOLUME   :
1103     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1104    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - -
1105                                              DAY OF WEEK = WEEKDAY
1106       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1107       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1108      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1109                                              DAY OF WEEK = SATURDAY
1110       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1111       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1112      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1113                                              DAY OF WEEK = SUNDAY
1114       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1115       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1116      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1117   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
       Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
1118    *** AERMET - VERSION  22112 ***
        ***                                                                  ***
        11:03:55
1119
                                  PAGE  16
1120    *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
1121
1122                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1123
1124    SOURCE ID = VOL12        ; SOURCE TYPE = VOLUME   :
1125     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
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- - - -
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                                PAGE  18
*** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                  WEEK (HRDOW) *

SOURCE ID = VOL14        ; SOURCE TYPE = VOLUME   :
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***       07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:03:55

                                PAGE  19
*** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                  WEEK (HRDOW) *

SOURCE ID = VOL15        ; SOURCE TYPE = VOLUME   :
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
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      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:03:55

                              PAGE  20
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL16        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -

                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:03:55

                              PAGE  21
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL17        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -

                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
```

```
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
      .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:03:55

                              PAGE  22
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL18        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .1000E+01    8  .1000E+01
       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:03:55

                              PAGE  23
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL19        ; SOURCE TYPE = VOLUME   :
```

```
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
  .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:03:55

                            PAGE  24
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL20        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
  .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
```

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      ***                                                                    ***
      11:03:55
1317
                                PAGE  25
1318  *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
1319
1320                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1321
1322  SOURCE ID = VOL21        ; SOURCE TYPE = VOLUME   :
1323   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1324  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1325                                                DAY OF WEEK = WEEKDAY
1326     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
1327     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
1328    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1329                                                DAY OF WEEK = SATURDAY
1330     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1331     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1332    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1333                                                DAY OF WEEK = SUNDAY
1334     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1335     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1336    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1337  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
1338   *** AERMET - VERSION  22112 ***
       ***                                                                   ***
       11:03:55
1339
                                PAGE  26
1340  *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
1341
1342                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1343
1344   SOURCE ID = VOL22        ; SOURCE TYPE = VOLUME   :
1345    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
        SCALAR   HOUR   SCALAR   HOUR   SCALAR
1346  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1347                                                DAY OF WEEK = WEEKDAY
1348     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
1349     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
1350    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1351                                                DAY OF WEEK = SATURDAY
1352     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1353     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1354    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
        .0000E+00   23  .0000E+00   24  .0000E+00
```

```
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:03:55

                              PAGE  27
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL23        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:03:55

                              PAGE  28
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL24        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
```

```
      .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
      .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:03:55

                            PAGE  29
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL25        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:03:55

                            PAGE  30
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
                   WEEK (HRDOW) *
```

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1431
1432  SOURCE ID = VOL26        ; SOURCE TYPE = VOLUME   :
1433   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1434  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1435                                              DAY OF WEEK = WEEKDAY
1436     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
1437     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
1438    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1439                                              DAY OF WEEK = SATURDAY
1440     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1441     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1442    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1443                                              DAY OF WEEK = SUNDAY
1444     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1445     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1446    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1447  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
1448   *** AERMET - VERSION  22112 ***
       ***                                                                  ***
       11:03:55
1449
                                  PAGE  31
1450   *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
1451
1452                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1453
1454  SOURCE ID = VOL27        ; SOURCE TYPE = VOLUME   :
1455   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1456  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1457                                              DAY OF WEEK = WEEKDAY
1458     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
1459     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
1460    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1461                                              DAY OF WEEK = SATURDAY
1462     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1463     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1464    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1465                                              DAY OF WEEK = SUNDAY
1466     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1467     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1468    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1469  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
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     Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
1470  *** AERMET - VERSION  22112 ***
      ***                                                              ***
      11:03:55
1471
                                PAGE  32
1472  *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
1473
1474                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1475
1476  SOURCE ID = VOL28        ; SOURCE TYPE = VOLUME   :
1477   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
      SCALAR   HOUR   SCALAR   HOUR   SCALAR
1478  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1479                                                DAY OF WEEK = WEEKDAY
1480     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
        .0000E+00    7  .1000E+01    8  .1000E+01
1481     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
        .1000E+01   15  .0000E+00   16  .0000E+00
1482    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1483                                                DAY OF WEEK = SATURDAY
1484     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
        .0000E+00    7  .0000E+00    8  .0000E+00
1485     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
        .0000E+00   15  .0000E+00   16  .0000E+00
1486    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1487                                                DAY OF WEEK = SUNDAY
1488     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
        .0000E+00    7  .0000E+00    8  .0000E+00
1489     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
        .0000E+00   15  .0000E+00   16  .0000E+00
1490    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1491  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
     Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
1492  *** AERMET - VERSION  22112 ***
      ***                                                              ***
      11:03:55
1493
                                PAGE  33
1494  *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
1495
1496                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1497
1498  SOURCE ID = VOL29        ; SOURCE TYPE = VOLUME   :
1499   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
      SCALAR   HOUR   SCALAR   HOUR   SCALAR
1500  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1501                                                DAY OF WEEK = WEEKDAY
1502     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
        .0000E+00    7  .1000E+01    8  .1000E+01
1503     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
        .1000E+01   15  .0000E+00   16  .0000E+00
1504    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1505                                                DAY OF WEEK = SATURDAY
1506     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
        .0000E+00    7  .0000E+00    8  .0000E+00
1507     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
        .0000E+00   15  .0000E+00   16  .0000E+00
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1508      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1509                                          DAY OF WEEK = SUNDAY
1510       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1511       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1512      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1513  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
1514   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       11:03:55
1515
                                  PAGE  34
1516   *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
1517
1518                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1519
1520   SOURCE ID = VOL30        ; SOURCE TYPE = VOLUME   :
1521    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1522   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1523                                          DAY OF WEEK = WEEKDAY
1524       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1525       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
1526      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1527                                          DAY OF WEEK = SATURDAY
1528       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1529       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1530      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1531                                          DAY OF WEEK = SUNDAY
1532       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1533       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1534      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1535  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
1536   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       11:03:55
1537
                                  PAGE  35
1538   *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
1539
1540                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1541
1542   SOURCE ID = VOL31        ; SOURCE TYPE = VOLUME   :
1543    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1544   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1545                                          DAY OF WEEK = WEEKDAY
1546       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
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      .0000E+00    7  .1000E+01    8  .1000E+01
1547   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
      .1000E+01   15  .0000E+00   16  .0000E+00
1548  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
1549                                          DAY OF WEEK = SATURDAY
1550   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
1551   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
1552  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
1553                                          DAY OF WEEK = SUNDAY
1554   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
1555   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
1556  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
1557 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
     Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
1558  *** AERMET - VERSION  22112 ***
      ***                                                                ***
      11:03:55
1559
                                PAGE  36
1560  *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
1561
1562                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                       WEEK (HRDOW) *
1563
1564  SOURCE ID = VOL32        ; SOURCE TYPE = VOLUME   :
1565   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
      SCALAR   HOUR   SCALAR   HOUR   SCALAR
1566  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
     - - - - - - - - - - - - - - - - - - - -
1567                                          DAY OF WEEK = WEEKDAY
1568    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .1000E+01    8  .1000E+01
1569   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .0000E+00   16  .0000E+00
1570  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
1571                                          DAY OF WEEK = SATURDAY
1572   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
1573   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
1574  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
1575                                          DAY OF WEEK = SUNDAY
1576   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
1577   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
1578  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
1579 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
     Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
1580  *** AERMET - VERSION  22112 ***
      ***                                                                ***
      11:03:55
1581
                                PAGE  37
1582  *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
1583
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1584                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1585
1586    SOURCE ID = VOL33        ; SOURCE TYPE = VOLUME   :
1587     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1588    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1589                                                DAY OF WEEK = WEEKDAY
1590       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1591       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1592      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1593                                                DAY OF WEEK = SATURDAY
1594       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1595       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1596      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1597                                                DAY OF WEEK = SUNDAY
1598       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1599       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1600      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1601    FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
        Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
1602     *** AERMET - VERSION  22112 ***
         ***                                                                    ***
         11:03:55
1603
                                  PAGE  38
1604    *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
1605
1606                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1607
1608    SOURCE ID = VOL34        ; SOURCE TYPE = VOLUME   :
1609     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1610    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1611                                                DAY OF WEEK = WEEKDAY
1612       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1613       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1614      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1615                                                DAY OF WEEK = SATURDAY
1616       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1617       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1618      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1619                                                DAY OF WEEK = SUNDAY
1620       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1621       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1622      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
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   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                ***
 11:03:55

                              PAGE  39
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL35        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                ***
 11:03:55

                              PAGE  40
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL36        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
    .0000E+00    7  .0000E+00    8  .0000E+00
```

```
1661       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1662      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
           .0000E+00   23  .0000E+00   24  .0000E+00
1663                                          DAY OF WEEK = SUNDAY
1664       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1665       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1666      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1667   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
       Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
1668    *** AERMET - VERSION  22112 ***
        ***                                                                  ***
        11:03:55
1669
                                  PAGE  41
1670    *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
1671
1672                                            *** DISCRETE CARTESIAN RECEPTORS ***
1673                                          (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
1674                                                      (METERS)
1675
1676       ( 574106.6, 3725973.2,     -15.2,    2651.3,       0.0);         ( 574279.0,
           3725910.5,     -15.9,    2651.3,       0.0);
1677       ( 574204.4, 3725350.5,     -19.1,    2651.3,       0.0);         ( 573655.6,
           3725533.6,     -16.7,    2651.3,       0.0);
1678       ( 573199.4, 3725824.6,     -14.8,    2651.3,       0.0);         ( 573815.9,
           3726049.2,     -13.7,    2651.3,       0.0);
1679       ( 574057.4, 3725989.2,     -14.7,    2651.3,       0.0);         ( 574023.1,
           3725980.7,     -14.6,    2651.3,       0.0);
1680       ( 574346.5, 3725650.9,     -17.5,    2651.3,       0.0);         ( 574313.0,
           3725545.0,     -17.4,    2651.3,       0.0);
1681       ( 574206.8, 3725308.8,     -19.7,    2651.3,       0.0);         ( 574038.4,
           3725331.2,     -18.7,    2651.3,       0.0);
1682       ( 574209.1, 3725258.2,     -19.7,    2651.3,       0.0);         ( 573785.2,
           3725289.0,     -17.4,    2651.3,       0.0);
1683       ( 573482.6, 3725346.8,     -16.6,    2651.3,       0.0);         ( 573666.9,
           3725489.5,     -17.0,    2651.3,       0.0);
1684       ( 573580.6, 3725595.5,     -16.2,    2651.3,       0.0);         ( 573477.6,
           3725543.7,     -16.2,    2651.3,       0.0);
1685       ( 573474.2, 3725503.2,     -16.5,    2651.3,       0.0);         ( 573229.4,
           3725847.4,     -14.7,    2651.3,       0.0);
1686       ( 573040.9, 3725971.2,     -13.5,    2651.3,       0.0);         ( 573120.2,
           3725973.9,     -13.8,    2651.3,       0.0);
1687   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
       Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
1688    *** AERMET - VERSION  22112 ***
        ***                                                                  ***
        11:03:55
1689
                                  PAGE  42
1690    *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
1691
1692                                              *** METEOROLOGICAL DAYS SELECTED FOR
                                                  PROCESSING ***
1693                                                        (1=YES; 0=NO)
1694
1695              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                  1 1 1 1 1   1 1 1 1 1 1 1 1 1 1 1
1696              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                  1 1 1 1 1   1 1 1 1 1 1 1 1 1 1 1
1697              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                  1 1 1 1 1   1 1 1 1 1 1 1 1 1 1 1
1698              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1
```

```
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1699            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1700            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1701            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1702            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1703
1704                NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT
                    IS INCLUDED IN THE DATA FILE.
1705
1706
1707
1708                                    *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED
                                        CATEGORIES ***
1709                                                    (METERS/SEC)
1710
1711                                                 1.54,   3.09,   5.14,   8.23,  10.80,
1712    FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
        Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
1713     *** AERMET - VERSION  22112 ***
         ***                                                                    ***
         11:03:55
1714
                                    PAGE  43
1715     *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
1716
1717                                    *** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA
                                        ***
1718
1719       Surface file:
           ..\KTRM_V11_trimmed.sfc
           Met Version:  22112
1720       Profile file:
           ..\KTRM_V11_trimmed.PFL
1721       Surface format:
           FREE

1722       Profile format:
           FREE

1723       Surface station no.:     3104                  Upper air station no.:     3190
1724                       Name: UNKNOWN                                  Name:
                           UNKNOWN
1725                       Year:   2017                                   Year:   2017
1726
1727     First 24 hours of scalar data
1728     YR MO DY JDY HR     H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALBEDO
         REF WS   WD     HT  REF TA     HT
1729    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - -
1730     17 01 01   1 01  -21.0  0.211 -9.000 -9.000 -999.  233.     49.1  0.06   2.53   1.00
         2.86  321.   10.1  284.8    2.0
1731     17 01 01   1 02  -48.7  0.490 -9.000 -9.000 -999.  824.    264.4  0.14   2.53   1.00
         5.36  358.   10.1  285.3    2.0
1732     17 01 01   1 03  -39.8  0.400 -9.000 -9.000 -999.  613.    175.9  0.06   2.53   1.00
         5.36  294.   10.1  284.8    2.0
1733     17 01 01   1 04  -47.4  0.477 -9.000 -9.000 -999.  790.    250.2  0.14   2.53   1.00
         5.22  335.   10.1  284.8    2.0
1734     17 01 01   1 05  -55.1  0.554 -9.000 -9.000 -999.  987.    337.1  0.06   2.53   1.00
         7.20  327.   10.1  284.2    2.0
1735     17 01 01   1 06  -30.8  0.309 -9.000 -9.000 -999.  472.    104.8  0.14   2.53   1.00
         3.44  335.   10.1  283.8    2.0
1736     17 01 01   1 07  -15.6  0.170 -9.000 -9.000 -999.  191.     31.7  0.06   2.53   1
         2.33  329.   10.1  283.8    2.0
```

```
1737    17 01 01   1 08   -7.2  0.185 -9.000 -9.000 -999.  191.     79.0  0.06   2.53   0.50
        2.47  326.   10.1  285.3    2.0
1738    17 01 01   1 09   46.3  0.265  0.707  0.005  276.  326.    -36.1  0.06   2.53
        3.00  303.   10.1  285.9    2.0
1739    17 01 01   1 10  113.8  0.336  1.418  0.005  907.  468.    -30.2  0.06   2.53   0.24
        3.76  300.   10.1  288.1    2.0
1740    17 01 01   1 11  159.2  0.526  1.708  0.005 1133.  915.    -82.7  0.06   2.53   0.22
        6.27  311.   10.1  289.2    2.0
1741    17 01 01   1 12  179.8  0.454  1.860  0.005 1296.  739.    -47.0  0.06   2.53   0.21
        5.24  315.   10.1  289.8    2.0
1742    17 01 01   1 13  175.0  0.302  1.886  0.005 1387.  416.    -14.2  0.06   2.53   0.21
        3.20  297.   10.1  290.3    2.0
1743    17 01 01   1 14  145.9  0.251  1.851  0.005 1573.  302.     -9.7  0.06   2.53   0.23
        2.50  322.   10.1  292.0    2.0
1744    17 01 01   1 15   91.5  0.235  1.599  0.005 1617.  273.    -12.8  0.06   2.53   0.26
        2.42  316.   10.1  291.4    2.0
1745    17 01 01   1 16   18.8  0.259  0.950  0.005 1643.  316.    -83.0  0.14   2.53   0.36
        2.57  338.   10.1  291.4    2.0
1746    17 01 01   1 17  -41.4  0.440 -9.000 -9.000 -999.  701.    213.3  0.14   2.53   0.66
        4.83  344.   10.1  288.8    2.0
1747    17 01 01   1 18  -40.2  0.408 -9.000 -9.000 -999.  626.    182.7  0.14   2.53   1.00
        4.49  356.   10.1  287.5    2.0
1748    17 01 01   1 19  -33.3  0.337 -9.000 -9.000 -999.  473.    124.8  0.14   2.53   1.00
        3.74  352.   10.1  287.0    2.0
1749    17 01 01   1 20  -19.3  0.194 -9.000 -9.000 -999.  219.     41.4  0.06   2.53   1.00
        2.64  326.   10.1  285.3    2.0
1750    17 01 01   1 21  -29.0  0.291 -9.000 -9.000 -999.  377.     93.2  0.14   2.53   1.00
        3.25  336.   10.1  285.3    2.0
1751    17 01 01   1 22  -11.2  0.142 -9.000 -9.000 -999.  145.     23.3  0.06   2.53   1.00
        2.01  272.   10.1  283.8    2.0
1752    17 01 01   1 23  -25.8  0.259 -9.000 -9.000 -999.  316.     73.6  0.06   2.53   1.00
        3.47  301.   10.1  285.9    2.0
1753    17 01 01   1 24  -13.9  0.162 -9.000 -9.000 -999.  161.     29.0  0.09   2.53   1.00
        2.05  250.   10.1  283.1    2.0
1754
1755
1756    First hour of profile data
1757    YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
1758    17 01 01 01   10.1 1  321.    2.86   284.9   99.0  -99.00  -99.00
1759
1760    F indicates top of profile (=1) or below (=0)
1761  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
        Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***       07/17/25
1762    *** AERMET - VERSION  22112 ***
        ***                                                                  ***
        11:03:55
1763
                                  PAGE  44
1764    *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
1765
1766                              *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION   VALUES
                                  FOR SOURCE GROUP:  ALL      ***
1767                                  INCLUDING SOURCE(S):     VOL1        , VOL2        ,
                                      VOL3        , VOL4        , VOL5        ,
1768                    VOL6        , VOL7        , VOL8        , VOL9        , VOL10       ,
                        VOL11       , VOL12       , VOL13       ,
1769                    VOL14       , VOL15       , VOL16       , VOL17       , VOL18       ,
                        VOL19       , VOL20       , VOL21       ,
1770                    VOL22       , VOL23       , VOL24       , VOL25       , VOL26       ,
                        VOL27       , VOL28       ,  . . .      ,
1771
1772                                      *** DISCRETE CARTESIAN RECEPTOR POINTS ***
1773
1774                                    ** CONC OF NOX      IN
                                        MICROGRAMS/M**3                          *
1775
```

Item 2.

```
      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
      Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - - -

       574106.64   3725973.24       20.70119  (17011107)               574278.99
       3725910.47       19.97032  (21011407)
       574204.36   3725350.47       31.58154  (19011407)               573655.61
       3725533.56       21.50832  (18020107)
       573199.43   3725824.57       10.02977  (17012308)               573815.91
       3726049.22       14.08038  (21012208)
       574057.43   3725989.22       19.10538  (21012507)               574023.10
       3725980.72       20.65501  (21012208)
       574346.45   3725650.86       21.73411  (21020107)               574312.95
       3725545.02       23.97684  (19012807)
       574206.77   3725308.84       24.76695  (19011407)               574038.43
       3725331.17       27.57043  (18010307)
       574209.11   3725258.17       20.56718  (18010307)               573785.25
       3725289.00       11.78940  (21020407)
       573482.56   3725346.84        9.25841  (22020307)               573666.90
       3725489.52       16.61871  (21012208)
       573580.56   3725595.53       20.88878  (18020107)               573477.56
       3725543.69       14.31826  (18020107)
       573474.22   3725503.19       13.37444  (22020307)               573229.37
       3725847.44       10.33249  (21122808)
       573040.93   3725971.18        6.19585  (17101907)               573120.15
       3725973.92        7.05413  (21121408)

FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:03:55

                              PAGE  45
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                          *** THE SUMMARY OF HIGHEST  1-HR RESULTS
                                          ***


                                ** CONC OF NOX      IN
                                MICROGRAMS/M**3                          **


                                                      DATE

                                                     NETWORK
GROUP ID                           AVERAGE CONC     (YYMMDDHH)             RECEPTOR  (XR,
YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS      31.58154  ON 19011407: AT (  574204.36,
3725350.47,   -19.13,  2651.27,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:03:55

                              PAGE  46
```

```
*** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

*** Message Summary : AERMOD Model Execution ***

 --------- Summary of Total Messages --------

A Total of            0 Fatal Error Message(s)
A Total of            5 Warning Message(s)
A Total of         1671 Informational Message(s)

A Total of        43800 Hours Were Processed

A Total of          763 Calm Hours Identified

A Total of          908 Missing Hours Identified (  2.07 Percent)


   ******** FATAL ERROR MESSAGES ********
              ***  NONE  ***


   ********   WARNING MESSAGES   ********
ME W340     675       PRBASE: Possible Error in PROFBASE Input:  Value is < 0
PROFBASE
ME W186     676       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold
used           0.50
ME W187     676       MEOPEN: ADJ_U* Option for Stable Low Winds used in
AERMET
MX W450   26281       CHKDAT: Record Out of Sequence in Meteorological File at:
21010101
MX W450   26281       CHKDAT: Record Out of Sequence in Meteorological File at:    1
year gap

   ***********************************
   *** AERMOD Finishes Successfully ***
   ***********************************
```

```
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 13.0.0
** Lakes Environmental Software Inc.
** Date: 11/4/2025
** File: C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const PM25\16552-02 Const PM25.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02
   MODELOPT DFAULT CONC
   AVERTIME 24
   URBANOPT 2492442 Riverside_County
   POLLUTID PM_2.5
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "16552-02 Const PM25.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     573500.180  3725886.220      -15.810
   LOCATION VOL2         VOLUME     573500.381  3725789.820      -16.120
   LOCATION VOL3         VOLUME     573597.602  3725886.190      -16.050
   LOCATION VOL4         VOLUME     573597.803  3725789.790      -16.360
   LOCATION VOL5         VOLUME     573694.930  3725886.254      -16.110
   LOCATION VOL6         VOLUME     573695.131  3725789.853      -16.280
   LOCATION VOL7         VOLUME     573792.553  3725789.824      -16.410
   LOCATION VOL8         VOLUME     573792.352  3725886.224      -16.330
   LOCATION VOL9         VOLUME     573890.171  3725886.254      -15.450
   LOCATION VOL10        VOLUME     573890.372  3725789.853      -15.750
   LOCATION VOL11        VOLUME     573987.794  3725789.824      -15.210
   LOCATION VOL12        VOLUME     573987.593  3725886.224      -15.520
   LOCATION VOL13        VOLUME     574085.292  3725886.133      -15.630
   LOCATION VOL14        VOLUME     574085.493  3725789.733      -15.890
   LOCATION VOL15        VOLUME     574182.915  3725789.703      -16.000
   LOCATION VOL16        VOLUME     574182.714  3725886.103      -15.750
   LOCATION VOL17        VOLUME     573695.175  3725695.674      -16.510
   LOCATION VOL18        VOLUME     573695.376  3725599.274      -16.700
   LOCATION VOL19        VOLUME     573792.799  3725599.244      -16.820
   LOCATION VOL20        VOLUME     573792.597  3725695.644      -16.620
   LOCATION VOL21        VOLUME     573890.309  3725695.354      -16.590
   LOCATION VOL22        VOLUME     573890.510  3725598.954      -16.930
   LOCATION VOL23        VOLUME     573987.932  3725598.925      -17.030
   LOCATION VOL24        VOLUME     573987.731  3725695.325      -16.730
   LOCATION VOL25        VOLUME     574085.442  3725695.035      -16.760
   LOCATION VOL26        VOLUME     574085.643  3725598.635      -17.100
   LOCATION VOL27        VOLUME     574183.066  3725598.605      -17.220
   LOCATION VOL28        VOLUME     574182.864  3725695.005      -16.880
   LOCATION VOL29        VOLUME     573895.419  3725502.137      -17.650
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   LOCATION VOL30        VOLUME     573895.620  3725405.737      -18.290
   LOCATION VOL31        VOLUME     573993.042  3725405.707      -18.630
   LOCATION VOL32        VOLUME     573992.841  3725502.107      -17.860
   LOCATION VOL33        VOLUME     574085.442  3725503.095      -17.950
   LOCATION VOL34        VOLUME     574085.643  3725406.695      -18.800
   LOCATION VOL35        VOLUME     574183.066  3725406.665      -18.970
   LOCATION VOL36        VOLUME     574182.864  3725503.066      -18.220
   LOCATION PAREA1       AREAPOLY   573452.368  3725934.831      -15.220
** Source Parameters **
   SRCPARAM VOL1         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL2         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL3         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL4         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL5         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL6         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL7         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL8         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL9         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL10        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL11        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL12        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL13        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL14        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL15        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL16        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL17        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL18        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL19        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL20        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL21        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL22        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL23        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL24        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL25        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL26        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL27        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL28        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL29        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL30        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL31        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL32        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL33        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL34        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL35        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL36        0.0009250105     5.000    22.640     1.400
   SRCPARAM PAREA1       1.6792E-07     0.000         8     1.000
   AREAVERT PAREA1       573452.368 3725934.831 574231.065 3725933.083
   AREAVERT PAREA1       574231.939 3725360.640 573845.649 3725358.018
   AREAVERT PAREA1       573845.649 3725549.415 573646.387 3725552.911
   AREAVERT PAREA1       573645.513 3725741.686 573451.494 3725741.686
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL2         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL6         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL11        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL12        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
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   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL24        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL28        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

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** WeekDays:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED "16552-02 Const PM25.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE ..\KTRM_V11_trimmed.sfc
   PROFFILE ..\KTRM_V11_trimmed.PFL
   SURFDATA 3104 2017
   UAIRDATA 3190 2017
   PROFBASE -36.04 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 24 ALL 1ST "16552-02 CONST PM25.AD\24H1GALL.PLT" 31
   SUMMFILE "16552-02 Const PM25.sum"
OU FINISHED
**
**************************************
** Project Parameters
**************************************
** PROJCTN  CoordinateSystemUTM
** DESCPTN  UTM: Universal Transverse Mercator
** DATUM    North American Datum 1983
** DTMRGN   CONUS
** UNITS    m
** ZONE     11
** ZONEINX  0
**
```

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**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 13.0.0
** Lakes Environmental Software Inc.
** Date: 11/4/2025
** File: C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const PM25\16552-02 Const
PM25.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02
   MODELOPT DFAULT CONC
   AVERTIME 24
   URBANOPT 2492442 Riverside_County
   POLLUTID PM_2.5
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "16552-02 Const PM25.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     573500.180  3725886.220      -15.810
   LOCATION VOL2         VOLUME     573500.381  3725789.820      -16.120
   LOCATION VOL3         VOLUME     573597.602  3725886.190      -16.050
   LOCATION VOL4         VOLUME     573597.803  3725789.790      -16.360
   LOCATION VOL5         VOLUME     573694.930  3725886.254      -16.110
   LOCATION VOL6         VOLUME     573695.131  3725789.853      -16.280
   LOCATION VOL7         VOLUME     573792.553  3725789.824      -16.410
   LOCATION VOL8         VOLUME     573792.352  3725886.224      -16.330
   LOCATION VOL9         VOLUME     573890.171  3725886.254      -15.450
   LOCATION VOL10        VOLUME     573890.372  3725789.853      -15.750
   LOCATION VOL11        VOLUME     573987.794  3725789.824      -15.210
   LOCATION VOL12        VOLUME     573987.593  3725886.224      -15.520
   LOCATION VOL13        VOLUME     574085.292  3725886.133      -15.630
   LOCATION VOL14        VOLUME     574085.493  3725789.733      -15.890
   LOCATION VOL15        VOLUME     574182.915  3725789.703      -16.000
   LOCATION VOL16        VOLUME     574182.714  3725886.103      -15.750
   LOCATION VOL17        VOLUME     573695.175  3725695.674      -16.510
   LOCATION VOL18        VOLUME     573695.376  3725599.274      -16.700
   LOCATION VOL19        VOLUME     573792.799  3725599.244      -16.820
   LOCATION VOL20        VOLUME     573792.597  3725695.644      -16.620
   LOCATION VOL21        VOLUME     573890.309  3725695.354      -16.590
   LOCATION VOL22        VOLUME     573890.510  3725598.954      -16.930
   LOCATION VOL23        VOLUME     573987.932  3725598.925      -17.030
   LOCATION VOL24        VOLUME     573987.731  3725695.325      -16.730
   LOCATION VOL25        VOLUME     574085.442  3725695.035      -16.760
   LOCATION VOL26        VOLUME     574085.643  3725598.635      -17.100
   LOCATION VOL27        VOLUME     574183.066  3725598.605      -17.220
   LOCATION VOL28        VOLUME     574182.864  3725695.005      -16.880
   LOCATION VOL29        VOLUME     573895.419  3725502.137      -17.650
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   LOCATION VOL30        VOLUME     573895.620  3725405.737      -18.290
   LOCATION VOL31        VOLUME     573993.042  3725405.707      -18.630
   LOCATION VOL32        VOLUME     573992.841  3725502.107      -17.860
   LOCATION VOL33        VOLUME     574085.442  3725503.095      -17.950
   LOCATION VOL34        VOLUME     574085.643  3725406.695      -18.800
   LOCATION VOL35        VOLUME     574183.066  3725406.665      -18.970
   LOCATION VOL36        VOLUME     574182.864  3725503.066      -18.220
   LOCATION PAREA1       AREAPOLY   573452.368  3725934.831      -15.220
** Source Parameters **
   SRCPARAM VOL1         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL2         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL3         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL4         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL5         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL6         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL7         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL8         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL9         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL10        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL11        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL12        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL13        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL14        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL15        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL16        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL17        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL18        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL19        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL20        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL21        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL22        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL23        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL24        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL25        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL26        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL27        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL28        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL29        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL30        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL31        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL32        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL33        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL34        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL35        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL36        0.0009250105     5.000    22.640     1.400
   SRCPARAM PAREA1       1.6792E-07     0.000         8     1.000
   AREAVERT PAREA1       573452.368 3725934.831 574231.065 3725933.083
   AREAVERT PAREA1       574231.939 3725360.640 573845.649 3725358.018
   AREAVERT PAREA1       573845.649 3725549.415 573646.387 3725552.911
   AREAVERT PAREA1       573645.513 3725741.686 573451.494 3725741.686
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL2         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL6         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL11        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL12        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
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   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL24        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL28        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

```
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

```
** WeekDays:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED "16552-02 Const PM25.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE ..\KTRM_V11_trimmed.sfc
   PROFFILE ..\KTRM_V11_trimmed.PFL
   SURFDATA 3104 2017
   UAIRDATA 3190 2017
   PROFBASE -36.04 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 24 ALL 1ST "16552-02 CONST PM25.AD\24H1GALL.PLT" 31
   SUMMFILE "16552-02 Const PM25.sum"
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            3 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***

```

```
   ********   WARNING MESSAGES   ********
 ME W340     697       PRBASE: Possible Error in PROFBASE Input:  Value is < 0
 PROFBASE
 ME W186     698       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold
 used           0.50
 ME W187     698       MEOPEN: ADJ_U* Option for Stable Low Winds used in
 AERMET

 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************

FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 17:01:41

                            PAGE   1
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                        ***     MODEL SETUP OPTIONS SUMMARY       ***
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - -

** Model Options Selected:
     * Model Uses Regulatory DEFAULT Options
     * Model Is Setup For Calculation of Average CONCentration Values.
     * NO GAS DEPOSITION Data Provided.
     * NO PARTICLE DEPOSITION Data Provided.
     * Model Uses NO DRY DEPLETION. DDPLETE  =  F
     * Model Uses NO WET DEPLETION. WETDPLT  =  F
     * Stack-tip Downwash.
     * Model Accounts for ELEVated Terrain Effects.
     * Use Calms Processing Routine.
     * Use Missing Data Processing Routine.
     * No Exponential Decay.
     * Model Uses URBAN Dispersion Algorithm for the SBL for    37 Source(s),
       for Total of    1 Urban Area(s):
  Urban Population =   2492442.0 ;  Urban Roughness Length =  1.000 m
     * Urban Roughness Length of 1.0 Meter Used.
     * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
     * CCVR_Sub - Meteorological data includes CCVR substitutions
     * TEMP_Sub - Meteorological data includes TEMP substitutions
     * Model Accepts FLAGPOLE Receptor . Heights.
     * The User Specified a Pollutant Type of: PM_2.5

**Model Calculates  1 Short Term Average(s) of:  24-HR

**This Run Includes:     37 Source(s);       1 Source Group(s); and      22 Receptor(s)

               with:      0 POINT(s), including
                          0 POINTCAP(s) and      0 POINTHOR(s)
                and:     36 VOLUME source(s)
                and:      1 AREA type source(s)
                and:      0 LINE source(s)
                and:      0 RLINE/RLINEXT source(s)
                and:      0 OPENPIT source(s)
                and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                and:      0 SWPOINT source(s)


**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date:  22112
```

**Output Options Selected:
Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours
m for Missing Hours
b for Both Calm and Missing Hours

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = -36.04 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0
Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 3.6 MB of RAM.

**Input Runstream File:
aermod.inp

**Output Print File:
aermod.out

**Detailed Error/Message File: 16552-02 Const PM25.err
**File for Summary of Results: 16552-02 Const PM25.sum
FF *** AERMOD - VERSION 24142 *** *** C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 *** 11/04/25
*** AERMET - VERSION 22112 ***
*** ***
17:01:41

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER EMISSION RATE INIT. PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	SZ (METERS)	SOURCE SCALAR VARY BY	URBAN SOURCE
VOL1	0	0.92501E-03	573500.2	3725886.2	-15.8	5.00	22.64	1.40	HRDOW	YES
VOL2	0	0.92501E-03	573500.4	3725789.8	-16.1	5.00	22.64	1.40	HRDOW	YES
VOL3	0	0.92501E-03	573597.6	3725886.2	-16.1	5.00	22.64	1.40	HRDOW	YES
VOL4	0	0.92501E-03	573597.8	3725789.8	-16.4	5.00	22.64	1.40	HRDOW	YES
VOL5	0	0.92501E-03	573694.9	3725886.3	-16.1	5.00	22.64	1.40	HRDOW	YES
VOL6	0	0.92501E-03	573695.1	3725789.9	-16.3	5.00	22.64	1.40	HRDOW	YES
VOL7	0	0.92501E-03	573792.6	3725789.8	-16.4	5.00	22.64	1.40	HRDOW	YES

```
825   VOL8            0   0.92501E-03  573792.4 3725886.2   -16.3     5.00    22.64
      1.40     YES   HRDOW            NO
826   VOL9            0   0.92501E-03  573890.2 3725886.3   -15.5     5.00    22.64
      1.40     YES   HRDOW            NO
827   VOL10           0   0.92501E-03  573890.4 3725789.9   -15.8     5.00    22.64
      1.40     YES   HRDOW            NO
828   VOL11           0   0.92501E-03  573987.8 3725789.8   -15.2     5.00    22.64
      1.40     YES   HRDOW            NO
829   VOL12           0   0.92501E-03  573987.6 3725886.2   -15.5     5.00    22.64
      1.40     YES   HRDOW            NO
830   VOL13           0   0.92501E-03  574085.3 3725886.1   -15.6     5.00    22.64
      1.40     YES   HRDOW            NO
831   VOL14           0   0.92501E-03  574085.5 3725789.7   -15.9     5.00    22.64
      1.40     YES   HRDOW            NO
832   VOL15           0   0.92501E-03  574182.9 3725789.7   -16.0     5.00    22.64
      1.40     YES   HRDOW            NO
833   VOL16           0   0.92501E-03  574182.7 3725886.1   -15.8     5.00    22.64
      1.40     YES   HRDOW            NO
834   VOL17           0   0.92501E-03  573695.2 3725695.7   -16.5     5.00    22.64
      1.40     YES   HRDOW            NO
835   VOL18           0   0.92501E-03  573695.4 3725599.3   -16.7     5.00    22.64
      1.40     YES   HRDOW            NO
836   VOL19           0   0.92501E-03  573792.8 3725599.2   -16.8     5.00    22.64
      1.40     YES   HRDOW            NO
837   VOL20           0   0.92501E-03  573792.6 3725695.6   -16.6     5.00    22.64
      1.40     YES   HRDOW            NO
838   VOL21           0   0.92501E-03  573890.3 3725695.4   -16.6     5.00    22.64
      1.40     YES   HRDOW            NO
839   VOL22           0   0.92501E-03  573890.5 3725599.0   -16.9     5.00    22.64
      1.40     YES   HRDOW            NO
840   VOL23           0   0.92501E-03  573987.9 3725598.9   -17.0     5.00    22.64
      1.40     YES   HRDOW            NO
841   VOL24           0   0.92501E-03  573987.7 3725695.3   -16.7     5.00    22.64
      1.40     YES   HRDOW            NO
842   VOL25           0   0.92501E-03  574085.4 3725695.0   -16.8     5.00    22.64
      1.40     YES   HRDOW            NO
843   VOL26           0   0.92501E-03  574085.6 3725598.6   -17.1     5.00    22.64
      1.40     YES   HRDOW            NO
844   VOL27           0   0.92501E-03  574183.1 3725598.6   -17.2     5.00    22.64
      1.40     YES   HRDOW            NO
845   VOL28           0   0.92501E-03  574182.9 3725695.0   -16.9     5.00    22.64
      1.40     YES   HRDOW            NO
846   VOL29           0   0.92501E-03  573895.4 3725502.1   -17.7     5.00    22.64
      1.40     YES   HRDOW            NO
847   VOL30           0   0.92501E-03  573895.6 3725405.7   -18.3     5.00    22.64
      1.40     YES   HRDOW            NO
848   VOL31           0   0.92501E-03  573993.0 3725405.7   -18.6     5.00    22.64
      1.40     YES   HRDOW            NO
849   VOL32           0   0.92501E-03  573992.8 3725502.1   -17.9     5.00    22.64
      1.40     YES   HRDOW            NO
850   VOL33           0   0.92501E-03  574085.4 3725503.1   -17.9     5.00    22.64
      1.40     YES   HRDOW            NO
851   VOL34           0   0.92501E-03  574085.6 3725406.7   -18.8     5.00    22.64
      1.40     YES   HRDOW            NO
852   VOL35           0   0.92501E-03  574183.1 3725406.7   -19.0     5.00    22.64
      1.40     YES   HRDOW            NO
853   VOL36           0   0.92501E-03  574182.9 3725503.1   -18.2     5.00    22.64
      1.40     YES   HRDOW            NO
854   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***       11/04/25
855    *** AERMET - VERSION  22112 ***
       ***                                                          ***
       17:01:41
856
                                  PAGE   3
                                                                                  1078
857    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
```

```
                                                     *** AREAPOLY SOURCE DATA ***

                NUMBER EMISSION RATE   LOCATION OF AREA  BASE     RELEASE  NUMBER
                INIT.   URBAN  EMISSION RATE    AIRCRAFT
  SOURCE         PART.  (GRAMS/SEC       X        Y      ELEV.    HEIGHT  OF VERTS.
  SZ     SOURCE  SCALAR VARY
    ID           CATS.   /METER**2)   (METERS) (METERS) (METERS) (METERS)
    (METERS)              BY
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - -

 PAREA1           0   0.16792E-06  573452.4 3725934.8   -15.2     0.00       8
 1.00     YES   HRDOW            NO
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 17:01:41

                              PAGE   4
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                        *** SOURCE IDs DEFINING SOURCE GROUPS ***

 SRCGROUP ID                                          SOURCE IDs
 -----------                                          ----------


  ALL        VOL1        , VOL2        , VOL3        , VOL4        , VOL5        ,
  VOL6        , VOL7        , VOL8        ,

             VOL9        , VOL10       , VOL11       , VOL12       , VOL13       ,
             VOL14       , VOL15       , VOL16       ,

             VOL17       , VOL18       , VOL19       , VOL20       , VOL21       ,
             VOL22       , VOL23       , VOL24       ,

             VOL25       , VOL26       , VOL27       , VOL28       , VOL29       ,
             VOL30       , VOL31       , VOL32       ,

             VOL33       , VOL34       , VOL35       , VOL36       , PAREA1      ,
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 17:01:41

                              PAGE   5
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                        *** SOURCE IDs DEFINED AS URBAN SOURCES ***

  URBAN ID   URBAN POP                                 SOURCE IDs
  --------   ---------                                 ----------


              2492442.   VOL1        , VOL2        , VOL3        , VOL4        ,
              VOL5        , VOL6        , VOL7        ,
 VOL8        ,

             VOL9        , VOL10       , VOL11       , VOL12       , VOL13       ,
             VOL14       , VOL15       , VOL16       ,
```

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905
906              VOL17       , VOL18       , VOL19       , VOL20       , VOL21
                 VOL22       , VOL23       , VOL24       ,
907
908              VOL25       , VOL26       , VOL27       , VOL28       , VOL29       ,
                 VOL30       , VOL31       , VOL32       ,
909
910              VOL33       , VOL34       , VOL35       , VOL36       , PAREA1      ,
911  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
     Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
912   *** AERMET - VERSION  22112 ***
      ***                                                                    ***
      17:01:41
913
                                PAGE   6
914   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
915
916                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                      WEEK (HRDOW) *
917
918   SOURCE ID = VOL1         ; SOURCE TYPE = VOLUME   :
919    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
920   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
921                                              DAY OF WEEK = WEEKDAY
922      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
923      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
924     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
925                                              DAY OF WEEK = SATURDAY
926      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
927      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
928     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
929                                              DAY OF WEEK = SUNDAY
930      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
931      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
932     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
933  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
     Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
934   *** AERMET - VERSION  22112 ***
      ***                                                                    ***
      17:01:41
935
                                PAGE   7
936   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
937
938                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                      WEEK (HRDOW) *
939
940   SOURCE ID = VOL2         ; SOURCE TYPE = VOLUME   :
941    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
942   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
943                                              DAY OF WEEK = WEEKDAY
944      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
         .0000E+00    7  .1000E+01    8  .1000E+01
```

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945       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
946       17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
947                                              DAY OF WEEK = SATURDAY
948       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
949       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
950       17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
951                                              DAY OF WEEK = SUNDAY
952       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
953       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
954       17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
955   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
956    *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       17:01:41
957
                                  PAGE   8
958    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
959
960                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
961
962    SOURCE ID = VOL3         ; SOURCE TYPE = VOLUME   :
963     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
964    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
965                                              DAY OF WEEK = WEEKDAY
966       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
967       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
968       17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
969                                              DAY OF WEEK = SATURDAY
970       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
971       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
972       17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
973                                              DAY OF WEEK = SUNDAY
974       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
975       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
976       17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
977   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
978    *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       17:01:41
979
                                  PAGE   9
980    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
981
982                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
```

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                    WEEK (HRDOW) *
983
984   SOURCE ID = VOL4         ; SOURCE TYPE = VOLUME   :
985    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
986   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
987                                              DAY OF WEEK = WEEKDAY
988      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
989      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
990     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
991                                              DAY OF WEEK = SATURDAY
992      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
993      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
994     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
995                                              DAY OF WEEK = SUNDAY
996      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
997      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
998     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
999   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
1000   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       17:01:41
1001
                                  PAGE  10
1002  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1003
1004                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1005
1006  SOURCE ID = VOL5         ; SOURCE TYPE = VOLUME   :
1007   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1008  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1009                                             DAY OF WEEK = WEEKDAY
1010     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
1011     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
1012    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1013                                             DAY OF WEEK = SATURDAY
1014     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1015     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1016    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1017                                             DAY OF WEEK = SUNDAY
1018     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1019     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1020    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
        .0000E+00   23  .0000E+00   24  .0000E+00
```

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1021  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***       11/04/25
1022   *** AERMET - VERSION  22112 ***
       ***                                                                ***
       17:01:41
1023
                                  PAGE  11
1024   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1025
1026                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
1027
1028   SOURCE ID = VOL6         ; SOURCE TYPE = VOLUME   :
1029    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1030   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1031                                              DAY OF WEEK = WEEKDAY
1032      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1033      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
1034     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1035                                              DAY OF WEEK = SATURDAY
1036      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1037      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1038     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1039                                              DAY OF WEEK = SUNDAY
1040      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1041      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1042     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1043  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***       11/04/25
1044   *** AERMET - VERSION  22112 ***
       ***                                                                ***
       17:01:41
1045
                                  PAGE  12
1046   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1047
1048                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
1049
1050   SOURCE ID = VOL7         ; SOURCE TYPE = VOLUME   :
1051    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1052   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1053                                              DAY OF WEEK = WEEKDAY
1054      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1055      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
1056     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1057                                              DAY OF WEEK = SATURDAY
1058      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1059      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
```

```
 .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 17:01:41

                            PAGE  13
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL8         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
  .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 17:01:41

                            PAGE  14
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL9         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
```

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1098       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1099       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1100      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1101                                              DAY OF WEEK = SATURDAY
1102       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1103       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1104      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1105                                              DAY OF WEEK = SUNDAY
1106       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1107       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1108      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1109  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
1110   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       17:01:41
1111
                                  PAGE  15
1112   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1113
1114                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
1115
1116   SOURCE ID = VOL10        ; SOURCE TYPE = VOLUME   :
1117    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1118   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - - - - - -
1119                                              DAY OF WEEK = WEEKDAY
1120       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1121       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1122      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1123                                              DAY OF WEEK = SATURDAY
1124       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1125       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1126      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1127                                              DAY OF WEEK = SUNDAY
1128       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1129       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1130      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1131  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
1132   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       17:01:41
1133
                                  PAGE  16
1134   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
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1135
1136                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1137
1138    SOURCE ID = VOL11        ; SOURCE TYPE = VOLUME   :
1139     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1140    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1141                                                DAY OF WEEK = WEEKDAY
1142       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1143       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1144      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1145                                                DAY OF WEEK = SATURDAY
1146       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1147       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1148      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1149                                                DAY OF WEEK = SUNDAY
1150       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1151       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1152      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1153    FE *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
        Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
1154     *** AERMET - VERSION  22112 ***
         ***                                                                    ***
         17:01:41
1155
                                  PAGE  17
1156    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1157
1158                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1159
1160    SOURCE ID = VOL12        ; SOURCE TYPE = VOLUME   :
1161     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1162    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1163                                                DAY OF WEEK = WEEKDAY
1164       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1165       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1166      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1167                                                DAY OF WEEK = SATURDAY
1168       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1169       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1170      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1171                                                DAY OF WEEK = SUNDAY
1172       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1173       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
           .0000E+00   15  .0000E+00   16  .0000E+00
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1174      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1175    FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
        Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
1176     *** AERMET - VERSION  22112 ***
         ***                                                                ***
         17:01:41
1177
                                    PAGE  18
1178     *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1179
1180                       * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                           WEEK (HRDOW) *
1181
1182     SOURCE ID = VOL13        ; SOURCE TYPE = VOLUME   :
1183      HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
          SCALAR   HOUR   SCALAR   HOUR   SCALAR
1184    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1185                                                DAY OF WEEK = WEEKDAY
1186        1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1187        9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
1188      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1189                                                DAY OF WEEK = SATURDAY
1190        1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1191        9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1192      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1193                                                DAY OF WEEK = SUNDAY
1194        1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1195        9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1196      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1197    FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
        Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
1198     *** AERMET - VERSION  22112 ***
         ***                                                                ***
         17:01:41
1199
                                    PAGE  19
1200     *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1201
1202                       * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                           WEEK (HRDOW) *
1203
1204     SOURCE ID = VOL14        ; SOURCE TYPE = VOLUME   :
1205      HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
          SCALAR   HOUR   SCALAR   HOUR   SCALAR
1206    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1207                                                DAY OF WEEK = WEEKDAY
1208        1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1209        9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
1210      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1211                                                DAY OF WEEK = SATURDAY
1212        1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
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      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 17:01:41

                             PAGE  20
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL15        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 17:01:41

                             PAGE  21
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL16        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
```

```
- - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 17:01:41

                            PAGE  22
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL17        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 17:01:41
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                                PAGE  23
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                  WEEK (HRDOW) *

SOURCE ID = VOL18        ; SOURCE TYPE = VOLUME   :
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
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                                PAGE  24
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                  WEEK (HRDOW) *

SOURCE ID = VOL19        ; SOURCE TYPE = VOLUME   :
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
   .0000E+00    7  .0000E+00    8  .0000E+00
```

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      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
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                              PAGE  25
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL20        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
     .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL21        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
     .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
     .0000E+00   23  .0000E+00   24  .0000E+00
```

```
                                          DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
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                            PAGE  27
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL22        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
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                            PAGE  28
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL23        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
```

```
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - -
```

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      17:01:41
1441
                                  PAGE  30
1442  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1443
1444                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1445
1446  SOURCE ID = VOL25        ; SOURCE TYPE = VOLUME   :
1447   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1448  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1449                                                DAY OF WEEK = WEEKDAY
1450     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
1451     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
1452    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1453                                                DAY OF WEEK = SATURDAY
1454     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1455     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1456    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1457                                                DAY OF WEEK = SUNDAY
1458     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1459     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1460    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1461  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
1462   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       17:01:41
1463
                                  PAGE  31
1464  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1465
1466                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1467
1468  SOURCE ID = VOL26        ; SOURCE TYPE = VOLUME   :
1469   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1470  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1471                                                DAY OF WEEK = WEEKDAY
1472     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
1473     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
1474    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1475                                                DAY OF WEEK = SATURDAY
1476     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1477     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1478    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1479                                                DAY OF WEEK = SUNDAY
```

```
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL27        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
     .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL28        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
     .1000E+01   15  .0000E+00   16  .0000E+00
```

```
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 17:01:41

                            PAGE  34
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL29        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
  .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 17:01:41

                            PAGE  35
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *
```

```
 SOURCE ID = VOL30        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 17:01:41

                            PAGE  36
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL31        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
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*** AERMET - VERSION  22112 ***
***                                                                    ***
17:01:41

                              PAGE  37
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                  WEEK (HRDOW) *

SOURCE ID = VOL32        ; SOURCE TYPE = VOLUME   :
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - -

                                          DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                   ***
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                              PAGE  38
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                  WEEK (HRDOW) *

 SOURCE ID = VOL33        ; SOURCE TYPE = VOLUME   :
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - -

                                          DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
```

```
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
      .0000E+00    7  .0000E+00    8  .0000E+00
     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
    .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
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                            PAGE  39
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL34        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .1000E+01    8  .1000E+01
     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .0000E+00   16  .0000E+00
    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
    .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
    .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
    .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 17:01:41

                            PAGE  40
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL35        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
      .0000E+00    7  .1000E+01    8  .1000E+01
```

```
1671       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1672      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1673                                              DAY OF WEEK = SATURDAY
1674       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1675       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1676      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1677                                              DAY OF WEEK = SUNDAY
1678       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1679       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1680      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1681  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
1682   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       17:01:41
1683
                                  PAGE  41
1684   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1685
1686                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1687
1688   SOURCE ID = VOL36        ; SOURCE TYPE = VOLUME   :
1689    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1690   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1691                                              DAY OF WEEK = WEEKDAY
1692       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1693       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1694      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1695                                              DAY OF WEEK = SATURDAY
1696       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1697       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1698      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1699                                              DAY OF WEEK = SUNDAY
1700       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1701       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1702      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1703  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
1704   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       17:01:41
1705
                                  PAGE  42
1706   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1707
1708                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
```

```
                    WEEK (HRDOW) *
1709
1710    SOURCE ID = PAREA1       ; SOURCE TYPE = AREAPOLY :
1711     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1712    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - -
1713                                                DAY OF WEEK = WEEKDAY
1714       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1715       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1716      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1717                                                DAY OF WEEK = SATURDAY
1718       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1719       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1720      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1721                                                DAY OF WEEK = SUNDAY
1722       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1723       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1724      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1725    FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
        Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
1726     *** AERMET - VERSION  22112 ***
         ***                                                                    ***
         17:01:41
1727
                                  PAGE  43
1728     *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1729
1730                                          *** DISCRETE CARTESIAN RECEPTORS ***
1731                                        (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
1732                                                    (METERS)
1733
1734         ( 574106.6, 3725973.2,     -15.2,    2651.3,       2.0);         ( 574279.0,
           3725910.5,     -15.9,    2651.3,       2.0);
1735         ( 574204.4, 3725350.5,     -19.1,    2651.3,       2.0);         ( 573655.6,
           3725533.6,     -16.7,    2651.3,       2.0);
1736         ( 573199.4, 3725824.6,     -14.8,    2651.3,       2.0);         ( 573815.9,
           3726049.2,     -13.7,    2651.3,       2.0);
1737         ( 574057.4, 3725989.2,     -14.7,    2651.3,       2.0);         ( 574023.1,
           3725980.7,     -14.6,    2651.3,       2.0);
1738         ( 574346.5, 3725650.9,     -17.5,    2651.3,       2.0);         ( 574313.0,
           3725545.0,     -17.4,    2651.3,       2.0);
1739         ( 574206.8, 3725308.8,     -19.7,    2651.3,       2.0);         ( 574038.4,
           3725331.2,     -18.7,    2651.3,       2.0);
1740         ( 574209.1, 3725258.2,     -19.7,    2651.3,       2.0);         ( 573785.2,
           3725289.0,     -17.4,    2651.3,       2.0);
1741         ( 573482.6, 3725346.8,     -16.6,    2651.3,       2.0);         ( 573666.9,
           3725489.5,     -17.0,    2651.3,       2.0);
1742         ( 573580.6, 3725595.5,     -16.2,    2651.3,       2.0);         ( 573477.6,
           3725543.7,     -16.2,    2651.3,       2.0);
1743         ( 573474.2, 3725503.2,     -16.5,    2651.3,       2.0);         ( 573229.4,
           3725847.4,     -14.7,    2651.3,       2.0);
1744         ( 573040.9, 3725971.2,     -13.5,    2651.3,       2.0);         ( 573120.2,
           3725973.9,     -13.8,    2651.3,       2.0);
1745    FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
        Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
1746     *** AERMET - VERSION  22112 ***
```

PAGE 44
*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
(1=YES; 0=NO)

1 1 1

```
 REF WS   WD     HT  REF TA     HT
- - - -
```

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION ***
FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): VOL1 , VOL2 , VOL3 , VOL4 , VOL5 , VOL6 , VOL7 , VOL8 , VOL9 , VOL10 , VOL11 , VOL12 , VOL13 , VOL14 , VOL15 , VOL16 , VOL17 , VOL18 , VOL19 , VOL20 , VOL21 , VOL22 , VOL23 , VOL24 , VOL25 , VOL26 , VOL27 , VOL28 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_2.5 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
574106.64	3725973.24	0.54980	(19011724)	574278.99	3725910.47	0.40412	(19011724)
574204.36	3725350.47	0.99001c	(22122824)	573655.61	3725533.56	0.47706	(18122024)
573199.43	3725824.57	0.21111	(21122824)	573815.91	3726049.22	0.46398	(18011924)
574057.43	3725989.22	0.51145	(18011924)	574023.10	3725980.72	0.58547	(18011924)
574346.45	3725650.86	0.35963	(21123024)	574312.95	3725545.02	0.49025	(21123024)
574206.77	3725308.84	0.64145c	(22122824)	574038.43	3725331.17	0.76524	(18120624)
574209.11	3725258.17	0.48885c	(22122824)	573785.25	3725289.00	0.25374	(18122024)
573482.56	3725346.84	0.15016	(17010624)	573666.90	3725489.52	0.34603	(18122024)
573580.56	3725595.53	0.36177	(17010624)	573477.56	3725543.69	0.22673	(17010624)
573474.22	3725503.19	0.20434	(17010624)	573229.37	3725847.44	0.23057	(21122824)
573040.93	3725971.18	0.14591	(21122824)	573120.15	3725973.92	0.15038	(21122824)

*** THE SUMMARY OF HIGHEST 24-HR RESULTS ***

** CONC OF PM_2.5 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID

```
- - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS       0.99001c ON 22122824: AT (  574204.36,
3725350.47,   -19.13,  2651.27,    2.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 17:01:41

                            PAGE  48
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of           77 Warning Message(s)
 A Total of         1671 Informational Message(s)

 A Total of        43800 Hours Were Processed

 A Total of          763 Calm Hours Identified

 A Total of          908 Missing Hours Identified (  2.07 Percent)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W340     697       PRBASE: Possible Error in PROFBASE Input:  Value is < 0
 PROFBASE
 ME W186     698       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold
 used           0.50
 ME W187     698       MEOPEN: ADJ_U* Option for Stable Low Winds used in
 AERMET
 CN W732    1176         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2017021824
 CN W732    5136         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2017080224
 CN W732    6048         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2017090924
 CN W732    6792         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2017101024
 CN W732   10368         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2018030824
 CN W732   10464         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2018031224
 CN W732   10632         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2018031924
 CN W732   12408         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2018060124
 CN W732   16704         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2018112724
 CN W732   16728         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2018112824
 CN W732   18552         AVER: 24-hr avg, < 18 hours of data, calms policy used.
```

```
      2019021224
1907  CN W732   19056         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019030524
1908  CN W732   19152         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019030924
1909  CN W732   19224         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019031224
1910  CN W732   19344         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019031724
1911  CN W732   19464         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019032224
1912  CN W732   19512         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019032424
1913  CN W732   19536         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019032524
1914  CN W732   19560         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019032624
1915  CN W732   19584         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019032724
1916  CN W732   19656         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019033024
1917  CN W732   20016         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019041424
1918  CN W732   20112         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019041824
1919  CN W732   20712         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019051324
1920  CN W732   20856         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019051924
1921  CN W732   22080         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019070924
1922  CN W732   22200         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019071424
1923  CN W732   22848         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019081024
1924  CN W732   23400         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019090224
1925  CN W732   24216         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019100624
1926  CN W732   24408         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019101424
1927  CN W732   24576         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019102124
1928  MX W450   26281       CHKDAT: Record Out of Sequence in Meteorological File at:
      21010101
1929  MX W450   26281       CHKDAT: Record Out of Sequence in Meteorological File at:    1
      year gap
1930  CN W732   26496         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021010924
1931  CN W732   26520         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021011024
1932  CN W732   26544         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021011124
1933  CN W732   26568         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021011224
1934  CN W732   26832         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021012324
1935  CN W732   26856         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021012424
1936  CN W732   26880         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021012524
1937  CN W732   27000         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021013024
1938  CN W732   27024         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021013124
1939  CN W732   27192         AVER: 24-hr avg, < 18 hours of data, calms policy used.
```

```
      2021020724
1940  CN W732   28032         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021031424
1941  CN W732   28416         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021033024
1942  CN W732   28512         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021040324
1943  CN W732   28680         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021041024
1944  CN W732   29976         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021060324
1945  CN W732   30072         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021060724
1946  CN W732   30408         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021062124
1947  CN W732   30768         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021070624
1948  CN W732   30816         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021070824
1949  CN W732   31512         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021080624
1950  CN W732   31560         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021080824
1951  CN W732   32136         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021090124
1952  CN W732   33024         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021100824
1953  CN W732   33048         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021100924
1954  CN W732   34584         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021121224
1955  CN W732   38256         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022051424
1956  CN W732   38976         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022061324
1957  CN W732   40392         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022081124
1958  CN W732   41088         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022090924
1959  CN W732   41112         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022091024
1960  CN W732   41160         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022091224
1961  CN W732   41400         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022092224
1962  CN W732   42624         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022111224
1963  CN W732   42648         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022111324
1964  CN W732   42672         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022111424
1965  CN W732   42696         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022111524
1966  CN W732   42888         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022112324
1967  CN W732   43128         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022120324
1968  CN W732   43272         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022120924
1969  CN W732   43296         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022121024
1970
1971     ***********************************
1972     *** AERMOD Finishes Successfully ***
1973     ***********************************
1974
```

```
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 13.0.0
** Lakes Environmental Software Inc.
** Date: 7/18/2025
** File: C:\Users\Alyssa Barnett\Desktop\HRA\16552\16652-02 Const PM10\16652-02 Const PM10.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02
   MODELOPT DFAULT CONC
   AVERTIME 24
   URBANOPT 2492442 Riverside_County
   POLLUTID PM_10
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "16652-02 Const PM10.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     573500.180  3725886.220      -15.810
   LOCATION VOL2         VOLUME     573500.381  3725789.820      -16.120
   LOCATION VOL3         VOLUME     573597.602  3725886.190      -16.050
   LOCATION VOL4         VOLUME     573597.803  3725789.790      -16.360
   LOCATION VOL5         VOLUME     573694.930  3725886.254      -16.110
   LOCATION VOL6         VOLUME     573695.131  3725789.853      -16.280
   LOCATION VOL7         VOLUME     573792.553  3725789.824      -16.410
   LOCATION VOL8         VOLUME     573792.352  3725886.224      -16.330
   LOCATION VOL9         VOLUME     573890.171  3725886.254      -15.450
   LOCATION VOL10        VOLUME     573890.372  3725789.853      -15.750
   LOCATION VOL11        VOLUME     573987.794  3725789.824      -15.210
   LOCATION VOL12        VOLUME     573987.593  3725886.224      -15.520
   LOCATION VOL13        VOLUME     574085.292  3725886.133      -15.630
   LOCATION VOL14        VOLUME     574085.493  3725789.733      -15.890
   LOCATION VOL15        VOLUME     574182.915  3725789.703      -16.000
   LOCATION VOL16        VOLUME     574182.714  3725886.103      -15.750
   LOCATION VOL17        VOLUME     573695.175  3725695.674      -16.510
   LOCATION VOL18        VOLUME     573695.376  3725599.274      -16.700
   LOCATION VOL19        VOLUME     573792.799  3725599.244      -16.820
   LOCATION VOL20        VOLUME     573792.597  3725695.644      -16.620
   LOCATION VOL21        VOLUME     573890.309  3725695.354      -16.590
   LOCATION VOL22        VOLUME     573890.510  3725598.954      -16.930
   LOCATION VOL23        VOLUME     573987.932  3725598.925      -17.030
   LOCATION VOL24        VOLUME     573987.731  3725695.325      -16.730
   LOCATION VOL25        VOLUME     574085.442  3725695.035      -16.760
   LOCATION VOL26        VOLUME     574085.643  3725598.635      -17.100
   LOCATION VOL27        VOLUME     574183.066  3725598.605      -17.220
   LOCATION VOL28        VOLUME     574182.864  3725695.005      -16.880
   LOCATION VOL29        VOLUME     573895.419  3725502.137      -17.650
```

```
   LOCATION VOL30        VOLUME     573895.620  3725405.737      -18.290
   LOCATION VOL31        VOLUME     573993.042  3725405.707      -18.630
   LOCATION VOL32        VOLUME     573992.841  3725502.107      -17.860
   LOCATION VOL33        VOLUME     574085.442  3725503.095      -17.950
   LOCATION VOL34        VOLUME     574085.643  3725406.695      -18.800
   LOCATION VOL35        VOLUME     574183.066  3725406.665      -18.970
   LOCATION VOL36        VOLUME     574182.864  3725503.066      -18.220
   LOCATION PAREA1       AREAPOLY   573452.368  3725934.831      -15.220
** Source Parameters **
   SRCPARAM VOL1         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL2         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL3         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL4         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL5         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL6         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL7         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL8         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL9         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL10        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL11        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL12        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL13        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL14        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL15        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL16        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL17        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL18        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL19        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL20        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL21        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL22        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL23        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL24        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL25        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL26        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL27        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL28        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL29        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL30        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL31        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL32        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL33        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL34        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL35        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL36        0.0010054462     5.000    22.640     1.400
   SRCPARAM PAREA1       3.5229E-07     0.000         8     1.000
   AREAVERT PAREA1       573452.368 3725934.831 574231.065 3725933.083
   AREAVERT PAREA1       574231.939 3725360.640 573845.649 3725358.018
   AREAVERT PAREA1       573845.649 3725549.415 573646.387 3725552.911
   AREAVERT PAREA1       573645.513 3725741.686 573451.494 3725741.686
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL2         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL6         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL11        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL12        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
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   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL24        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
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528      EMISFACT VOL28        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
529      EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
530   ** Saturday:
531      EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
532      EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
533      EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
534      EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
535   ** Sunday:
536      EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
537      EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
538      EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
539      EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
540   ** WeekDays:
541      EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
542      EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
543      EMISFACT VOL29        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
544      EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
545   ** Saturday:
546      EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
547      EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
548      EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
549      EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
550   ** Sunday:
551      EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
552      EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
553      EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
554      EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
555   ** WeekDays:
556      EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
557      EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
558      EMISFACT VOL30        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
559      EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
560   ** Saturday:
561      EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
562      EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
563      EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
564      EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
565   ** Sunday:
566      EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
567      EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
568      EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
569      EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
570   ** WeekDays:
571      EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
572      EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
573      EMISFACT VOL31        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
574      EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
575   ** Saturday:
576      EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
577      EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
578      EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
579      EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
580   ** Sunday:
581      EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
582      EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
583      EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
584      EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
585   ** WeekDays:
586      EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
587      EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
588      EMISFACT VOL32        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
589      EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
590   ** Saturday:
591      EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
592      EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
593      EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED "16652-02 Const PM10.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE ..\KTRM_V11_trimmed.sfc
   PROFFILE ..\KTRM_V11_trimmed.PFL
   SURFDATA 3104 2017
   UAIRDATA 3190 2017
   PROFBASE -36.04 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 24 ALL 1ST "16652-02 CONST PM10.AD\24H1GALL.PLT" 31
   SUMMFILE "16652-02 Const PM10.sum"
OU FINISHED
**
**************************************
** Project Parameters
**************************************
** PROJCTN  CoordinateSystemUTM
** DESCPTN  UTM: Universal Transverse Mercator
** DATUM    North American Datum 1983
** DTMRGN   CONUS
** UNITS    m
** ZONE     11
** ZONEINX  0
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**
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**
** AERMOD Input Produced by:
** AERMOD View Ver. 13.0.0
** Lakes Environmental Software Inc.
** Date: 7/18/2025
** File: C:\Users\Alyssa Barnett\Desktop\HRA\16552\16652-02 Const PM10\16652-02 Const
PM10.ADI
**
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** AERMOD Control Pathway
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**
**
CO STARTING
   TITLEONE C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02
   MODELOPT DFAULT CONC
   AVERTIME 24
   URBANOPT 2492442 Riverside_County
   POLLUTID PM_10
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "16652-02 Const PM10.err"
CO FINISHED
**
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** AERMOD Source Pathway
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**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     573500.180  3725886.220      -15.810
   LOCATION VOL2         VOLUME     573500.381  3725789.820      -16.120
   LOCATION VOL3         VOLUME     573597.602  3725886.190      -16.050
   LOCATION VOL4         VOLUME     573597.803  3725789.790      -16.360
   LOCATION VOL5         VOLUME     573694.930  3725886.254      -16.110
   LOCATION VOL6         VOLUME     573695.131  3725789.853      -16.280
   LOCATION VOL7         VOLUME     573792.553  3725789.824      -16.410
   LOCATION VOL8         VOLUME     573792.352  3725886.224      -16.330
   LOCATION VOL9         VOLUME     573890.171  3725886.254      -15.450
   LOCATION VOL10        VOLUME     573890.372  3725789.853      -15.750
   LOCATION VOL11        VOLUME     573987.794  3725789.824      -15.210
   LOCATION VOL12        VOLUME     573987.593  3725886.224      -15.520
   LOCATION VOL13        VOLUME     574085.292  3725886.133      -15.630
   LOCATION VOL14        VOLUME     574085.493  3725789.733      -15.890
   LOCATION VOL15        VOLUME     574182.915  3725789.703      -16.000
   LOCATION VOL16        VOLUME     574182.714  3725886.103      -15.750
   LOCATION VOL17        VOLUME     573695.175  3725695.674      -16.510
   LOCATION VOL18        VOLUME     573695.376  3725599.274      -16.700
   LOCATION VOL19        VOLUME     573792.799  3725599.244      -16.820
   LOCATION VOL20        VOLUME     573792.597  3725695.644      -16.620
   LOCATION VOL21        VOLUME     573890.309  3725695.354      -16.590
   LOCATION VOL22        VOLUME     573890.510  3725598.954      -16.930
   LOCATION VOL23        VOLUME     573987.932  3725598.925      -17.030
   LOCATION VOL24        VOLUME     573987.731  3725695.325      -16.730
   LOCATION VOL25        VOLUME     574085.442  3725695.035      -16.760
   LOCATION VOL26        VOLUME     574085.643  3725598.635      -17.100
   LOCATION VOL27        VOLUME     574183.066  3725598.605      -17.220
   LOCATION VOL28        VOLUME     574182.864  3725695.005      -16.880
   LOCATION VOL29        VOLUME     573895.419  3725502.137      -17.650
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   LOCATION VOL30        VOLUME     573895.620  3725405.737      -18.290
   LOCATION VOL31        VOLUME     573993.042  3725405.707      -18.630
   LOCATION VOL32        VOLUME     573992.841  3725502.107      -17.860
   LOCATION VOL33        VOLUME     574085.442  3725503.095      -17.950
   LOCATION VOL34        VOLUME     574085.643  3725406.695      -18.800
   LOCATION VOL35        VOLUME     574183.066  3725406.665      -18.970
   LOCATION VOL36        VOLUME     574182.864  3725503.066      -18.220
   LOCATION PAREA1       AREAPOLY   573452.368  3725934.831      -15.220
** Source Parameters **
   SRCPARAM VOL1         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL2         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL3         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL4         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL5         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL6         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL7         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL8         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL9         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL10        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL11        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL12        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL13        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL14        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL15        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL16        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL17        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL18        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL19        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL20        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL21        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL22        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL23        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL24        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL25        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL26        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL27        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL28        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL29        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL30        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL31        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL32        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL33        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL34        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL35        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL36        0.0010054462     5.000    22.640     1.400
   SRCPARAM PAREA1       3.5229E-07     0.000         8     1.000
   AREAVERT PAREA1       573452.368 3725934.831 574231.065 3725933.083
   AREAVERT PAREA1       574231.939 3725360.640 573845.649 3725358.018
   AREAVERT PAREA1       573845.649 3725549.415 573646.387 3725552.911
   AREAVERT PAREA1       573645.513 3725741.686 573451.494 3725741.686
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL2         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL6         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL11        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL12        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
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   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL24        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL28        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

```
** WeekDays:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**********************************
** AERMOD Receptor Pathway
**********************************
**
**
RE STARTING
   INCLUDED "16652-02 Const PM10.rou"
RE FINISHED
**
**********************************
** AERMOD Meteorology Pathway
**********************************
**
**
ME STARTING
   SURFFILE ..\KTRM_V11_trimmed.sfc
   PROFFILE ..\KTRM_V11_trimmed.PFL
   SURFDATA 3104 2017
   UAIRDATA 3190 2017
   PROFBASE -36.04 METERS
ME FINISHED
**
**********************************
** AERMOD Output Pathway
**********************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 24 ALL 1ST "16652-02 CONST PM10.AD\24H1GALL.PLT" 31
   SUMMFILE "16652-02 Const PM10.sum"
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            3 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***

```

```
   ********   WARNING MESSAGES   ********
 ME W340     697       PRBASE: Possible Error in PROFBASE Input:  Value is < 0
 PROFBASE
 ME W186     698       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold
 used           0.50
 ME W187     698       MEOPEN: ADJ_U* Option for Stable Low Winds used in
 AERMET

 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************

FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 14:26:55

                             PAGE   1
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                          ***     MODEL SETUP OPTIONS SUMMARY       ***
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - -

** Model Options Selected:
     * Model Uses Regulatory DEFAULT Options
     * Model Is Setup For Calculation of Average CONCentration Values.
     * NO GAS DEPOSITION Data Provided.
     * NO PARTICLE DEPOSITION Data Provided.
     * Model Uses NO DRY DEPLETION. DDPLETE  =  F
     * Model Uses NO WET DEPLETION. WETDPLT  =  F
     * Stack-tip Downwash.
     * Model Accounts for ELEVated Terrain Effects.
     * Use Calms Processing Routine.
     * Use Missing Data Processing Routine.
     * No Exponential Decay.
     * Model Uses URBAN Dispersion Algorithm for the SBL for    37 Source(s),
       for Total of    1 Urban Area(s):
  Urban Population =   2492442.0 ;  Urban Roughness Length =  1.000 m
     * Urban Roughness Length of 1.0 Meter Used.
     * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
     * CCVR_Sub - Meteorological data includes CCVR substitutions
     * TEMP_Sub - Meteorological data includes TEMP substitutions
     * Model Accepts FLAGPOLE Receptor . Heights.
     * The User Specified a Pollutant Type of: PM_10

**Model Calculates  1 Short Term Average(s) of:  24-HR

**This Run Includes:     37 Source(s);       1 Source Group(s); and      22 Receptor(s)

               with:      0 POINT(s), including
                          0 POINTCAP(s) and      0 POINTHOR(s)
                and:     36 VOLUME source(s)
                and:      1 AREA type source(s)
                and:      0 LINE source(s)
                and:      0 RLINE/RLINEXT source(s)
                and:      0 OPENPIT source(s)
                and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                and:      0 SWPOINT source(s)


**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date:  22112
```

**Output Options Selected:
Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours
m for Missing Hours
b for Both Calm and Missing Hours

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = -36.04 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0
Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 3.6 MB of RAM.

**Input Runstream File:
aermod.inp

**Output Print File:
aermod.out

**Detailed Error/Message File: 16652-02 Const PM10.err
**File for Summary of Results: 16652-02 Const PM10.sum
FF *** AERMOD - VERSION 24142 *** *** C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 *** 07/18/25
*** AERMET - VERSION 22112 ***
*** ***
14:26:55

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER EMISSION RATE INIT. PART. CATS.	URBAN SOURCE	EMISSION RATE (GRAMS/SEC) SCALAR VARY BY	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	SZ
VOL1	0		0.10054E-02 HRDOW	573500.2	3725886.2	-15.8	5.00	22.64	1.40
VOL2	0		0.10054E-02 HRDOW	573500.4	3725789.8	-16.1	5.00	22.64	1.40
VOL3	0		0.10054E-02 HRDOW	573597.6	3725886.2	-16.1	5.00	22.64	1.40
VOL4	0		0.10054E-02 HRDOW	573597.8	3725789.8	-16.4	5.00	22.64	1.40
VOL5	0		0.10054E-02 HRDOW	573694.9	3725886.3	-16.1	5.00	22.64	1.40
VOL6	0		0.10054E-02 HRDOW	573695.1	3725789.9	-16.3	5.00	22.64	1.40
VOL7	0		0.10054E-02 HRDOW	573792.6	3725789.8	-16.4	5.00	22.64	1.40

```
825   VOL8            0   0.10054E-02  573792.4 3725886.2   -16.3     5.00    22.64
      1.40     YES   HRDOW            NO
826   VOL9            0   0.10054E-02  573890.2 3725886.3   -15.5     5.00    22.64
      1.40     YES   HRDOW            NO
827   VOL10           0   0.10054E-02  573890.4 3725789.9   -15.8     5.00    22.64
      1.40     YES   HRDOW            NO
828   VOL11           0   0.10054E-02  573987.8 3725789.8   -15.2     5.00    22.64
      1.40     YES   HRDOW            NO
829   VOL12           0   0.10054E-02  573987.6 3725886.2   -15.5     5.00    22.64
      1.40     YES   HRDOW            NO
830   VOL13           0   0.10054E-02  574085.3 3725886.1   -15.6     5.00    22.64
      1.40     YES   HRDOW            NO
831   VOL14           0   0.10054E-02  574085.5 3725789.7   -15.9     5.00    22.64
      1.40     YES   HRDOW            NO
832   VOL15           0   0.10054E-02  574182.9 3725789.7   -16.0     5.00    22.64
      1.40     YES   HRDOW            NO
833   VOL16           0   0.10054E-02  574182.7 3725886.1   -15.8     5.00    22.64
      1.40     YES   HRDOW            NO
834   VOL17           0   0.10054E-02  573695.2 3725695.7   -16.5     5.00    22.64
      1.40     YES   HRDOW            NO
835   VOL18           0   0.10054E-02  573695.4 3725599.3   -16.7     5.00    22.64
      1.40     YES   HRDOW            NO
836   VOL19           0   0.10054E-02  573792.8 3725599.2   -16.8     5.00    22.64
      1.40     YES   HRDOW            NO
837   VOL20           0   0.10054E-02  573792.6 3725695.6   -16.6     5.00    22.64
      1.40     YES   HRDOW            NO
838   VOL21           0   0.10054E-02  573890.3 3725695.4   -16.6     5.00    22.64
      1.40     YES   HRDOW            NO
839   VOL22           0   0.10054E-02  573890.5 3725599.0   -16.9     5.00    22.64
      1.40     YES   HRDOW            NO
840   VOL23           0   0.10054E-02  573987.9 3725598.9   -17.0     5.00    22.64
      1.40     YES   HRDOW            NO
841   VOL24           0   0.10054E-02  573987.7 3725695.3   -16.7     5.00    22.64
      1.40     YES   HRDOW            NO
842   VOL25           0   0.10054E-02  574085.4 3725695.0   -16.8     5.00    22.64
      1.40     YES   HRDOW            NO
843   VOL26           0   0.10054E-02  574085.6 3725598.6   -17.1     5.00    22.64
      1.40     YES   HRDOW            NO
844   VOL27           0   0.10054E-02  574183.1 3725598.6   -17.2     5.00    22.64
      1.40     YES   HRDOW            NO
845   VOL28           0   0.10054E-02  574182.9 3725695.0   -16.9     5.00    22.64
      1.40     YES   HRDOW            NO
846   VOL29           0   0.10054E-02  573895.4 3725502.1   -17.7     5.00    22.64
      1.40     YES   HRDOW            NO
847   VOL30           0   0.10054E-02  573895.6 3725405.7   -18.3     5.00    22.64
      1.40     YES   HRDOW            NO
848   VOL31           0   0.10054E-02  573993.0 3725405.7   -18.6     5.00    22.64
      1.40     YES   HRDOW            NO
849   VOL32           0   0.10054E-02  573992.8 3725502.1   -17.9     5.00    22.64
      1.40     YES   HRDOW            NO
850   VOL33           0   0.10054E-02  574085.4 3725503.1   -17.9     5.00    22.64
      1.40     YES   HRDOW            NO
851   VOL34           0   0.10054E-02  574085.6 3725406.7   -18.8     5.00    22.64
      1.40     YES   HRDOW            NO
852   VOL35           0   0.10054E-02  574183.1 3725406.7   -19.0     5.00    22.64
      1.40     YES   HRDOW            NO
853   VOL36           0   0.10054E-02  574182.9 3725503.1   -18.2     5.00    22.64
      1.40     YES   HRDOW            NO
854   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***       07/18/25
855    *** AERMET - VERSION  22112 ***
       ***                                                          ***
       14:26:55
856
                                  PAGE   3
                                                                                1132
857    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
```

```
                                                     *** AREAPOLY SOURCE DATA ***

              NUMBER EMISSION RATE   LOCATION OF AREA  BASE     RELEASE  NUMBER
              INIT.   URBAN  EMISSION RATE    AIRCRAFT
   SOURCE       PART.  (GRAMS/SEC       X        Y      ELEV.    HEIGHT  OF VERTS.
   SZ     SOURCE  SCALAR VARY
     ID         CATS.   /METER**2)   (METERS) (METERS) (METERS) (METERS)
     (METERS)              BY
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - -

 PAREA1           0   0.35229E-06  573452.4 3725934.8   -15.2     0.00       8
 1.00     YES   HRDOW            NO
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 14:26:55

                            PAGE   4
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                       *** SOURCE IDs DEFINING SOURCE GROUPS ***

 SRCGROUP ID                                          SOURCE IDs
 -----------                                          ----------


  ALL        VOL1        , VOL2        , VOL3        , VOL4        , VOL5        ,
  VOL6        , VOL7        , VOL8        ,

             VOL9        , VOL10       , VOL11       , VOL12       , VOL13       ,
             VOL14       , VOL15       , VOL16       ,

             VOL17       , VOL18       , VOL19       , VOL20       , VOL21       ,
             VOL22       , VOL23       , VOL24       ,

             VOL25       , VOL26       , VOL27       , VOL28       , VOL29       ,
             VOL30       , VOL31       , VOL32       ,

             VOL33       , VOL34       , VOL35       , VOL36       , PAREA1      ,
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 14:26:55

                            PAGE   5
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                       *** SOURCE IDs DEFINED AS URBAN SOURCES ***

  URBAN ID   URBAN POP                                 SOURCE IDs
  --------   ---------                                 ----------


              2492442.   VOL1        , VOL2        , VOL3        , VOL4        ,
              VOL5        , VOL6        , VOL7        ,
 VOL8        ,

             VOL9        , VOL10       , VOL11       , VOL12       , VOL13       ,
             VOL14       , VOL15       , VOL16       ,
```

```
905
906              VOL17       , VOL18       , VOL19       , VOL20       , VOL21
                 VOL22       , VOL23       , VOL24       ,
907
908              VOL25       , VOL26       , VOL27       , VOL28       , VOL29       ,
                 VOL30       , VOL31       , VOL32       ,
909
910              VOL33       , VOL34       , VOL35       , VOL36       , PAREA1      ,
911  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
     Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
912   *** AERMET - VERSION  22112 ***
      ***                                                                    ***
      14:26:55
913
                                PAGE   6
914   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
915
916                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                      WEEK (HRDOW) *
917
918   SOURCE ID = VOL1         ; SOURCE TYPE = VOLUME   :
919    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
920   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
921                                              DAY OF WEEK = WEEKDAY
922      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
923      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
924     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
925                                              DAY OF WEEK = SATURDAY
926      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
927      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
928     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
929                                              DAY OF WEEK = SUNDAY
930      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
931      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
932     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
933  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
     Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
934   *** AERMET - VERSION  22112 ***
      ***                                                                    ***
      14:26:55
935
                                PAGE   7
936   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
937
938                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                      WEEK (HRDOW) *
939
940   SOURCE ID = VOL2         ; SOURCE TYPE = VOLUME   :
941    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
942   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
943                                              DAY OF WEEK = WEEKDAY
944      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
         .0000E+00    7  .1000E+01    8  .1000E+01
```

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      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
     .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 14:26:55

                              PAGE   8
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL3         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
     .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 14:26:55

                              PAGE   9
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
```

```
                    WEEK (HRDOW) *
983
984   SOURCE ID = VOL4         ; SOURCE TYPE = VOLUME   :
985    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
986   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
987                                              DAY OF WEEK = WEEKDAY
988      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
989      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
990     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
991                                              DAY OF WEEK = SATURDAY
992      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
993      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
994     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
995                                              DAY OF WEEK = SUNDAY
996      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
997      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
998     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
999   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1000   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       14:26:55
1001
                                  PAGE  10
1002  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1003
1004                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1005
1006  SOURCE ID = VOL5         ; SOURCE TYPE = VOLUME   :
1007   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1008  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1009                                             DAY OF WEEK = WEEKDAY
1010     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
1011     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
1012    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1013                                             DAY OF WEEK = SATURDAY
1014     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1015     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1016    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1017                                             DAY OF WEEK = SUNDAY
1018     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1019     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1020    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
        .0000E+00   23  .0000E+00   24  .0000E+00
```

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1021  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1022   *** AERMET - VERSION  22112 ***
       ***                                                                ***
       14:26:55
1023
                                  PAGE  11
1024   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1025
1026                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
1027
1028   SOURCE ID = VOL6         ; SOURCE TYPE = VOLUME   :
1029    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1030   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1031                                              DAY OF WEEK = WEEKDAY
1032      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1033      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
1034     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1035                                              DAY OF WEEK = SATURDAY
1036      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1037      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1038     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1039                                              DAY OF WEEK = SUNDAY
1040      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1041      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1042     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1043  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1044   *** AERMET - VERSION  22112 ***
       ***                                                                ***
       14:26:55
1045
                                  PAGE  12
1046   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1047
1048                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
1049
1050   SOURCE ID = VOL7         ; SOURCE TYPE = VOLUME   :
1051    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1052   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1053                                              DAY OF WEEK = WEEKDAY
1054      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1055      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
1056     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1057                                              DAY OF WEEK = SATURDAY
1058      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1059      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
```

```
 .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 14:26:55

                            PAGE  13
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL8         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
  .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 14:26:55

                            PAGE  14
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL9         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
```

```
1098       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1099       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1100      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1101                                              DAY OF WEEK = SATURDAY
1102       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1103       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1104      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1105                                              DAY OF WEEK = SUNDAY
1106       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1107       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1108      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1109 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
     Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1110  *** AERMET - VERSION  22112 ***
      ***                                                                    ***
      14:26:55
1111
                                PAGE  15
1112  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1113
1114                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1115
1116  SOURCE ID = VOL10        ; SOURCE TYPE = VOLUME   :
1117   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
      SCALAR   HOUR   SCALAR   HOUR   SCALAR
1118  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1119                                              DAY OF WEEK = WEEKDAY
1120       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1121       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1122      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1123                                              DAY OF WEEK = SATURDAY
1124       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1125       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1126      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1127                                              DAY OF WEEK = SUNDAY
1128       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1129       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1130      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1131 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
     Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1132  *** AERMET - VERSION  22112 ***
      ***                                                                    ***
      14:26:55
1133
                                PAGE  16
1134  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
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1135
1136                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1137
1138    SOURCE ID = VOL11        ; SOURCE TYPE = VOLUME   :
1139     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1140    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1141                                                DAY OF WEEK = WEEKDAY
1142       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1143       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1144      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1145                                                DAY OF WEEK = SATURDAY
1146       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1147       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1148      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1149                                                DAY OF WEEK = SUNDAY
1150       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1151       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1152      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1153    FE *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
        Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1154     *** AERMET - VERSION  22112 ***
         ***                                                                    ***
         14:26:55
1155
                                  PAGE  17
1156    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1157
1158                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1159
1160    SOURCE ID = VOL12        ; SOURCE TYPE = VOLUME   :
1161     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1162    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1163                                                DAY OF WEEK = WEEKDAY
1164       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1165       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1166      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1167                                                DAY OF WEEK = SATURDAY
1168       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1169       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1170      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1171                                                DAY OF WEEK = SUNDAY
1172       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1173       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
           .0000E+00   15  .0000E+00   16  .0000E+00
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1174      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1175   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
       Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1176    *** AERMET - VERSION  22112 ***
        ***                                                                  ***
        14:26:55
1177
                                   PAGE  18
1178    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1179
1180                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1181
1182    SOURCE ID = VOL13        ; SOURCE TYPE = VOLUME   :
1183     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1184    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1185                                                DAY OF WEEK = WEEKDAY
1186       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1187       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
1188      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1189                                                DAY OF WEEK = SATURDAY
1190       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1191       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1192      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1193                                                DAY OF WEEK = SUNDAY
1194       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1195       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1196      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1197   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
       Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1198    *** AERMET - VERSION  22112 ***
        ***                                                                  ***
        14:26:55
1199
                                   PAGE  19
1200    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1201
1202                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1203
1204    SOURCE ID = VOL14        ; SOURCE TYPE = VOLUME   :
1205     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1206    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1207                                                DAY OF WEEK = WEEKDAY
1208       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1209       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
1210      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1211                                                DAY OF WEEK = SATURDAY
1212       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
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      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 14:26:55

                             PAGE  20
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL15        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 14:26:55

                             PAGE  21
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL16        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
```

```
- - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 14:26:55

                            PAGE  22
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL17        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 14:26:55
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                                PAGE  23
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                  WEEK (HRDOW) *

SOURCE ID = VOL18        ; SOURCE TYPE = VOLUME   :
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 14:26:55

                                PAGE  24
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                  WEEK (HRDOW) *

SOURCE ID = VOL19        ; SOURCE TYPE = VOLUME   :
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
```

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      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 14:26:55

                              PAGE  25
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL20        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
     .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 14:26:55

                              PAGE  26
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL21        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
     .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
     .0000E+00   23  .0000E+00   24  .0000E+00
```

```
                                          DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 14:26:55

                            PAGE  27
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL22        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 14:26:55

                            PAGE  28
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL23        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
```

```
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - -
```

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      14:26:55
1441
                                  PAGE  30
1442  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1443
1444                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1445
1446  SOURCE ID = VOL25        ; SOURCE TYPE = VOLUME   :
1447   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1448  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1449                                                DAY OF WEEK = WEEKDAY
1450     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
1451     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
1452    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1453                                                DAY OF WEEK = SATURDAY
1454     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1455     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1456    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1457                                                DAY OF WEEK = SUNDAY
1458     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1459     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1460    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1461  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1462   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       14:26:55
1463
                                  PAGE  31
1464  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1465
1466                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1467
1468  SOURCE ID = VOL26        ; SOURCE TYPE = VOLUME   :
1469   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1470  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1471                                                DAY OF WEEK = WEEKDAY
1472     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
1473     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
1474    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1475                                                DAY OF WEEK = SATURDAY
1476     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1477     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1478    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1479                                                DAY OF WEEK = SUNDAY
```

1480 1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00

1481 9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00

1482 17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

1483 FF *** AERMOD - VERSION 24142 *** *** C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 *** 07/18/25

1484 *** AERMET - VERSION 22112 *** *** ***

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1485

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1486 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

1487

1488 * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

1489

1490 SOURCE ID = VOL27 ; SOURCE TYPE = VOLUME :

1491 HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR

1492 - - -

```
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 14:26:55

                             PAGE  34
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL29        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .1000E+01    8  .1000E+01
       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
       .1000E+01   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 14:26:55

                             PAGE  35
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *
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```
 SOURCE ID = VOL30        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 14:26:55

                            PAGE  36
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL31        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
```

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL32   ; SOURCE TYPE = VOLUME   :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00
7	.1000E+01	8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.0000E+00	16	.0000E+00	17	.0000E+00	18	.0000E+00
19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00
7	.0000E+00	8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00
13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00	17	.0000E+00	18	.0000E+00
19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00
7	.0000E+00	8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00
13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00	17	.0000E+00	18	.0000E+00
19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL33   ; SOURCE TYPE = VOLUME   :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00
7	.1000E+01	8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.0000E+00	16	.0000E+00	17	.0000E+00	18	.0000E+00
19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00
7	.0000E+00	8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00
13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00	17	.0000E+00	18	.0000E+00
19	.0000E+00	20	.0000E+00	21	.0000E+00						

```
      .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
      .0000E+00    7  .0000E+00    8  .0000E+00
     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                 ***
 14:26:55

                            PAGE  39
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL34        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .1000E+01    8  .1000E+01
     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .0000E+00   16  .0000E+00
    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                 ***
 14:26:55

                            PAGE  40
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL35        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
      .0000E+00    7  .1000E+01    8  .1000E+01
```

```
1671       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1672      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1673                                              DAY OF WEEK = SATURDAY
1674       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1675       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1676      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1677                                              DAY OF WEEK = SUNDAY
1678       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1679       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1680      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1681  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1682   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       14:26:55
1683
                                  PAGE  41
1684   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1685
1686                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1687
1688   SOURCE ID = VOL36        ; SOURCE TYPE = VOLUME   :
1689    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1690   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1691                                              DAY OF WEEK = WEEKDAY
1692       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1693       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1694      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1695                                              DAY OF WEEK = SATURDAY
1696       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1697       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1698      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1699                                              DAY OF WEEK = SUNDAY
1700       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1701       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1702      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1703  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1704   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       14:26:55
1705
                                  PAGE  42
1706   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1707
1708                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
```

```
                    WEEK (HRDOW) *

 SOURCE ID = PAREA1       ; SOURCE TYPE = AREAPOLY :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
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                            PAGE  43
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                      *** DISCRETE CARTESIAN RECEPTORS ***
                                    (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                (METERS)

     ( 574106.6, 3725973.2,     -15.2,    2651.3,       2.0);         ( 574279.0,
     3725910.5,     -15.9,    2651.3,       2.0);
     ( 574204.4, 3725350.5,     -19.1,    2651.3,       2.0);         ( 573655.6,
     3725533.6,     -16.7,    2651.3,       2.0);
     ( 573199.4, 3725824.6,     -14.8,    2651.3,       2.0);         ( 573815.9,
     3726049.2,     -13.7,    2651.3,       2.0);
     ( 574057.4, 3725989.2,     -14.7,    2651.3,       2.0);         ( 574023.1,
     3725980.7,     -14.6,    2651.3,       2.0);
     ( 574346.5, 3725650.9,     -17.5,    2651.3,       2.0);         ( 574313.0,
     3725545.0,     -17.4,    2651.3,       2.0);
     ( 574206.8, 3725308.8,     -19.7,    2651.3,       2.0);         ( 574038.4,
     3725331.2,     -18.7,    2651.3,       2.0);
     ( 574209.1, 3725258.2,     -19.7,    2651.3,       2.0);         ( 573785.2,
     3725289.0,     -17.4,    2651.3,       2.0);
     ( 573482.6, 3725346.8,     -16.6,    2651.3,       2.0);         ( 573666.9,
     3725489.5,     -17.0,    2651.3,       2.0);
     ( 573580.6, 3725595.5,     -16.2,    2651.3,       2.0);         ( 573477.6,
     3725543.7,     -16.2,    2651.3,       2.0);
     ( 573474.2, 3725503.2,     -16.5,    2651.3,       2.0);         ( 573229.4,
     3725847.4,     -14.7,    2651.3,       2.0);
     ( 573040.9, 3725971.2,     -13.5,    2651.3,       2.0);         ( 573120.2,
     3725973.9,     -13.8,    2651.3,       2.0);
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
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      ***                                                                  ***
      14:26:55
1747
                                  PAGE  44
1748  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1749
1750                                          *** METEOROLOGICAL DAYS SELECTED FOR
                                              PROCESSING ***
1751                                                        (1=YES; 0=NO)
1752
1753            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1754            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1755            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1756            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1757            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1758            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1759            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1760            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1761
1762              NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT
                  IS INCLUDED IN THE DATA FILE.
1763
1764
1765
1766                              *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED
                                  CATEGORIES ***
1767                                                  (METERS/SEC)
1768
1769                                                1.54,   3.09,   5.14,   8.23,  10.80,
1770  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1771   *** AERMET - VERSION  22112 ***
       ***                                                                 ***
       14:26:55
1772
                                  PAGE  45
1773   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1774
1775                                  *** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA
                                      ***
1776
1777        Surface file:
            ..\KTRM_V11_trimmed.sfc
            Met Version:  22112
1778        Profile file:
            ..\KTRM_V11_trimmed.PFL
1779        Surface format:
            FREE

1780        Profile format:
            FREE

1781        Surface station no.:     3104                  Upper air station no.:     3190
1782                       Name: UNKNOWN                                Name:
                           UNKNOWN
1783                       Year:   2017                                 Year:   2017
1784
1785   First 24 hours of scalar data
1786   YR MO DY JDY HR     H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALB
```

```
 REF WS   WD     HT  REF TA     HT
- - - -
```

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION ***
FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): VOL1 , VOL2 , VOL3 , VOL4 , VOL5 , VOL6 , VOL7 , VOL8 , VOL9 , VOL10 , VOL11 , VOL12 , VOL13 , VOL14 , VOL15 , VOL16 , VOL17 , VOL18 , VOL19 , VOL20 , VOL21 , VOL22 , VOL23 , VOL24 , VOL25 , VOL26 , VOL27 , VOL28 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
574106.64	3725973.24	1.04421	(19011724)	574278.99	3725910.47	0.77186	(19011724)
574204.36	3725350.47	1.80880c	(22122824)	573655.61	3725533.56	0.91255	(18122024)
573199.43	3725824.57	0.41050	(21122824)	573815.91	3726049.22	0.87930	(18011924)
574057.43	3725989.22	0.94511	(18011924)	574023.10	3725980.72	1.08957	(18011924)
574346.45	3725650.86	0.68155	(21123024)	574312.95	3725545.02	0.93207	(21123024)
574206.77	3725308.84	1.16527c	(22122824)	574038.43	3725331.17	1.41756	(18120624)
574209.11	3725258.17	0.90068	(21122124)	573785.25	3725289.00	0.48673	(18122024)
573482.56	3725346.84	0.28420	(17010624)	573666.90	3725489.52	0.65740	(18122024)
573580.56	3725595.53	0.66871	(17010624)	573477.56	3725543.69	0.42251	(17010624)
573474.22	3725503.19	0.38173	(17010624)	573229.37	3725847.44	0.44942	(21122824)
573040.93	3725971.18	0.28364	(21122824)	573120.15	3725973.92	0.29361	(21122824)

FF *** AERMOD - VERSION 24142 *** *** C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 *** 07/18/25
*** AERMET - VERSION 22112 *** *** ***
14:26:55

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** THE SUMMARY OF HIGHEST 24-HR RESULTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	NETWORK OF TYPE	GRID-ID

```
- - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS       1.80880c ON 22122824: AT (  574204.36,
3725350.47,   -19.13,  2651.27,    2.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 14:26:55

                              PAGE  48
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of           77 Warning Message(s)
 A Total of         1671 Informational Message(s)

 A Total of        43800 Hours Were Processed

 A Total of          763 Calm Hours Identified

 A Total of          908 Missing Hours Identified (  2.07 Percent)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W340     697       PRBASE: Possible Error in PROFBASE Input:  Value is < 0
 PROFBASE
 ME W186     698       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold
 used           0.50
 ME W187     698       MEOPEN: ADJ_U* Option for Stable Low Winds used in
 AERMET
 CN W732    1176         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2017021824
 CN W732    5136         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2017080224
 CN W732    6048         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2017090924
 CN W732    6792         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2017101024
 CN W732   10368         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2018030824
 CN W732   10464         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2018031224
 CN W732   10632         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2018031924
 CN W732   12408         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2018060124
 CN W732   16704         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2018112724
 CN W732   16728         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2018112824
 CN W732   18552         AVER: 24-hr avg, < 18 hours of data, calms policy used.
```

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      2019021224
1907  CN W732   19056         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019030524
1908  CN W732   19152         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019030924
1909  CN W732   19224         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019031224
1910  CN W732   19344         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019031724
1911  CN W732   19464         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019032224
1912  CN W732   19512         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019032424
1913  CN W732   19536         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019032524
1914  CN W732   19560         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019032624
1915  CN W732   19584         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019032724
1916  CN W732   19656         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019033024
1917  CN W732   20016         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019041424
1918  CN W732   20112         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019041824
1919  CN W732   20712         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019051324
1920  CN W732   20856         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019051924
1921  CN W732   22080         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019070924
1922  CN W732   22200         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019071424
1923  CN W732   22848         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019081024
1924  CN W732   23400         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019090224
1925  CN W732   24216         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019100624
1926  CN W732   24408         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019101424
1927  CN W732   24576         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019102124
1928  MX W450   26281       CHKDAT: Record Out of Sequence in Meteorological File at:
      21010101
1929  MX W450   26281       CHKDAT: Record Out of Sequence in Meteorological File at:    1
      year gap
1930  CN W732   26496         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021010924
1931  CN W732   26520         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021011024
1932  CN W732   26544         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021011124
1933  CN W732   26568         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021011224
1934  CN W732   26832         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021012324
1935  CN W732   26856         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021012424
1936  CN W732   26880         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021012524
1937  CN W732   27000         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021013024
1938  CN W732   27024         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021013124
1939  CN W732   27192         AVER: 24-hr avg, < 18 hours of data, calms policy used.
```

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      2021020724
1940  CN W732   28032         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021031424
1941  CN W732   28416         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021033024
1942  CN W732   28512         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021040324
1943  CN W732   28680         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021041024
1944  CN W732   29976         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021060324
1945  CN W732   30072         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021060724
1946  CN W732   30408         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021062124
1947  CN W732   30768         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021070624
1948  CN W732   30816         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021070824
1949  CN W732   31512         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021080624
1950  CN W732   31560         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021080824
1951  CN W732   32136         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021090124
1952  CN W732   33024         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021100824
1953  CN W732   33048         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021100924
1954  CN W732   34584         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021121224
1955  CN W732   38256         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022051424
1956  CN W732   38976         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022061324
1957  CN W732   40392         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022081124
1958  CN W732   41088         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022090924
1959  CN W732   41112         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022091024
1960  CN W732   41160         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022091224
1961  CN W732   41400         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022092224
1962  CN W732   42624         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022111224
1963  CN W732   42648         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022111324
1964  CN W732   42672         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022111424
1965  CN W732   42696         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022111524
1966  CN W732   42888         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022112324
1967  CN W732   43128         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022120324
1968  CN W732   43272         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022120924
1969  CN W732   43296         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022121024
1970
1971     ***********************************
1972     *** AERMOD Finishes Successfully ***
1973     ***********************************
1974
```

COVA Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	COVA
Construction Start Date	8/3/2026
Operational Year	2030
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	7.60
Location	33.668924537913895, -116.20280185678254
County	Riverside-Salton Sea
City	Coachella
Air District	South Coast AQMD
Air Basin	Salton Sea
TAZ	5662
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.30

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Single Family Housing	165	Dwelling Unit	53.6	321,750	1,932,621	—	533	—

1170

Condo/Townhouse	244	Dwelling Unit	15.3	258,640	0.00	—	788	—
Movie Theater (No Matinee)	278	1000sqft	6.38	277,804	0.00	—	—	Beach Club
Quality Restaurant	22.0	1000sqft	0.50	21,977	0.00	—	—	—
User Defined Recreational	8.93	User Defined Unit	0.20	0.00	0.00	—	—	—
Parking Lot	696	Space	6.26	0.00	0.00	—	—	—
Recreational Swimming Pool	536	1000sqft	12.3	0.00	0.00	—	—	—
Other Asphalt Surfaces	1.00	1000sqft	0.02	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Energy	E-10-B	Establish Onsite Renewable Energy Systems: Solar Power
Water	W-4	Require Low-Flow Water Fixtures
Water	W-5	Design Water-Efficient Landscapes
Waste	S-1/S-2	Implement Waste Reduction Plan

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	19.5	18.8	37.2	67.4	0.09	1.66	6.49	7.28	1.53	1.55	2.66	—	14,630	14,630	0.38	0.54	20.7	14,819

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	19.3	18.5	45.6	54.3	0.09	2.30	7.83	10.1	2.12	3.66	5.77	—	13,742	13,742	0.38	0.54	0.54	13,914
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	12.5	12.1	21.4	35.1	0.05	0.85	4.33	4.76	0.78	1.03	1.72	—	8,800	8,800	0.23	0.37	5.83	8,921
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.28	2.20	3.90	6.41	0.01	0.15	0.79	0.87	0.14	0.19	0.31	—	1,457	1,457	0.04	0.06	0.97	1,477

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	4.04	3.40	30.2	29.0	0.05	1.24	0.39	1.63	1.14	0.09	1.23	—	5,518	5,518	0.22	0.09	1.63	5,552
2027	5.22	4.39	37.2	55.9	0.09	1.66	5.35	6.06	1.53	1.28	2.66	—	12,209	12,209	0.38	0.51	20.7	12,388
2028	4.13	3.54	21.3	53.9	0.06	0.64	5.35	5.99	0.59	1.28	1.87	—	12,059	12,059	0.27	0.51	18.8	12,235
2029	18.7	18.2	21.7	58.5	0.07	0.60	6.30	6.90	0.56	1.50	2.06	—	13,079	13,079	0.29	0.53	19.4	13,262
2030	19.5	18.8	27.4	67.4	0.08	0.79	6.49	7.28	0.73	1.55	2.28	—	14,630	14,630	0.34	0.54	17.9	14,819
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	6.07	5.11	45.6	41.7	0.07	2.30	7.83	10.1	2.12	3.66	5.77	—	7,662	7,662	0.30	0.09	0.04	7,696
2027	5.79	4.86	43.2	43.0	0.09	2.11	7.83	9.95	1.95	3.66	5.60	—	11,448	11,448	0.38	0.51	0.54	11,607
2028	3.73	3.29	21.7	41.7	0.07	0.64	5.35	5.99	0.59	1.28	1.87	—	11,314	11,314	0.29	0.51	0.49	11,473
2029	18.4	17.8	22.0	45.1	0.07	0.60	6.30	6.90	0.56	1.50	2.06	—	12,203	12,203	0.30	0.53	0.50	12,368
2030	19.3	18.5	27.7	54.3	0.08	0.79	6.49	7.28	0.73	1.55	2.28	—	13,742	13,742	0.36	0.54	0.47	4

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.40	1.18	10.5	9.79	0.02	0.47	0.82	1.29	0.43	0.36	0.79	—	1,850	1,850	0.07	0.03	0.20	1,860
2027	3.33	2.82	21.4	31.0	0.05	0.85	3.31	4.16	0.78	0.94	1.72	—	7,645	7,645	0.23	0.23	3.59	7,723
2028	2.72	2.40	15.4	32.8	0.05	0.46	3.81	4.27	0.42	0.91	1.33	—	8,314	8,314	0.20	0.36	5.81	8,433
2029	11.0	10.7	15.4	34.5	0.05	0.43	4.33	4.76	0.40	1.03	1.43	—	8,800	8,800	0.20	0.37	5.83	8,921
2030	12.5	12.1	16.1	35.1	0.05	0.45	4.23	4.67	0.41	1.01	1.42	—	8,759	8,759	0.21	0.36	5.07	8,875
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.26	0.21	1.91	1.79	< 0.005	0.09	0.15	0.23	0.08	0.07	0.15	—	306	306	0.01	< 0.005	0.03	308
2027	0.61	0.51	3.90	5.65	0.01	0.15	0.60	0.76	0.14	0.17	0.31	—	1,266	1,266	0.04	0.04	0.59	1,279
2028	0.50	0.44	2.80	5.98	0.01	0.08	0.70	0.78	0.08	0.17	0.24	—	1,376	1,376	0.03	0.06	0.96	1,396
2029	2.01	1.95	2.80	6.30	0.01	0.08	0.79	0.87	0.07	0.19	0.26	—	1,457	1,457	0.03	0.06	0.97	1,477
2030	2.28	2.20	2.93	6.41	0.01	0.08	0.77	0.85	0.08	0.18	0.26	—	1,450	1,450	0.03	0.06	0.84	1,469

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	4.04	3.40	30.2	29.0	0.05	1.24	0.39	1.63	1.14	0.09	1.23	—	5,518	5,518	0.22	0.09	1.63	5,552
2027	5.22	4.39	37.2	55.9	0.09	1.66	5.35	6.06	1.53	1.28	2.66	—	12,209	12,209	0.38	0.51	20.7	12,388
2028	4.13	3.54	21.3	53.9	0.06	0.64	5.35	5.99	0.59	1.28	1.87	—	12,059	12,059	0.27	0.51	18.8	12,235
2029	18.7	18.2	21.7	58.5	0.07	0.60	6.30	6.90	0.56	1.50	2.06	—	13,079	13,079	0.29	0.53	19.4	13,262
2030	19.5	18.8	27.4	67.4	0.08	0.79	6.49	7.28	0.73	1.55	2.28	—	14,630	14,630	0.34	0.54	17.9	14,819
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	6.07	5.11	45.6	41.7	0.07	2.30	7.83	10.1	2.12	3.66	5.77	—	7,662	7,662	0.30	0.09	0.04	7,696
2027	5.79	4.86	43.2	43.0	0.09	2.11	7.83	9.95	1.95	3.66	5.60	—	11,448	11,448	0.38	0.51	0.54	11,7

2028	3.73	3.29	21.7	41.7	0.07	0.64	5.35	5.99	0.59	1.28	1.87	—	11,314	11,314	0.29	0.51	0.49	11,473
2029	18.4	17.8	22.0	45.1	0.07	0.60	6.30	6.90	0.56	1.50	2.06	—	12,203	12,203	0.30	0.53	0.50	12,368
2030	19.3	18.5	27.7	54.3	0.08	0.79	6.49	7.28	0.73	1.55	2.28	—	13,742	13,742	0.36	0.54	0.47	13,914
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.40	1.18	10.5	9.79	0.02	0.47	0.82	1.29	0.43	0.36	0.79	—	1,850	1,850	0.07	0.03	0.20	1,860
2027	3.33	2.82	21.4	31.0	0.05	0.85	3.31	4.16	0.78	0.94	1.72	—	7,645	7,645	0.23	0.23	3.59	7,723
2028	2.72	2.40	15.4	32.8	0.05	0.46	3.81	4.27	0.42	0.91	1.33	—	8,314	8,314	0.20	0.36	5.81	8,433
2029	11.0	10.7	15.4	34.5	0.05	0.43	4.33	4.76	0.40	1.03	1.43	—	8,800	8,800	0.20	0.37	5.83	8,921
2030	12.5	12.1	16.1	35.1	0.05	0.45	4.23	4.67	0.41	1.01	1.42	—	8,759	8,759	0.21	0.36	5.07	8,875
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.26	0.21	1.91	1.79	< 0.005	0.09	0.15	0.23	0.08	0.07	0.15	—	306	306	0.01	< 0.005	0.03	308
2027	0.61	0.51	3.90	5.65	0.01	0.15	0.60	0.76	0.14	0.17	0.31	—	1,266	1,266	0.04	0.04	0.59	1,279
2028	0.50	0.44	2.80	5.98	0.01	0.08	0.70	0.78	0.08	0.17	0.24	—	1,376	1,376	0.03	0.06	0.96	1,396
2029	2.01	1.95	2.80	6.30	0.01	0.08	0.79	0.87	0.07	0.19	0.26	—	1,457	1,457	0.03	0.06	0.97	1,477
2030	2.28	2.20	2.93	6.41	0.01	0.08	0.77	0.85	0.08	0.18	0.26	—	1,450	1,450	0.03	0.06	0.84	1,469

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	32.4	31.4	7.38	138	0.25	0.34	23.1	23.4	0.32	5.82	6.15	3,008	37,837	40,845	304	1.41	56.3	48,916
Mit.	32.4	31.4	7.38	138	0.25	0.34	23.1	23.4	0.32	5.82	6.15	2,435	33,254	35,689	246	1.25	56.3	42,263
% Reduced	—	—	—	—	—	—	—	—	—	—	—	19%	12%	13%	19%	11%	—	14%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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Item 2.

Unmit.	27.0	26.3	7.49	65.8	0.22	0.30	23.1	23.4	0.30	5.82	6.12	3,008	34,468	37,476	304	1.44	14.3	45,515
Mit.	27.0	26.3	7.49	65.8	0.22	0.30	23.1	23.4	0.30	5.82	6.12	2,435	29,885	32,320	246	1.28	14.3	38,861
% Reduced	—	—	—	—	—	—	—	—	—	—	—	19%	13%	14%	19%	11%	—	15%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	29.5	28.6	7.37	95.3	0.23	0.32	23.0	23.3	0.31	5.80	6.11	3,008	34,791	37,799	304	1.40	31.8	45,841
Mit.	29.5	28.6	7.37	95.3	0.23	0.32	23.0	23.3	0.31	5.80	6.11	2,435	30,208	32,643	246	1.24	31.8	39,187
% Reduced	—	—	—	—	—	—	—	—	—	—	—	19%	13%	14%	19%	11%	—	15%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.38	5.21	1.34	17.4	0.04	0.06	4.20	4.25	0.06	1.06	1.11	498	5,760	6,258	50.3	0.23	5.27	7,589
Mit.	5.38	5.21	1.34	17.4	0.04	0.06	4.20	4.25	0.06	1.06	1.11	403	5,001	5,404	40.7	0.21	5.27	6,488
% Reduced	—	—	—	—	—	—	—	—	—	—	—	19%	13%	14%	19%	11%	—	15%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.03	6.42	4.00	99.3	0.23	0.07	23.1	23.2	0.07	5.82	5.89	—	23,244	23,244	0.54	0.45	43.1	23,435
Area	25.1	24.8	0.33	36.3	< 0.005	0.03	—	0.03	0.03	—	0.03	0.00	1,208	1,208	0.15	0.02	—	1,217
Energy	0.34	0.17	3.05	2.56	0.02	0.23	—	0.23	0.23	—	0.23	—	12,756	12,756	1.54	0.15	—	12,840
Water	—	—	—	—	—	—	—	—	—	—	—	319	629	948	32.8	0.79	—	2,004
Waste	—	—	—	—	—	—	—	—	—	—	—	2,689	0.00	2,689	269	0.00	—	9,407
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.2	13.2
Total	32.4	31.4	7.38	138	0.25	0.34	23.1	23.4	0.32	5.82	6.15	3,008	37,837	40,845	304	1.41	56.3	1175

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.06	5.47	4.44	63.3	0.20	0.07	23.1	23.2	0.07	5.82	5.89	—	19,991	19,991	0.56	0.48	1.12	20,150
Area	20.6	20.6	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	1,092	1,092	0.15	0.02	—	1,101
Energy	0.34	0.17	3.05	2.56	0.02	0.23	—	0.23	0.23	—	0.23	—	12,756	12,756	1.54	0.15	—	12,840
Water	—	—	—	—	—	—	—	—	—	—	—	319	629	948	32.8	0.79	—	2,004
Waste	—	—	—	—	—	—	—	—	—	—	—	2,689	0.00	2,689	269	0.00	—	9,407
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.2	13.2
Total	27.0	26.3	7.49	65.8	0.22	0.30	23.1	23.4	0.30	5.82	6.12	3,008	34,468	37,476	304	1.44	14.3	45,515
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.30	5.71	4.15	74.8	0.21	0.07	23.0	23.1	0.07	5.80	5.86	—	21,275	21,275	0.54	0.46	18.6	21,444
Area	22.8	22.7	0.16	17.9	< 0.005	0.02	—	0.02	0.01	—	0.01	0.00	132	132	0.01	< 0.005	—	133
Energy	0.34	0.17	3.05	2.56	0.02	0.23	—	0.23	0.23	—	0.23	—	12,756	12,756	1.54	0.15	—	12,840
Water	—	—	—	—	—	—	—	—	—	—	—	319	629	948	32.8	0.79	—	2,004
Waste	—	—	—	—	—	—	—	—	—	—	—	2,689	0.00	2,689	269	0.00	—	9,407
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.2	13.2
Total	29.5	28.6	7.37	95.3	0.23	0.32	23.0	23.3	0.31	5.80	6.11	3,008	34,791	37,799	304	1.40	31.8	45,841
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.15	1.04	0.76	13.7	0.04	0.01	4.20	4.21	0.01	1.06	1.07	—	3,522	3,522	0.09	0.08	3.08	3,550
Area	4.17	4.14	0.03	3.27	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	21.8	21.8	< 0.005	< 0.005	—	22.0
Energy	0.06	0.03	0.56	0.47	< 0.005	0.04	—	0.04	0.04	—	0.04	—	2,112	2,112	0.26	0.03	—	2,126
Water	—	—	—	—	—	—	—	—	—	—	—	52.8	104	157	5.43	0.13	—	332
Waste	—	—	—	—	—	—	—	—	—	—	—	445	0.00	445	44.5	0.00	—	1,557
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.19	2.19
Total	5.38	5.21	1.34	17.4	0.04	0.06	4.20	4.25	0.06	1.06	1.11	498	5,760	6,258	50.3	0.23	5.27	7,589

2.6. Operations Emissions by Sector, Mitigated

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Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.03	6.42	4.00	99.3	0.23	0.07	23.1	23.2	0.07	5.82	5.89	—	23,244	23,244	0.54	0.45	43.1	23,435
Area	25.1	24.8	0.33	36.3	< 0.005	0.03	—	0.03	0.03	—	0.03	0.00	1,208	1,208	0.15	0.02	—	1,217
Energy	0.34	0.17	3.05	2.56	0.02	0.23	—	0.23	0.23	—	0.23	—	8,274	8,274	0.94	0.08	—	8,322
Water	—	—	—	—	—	—	—	—	—	—	—	284	527	811	29.2	0.70	—	1,750
Waste	—	—	—	—	—	—	—	—	—	—	—	2,151	0.00	2,151	215	0.00	—	7,526
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.2	13.2
Total	32.4	31.4	7.38	138	0.25	0.34	23.1	23.4	0.32	5.82	6.15	2,435	33,254	35,689	246	1.25	56.3	42,263
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.06	5.47	4.44	63.3	0.20	0.07	23.1	23.2	0.07	5.82	5.89	—	19,991	19,991	0.56	0.48	1.12	20,150
Area	20.6	20.6	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	1,092	1,092	0.15	0.02	—	1,101
Energy	0.34	0.17	3.05	2.56	0.02	0.23	—	0.23	0.23	—	0.23	—	8,274	8,274	0.94	0.08	—	8,322
Water	—	—	—	—	—	—	—	—	—	—	—	284	527	811	29.2	0.70	—	1,750
Waste	—	—	—	—	—	—	—	—	—	—	—	2,151	0.00	2,151	215	0.00	—	7,526
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.2	13.2
Total	27.0	26.3	7.49	65.8	0.22	0.30	23.1	23.4	0.30	5.82	6.12	2,435	29,885	32,320	246	1.28	14.3	38,861
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.30	5.71	4.15	74.8	0.21	0.07	23.0	23.1	0.07	5.80	5.86	—	21,275	21,275	0.54	0.46	18.6	21,444
Area	22.8	22.7	0.16	17.9	< 0.005	0.02	—	0.02	0.01	—	0.01	0.00	132	132	0.01	< 0.005	—	133
Energy	0.34	0.17	3.05	2.56	0.02	0.23	—	0.23	0.23	—	0.23	—	8,274	8,274	0.94	0.08	—	8,322
Water	—	—	—	—	—	—	—	—	—	—	—	284	527	811	29.2	0.70	—	1,750
Waste	—	—	—	—	—	—	—	—	—	—	—	2,151	0.00	2,151	215	0.00	—	7,526
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.2	1177

Total	29.5	28.6	7.37	95.3	0.23	0.32	23.0	23.3	0.31	5.80	6.11	2,435	30,208	32,643	246	1.24	31.8	39,187
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.15	1.04	0.76	13.7	0.04	0.01	4.20	4.21	0.01	1.06	1.07	—	3,522	3,522	0.09	0.08	3.08	3,550
Area	4.17	4.14	0.03	3.27	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	21.8	21.8	< 0.005	< 0.005	—	22.0
Energy	0.06	0.03	0.56	0.47	< 0.005	0.04	—	0.04	0.04	—	0.04	—	1,370	1,370	0.16	0.01	—	1,378
Water	—	—	—	—	—	—	—	—	—	—	—	47.0	87.3	134	4.83	0.12	—	290
Waste	—	—	—	—	—	—	—	—	—	—	—	356	0.00	356	35.6	0.00	—	1,246
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.19	2.19
Total	5.38	5.21	1.34	17.4	0.04	0.06	4.20	4.25	0.06	1.06	1.11	403	5,001	5,404	40.7	0.21	5.27	6,488

3. Construction Emissions Details

3.1. Demolition (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.92	3.30	29.8	27.1	0.05	1.23	—	1.23	1.14	—	1.14	—	4,947	4,947	0.20	0.04	—	4,964
Demolition	—	—	—	—	—	—	0.05	0.05	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	3.92	3.30	29.8	27.1	0.05	1.23	—	1.23	1.14	—	1.14	—	4,947	4,947	0.20	0.04	—	4,964
Demolition	—	—	—	—	—	—	0.05	0.05	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81	0.68	6.13	5.56	0.01	0.25	—	0.25	0.23	—	0.23	—	1,017	1,017	0.04	0.01	—	1,020
Demolition	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.12	1.02	< 0.005	0.05	—	0.05	0.04	—	0.04	—	168	168	0.01	< 0.005	—	169
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.10	1.77	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	291	291	0.01	0.01	0.93	295
Vendor	0.01	0.01	0.22	0.10	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	217	217	< 0.005	0.03	0.57	227
Hauling	< 0.005	< 0.005	0.07	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	63.1	63.1	< 0.005	0.01	0.13	66.2

Item 2.

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.10	1.00	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	248	248	< 0.005	0.01	0.02	251
Vendor	0.01	0.01	0.24	0.10	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	218	218	< 0.005	0.03	0.01	227
Hauling	< 0.005	< 0.005	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	63.2	63.2	< 0.005	0.01	< 0.005	66.1
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.26	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	54.4	54.4	< 0.005	< 0.005	0.08	55.0
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	44.7	44.7	< 0.005	0.01	0.05	46.6
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.0	13.0	< 0.005	< 0.005	0.01	13.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.00	9.00	< 0.005	< 0.005	0.01	9.11
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.40	7.40	< 0.005	< 0.005	0.01	7.71
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.15	2.15	< 0.005	< 0.005	< 0.005	2.25

3.2. Demolition (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.92	3.30	29.8	27.1	0.05	1.23	—	1.23	1.14	—	1.14	—	4,947	4,947	0.20	0.04	—	4,964
Demolition	—	—	—	—	—	—	0.05	0.05	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

1180

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.92	3.30	29.8	27.1	0.05	1.23	—	1.23	1.14	—	1.14	—	4,947	4,947	0.20	0.04	—	4,964
Demolition	—	—	—	—	—	—	0.05	0.05	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81	0.68	6.13	5.56	0.01	0.25	—	0.25	0.23	—	0.23	—	1,017	1,017	0.04	0.01	—	1,020
Demolition	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.12	1.02	< 0.005	0.05	—	0.05	0.04	—	0.04	—	168	168	0.01	< 0.005	—	169
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.10	1.77	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	291	291	0.01	0.01	0.93	295
Vendor	0.01	0.01	0.22	0.10	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	217	217	< 0.005	0.03	0.57	1181

Hauling	< 0.005	< 0.005	0.07	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	63.1	63.1	< 0.005	0.01	0.13	66.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.10	1.00	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	248	248	< 0.005	0.01	0.02	251
Vendor	0.01	0.01	0.24	0.10	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	218	218	< 0.005	0.03	0.01	227
Hauling	< 0.005	< 0.005	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	63.2	63.2	< 0.005	0.01	< 0.005	66.1
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.26	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	54.4	54.4	< 0.005	< 0.005	0.08	55.0
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	44.7	44.7	< 0.005	0.01	0.05	46.6
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.0	13.0	< 0.005	< 0.005	0.01	13.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.00	9.00	< 0.005	< 0.005	0.01	9.11
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.40	7.40	< 0.005	< 0.005	0.01	7.71
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.15	2.15	< 0.005	< 0.005	< 0.005	2.25

3.3. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.97	5.02	45.4	40.5	0.07	2.30	—	2.30	2.11	—	2.11	—	7,259	7,259	0.29	0.06	—	7,284

Dust From Material Movement	—	—	—	—	—	—	7.50	7.50	—	3.58	3.58	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.47	4.26	3.81	0.01	0.22	—	0.22	0.20	—	0.20	—	682	682	0.03	0.01	—	684
Dust From Material Movement	—	—	—	—	—	—	0.70	0.70	—	0.34	0.34	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.09	0.78	0.69	< 0.005	0.04	—	0.04	0.04	—	0.04	—	113	113	< 0.005	< 0.005	—	113
Dust From Material Movement	—	—	—	—	—	—	0.13	0.13	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	0.12	1.13	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	278	278	< 0.005	0.01	0.03	1183

Vendor	0.01	< 0.005	0.14	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	124	124	< 0.005	0.02	0.01	130
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	28.0	28.0	< 0.005	< 0.005	0.04	28.3
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.7	11.7	< 0.005	< 0.005	0.01	12.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.63	4.63	< 0.005	< 0.005	0.01	4.69
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.93	1.93	< 0.005	< 0.005	< 0.005	2.02
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Site Preparation (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.97	5.02	45.4	40.5	0.07	2.30	—	2.30	2.11	—	2.11	—	7,259	7,259	0.29	0.06	—	7,284
Dust From Material Movement	—	—	—	—	—	—	7.50	7.50	—	3.58	3.58	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

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Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.47	4.26	3.81	0.01	0.22	—	0.22	0.20	—	0.20	—	682	682	0.03	0.01	—	684
Dust From Material Movement	—	—	—	—	—	—	0.70	0.70	—	0.34	0.34	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.09	0.78	0.69	< 0.005	0.04	—	0.04	0.04	—	0.04	—	113	113	< 0.005	< 0.005	—	113
Dust From Material Movement	—	—	—	—	—	—	0.13	0.13	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	0.12	1.13	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	278	278	< 0.005	0.01	0.03	282
Vendor	0.01	< 0.005	0.14	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	124	124	< 0.005	0.02	0.01	130
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	28.0	28.0	< 0.005	< 0.005	0.04	1185

Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.7	11.7	< 0.005	< 0.005	0.01	12.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.63	4.63	< 0.005	< 0.005	0.01	4.69
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.93	1.93	< 0.005	< 0.005	< 0.005	2.02
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Site Preparation (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.69	4.78	42.9	39.7	0.07	2.11	—	2.11	1.94	—	1.94	—	7,261	7,261	0.29	0.06	—	7,286
Dust From Material Movement	—	—	—	—	—	—	7.50	7.50	—	3.58	3.58	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.26	1.16	< 0.005	0.06	—	0.06	0.06	—	0.06	—	213	213	0.01	< 0.005	—	214

Dust From Material Movement	—	—	—	—	—	—	0.22	0.22	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.23	0.21	< 0.005	0.01	—	0.01	0.01	—	0.01	—	35.3	35.3	< 0.005	< 0.005	—	35.4
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.11	1.05	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	273	273	< 0.005	0.01	0.02	276
Vendor	0.01	< 0.005	0.13	0.05	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	122	122	< 0.005	0.02	0.01	126
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.57	8.57	< 0.005	< 0.005	0.01	8.67
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.57	3.57	< 0.005	< 0.005	< 0.005	3.71
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.42	1.42	< 0.005	< 0.005	< 0.005	1187

Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.59	0.59	< 0.005	< 0.005	< 0.005	0.61
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Site Preparation (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.69	4.78	42.9	39.7	0.07	2.11	—	2.11	1.94	—	1.94	—	7,261	7,261	0.29	0.06	—	7,286
Dust From Material Movement	—	—	—	—	—	—	7.50	7.50	—	3.58	3.58	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.26	1.16	< 0.005	0.06	—	0.06	0.06	—	0.06	—	213	213	0.01	< 0.005	—	214
Dust From Material Movement	—	—	—	—	—	—	0.22	0.22	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.23	0.21	< 0.005	0.01	—	0.01	0.01	—	0.01	—	35.3	35.3	< 0.005	< 0.005	—	35.4
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.11	1.05	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	273	273	< 0.005	0.01	0.02	276
Vendor	0.01	< 0.005	0.13	0.05	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	122	122	< 0.005	0.02	0.01	126
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.57	8.57	< 0.005	< 0.005	0.01	8.67
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.57	3.57	< 0.005	< 0.005	< 0.005	3.71
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.42	1.42	< 0.005	< 0.005	< 0.005	1.44
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.59	0.59	< 0.005	< 0.005	< 0.005	0.61
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Grading (2027) - Unmitigated

1189

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.07	4.26	36.7	37.2	0.08	1.66	—	1.66	1.52	—	1.52	—	9,100	9,100	0.37	0.07	—	9,131
Dust From Material Movement	—	—	—	—	—	—	3.08	3.08	—	1.02	1.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.07	4.26	36.7	37.2	0.08	1.66	—	1.66	1.52	—	1.52	—	9,100	9,100	0.37	0.07	—	9,131
Dust From Material Movement	—	—	—	—	—	—	3.08	3.08	—	1.02	1.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.60	1.34	11.6	11.7	0.03	0.52	—	0.52	0.48	—	0.48	—	2,867	2,867	0.12	0.02	—	2,877

Dust From Material Movement	—	—	—	—	—	—	0.97	0.97	—	0.32	0.32	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.29	0.25	2.11	2.14	< 0.005	0.10	—	0.10	0.09	—	0.09	—	475	475	0.02	< 0.005	—	476
Dust From Material Movement	—	—	—	—	—	—	0.18	0.18	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.12	2.27	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	392	392	< 0.005	0.01	1.15	397
Vendor	0.02	0.01	0.31	0.13	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	304	304	< 0.005	0.04	0.75	317
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.13	1.29	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	334	334	< 0.005	0.01	0.03	338
Vendor	0.01	0.01	0.33	0.14	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	304	304	< 0.005	0.04	0.02	316
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.51	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	112	112	< 0.005	< 0.005	0.16	114
Vendor	< 0.005	< 0.005	0.10	0.04	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	95.8	95.8	< 0.005	0.01	0.10	1191

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.6	18.6	< 0.005	< 0.005	0.03	18.8
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	15.9	15.9	< 0.005	< 0.005	0.02	16.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Grading (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.07	4.26	36.7	37.2	0.08	1.66	—	1.66	1.52	—	1.52	—	9,100	9,100	0.37	0.07	—	9,131
Dust From Material Movement	—	—	—	—	—	—	3.08	3.08	—	1.02	1.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.07	4.26	36.7	37.2	0.08	1.66	—	1.66	1.52	—	1.52	—	9,100	9,100	0.37	0.07	—	9,131
Dust From Material Movement	—	—	—	—	—	—	3.08	3.08	—	1.02	1.02	—	—	—	—	—	—	—

1192

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.60	1.34	11.6	11.7	0.03	0.52	—	0.52	0.48	—	0.48	—	2,867	2,867	0.12	0.02	—	2,877
Dust From Material Movement	—	—	—	—	—	—	0.97	0.97	—	0.32	0.32	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.29	0.25	2.11	2.14	< 0.005	0.10	—	0.10	0.09	—	0.09	—	475	475	0.02	< 0.005	—	476
Dust From Material Movement	—	—	—	—	—	—	0.18	0.18	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.12	2.27	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	392	392	< 0.005	0.01	1.15	397
Vendor	0.02	0.01	0.31	0.13	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	304	304	< 0.005	0.04	0.75	317
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.13	1.29	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	334	334	< 0.005	0.01	0.03	1193

Vendor	0.01	0.01	0.33	0.14	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	304	304	< 0.005	0.04	0.02	316
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.51	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	112	112	< 0.005	< 0.005	0.16	114
Vendor	< 0.005	< 0.005	0.10	0.04	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	95.8	95.8	< 0.005	0.01	0.10	99.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.6	18.6	< 0.005	< 0.005	0.03	18.8
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	15.9	15.9	< 0.005	< 0.005	0.02	16.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.46	2.06	18.7	25.1	0.05	0.67	—	0.67	0.62	—	0.62	—	4,817	4,817	0.20	0.04	—	4,833
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.46	2.06	18.7	25.1	0.05	0.67	—	0.67	0.62	—	0.62	—	4,817	4,817	0.20	0.04	—	4,833

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	6.93	9.29	0.02	0.25	—	0.25	0.23	—	0.23	—	1,781	1,781	0.07	0.01	—	1,788
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.26	1.70	< 0.005	0.05	—	0.05	0.04	—	0.04	—	295	295	0.01	< 0.005	—	296
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.72	1.55	1.56	29.8	0.00	0.00	4.72	4.72	0.00	1.11	1.11	—	5,144	5,144	0.06	0.17	15.2	5,211
Vendor	0.12	0.09	2.26	0.99	0.02	0.03	0.63	0.67	0.03	0.17	0.21	—	2,248	2,248	0.03	0.30	5.57	2,343
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.47	1.29	1.71	16.9	0.00	0.00	4.72	4.72	0.00	1.11	1.11	—	4,381	4,381	0.06	0.17	0.39	4,434
Vendor	0.11	0.08	2.42	1.01	0.02	0.03	0.63	0.67	0.03	0.17	0.21	—	2,250	2,250	0.03	0.30	0.14	2,340
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.50	0.57	7.82	0.00	0.00	1.74	1.74	0.00	0.41	0.41	—	1,732	1,732	0.02	0.06	2.42	1,753
Vendor	0.04	0.03	0.87	0.36	0.01	0.01	0.23	0.25	0.01	0.06	0.08	—	832	832	0.01	0.11	0.89	1195

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.10	1.43	0.00	0.00	0.32	0.32	0.00	0.07	0.07	—	287	287	< 0.005	0.01	0.40	290
Vendor	0.01	0.01	0.16	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	138	138	< 0.005	0.02	0.15	143
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.46	2.06	18.7	25.1	0.05	0.67	—	0.67	0.62	—	0.62	—	4,817	4,817	0.20	0.04	—	4,833
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.46	2.06	18.7	25.1	0.05	0.67	—	0.67	0.62	—	0.62	—	4,817	4,817	0.20	0.04	—	4,833
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	6.93	9.29	0.02	0.25	—	0.25	0.23	—	0.23	—	1,781	1,781	0.07	0.01	—	1,788

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.26	1.70	< 0.005	0.05	—	0.05	0.04	—	0.04	—	295	295	0.01	< 0.005	—	296
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.72	1.55	1.56	29.8	0.00	0.00	4.72	4.72	0.00	1.11	1.11	—	5,144	5,144	0.06	0.17	15.2	5,211
Vendor	0.12	0.09	2.26	0.99	0.02	0.03	0.63	0.67	0.03	0.17	0.21	—	2,248	2,248	0.03	0.30	5.57	2,343
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.47	1.29	1.71	16.9	0.00	0.00	4.72	4.72	0.00	1.11	1.11	—	4,381	4,381	0.06	0.17	0.39	4,434
Vendor	0.11	0.08	2.42	1.01	0.02	0.03	0.63	0.67	0.03	0.17	0.21	—	2,250	2,250	0.03	0.30	0.14	2,340
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.50	0.57	7.82	0.00	0.00	1.74	1.74	0.00	0.41	0.41	—	1,732	1,732	0.02	0.06	2.42	1,753
Vendor	0.04	0.03	0.87	0.36	0.01	0.01	0.23	0.25	0.01	0.06	0.08	—	832	832	0.01	0.11	0.89	866
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.10	1.43	0.00	0.00	0.32	0.32	0.00	0.07	0.07	—	287	287	< 0.005	0.01	0.40	290
Vendor	0.01	0.01	0.16	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	138	138	< 0.005	0.02	0.15	143
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.37	1.98	17.8	25.1	0.05	0.60	—	0.60	0.55	—	0.55	—	4,818	4,818	0.20	0.04	—	4,834
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.37	1.98	17.8	25.1	0.05	0.60	—	0.60	0.55	—	0.55	—	4,818	4,818	0.20	0.04	—	4,834
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.70	1.42	12.7	18.0	0.03	0.43	—	0.43	0.40	—	0.40	—	3,451	3,451	0.14	0.03	—	3,462
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.31	0.26	2.32	3.28	0.01	0.08	—	0.08	0.07	—	0.07	—	571	571	0.02	< 0.005	—	573

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Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.66	1.49	1.40	27.8	0.00	0.00	4.72	4.72	0.00	1.11	1.11	—	5,047	5,047	0.05	0.17	13.6	5,112
Vendor	0.10	0.07	2.16	0.93	0.02	0.03	0.63	0.67	0.03	0.17	0.21	—	2,194	2,194	0.03	0.30	5.14	2,289
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.27	1.24	1.56	15.7	0.00	0.00	4.72	4.72	0.00	1.11	1.11	—	4,300	4,300	0.06	0.17	0.35	4,353
Vendor	0.09	0.06	2.33	0.97	0.02	0.03	0.63	0.67	0.03	0.17	0.21	—	2,197	2,197	0.03	0.30	0.13	2,286
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.95	0.93	1.00	14.1	0.00	0.00	3.36	3.36	0.00	0.79	0.79	—	3,291	3,291	0.04	0.12	4.22	3,332
Vendor	0.07	0.05	1.62	0.68	0.01	0.02	0.45	0.48	0.02	0.12	0.15	—	1,572	1,572	0.02	0.21	1.59	1,638
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.17	0.18	2.57	0.00	0.00	0.61	0.61	0.00	0.14	0.14	—	545	545	0.01	0.02	0.70	552
Vendor	0.01	0.01	0.30	0.12	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	260	260	< 0.005	0.04	0.26	271
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.37	1.98	17.8	25.1	0.05	0.60	—	0.60	0.55	—	0.55	—	4,818	4,818	0.20	0.04	—	4,834
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.37	1.98	17.8	25.1	0.05	0.60	—	0.60	0.55	—	0.55	—	4,818	4,818	0.20	0.04	—	4,834
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.70	1.42	12.7	18.0	0.03	0.43	—	0.43	0.40	—	0.40	—	3,451	3,451	0.14	0.03	—	3,462
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.31	0.26	2.32	3.28	0.01	0.08	—	0.08	0.07	—	0.07	—	571	571	0.02	< 0.005	—	573
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	1.66	1.49	1.40	27.8	0.00	0.00	4.72	4.72	0.00	1.11	1.11	—	5,047	5,047	0.05	0.17	13.6	5,112
Vendor	0.10	0.07	2.16	0.93	0.02	0.03	0.63	0.67	0.03	0.17	0.21	—	2,194	2,194	0.03	0.30	5.14	2,289
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.27	1.24	1.56	15.7	0.00	0.00	4.72	4.72	0.00	1.11	1.11	—	4,300	4,300	0.06	0.17	0.35	4,353
Vendor	0.09	0.06	2.33	0.97	0.02	0.03	0.63	0.67	0.03	0.17	0.21	—	2,197	2,197	0.03	0.30	0.13	2,286
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.95	0.93	1.00	14.1	0.00	0.00	3.36	3.36	0.00	0.79	0.79	—	3,291	3,291	0.04	0.12	4.22	3,332
Vendor	0.07	0.05	1.62	0.68	0.01	0.02	0.45	0.48	0.02	0.12	0.15	—	1,572	1,572	0.02	0.21	1.59	1,638
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.17	0.18	2.57	0.00	0.00	0.61	0.61	0.00	0.14	0.14	—	545	545	0.01	0.02	0.70	552
Vendor	0.01	0.01	0.30	0.12	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	260	260	< 0.005	0.04	0.26	271
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Building Construction (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.31	1.93	17.1	25.0	0.05	0.55	—	0.55	0.51	—	0.51	—	4,816	4,816	0.20	0.04	—	4,833

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.31	1.93	17.1	25.0	0.05	0.55	—	0.55	0.51	—	0.51	—	4,816	4,816	0.20	0.04	—	4,833
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.65	1.38	12.2	17.9	0.03	0.40	—	0.40	0.36	—	0.36	—	3,440	3,440	0.14	0.03	—	3,452
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.25	2.22	3.26	0.01	0.07	—	0.07	0.07	—	0.07	—	570	570	0.02	< 0.005	—	572
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.42	1.41	1.25	25.9	0.00	0.00	4.72	4.72	0.00	1.11	1.11	—	4,956	4,956	0.05	0.17	12.2	5,020
Vendor	0.10	0.07	2.09	0.89	0.02	0.03	0.63	0.67	0.03	0.17	0.21	—	2,137	2,137	0.03	0.28	4.74	2,226
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	1.21	1.03	1.39	14.7	0.00	0.00	4.72	4.72	0.00	1.11	1.11	—	4,224	4,224	0.06	0.17	0.32	4,277
Vendor	0.09	0.06	2.24	0.93	0.02	0.03	0.63	0.67	0.03	0.17	0.21	—	2,140	2,140	0.03	0.28	0.12	2,224
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.91	0.89	0.88	13.1	0.00	0.00	3.35	3.35	0.00	0.79	0.79	—	3,223	3,223	0.03	0.12	3.77	3,264
Vendor	0.07	0.05	1.55	0.65	0.01	0.02	0.45	0.47	0.02	0.12	0.15	—	1,527	1,527	0.02	0.20	1.46	1,589
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.16	0.16	2.39	0.00	0.00	0.61	0.61	0.00	0.14	0.14	—	534	534	0.01	0.02	0.62	540
Vendor	0.01	0.01	0.28	0.12	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	253	253	< 0.005	0.03	0.24	263
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Building Construction (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.31	1.93	17.1	25.0	0.05	0.55	—	0.55	0.51	—	0.51	—	4,816	4,816	0.20	0.04	—	4,833
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	2.31	1.93	17.1	25.0	0.05	0.55	—	0.55	0.51	—	0.51	—	4,816	4,816	0.20	0.04	—	4,833
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.65	1.38	12.2	17.9	0.03	0.40	—	0.40	0.36	—	0.36	—	3,440	3,440	0.14	0.03	—	3,452
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.25	2.22	3.26	0.01	0.07	—	0.07	0.07	—	0.07	—	570	570	0.02	< 0.005	—	572
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.42	1.41	1.25	25.9	0.00	0.00	4.72	4.72	0.00	1.11	1.11	—	4,956	4,956	0.05	0.17	12.2	5,020
Vendor	0.10	0.07	2.09	0.89	0.02	0.03	0.63	0.67	0.03	0.17	0.21	—	2,137	2,137	0.03	0.28	4.74	2,226
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.21	1.03	1.39	14.7	0.00	0.00	4.72	4.72	0.00	1.11	1.11	—	4,224	4,224	0.06	0.17	0.32	4,277
Vendor	0.09	0.06	2.24	0.93	0.02	0.03	0.63	0.67	0.03	0.17	0.21	—	2,140	2,140	0.03	0.28	0.12	2,224
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.91	0.89	0.88	13.1	0.00	0.00	3.35	3.35	0.00	0.79	0.79	—	3,223	3,223	0.03	0.12	3.77	3,264
Vendor	0.07	0.05	1.55	0.65	0.01	0.02	0.45	0.47	0.02	0.12	0.15	—	1,527	1,527	0.02	0.20	1.46	1,589
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.16	0.16	2.39	0.00	0.00	0.61	0.61	0.00	0.14	0.14	—	534	534	0.01	0.02	0.62	540
Vendor	0.01	0.01	0.28	0.12	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	253	253	< 0.005	0.03	0.24	263
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Building Construction (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.25	1.88	16.7	25.0	0.05	0.52	—	0.52	0.48	—	0.48	—	4,816	4,816	0.20	0.04	—	4,833
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.25	1.88	16.7	25.0	0.05	0.52	—	0.52	0.48	—	0.48	—	4,816	4,816	0.20	0.04	—	4,833
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.50	1.25	11.1	16.6	0.03	0.35	—	0.35	0.32	—	0.32	—	3,205	3,205	0.13	0.03	—	3,216
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.23	2.02	3.04	0.01	0.06	—	0.06	0.06	—	0.06	—	531	531	0.02	< 0.005	—	532
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.35	1.19	1.09	24.3	0.00	0.00	4.72	4.72	0.00	1.11	1.11	—	4,871	4,871	0.04	0.17	10.9	4,934
Vendor	0.10	0.07	2.01	0.87	0.02	0.03	0.63	0.67	0.03	0.17	0.21	—	2,077	2,077	0.03	0.28	4.33	2,165
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.17	1.00	1.24	13.7	0.00	0.00	4.72	4.72	0.00	1.11	1.11	—	4,154	4,154	0.06	0.17	0.28	4,207
Vendor	0.09	0.06	2.16	0.89	0.02	0.03	0.63	0.67	0.03	0.17	0.21	—	2,079	2,079	0.03	0.28	0.11	2,163
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.80	0.69	0.81	11.4	0.00	0.00	3.12	3.12	0.00	0.73	0.73	—	2,952	2,952	0.03	0.11	3.14	2,990
Vendor	0.06	0.04	1.40	0.58	0.01	0.02	0.42	0.44	0.02	0.12	0.14	—	1,383	1,383	0.02	0.19	1.24	1,440
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

1206

Item 2.

Worker	0.15	0.13	0.15	2.08	0.00	0.00	0.57	0.57	0.00	0.13	0.13	—	489	489	0.01	0.02	0.52	495
Vendor	0.01	0.01	0.25	0.11	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	229	229	< 0.005	0.03	0.21	238
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Building Construction (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.25	1.88	16.7	25.0	0.05	0.52	—	0.52	0.48	—	0.48	—	4,816	4,816	0.20	0.04	—	4,833
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.25	1.88	16.7	25.0	0.05	0.52	—	0.52	0.48	—	0.48	—	4,816	4,816	0.20	0.04	—	4,833
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.50	1.25	11.1	16.6	0.03	0.35	—	0.35	0.32	—	0.32	—	3,205	3,205	0.13	0.03	—	3,216
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

1207

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.23	2.02	3.04	0.01	0.06	—	0.06	0.06	—	0.06	—	531	531	0.02	< 0.005	—	532
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.35	1.19	1.09	24.3	0.00	0.00	4.72	4.72	0.00	1.11	1.11	—	4,871	4,871	0.04	0.17	10.9	4,934
Vendor	0.10	0.07	2.01	0.87	0.02	0.03	0.63	0.67	0.03	0.17	0.21	—	2,077	2,077	0.03	0.28	4.33	2,165
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.17	1.00	1.24	13.7	0.00	0.00	4.72	4.72	0.00	1.11	1.11	—	4,154	4,154	0.06	0.17	0.28	4,207
Vendor	0.09	0.06	2.16	0.89	0.02	0.03	0.63	0.67	0.03	0.17	0.21	—	2,079	2,079	0.03	0.28	0.11	2,163
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.80	0.69	0.81	11.4	0.00	0.00	3.12	3.12	0.00	0.73	0.73	—	2,952	2,952	0.03	0.11	3.14	2,990
Vendor	0.06	0.04	1.40	0.58	0.01	0.02	0.42	0.44	0.02	0.12	0.14	—	1,383	1,383	0.02	0.19	1.24	1,440
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.13	0.15	2.08	0.00	0.00	0.57	0.57	0.00	0.13	0.13	—	489	489	0.01	0.02	0.52	495
Vendor	0.01	0.01	0.25	0.11	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	229	229	< 0.005	0.03	0.21	238
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Paving (2030) - Unmitigated

1208

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	0.64	6.28	9.90	0.01	0.22	—	0.22	0.20	—	0.20	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.15	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	0.64	6.28	9.90	0.01	0.22	—	0.22	0.20	—	0.20	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.15	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.19	1.89	2.98	< 0.005	0.07	—	0.07	0.06	—	0.06	—	455	455	0.02	< 0.005	—	457
Paving	0.05	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.04	0.04	0.35	0.54	< 0.005	0.01	—	0.01	0.01	—	0.01	—	75.4	75.4	< 0.005	< 0.005	—	75.6
Paving	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	1.01	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	202	202	< 0.005	0.01	0.45	205
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.05	0.57	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	173	173	< 0.005	0.01	0.01	175
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.02	0.21	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	55.6	55.6	< 0.005	< 0.005	0.06	56.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.20	9.20	< 0.005	< 0.005	0.01	9.32
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.18. Paving (2030) - Mitigated

1210

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	0.64	6.28	9.90	0.01	0.22	—	0.22	0.20	—	0.20	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.15	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	0.64	6.28	9.90	0.01	0.22	—	0.22	0.20	—	0.20	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.15	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.19	1.89	2.98	< 0.005	0.07	—	0.07	0.06	—	0.06	—	455	455	0.02	< 0.005	—	457
Paving	0.05	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.04	0.04	0.35	0.54	< 0.005	0.01	—	0.01	0.01	—	0.01	—	75.4	75.4	< 0.005	< 0.005	—	75.6
Paving	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	1.01	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	202	202	< 0.005	0.01	0.45	205
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.05	0.57	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	173	173	< 0.005	0.01	0.01	175
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.02	0.21	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	55.6	55.6	< 0.005	< 0.005	0.06	56.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.20	9.20	< 0.005	< 0.005	0.01	9.32
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Architectural Coating (2029) - Unmitigated

1212

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.06	1.48	< 0.005	0.02	—	0.02	0.02	—	0.02	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	14.4	14.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.06	1.48	< 0.005	0.02	—	0.02	0.02	—	0.02	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	14.4	14.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	0.60	0.84	< 0.005	0.01	—	0.01	0.01	—	0.01	—	100	100	< 0.005	< 0.005	—	101

Architectural Coating	8.13	8.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.11	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.6	16.6	< 0.005	< 0.005	—	16.7
Architectural Coatings	1.48	1.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.28	0.25	5.18	0.00	0.00	0.94	0.94	0.00	0.22	0.22	—	991	991	0.01	0.03	2.45	1,004
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.21	0.28	2.95	0.00	0.00	0.94	0.94	0.00	0.22	0.22	—	845	845	0.01	0.03	0.06	855
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.14	0.14	2.07	0.00	0.00	0.53	0.53	0.00	0.12	0.12	—	509	509	0.01	0.02	0.60	515
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	1214

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.38	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	84.2	84.2	< 0.005	< 0.005	0.10	85.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. Architectural Coating (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.06	1.48	< 0.005	0.02	—	0.02	0.02	—	0.02	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	14.4	14.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.06	1.48	< 0.005	0.02	—	0.02	0.02	—	0.02	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	14.4	14.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	1215

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	0.60	0.84	< 0.005	0.01	—	0.01	0.01	—	0.01	—	100	100	< 0.005	< 0.005	—	101
Architectural Coatings	8.13	8.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.11	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.6	16.6	< 0.005	< 0.005	—	16.7
Architectural Coatings	1.48	1.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.28	0.25	5.18	0.00	0.00	0.94	0.94	0.00	0.22	0.22	—	991	991	0.01	0.03	2.45	1,004
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.21	0.28	2.95	0.00	0.00	0.94	0.94	0.00	0.22	0.22	—	845	845	0.01	0.03	0.06	855
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	1216

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.14	0.14	2.07	0.00	0.00	0.53	0.53	0.00	0.12	0.12	—	509	509	0.01	0.02	0.60	515
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.38	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	84.2	84.2	< 0.005	< 0.005	0.10	85.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Architectural Coating (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.05	1.48	< 0.005	0.01	—	0.01	0.01	—	0.01	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	14.4	14.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.16	0.13	1.05	1.48	< 0.005	0.01	—	0.01	0.01	—	0.01	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	14.4	14.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.70	0.98	< 0.005	0.01	—	0.01	0.01	—	0.01	—	118	118	< 0.005	< 0.005	—	119
Architectural Coatings	9.59	9.59	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.13	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	19.6	19.6	< 0.005	< 0.005	—	19.7
Architectural Coatings	1.75	1.75	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27	0.24	0.22	4.86	0.00	0.00	0.94	0.94	0.00	0.22	0.22	—	974	974	0.01	0.03	2.19	1218

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.23	0.20	0.25	2.74	0.00	0.00	0.94	0.94	0.00	0.22	0.22	—	831	831	0.01	0.03	0.06	841
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.14	0.16	2.28	0.00	0.00	0.62	0.62	0.00	0.15	0.15	—	590	590	0.01	0.02	0.63	598
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.42	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	97.8	97.8	< 0.005	< 0.005	0.10	99.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.22. Architectural Coating (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.05	1.48	< 0.005	0.01	—	0.01	0.01	—	0.01	—	178	178	0.01	< 0.005	—	179

Architectural Coatings	14.4	14.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.05	1.48	< 0.005	0.01	—	0.01	0.01	—	0.01	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	14.4	14.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.70	0.98	< 0.005	0.01	—	0.01	0.01	—	0.01	—	118	118	< 0.005	< 0.005	—	119
Architectural Coatings	9.59	9.59	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.13	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	19.6	19.6	< 0.005	< 0.005	—	19.7

Architectural Coating	1.75	1.75	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27	0.24	0.22	4.86	0.00	0.00	0.94	0.94	0.00	0.22	0.22	—	974	974	0.01	0.03	2.19	987
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.23	0.20	0.25	2.74	0.00	0.00	0.94	0.94	0.00	0.22	0.22	—	831	831	0.01	0.03	0.06	841
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.14	0.16	2.28	0.00	0.00	0.62	0.62	0.00	0.15	0.15	—	590	590	0.01	0.02	0.63	598
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.42	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	97.8	97.8	< 0.005	< 0.005	0.10	99.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

1221

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.1.2. Mitigated

Mobile source emissions results are presented in Sections 2.5. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	1,043	1,043	0.14	0.02	—	1,052
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	1,209	1,209	0.16	0.02	—	1,219
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	—	5,699	5,699	0.76	0.09	—	5,745
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	1,003	1,003	0.13	0.02	—	1,011
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	161	161	0.02	< 0.005	—	163

1222

Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	9,116	9,116	1.22	0.15	—	9,191
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	1,043	1,043	0.14	0.02	—	1,052
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	1,209	1,209	0.16	0.02	—	1,219
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	—	5,699	5,699	0.76	0.09	—	5,745
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	1,003	1,003	0.13	0.02	—	1,011
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	161	161	0.02	< 0.005	—	163
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	9,116	9,116	1.22	0.15	—	9,191

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	173	173	0.02	< 0.005	—	174
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	200	200	0.03	< 0.005	—	202
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	—	944	944	0.13	0.02	—	951
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	166	166	0.02	< 0.005	—	167
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	26.7	26.7	< 0.005	< 0.005	—	26.9
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,509	1,509	0.20	0.02	—	1,522

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

1224

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	519	519	0.07	0.01	—	523
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	603	603	0.08	0.01	—	608
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	—	2,849	2,849	0.38	0.05	—	2,873
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	502	502	0.07	0.01	—	506
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	161	161	0.02	< 0.005	—	163
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,635	4,635	0.62	0.08	—	4,672
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	519	519	0.07	0.01	—	523
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	603	603	0.08	0.01	—	608

Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	—	2,849	2,849	0.38	0.05	—	2,873
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	502	502	0.07	0.01	—	506
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	161	161	0.02	< 0.005	—	163
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,635	4,635	0.62	0.08	—	4,672
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	85.9	85.9	0.01	< 0.005	—	86.6
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	99.9	99.9	0.01	< 0.005	—	101
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	—	472	472	0.06	0.01	—	476
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	83.0	83.0	0.01	< 0.005	—	83.7
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	26.7	26.7	< 0.005	< 0.005	—	26.9
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	767	767	0.10	0.01	—	774

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Movie Theater (No Matinee)	0.27	0.13	2.42	2.04	0.01	0.18	—	0.18	0.18	—	0.18	—	2,892	2,892	0.26	0.01	—	2,900
Quality Restaurant	0.07	0.03	0.63	0.53	< 0.005	0.05	—	0.05	0.05	—	0.05	—	747	747	0.07	< 0.005	—	749
User Defined Recreational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Recreati Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.34	0.17	3.05	2.56	0.02	0.23	—	0.23	0.23	—	0.23	—	3,640	3,640	0.32	0.01	—	3,650
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Movie Theater (No Matinee)	0.27	0.13	2.42	2.04	0.01	0.18	—	0.18	0.18	—	0.18	—	2,892	2,892	0.26	0.01	—	2,900
Quality Restaurant	0.07	0.03	0.63	0.53	< 0.005	0.05	—	0.05	0.05	—	0.05	—	747	747	0.07	< 0.005	—	749
User Defined Recreational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.34	0.17	3.05	2.56	0.02	0.23	—	0.23	0.23	—	0.23	—	3,640	3,640	0.32	0.01	—	3,650
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1228

Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Movie Theater (No Matinee)	0.05	0.02	0.44	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	479	479	0.04	< 0.005	—	480
Quality Restaurant	0.01	0.01	0.11	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	124	124	0.01	< 0.005	—	124
User Defined Recreational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.06	0.03	0.56	0.47	< 0.005	0.04	—	0.04	0.04	—	0.04	—	603	603	0.05	< 0.005	—	604

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

1229

Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Movie Theater (No Matinee)	0.27	0.13	2.42	2.04	0.01	0.18	—	0.18	0.18	—	0.18	—	2,892	2,892	0.26	0.01	—	2,900
Quality Restaurant	0.07	0.03	0.63	0.53	< 0.005	0.05	—	0.05	0.05	—	0.05	—	747	747	0.07	< 0.005	—	749
User Defined Recreational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.34	0.17	3.05	2.56	0.02	0.23	—	0.23	0.23	—	0.23	—	3,640	3,640	0.32	0.01	—	3,650
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Movie Theater (No Matinee)	0.27	0.13	2.42	2.04	0.01	0.18	—	0.18	0.18	—	0.18	—	2,892	2,892	0.26	0.01	—	2,900
Quality Restaurant	0.07	0.03	0.63	0.53	< 0.005	0.05	—	0.05	0.05	—	0.05	—	747	747	0.07	< 0.005	—	749
User Defined Recreational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.34	0.17	3.05	2.56	0.02	0.23	—	0.23	0.23	—	0.23	—	3,640	3,640	0.32	0.01	—	3,650
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Movie Theater (No Matinee)	0.05	0.02	0.44	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	479	479	0.04	< 0.005	—	480
Quality Restaurant	0.01	0.01	0.11	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	124	124	0.01	< 0.005	—	124
User Defined Recreational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.06	0.03	0.56	0.47	< 0.005	0.04	—	0.04	0.04	—	0.04	—	603	603	0.05	< 0.005	—	604

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	1,092	1,092	0.15	0.02	—	1,101
Consumer Products	18.9	18.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.78	1.78	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	4.44	4.15	0.33	36.3	< 0.005	0.03	—	0.03	0.03	—	0.03	—	116	116	< 0.005	< 0.005	—	116
Total	25.1	24.8	0.33	36.3	< 0.005	0.03	—	0.03	0.03	—	0.03	0.00	1,208	1,208	0.15	0.02	—	1,217

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	1,092	1,092	0.15	0.02	—	1,101
Consumer Products	18.9	18.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.78	1.78	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	20.6	20.6	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	1,092	1,092	0.15	0.02	—	1,101
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	12.4	12.4	< 0.005	< 0.005	—	12.5
Consumer Products	3.44	3.44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.32	0.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.40	0.37	0.03	3.27	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.44	9.44	< 0.005	< 0.005	—	9.48
Total	4.17	4.14	0.03	3.27	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	21.8	21.8	< 0.005	< 0.005	—	22.0

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

1233

Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	1,092	1,092	0.15	0.02	—	1,101
Consumer Products	18.9	18.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.78	1.78	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	4.44	4.15	0.33	36.3	< 0.005	0.03	—	0.03	0.03	—	0.03	—	116	116	< 0.005	< 0.005	—	116
Total	25.1	24.8	0.33	36.3	< 0.005	0.03	—	0.03	0.03	—	0.03	0.00	1,208	1,208	0.15	0.02	—	1,217
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	1,092	1,092	0.15	0.02	—	1,101
Consumer Products	18.9	18.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.78	1.78	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	20.6	20.6	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	1,092	1,092	0.15	0.02	—	1,101
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	12.4	12.4	< 0.005	< 0.005	—	12.5
Consumer Products	3.44	3.44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.32	0.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

1234

Landsca Equipment	0.40	0.37	0.03	3.27	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.44	9.44	< 0.005	< 0.005	—	9.48
Total	4.17	4.14	0.03	3.27	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	21.8	21.8	< 0.005	< 0.005	—	22.0

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	12.9	118	131	1.33	0.03	—	174
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	19.0	31.8	50.8	1.95	0.05	—	114
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	214	357	571	22.0	0.53	—	1,277
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	12.8	21.3	34.1	1.31	0.03	—	76.4
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	60.7	101	162	6.24	0.15	—	363

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	319	629	948	32.8	0.79	—	2,004
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	12.9	118	131	1.33	0.03	—	174
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	19.0	31.8	50.8	1.95	0.05	—	114
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	214	357	571	22.0	0.53	—	1,277
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	12.8	21.3	34.1	1.31	0.03	—	76.4
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	60.7	101	162	6.24	0.15	—	363
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	319	629	948	32.8	0.79	—	2,004
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	2.13	19.5	21.6	0.22	0.01	—	28.8

Condo/T	—	—	—	—	—	—	—	—	—	—	—	3.15	5.26	8.41	0.32	0.01	—	18.8
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	35.4	59.1	94.5	3.64	0.09	—	211
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	2.12	3.53	5.65	0.22	0.01	—	12.6
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	10.1	16.8	26.8	1.03	0.02	—	60.0
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	52.8	104	157	5.43	0.13	—	332

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	9.62	69.1	78.7	1.00	0.02	—	111
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	14.2	23.8	38.0	1.46	0.04	—	85.0

Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	193	322	515	19.8	0.48	—	1,153
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	11.6	19.4	31.0	1.19	0.03	—	69.2
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	55.5	92.6	148	5.70	0.14	—	331
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	284	527	811	29.2	0.70	—	1,750
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	9.62	69.1	78.7	1.00	0.02	—	111
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	14.2	23.8	38.0	1.46	0.04	—	85.0
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	193	322	515	19.8	0.48	—	1,153
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	11.6	19.4	31.0	1.19	0.03	—	69.2
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	55.5	92.6	148	5.70	0.14	—	331
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	284	527	811	29.2	0.70	—	1,750
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	1.59	11.4	13.0	0.16	< 0.005	—	18.4
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	2.36	3.93	6.29	0.24	0.01	—	14.1
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	32.0	53.4	85.3	3.28	0.08	—	191
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	1.92	3.21	5.12	0.20	< 0.005	—	11.5
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	9.18	15.3	24.5	0.94	0.02	—	54.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

1239

Total	—	—	—	—	—	—	—	—	—	—	—	47.0	87.3	134	4.83	0.12	—	290

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	81.4	0.00	81.4	8.14	0.00	—	285
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	97.2	0.00	97.2	9.72	0.00	—	340
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	853	0.00	853	85.3	0.00	—	2,986
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	10.8	0.00	10.8	1.08	0.00	—	37.8
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	1,646	0.00	1,646	165	0.00	—	5,759
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

1240

Total	—	—	—	—	—	—	—	—	—	—	—	2,689	0.00	2,689	269	0.00	—	9,407
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	81.4	0.00	81.4	8.14	0.00	—	285
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	97.2	0.00	97.2	9.72	0.00	—	340
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	853	0.00	853	85.3	0.00	—	2,986
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	10.8	0.00	10.8	1.08	0.00	—	37.8
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	1,646	0.00	1,646	165	0.00	—	5,759
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2,689	0.00	2,689	269	0.00	—	9,407
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	13.5	0.00	13.5	1.35	0.00	—	47.2
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	16.1	0.00	16.1	1.61	0.00	—	56.3

Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	141	0.00	141	14.1	0.00	—	494
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	1.79	0.00	1.79	0.18	0.00	—	6.26
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	273	0.00	273	27.2	0.00	—	953
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	445	0.00	445	44.5	0.00	—	1,557

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	65.1	0.00	65.1	6.51	0.00	—	228
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	77.8	0.00	77.8	7.77	0.00	—	272

Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	683	0.00	683	68.2	0.00	—	2,389
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	8.65	0.00	8.65	0.86	0.00	—	30.3
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	1,317	0.00	1,317	132	0.00	—	4,607
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2,151	0.00	2,151	215	0.00	—	7,526
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	65.1	0.00	65.1	6.51	0.00	—	228
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	77.8	0.00	77.8	7.77	0.00	—	272
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	683	0.00	683	68.2	0.00	—	2,389
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	8.65	0.00	8.65	0.86	0.00	—	30.3
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	1,317	0.00	1,317	132	0.00	—	4,607
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2,151	0.00	2,151	215	0.00	—	7,526
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	10.8	0.00	10.8	1.08	0.00	—	37.7
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	12.9	0.00	12.9	1.29	0.00	—	45.1
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	113	0.00	113	11.3	0.00	—	395
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	1.43	0.00	1.43	0.14	0.00	—	5.01
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	218	0.00	218	21.8	0.00	—	763
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	356	0.00	356	35.6	0.00	—	1,246

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.34	0.34
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.3	12.3
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.2	13.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.34	0.34

Condo/T	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.3	12.3
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.2	13.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.04	2.04
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.19	2.19

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

1246

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.34	0.34
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.3	12.3
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.2	13.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.34	0.34
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.3	1247

Recreati Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.2	13.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.04	2.04
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.19	2.19

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1248

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	8/3/2026	11/13/2026	5.00	75.0	—
Site Preparation	Site Preparation	11/14/2026	1/15/2027	5.00	45.0	—
Grading	Grading	1/16/2027	6/25/2027	5.00	115	—
Building Construction	Building Construction	6/26/2027	12/6/2030	5.00	900	—
Paving	Paving	7/6/2030	12/6/2030	5.00	110	—
Architectural Coating	Architectural Coating	3/19/2029	12/6/2030	5.00	450	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	4.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Rubber Tired Dozers	Diesel	Average	4.00	8.00	367	0.40
Site Preparation	Crawler Tractors	Diesel	Average	5.00	8.00	87.0	0.43

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Grading	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	3.00	8.00	423	0.48
Grading	Crawler Tractors	Diesel	Average	3.00	8.00	87.0	0.43
Building Construction	Cranes	Diesel	Average	2.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	5.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	2.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	5.00	8.00	84.0	0.37
Building Construction	Welders	Diesel	Average	2.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	4.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Rubber Tired Dozers	Diesel	Average	4.00	8.00	367	0.40
Site Preparation	Crawler Tractors	Diesel	Average	5.00	8.00	87.0	0.43
Grading	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	3.00	8.00	423	0.48
Grading	Crawler Tractors	Diesel	Average	3.00	8.00	87.0	0.43

Building Construction	Cranes	Diesel	Average	2.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	5.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	2.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	5.00	8.00	84.0	0.37
Building Construction	Welders	Diesel	Average	2.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	20.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	7.00	10.2	HHDT,MHDT
Demolition	Hauling	0.95	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	22.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	4.00	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	27.5	18.5	LDA,LDT1,LDT2
Grading	Vendor	10.0	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT

Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	361	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	74.0	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	72.2	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	20.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	7.00	10.2	HHDT,MHDT
Demolition	Hauling	0.95	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	22.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	4.00	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT

Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	27.5	18.5	LDA,LDT1,LDT2
Grading	Vendor	10.0	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	361	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	74.0	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	72.2	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	1,175,290	391,763	449,672	149,891	16,432

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	6,143	—
Site Preparation	—	—	203	0.00	—
Grading	—	—	633	0.00	—
Paving	0.00	0.00	0.00	0.00	8.11

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Single Family Housing	1.82	0%
Condo/Townhouse	—	0%
Movie Theater (No Matinee)	0.00	0%
Quality Restaurant	0.00	0%
User Defined Recreational	0.00	0%
Parking Lot	6.26	100%
Recreational Swimming Pool	0.00	0%

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Other Asphalt Surfaces	0.02	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	457	0.03	< 0.005
2027	0.00	457	0.03	< 0.005
2028	0.00	457	0.03	< 0.005
2029	0.00	457	0.03	< 0.005
2030	0.00	457	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	1,887	1,887	1,887	688,755	33,272	33,272	33,272	12,144,280

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	1,887	1,887	1,887	688,755	33,272	33,272	33,272	12,144,280

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Single Family Housing	—

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Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	165
No Fireplaces	0
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0
Condo/Townhouse	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	244
No Fireplaces	0
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Single Family Housing	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	165
No Fireplaces	0

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Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0
Condo/Townhouse	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	244
No Fireplaces	0
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
1175289.75	391,763	449,672	149,891	16,432

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value

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Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	1,545,056	247	0.0330	0.0040	0.00
Condo/Townhouse	1,790,418	247	0.0330	0.0040	0.00
Movie Theater (No Matinee)	8,438,137	247	0.0330	0.0040	9,024,353
Quality Restaurant	1,485,248	247	0.0330	0.0040	2,332,120
User Defined Recreational	0.00	247	0.0330	0.0040	0.00
Parking Lot	239,025	247	0.0330	0.0040	0.00
Recreational Swimming Pool	0.00	247	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	247	0.0330	0.0040	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	768,447	247	0.0330	0.0040	0.00
Condo/Townhouse	893,101	247	0.0330	0.0040	0.00
Movie Theater (No Matinee)	4,219,069	247	0.0330	0.0040	9,024,353
Quality Restaurant	742,624	247	0.0330	0.0040	2,332,120
User Defined Recreational	0.00	247	0.0330	0.0040	0.00
Parking Lot	239,025	247	0.0330	0.0040	0.00
Recreational Swimming Pool	0.00	247	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	247	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	6,711,173	44,326,113
Condo/Townhouse	9,924,401	0.00
Movie Theater (No Matinee)	111,566,492	0.00
Quality Restaurant	6,670,760	0.00
User Defined Recreational	0.00	0.00
Parking Lot	0.00	0.00
Recreational Swimming Pool	31,688,246	0.00
Other Asphalt Surfaces	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	5,021,971	24,396,890
Condo/Townhouse	7,426,429	0.00
Movie Theater (No Matinee)	100,744,543	0.00
Quality Restaurant	6,050,380	0.00
User Defined Recreational	0.00	0.00
Parking Lot	0.00	0.00
Recreational Swimming Pool	28,950,382	0.00
Other Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	151	—
Condo/Townhouse	180	—
Movie Theater (No Matinee)	1,583	—
Quality Restaurant	20.1	—
User Defined Recreational	0.00	—
Parking Lot	0.00	—
Recreational Swimming Pool	3,054	—
Other Asphalt Surfaces	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	121	—
Condo/Townhouse	144	—
Movie Theater (No Matinee)	1,267	—
Quality Restaurant	16.0	—
User Defined Recreational	0.00	—
Parking Lot	0.00	—
Recreational Swimming Pool	2,443	—
Other Asphalt Surfaces	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	User Defined	750	< 0.005	2.50	2.50	10.0

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Single Family Housing	Household refrigerators and/or freezers	User Defined	150	0.12	0.60	0.00	1.00
Condo/Townhouse	Average room A/C & Other residential A/C and heat pumps	User Defined	750	< 0.005	2.50	2.50	10.0
Condo/Townhouse	Household refrigerators and/or freezers	User Defined	150	0.12	0.60	0.00	1.00
Movie Theater (No Matinee)	Other commercial A/C and heat pumps	User Defined	750	< 0.005	4.00	4.00	18.0
Movie Theater (No Matinee)	Stand-alone retail refrigerators and freezers	User Defined	150	0.04	1.00	0.00	1.00
Movie Theater (No Matinee)	Walk-in refrigerators and freezers	User Defined	150	< 0.005	7.50	7.50	20.0
Quality Restaurant	Household refrigerators and/or freezers	User Defined	150	0.00	0.60	0.00	1.00
Quality Restaurant	Other commercial A/C and heat pumps	User Defined	750	1.80	4.00	4.00	18.0
Quality Restaurant	Walk-in refrigerators and freezers	User Defined	150	< 0.005	7.50	7.50	20.0
Recreational Swimming Pool	Other commercial A/C and heat pumps	User Defined	750	< 0.005	4.00	4.00	18.0
Recreational Swimming Pool	Stand-alone retail refrigerators and freezers	User Defined	150	0.04	1.00	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	User Defined	750	< 0.005	2.50	2.50	10.0

Single Family Housing	Household refrigerators and/or freezers	User Defined	150	0.12	0.60	0.00	1.00
Condo/Townhouse	Average room A/C & Other residential A/C and heat pumps	User Defined	750	< 0.005	2.50	2.50	10.0
Condo/Townhouse	Household refrigerators and/or freezers	User Defined	150	0.12	0.60	0.00	1.00
Movie Theater (No Matinee)	Other commercial A/C and heat pumps	User Defined	750	< 0.005	4.00	4.00	18.0
Movie Theater (No Matinee)	Stand-alone retail refrigerators and freezers	User Defined	150	0.04	1.00	0.00	1.00
Movie Theater (No Matinee)	Walk-in refrigerators and freezers	User Defined	150	< 0.005	7.50	7.50	20.0
Quality Restaurant	Household refrigerators and/or freezers	User Defined	150	0.00	0.60	0.00	1.00
Quality Restaurant	Other commercial A/C and heat pumps	User Defined	750	1.80	4.00	4.00	18.0
Quality Restaurant	Walk-in refrigerators and freezers	User Defined	150	< 0.005	7.50	7.50	20.0
Recreational Swimming Pool	Other commercial A/C and heat pumps	User Defined	750	< 0.005	4.00	4.00	18.0
Recreational Swimming Pool	Stand-alone retail refrigerators and freezers	User Defined	150	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

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5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	23.5	annual days of extreme heat
Extreme Precipitation	0.05	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.14	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	91.1
AQ-PM	8.11
AQ-DPM	43.5
Drinking Water	72.0
Lead Risk Housing	4.10
Pesticides	72.9
Toxic Releases	2.83
Traffic	9.28
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	0.00
Haz Waste Facilities/Generators	35.6
Impaired Water Bodies	0.00
Solid Waste	0.00

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Sensitive Population	—
Asthma	26.8
Cardio-vascular	32.6
Low Birth Weights	4.36
Socioeconomic Factor Indicators	—
Education	30.4
Housing	42.8
Linguistic	86.9
Poverty	40.8
Unemployment	64.5

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	52.34184525
Employed	12.04927499
Median HI	41.75542153
Education	—
Bachelor's or higher	59.05299628
High school enrollment	100
Preschool enrollment	1.873476197
Transportation	—
Auto Access	43.30809701
Active commuting	33.32477865
Social	—
2-parent households	17.11792634
Voting	54.07416913

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Neighborhood	—
Alcohol availability	91.45386886
Park access	2.194276915
Retail density	9.790837931
Supermarket access	15.98870781
Tree canopy	8.661619402
Housing	—
Homeownership	66.77787758
Housing habitability	81.5603747
Low-inc homeowner severe housing cost burden	21.18567946
Low-inc renter severe housing cost burden	92.91672013
Uncrowded housing	70.98678301
Health Outcomes	—
Insured adults	50.93032208
Arthritis	1.8
Asthma ER Admissions	72.2
High Blood Pressure	3.3
Cancer (excluding skin)	2.7
Asthma	55.1
Coronary Heart Disease	2.7
Chronic Obstructive Pulmonary Disease	14.4
Diagnosed Diabetes	19.9
Life Expectancy at Birth	80.0
Cognitively Disabled	85.7
Physically Disabled	10.0
Heart Attack ER Admissions	73.8
Mental Health Not Good	68.6
Chronic Kidney Disease	5.2

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Obesity	37.0
Pedestrian Injuries	19.6
Physical Health Not Good	38.5
Stroke	13.0
Health Risk Behaviors	—
Binge Drinking	87.0
Current Smoker	74.7
No Leisure Time for Physical Activity	49.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	90.2
Elderly	5.0
English Speaking	66.0
Foreign-born	19.1
Outdoor Workers	12.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	84.6
Traffic Density	11.0
Traffic Access	23.0
Other Indices	—
Hardship	50.2
Other Decision Support	—
2016 Voting	78.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	21.0

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Healthy Places Index Score for Project Location (b)	31.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Total area is 81.14 acres
Construction: Construction Phases	Construction schedule based on a 2030 opening year
Construction: Off-Road Equipment	Crawler Tractors used in lieu of Tractors/Loaders/Backhoes
Construction: Trips and VMT	Vendor trips adjusted based on CalEEMod defaults for Building Construction and number of days during Demolition, Site Preparation, Grading, and Building Construction
Construction: Architectural Coatings	Rule 1113
Operations: Vehicle Data	Trip characteristics based on information provided in the Traffic analysis
Operations: Hearths	Rule 445
Operations: Refrigerants	As of 1 January 2022, new commercial refrigeration equipment may not use refrigerants with a GWP of 150 or greater. Further, R-404A (the CalEEMod default) is unacceptable for new supermarket and cold storage systems as of 1 January 2019 and 2023, respectively. Beginning 1 January 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater.
Operations: Fleet Mix	Adjusted Fleet Mix

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Operations: Energy Use	No natural gas for residential

86-ACRE PROJECT SITE

ASSESSOR PARCEL NUMBERS (APNS) 780-040-001 AND -003, AND 780-060-001 AND -002

COACHELLA, RIVERSIDE COUNTY, CALIFORNIA

Habitat Assessment & Coachella Valley Multiple Species Habitat Conservation Plan Consistency Analysis

Prepared For:

RELEVANT COACHELLA OWNER, LLC
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April 2025

86-ACRE PROJECT SITE

ASSESSOR PARCEL NUMBERS (APNS)780-040-001 AND -003, AND 780-060-001 AND -002

PALM DESERT, RIVERSIDE COUNTY, CALIFORNIA

Habitat Assessment
Coachella Valley Multiple Species Habitat Conservation Plan
Consistency Analysis

The undersigned certify that the statements furnished in this report and exhibits present data and information required for this biological evaluation, and the facts, statements, and information presented is a complete and accurate account of the findings and conclusions to the best of our knowledge and beliefs.



Travis J. McGill
Director



Thomas J. McGill, Ph.D.
Managing Director

April 2025

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Section 1 Introduction

This report contains the findings of ELMT Consulting (ELMT) Habitat Assessment and Coachella Valley Multiple Species Habitat Conservation plan (CVMSHCP) Consistency Analysis for the Proposed 86-Acre Project site located on the southwest corner of 52nd Avenue and Van Buren Avenue within APNs 780-040-001 and -003, and 7860-060-001 and -002 in the City of Coachella, Riverside County, California. ELMT biologists Megan E. Peukert and Andrew N. Mestas conducted a field survey and evaluated the condition of the habitat within the proposed project site on February 21, 2025.

The biological resources assessment was conducted to characterize existing site conditions and assess the probability of occurrence of special-status[1] plant and wildlife species that could pose a constraint to implementation of the project. This report provides a detailed assessment of the suitability of the onsite habitat to support special-status plant and wildlife species that were identified by the California Natural Diversity Database (CNDDB) and other electronic databases as potentially occurring in the vicinity of the proposed distribution alignment. Special attention was given to the suitability of the on-site habitat to support burrowing owl (*Athene cunicularia*), species protected under the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP), and potential jurisdictional drainage features.

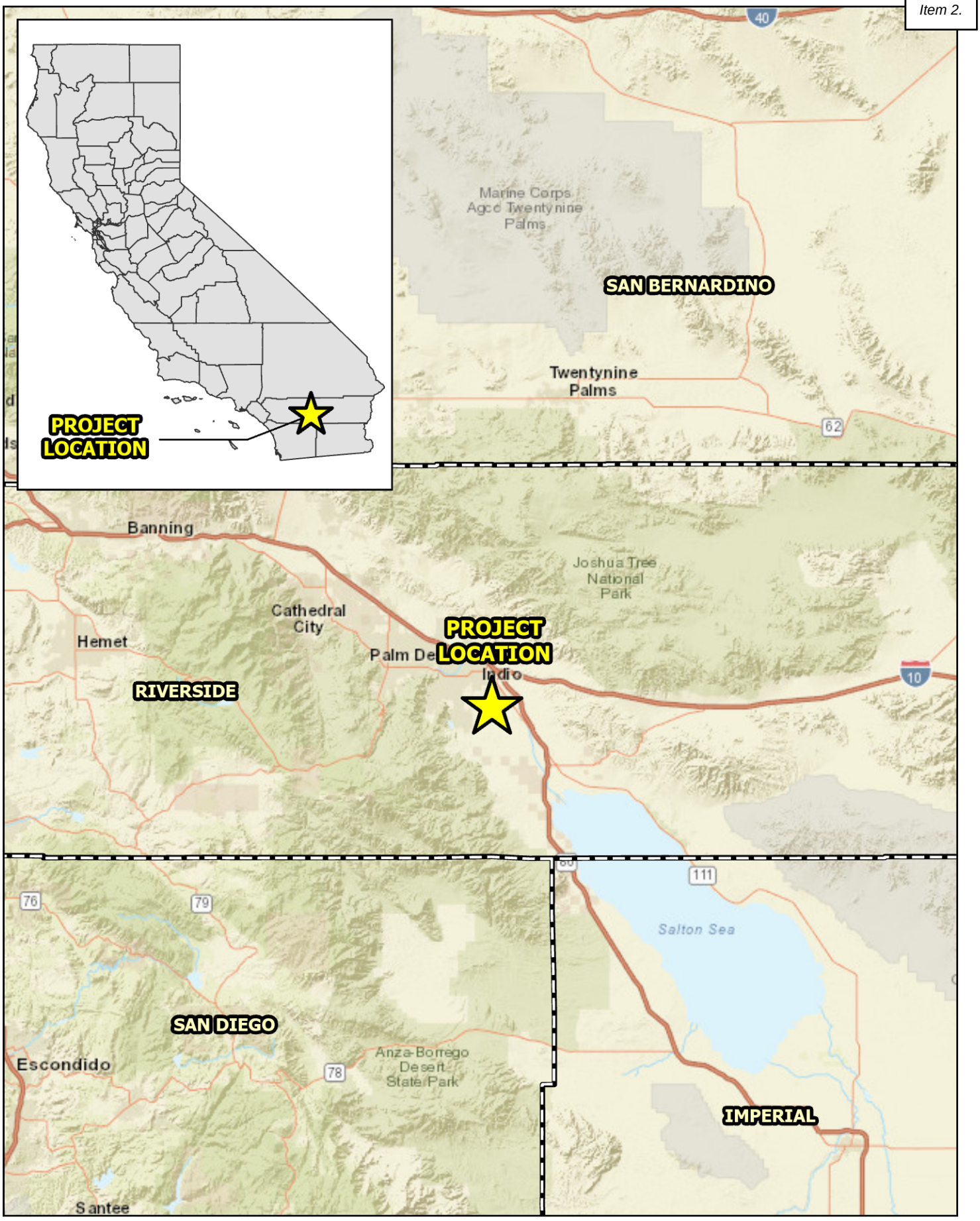
1.1 PROJECT LOCATION

The project site is generally located south and west of State Route 111, and northeast of Martinez Mountain in the City of Coachella, Riverside County, California. The site is depicted on the Indio quadrangle of the United States Geological Survey's (USGS) 7.5-minute topographic map series within Section 12 of Township 6 South, Range 7 East. Specifically, the Project site is bounded to the north by 52nd Avenue, to the east by Van Buren Street, to the west by Calhoun Street, and lies approximately 657 feet north of Avenue 53. The site is located within APNs 780-040-001 and -003, and 780-060-001 and -002 (refer to Exhibits 1-3).

1.2 PROJECT DESCRIPTION

The Project proposes the development of a mixed-use residential property with amenities such as a clubhouse, pools, a beach club, a marina with an artificial lagoon, and equestrian facilities.

[1] As used in this report, "special-status" refers to plant and wildlife species that are federally or State listed, proposed, or candidates; CVMSHCP listed species; plant species that have been designated a CNPS Rare Plant Rank; and wildlife species that are designated by the CDFW as fully protected, species of special concern, or watch list species.

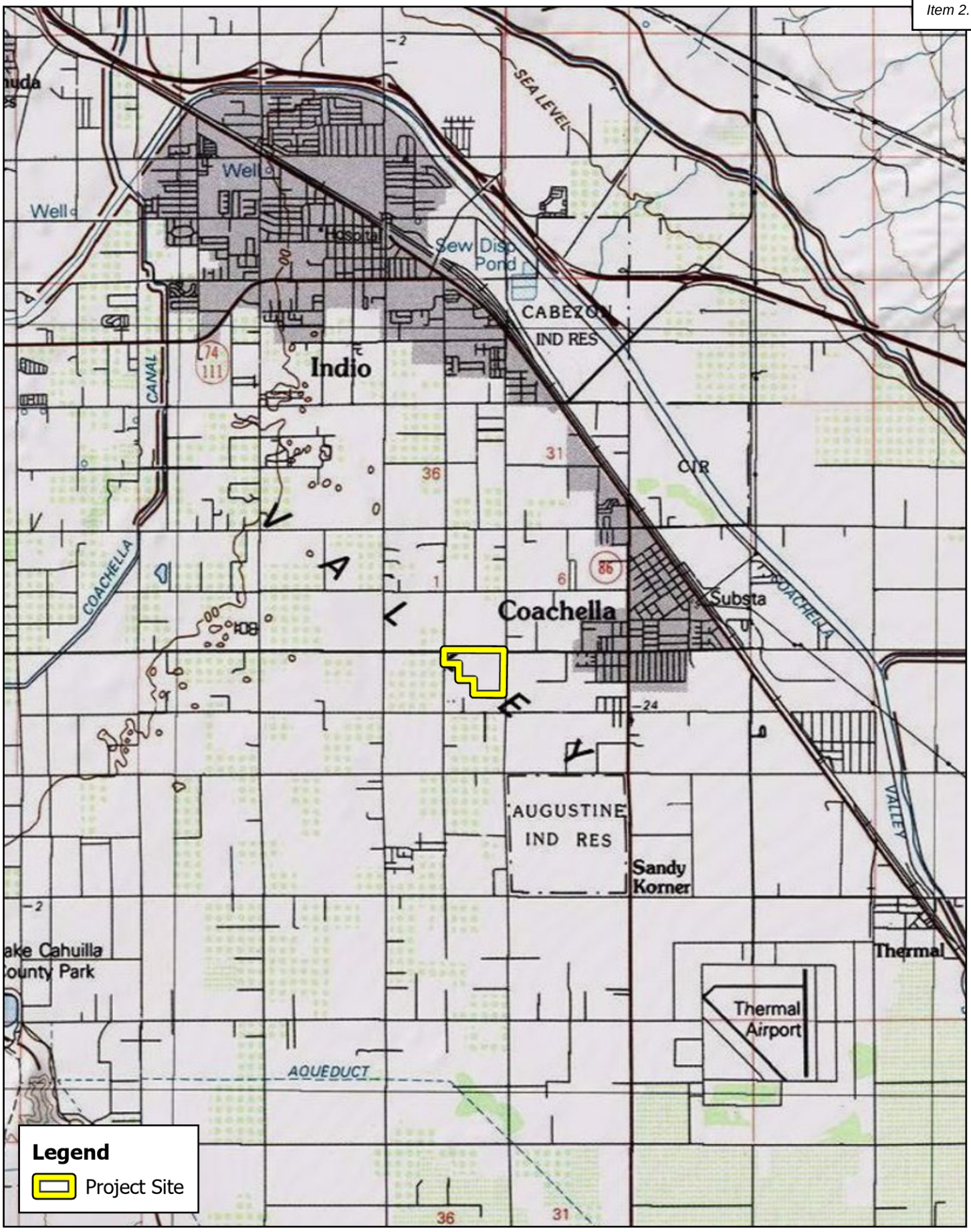


86-ACRE PROJECT SITE

Regional Vicin

Source: World Street Map; Riverside County

Exhibit 1



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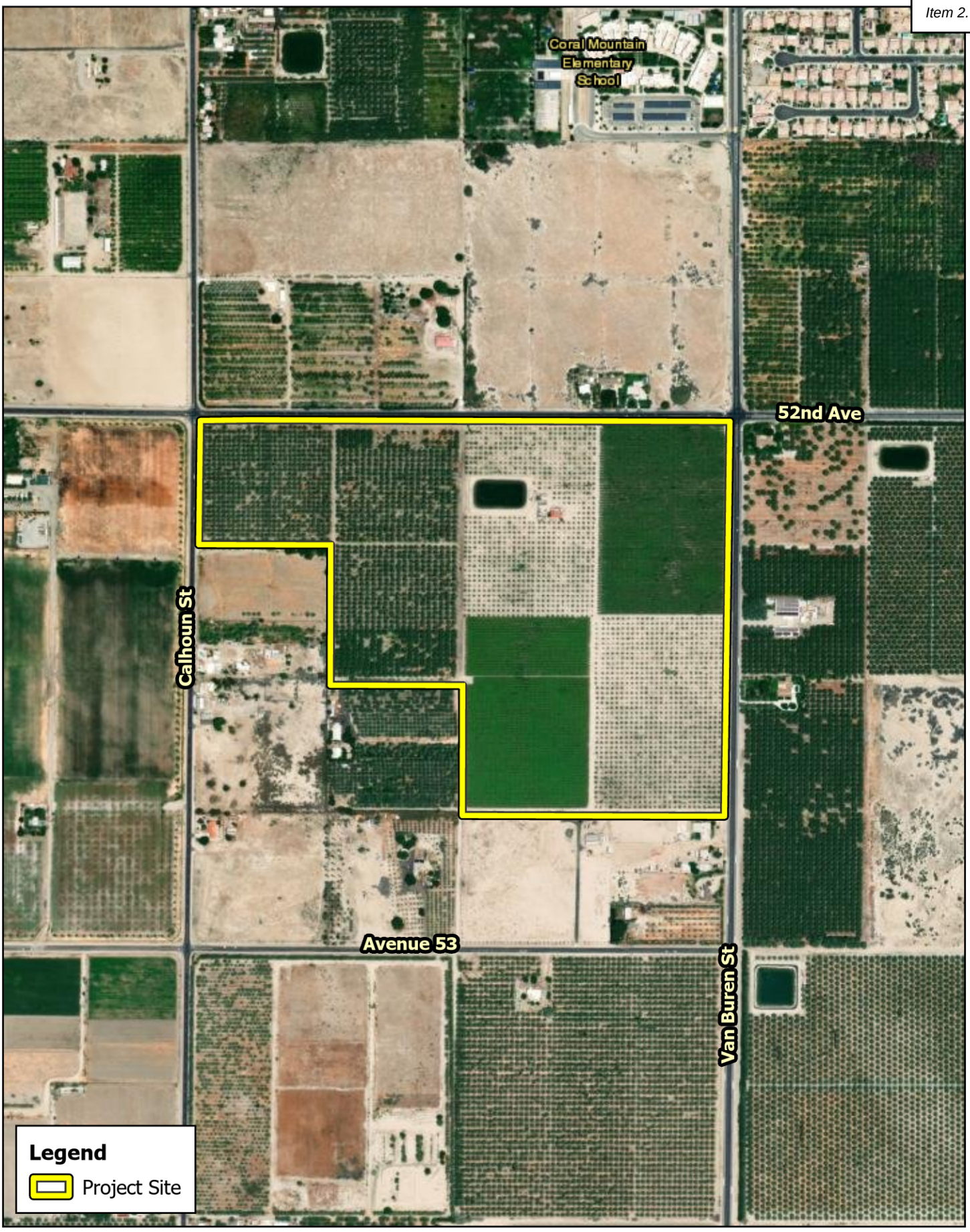
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Source: USGS Topographic Map; Riverside County

86-ACRE PROJECT SITE

Site Vicinity

Exhibit 2



86-ACRE PROJECT SITE

Project S

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Source: ESRI Aerial Imagery; Riverside County

ELMT CONSULTING

Exhibit 3

Section 2 Methodology

A thorough literature review and records search was conducted to determine which special-status biological resources have the potential to occur on or within the general vicinity of the project site. In addition, a general habitat assessment and field investigation of the project site and immediate surrounding area was conducted and provided information about the existing conditions on the project site and the potential for special-status biological resources to occur.

2.1 LITERATURE REVIEW

Prior to conducting the field investigation, a literature review and records search was conducted for special-status biological resources potentially occurring on or within the vicinity of the project site. Previously recorded occurrences of special-status plant and wildlife species and their proximity to the project site were determined through a query of the CDFW's CNDDB Rarefind 5, the California Native Plant Society's (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California, Calflora Database, compendia of special-status species published by CDFW, and the United States Fish and Wildlife Service (USFWS) species listings.

Literature detailing biological resources previously observed in the vicinity of project site and historical land uses were reviewed to understand the extent of disturbances to the habitats on-site. Standard field guides and texts on special-status and non-special-status biological resources were reviewed for habitat requirements, as well as the following resources:

- Google Earth Pro historic aerial imagery (1985-2024);
- CDFW 2012 Staff Report on Burrowing Owl Mitigation;
- Coachella Valley Multiple Species Habitat Conservation Plan:
- United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS), Soil Survey[2]; and
- USFWS Critical Habitat designations for Threatened and Endangered Species.

The literature review provided a baseline from which to inventory the biological resources potentially occurring on the project site. Additional recorded occurrences of these species found on or near the project site were derived from database queries. The CNDDB ArcGIS database was used, in conjunction with ArcGIS software, to locate the nearest occurrence and determine the distance from the project site.

2.2 FIELD INVESTIGATION

ELMT biologist Megan E. Peukert and Andrew N. Mestas inventoried and evaluated the extent and conditions of the plant communities found within the boundaries of the project site and a 200-foot

[2] A soil series is defined as a group of soils with similar profiles developed from similar parent materials under comparable climatic and vegetation conditions. These profiles include major horizons with similar thickness, arrangement, and other important characteristics, which may promote favorable conditions for certain biological resources.

buffer on February 21, 2025. Plant communities identified on aerial photographs during the literature review were verified by walking meandering transects through the plant communities and along boundaries between plant communities. The plant communities were evaluated for their potential to support special-status plant and wildlife species. In addition, field staff identified any natural corridors and linkages that may support the movement of wildlife through the area. Special attention was given to special-status habitats and/or undeveloped areas, which have higher potentials to support special-status plant and wildlife species.

All plant and wildlife species observed, as well as dominant plant species within each plant community, were recorded. Wildlife detections were made through observation of scat, trails, tracks, burrows, nests, and/or visual and aural observation. In addition, site characteristics such as soil condition, topography, hydrology, anthropogenic disturbances, indicator species, condition of on-site plant communities, and presence of potential jurisdictional drainage and/or wetland features were noted.

2.3 SOIL SERIES ASSESSMENT

Onsite and adjoining soils were researched prior to the field visit using the USDA NRCS Soil Survey for Riverside County, California. In addition, a review of the local geological conditions and historical aerial photographs was conducted to assess the ecological changes the project site has undergone.

2.4 PLANT COMMUNITIES

Plant communities were mapped using 7.5-minute USGS topographic base maps and aerial photography. The plant communities were classified in accordance with Sawyer, Keeler-Wolf and Evens (2009), CDFW (2003), and Holland (1986), delineated on an aerial photograph, and then digitized into GIS Arcview. The Arcview application was used to compute the area of each plant community in acres.

2.5 PLANTS

Common plant species observed during the field survey were identified by visual characteristics and morphology in the field and recorded in a field notebook. Unusual and less-familiar plants were photographed in the field and identified in the laboratory using taxonomical guides. Taxonomic nomenclature used in this study follows the 2012 Jepson Manual (Hickman 2012). In this report, scientific names are provided immediately following common names of plant species (first reference only).

2.6 WILDLIFE

Wildlife species detected during field surveys by sight, calls, tracks, scat, or other sign were recorded during surveys in a field notebook. Field guides were used to assist with identification of species during surveys included The Sibley Field Guide to the Birds of Western North America (Sibley 2003) for birds, A Field Guide to Western Reptiles and Amphibians (Stebbins 2003) for herpetofauna, and A Field Guide to Mammals of North America (Reid 2006). Although common names of wildlife species

are fairly well standardized, scientific names are provided immediately following common names in this report (first reference only).

2.7 JURISDICTIONAL DRAINAGES AND WETLANDS

Aerial photography was reviewed prior to conducting a field investigation in order to locate and inspect any potential natural drainage features, ponded areas, or water bodies that may fall under the jurisdiction of the United States Army Corps of Engineers (Corps), Regional Water Quality Control Board (Regional Board), or CDFW. In general, surface drainage features indicated as blue-line streams on USGS maps that are observed or expected to exhibit evidence of flow are considered potential riparian/riverine habitat and are also subject to state and federal regulatory jurisdiction. In addition, ELMT reviewed jurisdictional waters information through examining historical aerial photographs to gain an understanding of the impact of land-use on natural drainage patterns in the area. The USFWS National Wetland Inventory (NWI) and Environmental Protection Agency (EPA) Water Program "My Waters" data layers were also reviewed to determine whether any hydrologic features and wetland areas have been documented on or within the vicinity of the project site.

Section 3 Existing Conditions

3.1 LOCAL CLIMATE

Riverside County features a somewhat cooler version of a Mediterranean climate, or semi-arid climate, with warm, sunny, dry summers and cool, rainy, mild winters. Relative to other areas in Southern California, winters are colder with frost and with chilly to cold morning temperatures common. Climatological data obtained for the City of Coachella indicates the annual precipitation averages 2.24 inches per year. Almost all of the precipitation occurs in the months between November and March, with hardly any occurring in the month of June. Heavy monsoonal rains occur from July to September, with August accumulating the most rainfall (0.30 inches). The wettest month is usually February, with a monthly average total precipitation of 1.40 inches. The average yearly maximum and minimum temperatures for the City of Coachella are 107 and 40 degrees Fahrenheit (F) respectively with July and August being the hottest months and December and January being the coldest months. The temperature during the site visit was approximately 73°F with clear skies.

3.2 TOPOGRAPHY AND SOILS

On-site surface elevation ranges from approximately 47 to 64 feet below mean sea level. The proposed project site slopes marginally from northwest to southeast. Based on the USDA NRCS Soil Survey, the proposed project site is underlain by the following soil units: Coachella fine sand (0 to 2 percent slopes, wet), Gilman fine sandy loam (0 to 2 percent slopes, wet), and Indio fine sandy loam (wet). Soils within the proposed project site have been compacted and disturbed by historical agricultural activities, vehicular access disking, and onsite and surrounding development. The project site was historically used as agricultural land from as early as 1953 and currently supports agricultural land uses. As a result, the majority of the site does not consist of soils native to the site or immediate surrounding area.

3.3 SURROUNDING LAND USES

The project site is located in an area that predominantly supports agricultural activities. In recent decades, land-use in the vicinity of the site has changed to include more residential and commercial development with heavily disturbed and fragmented habitat occurring in undeveloped parcels throughout the surrounding landscape. The site is bounded to the north by 52nd Avenue with a mix of residential development, agricultural development and vacant, undeveloped parcels beyond; to the west by Calhoun street and agricultural development with additional agricultural development beyond; to the south by agricultural development with Avenue 53 beyond; and to the east by Van Buren Street with agricultural development beyond.

Section 4 Discussion

4.1 SITE CONDITIONS

The Project site consists primarily of agricultural development in the form of row crops in the central and western portion of the site and a palm plantation within the eastern portion. An irrigation pond occurs in the central-northern area of the site with nearby pump housing and additional support structures. Dirt access roads occur adjacent to site boundaries and within the inner portion of the site, further segmenting crop boundaries. These disturbances have entirely eliminated the natural plant communities that historically occurred on the project site.

4.2 VEGETATION

Due to existing land uses, no native plant communities or natural communities of special concern were observed within the boundaries of the Project site. The project site contains four (4) land cover types that would be classified as agricultural, disturbed, developed, and agricultural irrigation pond. Refer to Exhibit 4, *Vegetation* and Appendix A, *Site Photographs*, for representative photographs of the project site.

4.2.1 Agricultural

The majority of the project site supports an agricultural land cover type in the form of row crops. Agricultural segments for date palm (*Phoenix dactylifera*) and grape (*Vitis* sp.) occur throughout the proposed project site. These areas consist of dense monocultures of the aforementioned crop species. Additional plant species in the Agricultural areas onsite include Russian thistle (*Salsola tragus*), Saharan mustard (*Brassica tournefortii*), Mediterranean mustard (*Hirschfeldia incana*), and prickly lettuce (*Lactuca seriola*).

4.2.2 Developed

The developed areas of the project site include the support structures in the central portion of the project site to the east of the irrigation pond. These areas are predominantly void of vegetation with the exception of a few weedy, ruderal, and nonnative/invasive species. Plant species observed in the developed areas onsite include castor (*Ricinus communis*), date palm, salt cedar (*Tamarix ramosissima*), Mexican palo verde (*Parkinsonia aculeata*), and sowthistle (*Sonchus asper*).

4.2.3 Disturbed

Disturbed areas of the proposed project site occur along site boundaries and within margins of developed and agricultural areas onsite. Additional disturbed areas include a network of unpaved access roads that transect the site. Developed areas onsite are generally void of vegetation but contain a few ruderal, invasive species such as cheeseweed (*Malva parviflora*), London rocket (*Sysimbrium irio*), cheatgrass (*Bromus tectorum*), horseweed (*Erigeron canadensis*), and pigweed (*Chenopodium album*).

4.2.4 Agricultural Irrigation Pond

An irrigation pond occurs in the central-northern portion of the project site. This pond was primarily inundated due to recent pumping practices and precipitation and serves to irrigate the surrounding agricultural areas onsite. The irrigation pond does not support hydrophytic vegetation or wetland-obligate species. Plant species observed surrounding the agricultural irrigation pond include Mediterranean mustard, cheatgrass, and cheeseweed.

4.3 WILDLIFE

Plant communities provide foraging habitat, nesting and denning sites, and shelter from adverse weather or predation. This section provides a discussion of those wildlife species observed, expected, or not expected to occur on-site. The discussion is to be used as a general reference and is limited by the season, time of day, and weather conditions in which the survey was conducted. Wildlife observations were based on calls, songs, scat, tracks, burrows, and actual sightings of animals.

4.3.1 Fish

No fish or hydrogeomorphic features (e.g., creeks, ponds, lakes, reservoirs) that would provide suitable habitat for fish were observed on or within the vicinity of the project site. The irrigation pond within the boundaries of the project site does not support fish species. Therefore, no fish are expected to occur and are presumed absent from the site.

4.3.2 Amphibians

The irrigation pond within the project site has the potential to provide suitable habitat for amphibian species adapted to a high degree of anthropogenic disturbance and conditions in the Coachella Valley. No amphibian species were observed at the time of the investigation. Common amphibian species which may be expected to occur onsite include Great Plains toad (*Anaxyrus cognatus*), and Woodhouse's toad (*Anaxyrus woodhousii*).

4.3.3 Reptiles

The project site provides suitable habitat to support reptilian species adapted to disturbed environments and conditions in the Coachella Valley. No reptilian species were detected onsite during the investigation. Common reptilian species that might be expected to occur onsite include western side-blotched lizard (*Uta stansburiana elegans*),western zebra-tailed lizard (*Callisaurus draconoides rhodostictus*) Great Basin fence lizard (*Sceloporus occidentalis longipes*) San Diego gopher snake (*Pituophis catenifer annectens*), and coachwhip (*Coluber flagellum piceus*).

4.3.4 Birds

The project site provides suitable foraging and nesting habitat for avian species adapted to routine human disturbance and desert environments. Avian species detected during the field investigation include house finch (*Haemorhous mexicanus*), mourning dove (*Zenaida macroura*), great egret (*Ardea alba*), double-crested cormorant (*Nannopterum auritum*), turkey vulture (*Cathartes aura*), northern

mockingbird (*Mimus polyglottos*), Cassin's kingbird (*Tyrannus vociferans*), ring-necked duck (*Aythya collaris*), yellow-rumped warbler (*Setophaga coronata*), Eurasian collared dove (*Streptopelia decaocto*), Inca dove (*Columbina inca*), and house sparrow (*Passer domesticus*).

4.3.5 Mammals

The project site provides suitable foraging and denning habitat for mammalian species adapted to routine human disturbance and desert environments. However, most mammal species are nocturnal and are difficult to observe during a diurnal field visit. Mammalian species detected and/or sign observed during the field investigation were dog (*Canis lupus familiaris*), domestic horse (*Equus caballus*), and California ground squirrel (*Otospemophilus beecheyi*). Other common mammalian species that may be expected to occur onsite include black-tailed jackrabbit (*Lepus californicus*) and desert cottontail (*Sylvilagus audubonii*). No bat species are expected to roost on-site due to a lack of suitable roosting habitat (i.e., trees, crevices, abandoned structures) within and surrounding the project site.

4.4 NESTING BIRDS

No active nests or birds displaying nesting behavior were observed during the field survey, which was conducted during the breeding season. Although heavily disturbed, the project site and surrounding area have the potential to provide minimal foraging and nesting habitat for year-round and seasonal avian residents, as well as migrating songbirds that could occur in the area that area adapted to disturbed areas and urban environments.

Nesting birds are protected pursuant to the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (Sections 3503, 3503.5, 3511, and 3513 prohibit the take, possession, or destruction of birds, their nests or eggs). If construction occurs between February 1st and August 31st, a pre-construction clearance survey for nesting birds should be conducted prior to the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction.

4.5 MIGRATORY CORRIDORS AND LINKAGES

Habitat linkages provide links between larger habitat areas that are separated by development. Wildlife corridors are similar to linkages, but provide specific opportunities for animals to disperse or migrate between areas. A corridor can be defined as a linear landscape feature of sufficient width to allow animal movement between two comparatively undisturbed habitat fragments. Adequate cover is essential for a corridor to function as a wildlife movement area. It is possible for a habitat corridor to be adequate for one species yet inadequate for others. Wildlife corridors are significant features for dispersal, seasonal migration, breeding, and foraging. Additionally, open space can provide a buffer against both human disturbance and natural fluctuations in resources.

The proposed project site does not occur within any known migratory corridors or linkages. The nearest open space in the vicinity of the project site occurs approximately 4.03 miles to the west in association with the Santa Rosa and San Jacinto mountains. The project site is separated from the Santa Rosa and San Jacinto mountains by heavily developed areas including golf courses, main thoroughfares, agricultural fields and

residential communities. As a result, implementation of the proposed project will not have any adverse effect on migratory corridors or linkages in the surrounding area.

4.6 JURISDICTIONAL AREAS

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Branch regulates discharge of dredge and/or fill materials into "waters of the United States" pursuant to Section 404 of the CWA and Section 10 of the Rivers and Harbors Act. Of the State agencies, the CDFW regulates alterations to streambed and associated plant communities pursuant to Section 1602 of the Fish and Game Code, and the Regional Board regulates discharges into surface waters pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act.

No jurisdictional drainage and/or wetland features were observed within the project site during the field survey. The irrigation pond within the project site is an artificial feature that was constructed wholly in the uplands to provide store and provide water for agricultural crops. Furthermore, the irrigation pond does not support any riparian habitat or hydrophytic vegetation, and will not fall under the regulatory authority of the Corps, Regional Board, or CDFW. Therefore, development of the proposed project will not result in impacts to Corps, Regional Board, or CDFW jurisdiction and regulatory approvals will not be required.

4.7 SPECIAL-STATUS BIOLOGICAL RESOURCES

The CNDDB was queried for reported locations of special-status plant and wildlife species as well as special-status natural plant communities in the Indio USGS 7.5-minute quadrangle. A search of published records of these species was conducted within this quadrangle using the CDFW's CNDDB Rarefind 5 online software and CNDDB Quickview Tool. The CNPS Inventory of Rare and Endangered Vascular Plants of California supplied information regarding the distribution and habitats of vascular plants in the vicinity of the project site. The field investigation was used to assess the ability of the plant communities found on-site to provide suitable habitat for relevant special-status plant and wildlife species.

The literature search identified ten (10) special-status plant species and twenty-six (26) special-status wildlife species as having the potential to occur within the Indio quadrangle. No special-status vegetation communities are listed as having the potential to occur within the Indio quadrangle. Special-status plant and wildlife species were evaluated for their potential to occur within the project boundaries based on habitat requirements, availability and quality of suitable habitat, and known distributions. Species determined to have the potential to occur within the general vicinity of the project site are presented in Appendix B, *Potentially Occurring Special-Status Biological Resources*, and discussed below.

4.7.1 Special-Status Plants

Ten (10) special-status plant species have been recorded in the CNDDB and CNPS in the Indio quadrangle (refer to Appendix B). No special-status plant species were observed on-site during the field

investigation. Based on habitat requirements for specific special-status plant species and the availability and quality of habitats on-site, it was determined the project site does not have potential to support any special-status plant species known to occur in the area and all are presumed absent due to the removal of native habitats through historical agricultural land use and development within the project site.

Due to regional significance, the potential occurrence of Coachella Valley milkvetch is discussed in further detail below.

Coachella Valley Milk-Vetch

Coachella Valley milk-vetch can be either an annual or perennial herb that blooms between February and May. It is federally listed as endangered and is designated by the CNPS with the Rare Plant Rank 1B.2, indicating that is rare, threatened, or endangered in California and elsewhere, and is considered fairly threatened in California, with 20-80% of its known occurrences threatened. It is covered under the MSHCP. It is endemic to California and is only known from Riverside County. It occurs in sandy soils within desert dunes and Sonoran desert scrub, where it typically grows at elevations between 130 and 2,150 feet. Coachella Valley milk-vetch is known to occur in many locations throughout the Coachella Valley.

Coachella Valley milk-vetch was not observed during the field investigation. Further, it was determined that the highly disturbed soils within the project site do not provide suitable habitat for the species. Therefore, it was determined that the site does not have the potential to support Coachella Valley milk-vetch. Since Coachella Valley milk-vetch is a covered species under the CVMSHCP, no further surveys or additional mitigation measures will be required for impacts to this species.

4.7.2 Special-Status Wildlife

Twenty-six (26) special-status wildlife species have been reported in the Indio quadrangle (refer to Appendix B). No special-status species were observed during the field investigation. Based on habitat requirements for specific species and the availability and quality of on-site and adjacent habitats, it was determined that the proposed project site has a high potential to support Coopers hawk (*Accipiter cooperii*). It was further determined that the project site does not provide suitable habitat for any of the other special-status wildlife species known to occur in the area and all are presumed absent from the project site.

Cooper's hawk is not a State or federally listed species. However, out of an abundance of caution, a pre-construction nesting bird clearance survey shall be conducted prior to ground disturbance in order to ensure impacts to special-status avian species do not occur from implementation of the proposed project. With implementation of the pre-construction nesting bird clearance survey, impacts to special-status avian species will be less than significant and no mitigation will be required.

Due to regional significance, the potential occurrence of burrowing owl is discussed in further detail below.

Burrowing Owl

The burrowing owl is currently listed as a Candidate endangered species under the California Endangered Species Act (CESA). It is a grassland specialist distributed throughout western North America where it occupies open areas with short vegetation and bare ground within shrub, desert, and grassland environments. Burrowing owls use a wide variety of arid and semi-arid environments with well-drained, level to gently-sloping areas characterized by sparse vegetation and bare ground (Haug and Didiuk 1993; Dechant et al. 1999). Burrowing owls are dependent upon the presence of burrowing mammals (such as ground squirrels) whose burrows are used for roosting and nesting (Haug and Didiuk 1993). The presence or absence of colonial mammal burrows is often a major factor that limits the presence or absence of burrowing owls. Where mammal burrows are scarce, burrowing owls have been found occupying man-made cavities, such as buried and non-functioning drain pipes, stand-pipes, and dry culverts. Burrowing mammals may burrow beneath rocks and debris or large, heavy objects such as abandoned cars, concrete blocks, or concrete pads. They also require open vegetation allowing line-of-sight observation of the surrounding habitat to forage as well as watch for predators.

Despite a systematic search of the project site, no burrowing owls or sign (i.e., pellets, feathers, castings, or whitewash) were observed during the field investigation. The existing agricultural crops do not provide line-of-sight observations favored by burrowing owl. Further, the trees found onsite, and surrounding electrical poles north of the project site provide suitable perching opportunities for large raptors (i.e., red-tailed hawk) that can prey on burrowing owl.

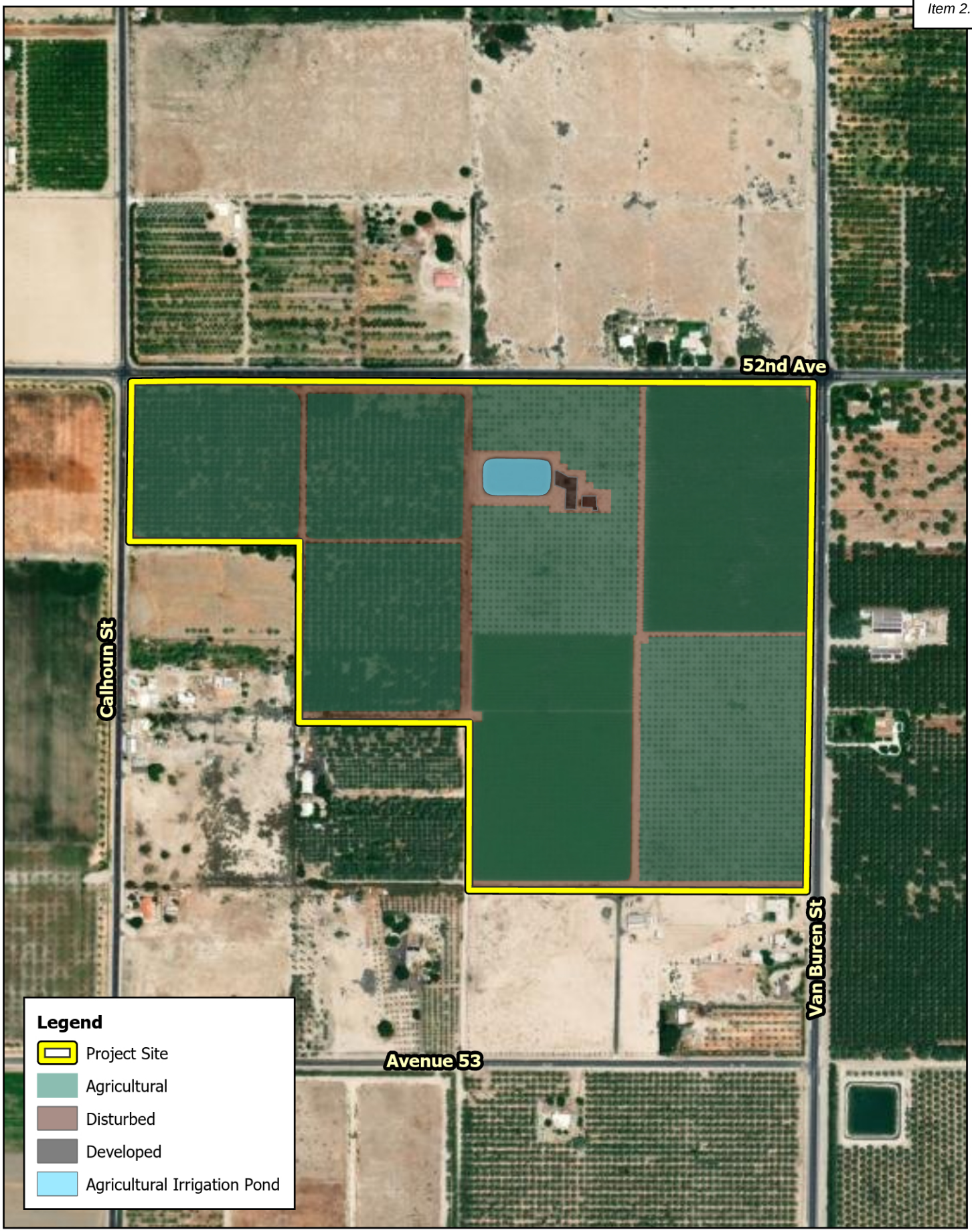
Based on the results of the field investigation, it was determined that the project site does not have potential to support burrowing owl, and focused surveys are not recommended.

4.8 CRITICAL HABITAT

Under the federal Endangered Species Act, "Critical Habitat" is designated at the time of listing of a species or within one year of listing. Critical Habitat refers to specific areas within the geographical range of a species at the time it is listed that include the physical or biological features that are essential to the survival and eventual recovery of that species. Maintenance of these physical and biological features requires special management considerations or protection, regardless of whether individuals or the species are present or not. All federal agencies are required to consult with the United States Fish and Wildlife Service (USFWS) regarding activities they authorize, fund, or permit which may affect a federally listed species or its designated Critical Habitat. The purpose of the consultation is to ensure that projects will not jeopardize the continued existence of the listed species or adversely modify or destroy its designated Critical Habitat. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing is on federal lands, uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highways Administration or a CWA Permit from the Corps). If there is a federal nexus, then the federal agency that is responsible for providing the funding or permit would consult with the USFWS.

The project site is not located within federally designated Critical Habitat (Exhibit 5, *Critical Habitat*). The nearest Critical Habitat is located 4.4 miles east of the Project site for peninsular bighorn sheep (*Ovis canadensis nelsoni*). Project activities will be restricted to areas which have undergone decades

of anthropogenic disturbance, and which do not provide suitable habitat for this species. Therefore, implementation of the proposed project will not result in any impacts or adverse modification to designated Critical Habitat.



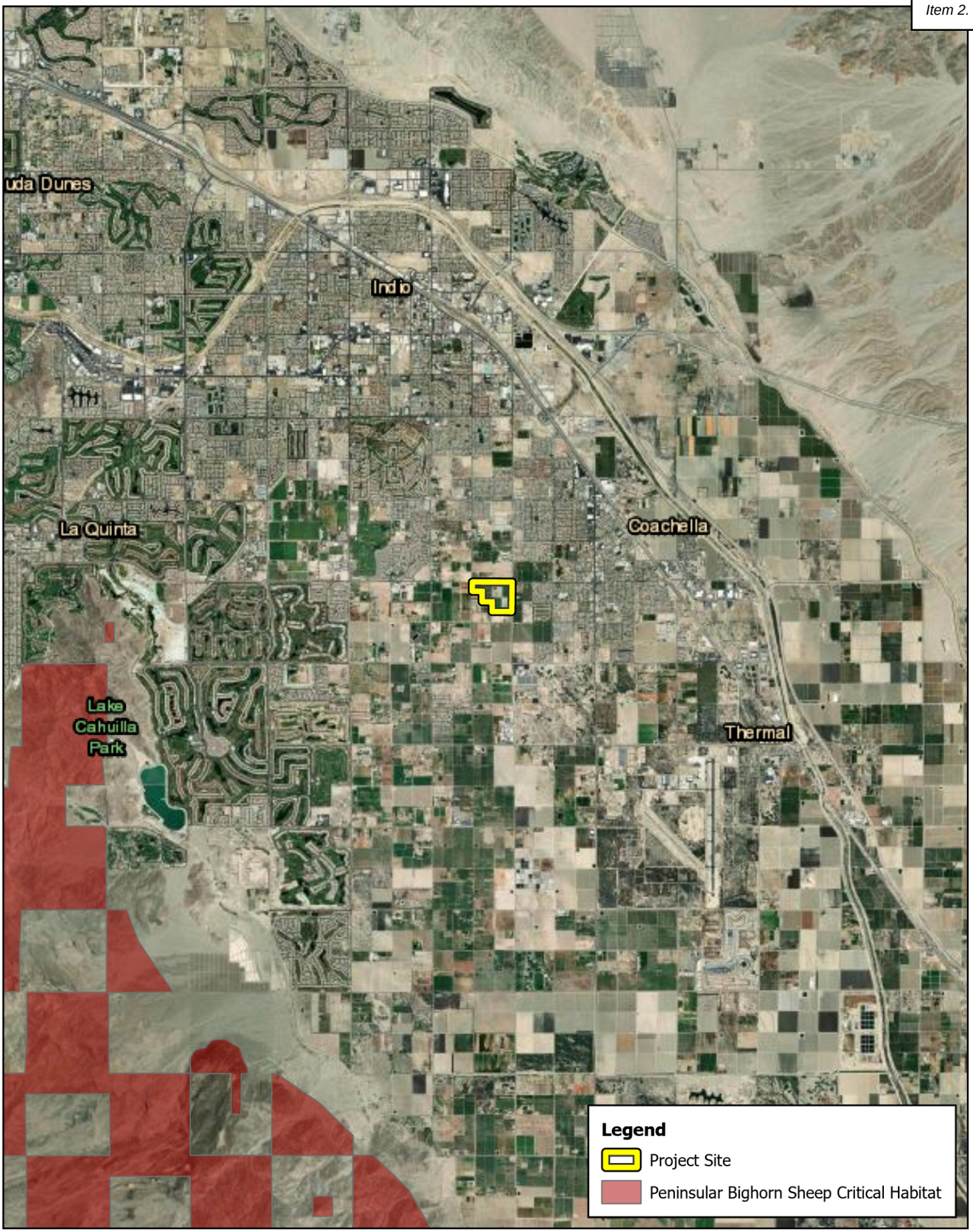
86-ACRE PROJECT SITE

Vegetati

ELMT CONSULTING

Source: ESRI Aerial Imagery; Riverside County

Exhibit 4



86-ACRE PROJECT SITE

Critical Habi

ELMT CONSULTING

N

0 1.25 2.5 5 Miles

Source: ESRI Aerial Imagery; Riverside County

Exhibit 5

Section 5 Coachella Valley MSHCP Consistency Analyis

The project site is not located within any of the CVMSHCP designated conservation areas; the closest conservation area is the Santa Rosa and San Jacinto Mountains Conservation Area which is located approximately 4.03 miles west of the Project site. (Exhibit 6, *CVMSHCP Conservation Areas*).

5.1 COVERED ACTIVITIES OUTSIDE CONSERVATION AREAS

The proposed project was reviewed to determine consistency with the CVMSHCP. Geographic Information System (GIS) software was utilized to map the proposed project site in relation to the CVMSHCP including conservation areas, corridors and linkages, and sand transport areas. The CVMSHCP requires that local permittees comply with various protective measures for covered species, communities, essential ecological processes, and biological corridors. In addition, certain projects may be subject to local development mitigation fees, a Joint Project Review Process, or other conservation or implementation measures.

The proposed project is not listed as a planned "Covered Activity" under the published CVMSHCP but is still considered to be a current Covered Activity pursuant to Section 7.1 of the CVMSHCP. According to Section 7.1 of the CVMSHCP, take authorization will be provided for certain activities that take place outside of Conservation Areas including *"Public facility construction, operations (not including groundwater withdrawal), and maintenance and safety activities by the Permittees for existing and future facilities, including both on and off site activities. Such facilities include, but are not limited to, publicly maintained roads and rights-of-way; materials pits; maintenance yards; flood control facilities; landfills, transfer stations, and other solid waste related facilities, including those for the processing of organic materials; public buildings; water development, production, storage, treatment, and transmission facilities; sewage treatment and transmission facilities; reclaimed water storage and transmission facilities; public parks; substations and electric transmission facilities; and other public utility facilities providing services essential to the health, safety, and welfare of the public."*

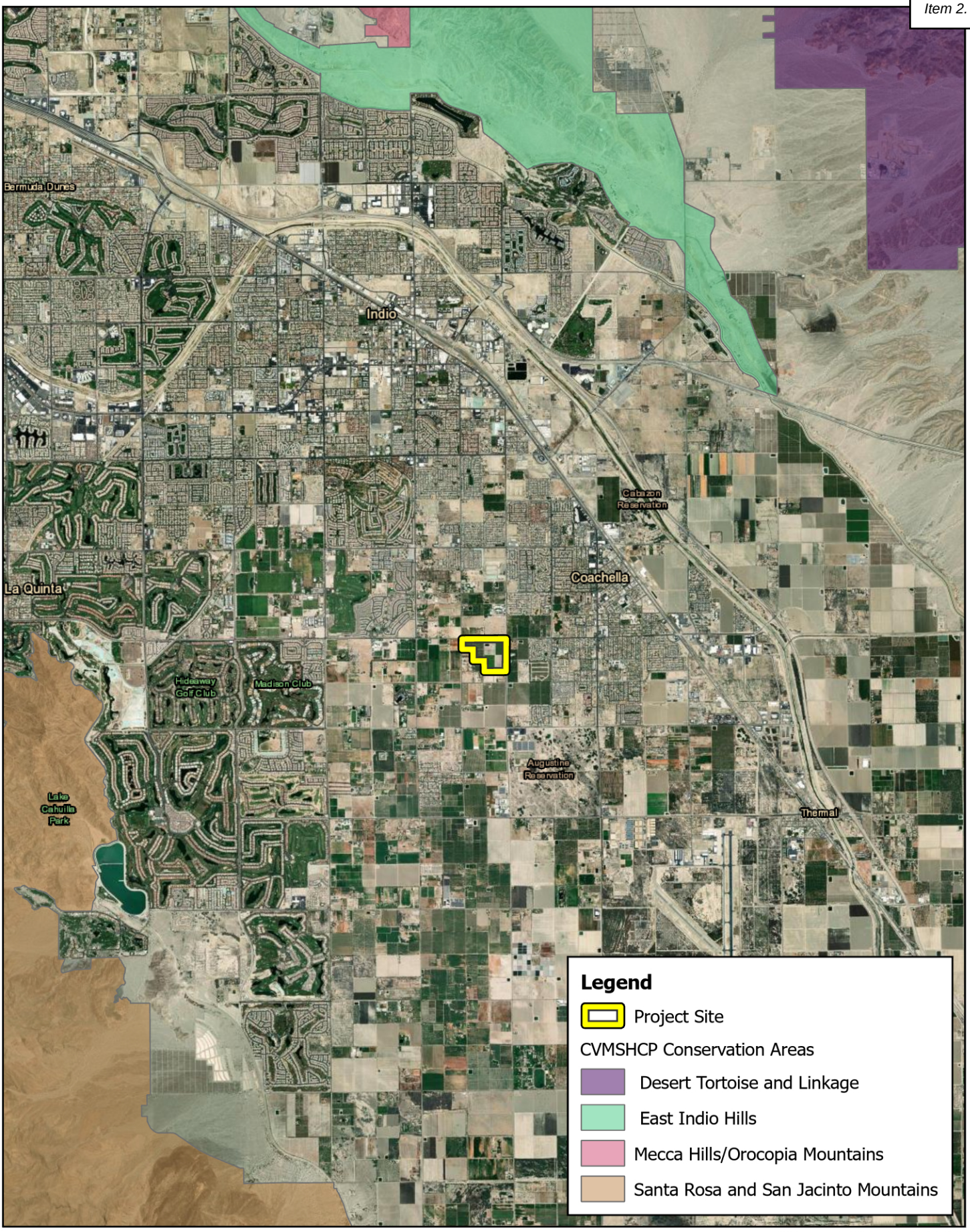
As a Covered Activity located outside designated conservation areas, implementation of the proposed project is consistent with the applicable regulatory compliance measures described in Section 4.4 of the CVMSHCP (refer to Appendix C). As required under CEQA, mitigation is based on baseline conditions and impacts to sensitive biological resources associated with the project site. The CVMSHCP was developed specifically to support development projects within the Coachella Valley. The proposed project and recommended mitigation are consistent with the CVMSHCP.

5.2 CVMSHCP LAND USE ADJACENCY GUIDELINES

The purpose of Land Use Adjacency Guidelines (Section 4.5 of the CVMSHCP) is to avoid or minimize indirect effects from development adjacent to or within the Conservation Areas. Adjacent means sharing a common boundary with any parcel in a Conservation Area. Such indirect effects are commonly referred to as edge effects, and may include noise, lighting, drainage, intrusion of people, and the introduction of non-native plants and non-native predators such as dogs and cats. The nearest conservation area to the project site is the Santa Rosa and San Jacinto Mountains Conservation Area located approximately 4.03 miles to the west. As such the proposed project would not require the use of Land Use Adjacency Guidelines during proposed project implementation.

5.3 CVMSHCP COVERED SPECIES

The CVMSHCP does not identify modeled habitat for any species as occurring within or adjacent to the project site (refer to Appendix D, *CVMSHCP Covered Species*). Based on the results of the field investigation, the project site contains primarily disturbed and developed land that has been subjected to a variety of anthropogenic disturbances. These disturbances have reduced, if not eliminated, the ability of the project site to provide suitable habitat for CVMSHCP Covered species throughout the majority of the project site. As such, no potential impacts to CVMSHCP Covered Species are expected to occur from proposed project implementation.



86-ACRE PROJECT SITE

ELMT CONSULTING

N

0 0.75 1.5 3 Miles

CVMSHCP Conservation Are

Source: ESRI Aerial Imagery; Riverside County

Section 6 Conclusion and Recommendations

The project site primarily consists of disturbed and developed land. The site occurs south and west of State Route 111 and is bounded to the east by Van Buren Street, to the north by 52nd Avenue, and to the west by Calhoun Street. No natural plant communities were observed onsite and four (4) land cover types that would be classified as agricultural, disturbed, developed, and agricultural irrigation pond were observed.

Special-Status Plant Species

No special-status plant species were observed during the field investigation. Based on habitat requirements for the identified special-status species, known species distributions, and existing site conditions, it was determined that the project site does not have the potential to support any special-status plant species known to occur in the vicinity of the project site and all are presumed absent. Therefore, no impacts to special-status plant species are expected to occur due to proposed project implementation.

Special-Status Wildlife Species

No special-status animal species were observed on-site during the field investigation. Based on habitat requirements for the identified special-status wildlife species, known distributions, and the and routine disturbance, it was determined that the proposed project site has a high potential to support Cooper's hawk. Further, it was determined that no other special-status wildlife species have the potential to occur on-site and all are presumed absent. Cooper's hawk is not expected to nest onsite due to the location of the site lying outside of the typical breeding range for the species.

With implementation of a pre-construction nesting bird clearance survey, no impacts to any special-status avian species are expected to occur.

Migratory Bird Treaty Act and CDFW Fish and Game Code Compliance

Nesting birds are protected pursuant to the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (Sections 3503, 3503.3, 3511, and 3513 of the California Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs).

If construction occurs between February 1st and August 31st, a pre-construction clearance survey for nesting birds should be conducted within three (3) days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction. The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active avian nests will occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities should stay outside of a no-disturbance buffer. The size of the no-disturbance buffer will be determined by the wildlife biologist and will depend on the level of noise and/or surrounding anthropogenic disturbances, line of sight between the nest and the construction activity, type and duration of construction activity, ambient noise, species habituation, and topographical barriers. These factors will be evaluated on a case-by-case basis when developing buffer

distances. Limits of construction to avoid an active nest will be established in the field with flagging, fencing, or other appropriate barriers; and construction personnel will be instructed on the sensitivity of nest areas. A biological monitor should be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction activities within the buffer area can occur.

Riparian Habitat and Special-Status Natural Communities

No jurisdictional drainage and/or wetland features were observed within the project site during the field survey. Therefore, development of the project site will not result in impacts to Corps, Regional Board, or CDFW jurisdiction and regulatory approvals will not be required.

No special-status natural communities were observed within the boundaries of the project site. Therefore, no special-status natural communities will be impacted by project implementation.

Wildlife Corridors and Linkages

The Project site does not occur within or adjacent to any wildlife corridors or linkages. The nearest open space in the vicinity of the project site occurs approximately miles to the west in association with the Santa Rosa and San Jacinto mountains. The Project site is separated from the Santa Rosa and San Jacinto mountains by heavily developed areas including golf courses and residential communities. Further, project implementation is expected to be confined to areas which have previously undergone decades of anthropogenic disturbance. Therefore, implementation of the proposed project will not disrupt or have any adverse effects on any migratory corridors or linkages in the surrounding area.

CVMSHCP Compliance

As a Covered Activity located outside designated conservation areas, construction of the proposed project is expected to implement the applicable regulatory complinace measures described in Section 4.4 of the CVMSHCP (refer to Appendix C). With implementation of these measures, and land use adjacney guidelines, the proposed project would be fully consistent with the biological goals and objectives of the CVMSHCP.

Section 7 References

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Appendix A Site Photographs



Photograph 1: From the northwest corner of the project site, looking east along the northern boundary and 52nd Avenue.



Photograph 2: From the northwest corner of the project site, looking south along the western boundary and Calhoun Street.



Photograph 3: From the middle of the northern boundary, looking south through an unpaved access roads that runs through the project site.



Photograph 4: From the central-northern portion of the project site, looking northeast through an existing retaining pond onsite.



Photograph 5: From the northeast corner of the eastern parcels looking west along the northern boundary and 52nd Street.



Photograph 6: From the northeast corner of the project site, looking south along the eastern boundary and Van Buren Street



Photograph 7: From the middle of the eastern boundary, looking west through an unpaved access road which separates abandoned agricultural plots of palm and grape species.



Photograph 8: From the southeast corner of the project site, looking west along the southern boundary.



Photograph 9: From the southeast corner of the project site, looking north along the eastern boundary and Van Buren Street.



Photograph 10: From the southwest corner of the project site, looking north through the unpaved access road that transects the site.

Appendix B Potentially Occurring Special-Status Biological Resources

Table B-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	**Status**	**Habitat**	**Observed Onsite**	**Potential to Occur**
SPECIAL-STATUS WILDLIFE SPECIES				
Accipiter cooperii Cooper's hawk	Fed: None CA: WL CVMHCP: Not Covered	Generally found in forested areas up to 3,000 feet in elevation, especially near edges and rivers. Prefers hardwood stands and mature forests but can be found in urban and suburban areas where there are tall trees for nesting. Common in open areas during nesting season.	No	**High.** Suitable foraging habitat is present on-site. This species is adapted to urban environments and occurs commonly.
Anodonta californiensis California floater	Fed: None CA: None CVMHCP: Not Covered	Most often found in sand and mud of lakes, reservoirs, or in stable areas of low-gradient stream reaches.	No	**Presumed Absent.** There is no suitable habitat present within the project site.
Athene cunicularia burrowing owl	Fed: None CA: SSC CVMHCP: Covered	Primarily a grassland species, but it persists and even thrives in some landscapes highly altered by human activity. Occurs in open, annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. The overriding characteristics of suitable habitat appear to be burrows for roosting and nesting and relatively short vegetation with only sparse shrubs and taller vegetation.	No	**Presumed Absent**. The project site does not provide line-of-sight opportunities favored by this species. No suitable burrows (>4 inches in diameter) were observed.
Buteo regalis ferruginous hawk	Fed: None CA: WL CVMHCP: Not Covered	Occurs primarily in open grasslands and fields, but may be found in sagebrush flats, desert scrub, low foothills, or along the edges of pinyon-juniper woodland. Feeds primarily on small mammals and typically found in agricultural or open fields.	No	**Presumed Absent** There is no suitable habitat present within or near the project site.
Coleonyx variegatus abbotti San Diego banded gecko	Fed: None CA: SSC CVMHCP: Not Covered	Prefers rocky areas in coastal sage and chaparral within granite or rocky outcrops. Occurs in coastal and cismontane southern California from interior Ventura Co. south.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Eumops perotis californicus western mastiff bat	Fed: None CA: SSC CVMHCP: Not Covered	Primarily a cliff-dwelling species, roost generally under exfoliating rock slabs. Roosts are generally high above the ground, usually allowing a clear vertical drop of at least 3 meters below the entrance for flight. In California, it is most frequently encountered in broad open areas including dry desert washes, flood plains, chaparral, oak woodland, open ponderosa pine forest, grassland, and agricultural areas.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Euparagia unidentate Algodones euparagia	Fed: None CA: None CVMHCP: Not Covered	Lives in arid regions, including the deserts of the southwestern United States and northwestern Mexico. Found in dunes, where they build underground nests in the soil.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Observed Onsite**	**Potential to Occur**
Falco peregrinus anatum	Fed: DL CA: DL; FP CVMHCP Not Covered	Uncommon winter resident of the inland region of southern California. Active nesting sites are known along the coast north of Santa Barbara, in the Sierra Nevada, and in other mountains of northern California. Breeds mostly in woodland, forest, and coastal habitats. Riparian areas and coastal and inland wetlands are important habitats yearlong, especially in nonbreeding seasons.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Gopherus agassizii desert tortoise	Fed: **THR** CA: **THR** CVMHCP: Covered	Widely distributed in the Mojave, Sonoran, and Colorado deserts from below sea level to 7,220 feet. Most common in desert scrub, desert wash, and Joshua tree habitats, but occurs in almost every desert habitat except those on the most precipitous slopes.	No	**Presumed Absent.** No suitable habitat is present within or adjacent to the project site.
Hesperopsis gracielae MacNeills sootywing	Fed: None CA: None CVMHCP: Not Covered	Lives in arid habitats along rivers, desert washes, alkali flats, and canyons. Relies on saltbush (*Atriplex lentiforms*) for nectar resources. Broods occur from April to May and again in July to October.	No	**Presumed Absent.** No suitable habitat is present within or adjacent to the project site.
Lasiurus xanthinus western yellow bat	Fed: None CA: SSC CVMHCP: Covered	Roosts in palm trees in foothill riparian, desert wash, and palm oasis habitats with access to water for foraging.	No	**Presumed Absent.** No suitable habitat is present within or adjacent to the project site.
Lithobates yavapaiensis lowland leopard frog	Fed: None CA: SSC CVMHCP: Not Covered	Lives in a variety of aquatic habitats in arid canyons, and desert scrubland. Habitats can include streams, lakes, ponds, and rivers. May also use man-made structures such as water troughs and swimming pools. Prefer rocky streams in canyons surrounded by conifer species.	No	**Presumed Absent.** No suitable habitat is present within or adjacent to the project site.
Macrobaenetes valgum Coachella giant sand treader cricket	Fed: None CA: None CVMHCP: Covered	Nocturnal and moisture sensitive insects. Emergence occurs with winter rains and appear at maximum densities in January-February. Can be detected via their characteristic delta-shaped burrow excavations.	No	**Presumed Absent.** No suitable habitat is present within or adjacent to the project site.
Melozone aberti Abert's towhee	Fed: None CA: None CVMHCP: Not Covered	Lives in native cottonwood-willow riparian forests of the southwestern U.S. and Mexico. Can also be found in shrublands within dense brush and thickets. Species is non-migratory.	No	**Presumed Absent.** No suitable habitat is present within or adjacent to the project site.
Perognathus longimembris bangsi Palm Springs pocket mouse	Fed: None CA: SSC CVMHCP: Covered	Inhabits areas having flat to gently sloping topography, sparse to moderate vegetative cover, and loosely packed or sandy soils on slopes ranging from 0% to approximately 15%. Remaining habitat in the Coachella Valley and environs is about 142,000 acres.	No	**Presumed Absent.** No suitable habitat is present within or adjacent to the project site.
Phrynosoma mcallii flat-tailed horned lizard	Fed: None CA: SSC CVMHCP: Covered	Typical habitat is sandy desert hardpan or gravel flats with scattered sparse vegetation of low species diversity. Most common in areas with high density of harvester ants and fine windblown sand, but rarely occurs on dunes.	No	**Presumed Absent.** No suitable habitat is present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Observed Onsite**	**Potential to Occur**
Piranga rubra summer tanager	Fed: None CA: SSC CVMHCP: Covered	Breed in gaps and edges of open deciduous or pine-oak forests across the southern and mid-Atlantic U.S. Uncommon (formerly common) summer resident and breeder in desert riparian habitat along lower Colorado River. Breeds in mature, desert riparian habitat dominated by cottonwoods and willows.	No	**Presumed Absent.** No suitable habitat is present within or adjacent to the project site.
Polioptila melanura black-tailed gnatcatcher	Fed: None CA: WL CVMHCP: Not Covered	In Mojave, Great Basin, Colorado and Sonoran desert communities, prefers nesting and foraging in densely lined arroyos and washes dominated by creosote bush and salt bush with scattered bursage, burrowed, ocotillo, saguaro, barrel cactus, nipple cactus, and prickly pear and cholla.	No	**Presumed Absent.** No suitable habitat is present within or adjacent to the project site.
Pyrocephalus rubinus vermilion flycatcher	Fed: None CA: SSC CVMHCP: Not Covered	Occupies desert riparian habitat, particularly cottonwoods, willows, mesquite, and other large desert riparian trees, in habitat adjacent to irrigated fields, irrigation ditches, pastures, and other open, mesic areas where it can forage.	No	**Presumed Absent.** No suitable habitat is present within or adjacent to the project site.
Rallus obsoletus yumanensis Yuma Ridgway's rail	Fed: **END** CA: **THR** CVMHCP: Not Covered	Found in the marshes of the lower Colorado River, the Salton Sea, and other water bodies in Arizona and Mexico. Prefers younger stands of cattail and bulrush, requiring crayfish, freshwater clams and other aquatic invertebrates as food.	No	**Presumed Absent.** No suitable habitat is present within or adjacent to the project site.
Taxidea taxus American badger	Fed: None CA: SSC CVMHCP: Not Covered	Primarily occupy grasslands, parklands, farms, tallgrass and shortgrass prairies, meadows, shrub-steppe communities and other treeless areas with sandy loam soils where it can dig more easily for its prey. Occasionally found in open chaparral (with less than 50% plant cover) and riparian zones.	No	**Presumed Absent.** No suitable habitat is present within or adjacent to the project site.
Toxostoma crissale Crissal thrasher	Fed: None CA: SSC CVMHCP: Covered	Year round resident in California. Occupies a relatively large variety of desert riparian and scrub habitats from below sea level to over 6,000 feet. The common factor, regardless of habitat type and species of shrub, is dense, low scrubby vegetation. Primarily occupies riparian scrub or woodland at lower elevations.	No	**Presumed Absent.** No suitable habitat is present within or adjacent to the project site.
Toxostoma lecontei Le Conte's thrasher	Fed: None CA: SSC CVMHCP: Covered	An uncommon to rare, local resident in southern California deserts from southern Mono Co. south to the Mexican border, and in western and southern San Joaquin Valley. Occurs primarily in open desert wash, desert scrub, alkali desert scrub, and desert succulent shrub habitats; also occurs in Joshua tree habitat with scattered shrubs.	No	**Presumed Absent.** No suitable habitat is present within or adjacent to the project site.
Uma inornata Coachella Valley fringe-toed lizard	Fed: **THR** CA: **END** CVMHCP: Covered	Sparsely-vegetated arid areas with fine wind-blown sand, including dunes, washes, and flats with sandy hummocks formed around the bases of vegetation. Needs fine, loose sand for burrowing.	No	**Presumed Absent.** No suitable habitat is present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Observed Onsite**	**Potential to Occur**
Xanthocephalus xanthocephalus yellow-headed blackbird	Fed: None CA: SSC CVMHCP: Not Covered	Uncommon yearlong resident of southern California throughout freshwater emergent wetlands, and moist, open areas along agricultural areas, and mudflats of lacustrine habitats. Prefers to nest in dense wetland vegetation characterized by cattails, tules, or other similar plant species along the border of lakes and ponds.	No	**Presumed Absent.** No suitable habitat is present within or adjacent to the project site.
Xerospermophilus tereticaudus chlorus Palm Springs round-tailed ground squirrel	Fed: None CA: SSC CVMHCP: Covered	Inhabits sandy arid regions of Lower Sonoran Life Zone. Its scrub and wash habitats include mesquite and creosote dominated sand dunes, creosote bush scrub, creosote palo verde and saltbush/alkali scrub.	No	**Presumed Absent.** No suitable habitat is present within or adjacent to the project site.
SPECIAL-STATUS PLANT SPECIES				
Abronia villosa* var. *aurita chaparral sand-verbena	Fed: None CA: None CNPS: 1B.1 CVMSHCP: Not Covered	Found on the coastal side of the southern California mountains in chaparral and coastal sage scrub plant communities in areas of full sun and sandy soils. Found at elevations ranging from 262 to 5,249 feet. Blooming period is from January to September.	No	**Presumed absent**. No suitable habitat is present.
Astragalus lentiginosus* var. *coachellae Coachella Valley milk-vetch	Fed: **END** CA: None CNPS: 1B.2 CVMSHCP: Covered	Preferred habitat includes desert dunes and sandy Sonoran desert scrub. Found at elevations ranging from 131 to 2,149 feet in elevation. Blooming period is from February to May.	No	**Presumed absent**. No suitable habitat is present.
Astragalus preussii var. laxiflorus Lancaster milk-vetch	Fed: None CA: None CNPS: 1B.1 CVMSHCP: Not Covered	Grows in lower muddy and virgin valleys near Lake Mead and in northeastern Los Angeles County. Found in creosote bush communities at elevations of 7,200 to 8,200 feet.	No	**Presumed absent**. No suitable habitat is present.
Astragalus sabulonum gravel milk-vetch	Fed: None CA: None CNPS: 2B.2 CVMSHCP: Not Covered	Native to Southwestern United States from desert to mountain habitats. Blooms period is February to July	No	**Presumed absent**. No suitable habitat is present.
Ditaxis claryana glandular ditaxis	Fed: None CA: None CNPS: 2B.2 CVMSHCP: Not Covered	Found in arid habitats on cliffs and washes in sandy soils. Can also be found in chaparral thickets and in disturbed areas along roadways. Blooming period is December to March	No	**Presumed absent**. No suitable habitat is present.
Horsfordia alata pink velvet-mallow	Fed: None CA: None CNPS: 4.3 CVMSHCP: Not Covered	Grows in the Sonoran Desert within rocky canyons and washes at elevations of up to 2,000 feet. Found in disturbed areas and creosote bush scrub communities. Blooming period is December to April.	No	**Presumed absent**. No suitable habitat is present.
Horsfordia newberryi Newberry's velvet-mallow	Fed: None CA: None CNPS: 4.3 CVMSHCP: Not Covered	Grows in a variety of desert habitats including dry, rocky hillsides, canyons and arroyos. Found in disturbed margins of development. Blooms year-round.	No	**Presumed absent**. No suitable habitat is present.

Scientific Name Common Name	**Status**	**Habitat**	**Observed Onsite**	**Potential to Occur**
Johnstonella costata ribbed cryptantha	Fed: None CA: None CNPS: 4.3 CVMSHCP: Not Covered	Preferred habitat includes desert dunes, Mojavean desert scrub, and Sonoran desert scrub habitats on sandy soil. Found at elevations ranging from 197 to 1,640 feet. Blooming period is from February to May.	No	**Presumed absent**. No suitable habitat is present.
Juncus acutus ssp. leopoldii southwestern spiny rush	Fed: None CA: None CNPS: 4.2 CVMSHCP: Not Covered	Found in coastal dunes (mesic), meadows and seeps (alkaline), and marshes and swamps (coastal salt). Found at elevations ranging from 0 to 3,115 feet. Blooming period is from May to June.	No	**Presumed absent**. No suitable habitat is present.
Stuckenia striata broadleaf pondweed	Fed: None CA: None CNPS: 2B.3 CVMSHCP: Not Covered	Grows in waters of alkaline rivers, canals, and ponds throughout the western United States and Central and South America at elevations of 2,600 to 6,600 feet.	No	**Presumed absent**. No suitable habitat is present.

U.S. Fish and Wildlife Service (Fed) - Federal
END – Federal Endangered
THR – Federal Threatened

California Department of Fish and Wildlife (CA) - California
END – California Endangered
THR – California Threatened
FP – California Fully Protected
CSC – California Species of Special Concern
WL – California Watch List

California Native Plant Society (CNPS)
California Rare Plant Rank
1B Plants Rare, Threatened, or Endangered in California and Elsewhere
2B Plants Rare, Threatened, or Endangered in California, but More Common Elsewhere
3 More Information Needed
4 Plants of Limited Distribution – A Watch List

Threat Ranks
0.1- Seriously threatened in California
0.2- Moderately threatened in California
0.3- Not very threatened in California

Appendix C Section 4.4 of the CVMSHCP

4.4 Required Avoidance, Minimization, and Mitigation Measures

This section describes certain avoidance, minimization, and mitigation requirements for Covered Activities within the Conservation Area, in addition to Conservation Area specific measures described in the Conservation Area subsections in Section 4.3. The measures described in this section do not apply to single-family homes, emergency response activities, and any non-commercial accessory uses and structures including but not limited to second units on an existing legal lot. To assist Permittees with implementation of these measures, CVCC will maintain maps of modeled Habitat and a natural communities map and will provide them to each of the Permittees. CVCC will also maintain a list of Acceptable Biologists who may be used to conduct surveys for specified Covered Species identified in this section. Any Permittee may submit the names of biologists for inclusion in the initial list of Acceptable Biologists. The list shall be updated at least annually. CVCC will develop procedures for individual biologists to submit their name for inclusion on the list. Individuals conducting survey activities for listed endangered or threatened species or species for which a state or federal protocol exists must have the appropriate permit (i.e., in accordance with the federal Endangered Species Act, Section 10(a)(1)(A), or state Endangered Species Act, California Fish and Game Code, Section 2081(a)) to conduct such surveys. Annually, or whenever the list is revised, CVCC shall submit the list to the Wildlife Agencies for review. The Wildlife Agencies shall have thirty (30) days to provide input on the qualifications of any biologists on the list. If the Wildlife Agencies have not responded within thirty days (30) of receipt of the list from CVCC, the biologists on the list shall be deemed acceptable.

In the event that a survey of a parcel is required pursuant to the MSHCP, it will be conducted by an Acceptable Biologist. The survey shall be conducted in the appropriate season, in accordance with established accepted protocols if they exist. Within one (1) year of Permit issuance, the Wildlife Agencies and the MPA, in consultation with CVCC, shall develop survey protocols for those species for which a protocol is required. CVCC will maintain a list of accepted survey protocols. For those species for which protocols do not exist at the time surveys are needed, the Acceptable Biologist shall use a survey protocol generally accepted by biologists familiar with the species. Survey results shall be documented in both mapped and text form and shall be presented for review by the appropriate Permittee and CVCC. Wildlife Agencies' concurrence or acceptance of the surveys and/or the results contained therein is not required by the MSHCP.

Biological Corridors. Specific roads in Conservation Areas, where culverts or undercrossings are required to maintain Biological Corridors, are delineated in the Section 4.3 subsections on individual Conservation Areas.

Burrowing Owl. This measure does not apply to single-family residences and any non-commercial accessory uses and structures including but not limited to second units on an existing legal lot, or to O&M of Covered Activities other than levees, berms, dikes, and similar features that are known to contain burrowing owl burrows. O&M of

roads is not subject to this requirement. For other projects that are subject to CEQA, the Permittees will require burrowing owl surveys in the Conservation Areas using an accepted protocol (as determined by the CVCC in coordination with the Permittees and the Wildlife Agencies). Prior to Development, the construction area and adjacent areas within 500 feet of the Development site, or to the edge of the property if less than 500 feet, will be surveyed by an Acceptable Biologist for burrows that could be used by burrowing owl. If a burrow is located, the biologist will determine if an owl is present in the burrow. If the burrow is determined to be occupied, the burrow will be flagged and a 160-foot buffer during the non-breeding season and a 250-foot buffer during the breeding season, or a buffer to the edge of the property boundary if less than 500 feet, will be established around the burrow. The buffer will be staked and flagged. No Development or O&M activities will be permitted within the buffer until the young are no longer dependent on the burrow.

If the burrow is unoccupied, the burrow will be made inaccessible to owls, and the Covered Activity may proceed. If either a nesting or escape burrow is occupied, owls shall be relocated pursuant to accepted Wildlife Agency protocols. A burrow is assumed occupied if records indicate that, based on surveys conducted following protocol, at least one burrowing owl has been observed occupying a burrow on site during the past three years. If there are no records for the site, surveys must be conducted to determine, prior to construction, if burrowing owls are present. Determination of the appropriate method of relocation, such as eviction/passive relocation or active relocation, shall be based on the specific site conditions (e.g., distance to nearest suitable habitat and presence of burrows within that habitat) in coordination with the Wildlife Agencies. Active relocation and eviction/passive relocation require the preservation and maintenance of suitable burrowing owl habitat determined through coordination with the Wildlife Agencies.

Within one (1) year of Permit issuance, CVCC will cooperate with County Flood Control, CVWD and IID to conduct an inventory of levees, berms, dikes, and similar features in the Plan Area maintained by those Permittees. Burrowing owl burrow locations will be mapped and each of these Permittees will incorporate the information into its O&M practices to avoid impacts to the burrowing owl to the maximum extent Feasible. CVCC in cooperation with County Flood Control, CVWD, and IID will prepare a manual for maintenance staff, educating them about the burrowing owl and appropriate actions to take when owls are encountered to avoid impacts to the maximum extent Feasible. The manual will be submitted to the Wildlife Agencies for review and comment within two (2) years of Permit issuance. In conjunction with the Monitoring Program, the maps of the burrowing owl locations along the above-described levees, berms, dikes, and similar features will be periodically updated.

Covered Riparian Bird Species. This measure does not apply to single-family residences and any non-commercial accessory uses and structures including but not limited to second units on an existing legal lot. Riparian Habitat here refers to the following natural communities: southern arroyo willow riparian forest, Sonoran cottonwood-willow riparian forest, desert fan palm oasis woodland, and southern sycamore-alder riparian woodland in the Cabazon, Stubbe and Cottonwood Canyons,

Whitewater Canyon, Upper Mission Creek/Big Morongo Canyon, Thousand Palms, Indio Hills Palms, Joshua Tree National Park, Mecca Hills and Orocopia Mountains, Dos Palmas, Coachella Valley Stormwater Channel and Delta, and Santa Rosa and San Jacinto Mountains Conservation Areas. Covered Activities, including O&M of facilities and construction of permitted new projects, in riparian Habitat will be conducted to the maximum extent Feasible outside of the March 15 – September 15 nesting season for least Bell's vireo, and the May 1 – September 15 nesting season for southwestern willow flycatcher, summer tanager, yellow warbler, and yellow-breasted chat. If Covered Activities must occur during the nesting season, surveys shall be conducted to determine if any active nests are present. If active nests are identified, the Covered Activity shall not be conducted within 200 feet of an active nest. If surveys conducted during the nesting season document that Covered nesting riparian bird Species are not present, the Covered Activity may proceed.

Crissal Thrasher. This measure does not apply to single-family residences and any non-commercial accessory uses and structures including but not limited to second units on an existing legal lot, or to O&M of Covered Activities. In modeled crissal thrasher Habitat in the Willow Hole, Thousand Palms, Indio Hills Palms, East Indio Hills, Dos Palmas, and Coachella Valley Stormwater Channel and Delta Conservation Areas, surveys will be conducted by an Acceptable Biologist prior to the start of construction activities during the nesting season, January 15 – June 15, to determine if active nest sites for this species occur on the construction site and/or within 500 feet of the construction site, or to the edge of the property boundary if less than 500 feet. If nesting crissal thrashers are found, a 500-foot buffer, or a buffer to the edge of the property boundary if less than 500 feet, will be established around the nest site. The buffer will be staked and flagged. No construction activities will be permitted within the buffer during the breeding season of January 15 – June 15 or until the young have fledged.

Desert tortoise. This measure does not apply to single-family residences and any non-commercial accessory uses and structures, including but not limited to second units on an existing legal lot, or to O&M of Covered Activities for Permittee infrastructure facilities. Within Conservation Areas, the Permittees will require surveys for desert tortoise for Development in modeled desert tortoise Habitat. Prior to Development, an Acceptable Biologist will conduct a presence/absence survey of the Development area and adjacent areas within 200 feet of the Development area, or to the property boundary if less than 200 feet and permission from the adjacent landowner cannot be obtained, for fresh sign of desert tortoise, including live tortoises, tortoise remains, burrows, tracks, scat, or egg shells. The presence/absence survey must be conducted during the window between February 15 and October 31. Presence/absence surveys require 100% coverage of the survey area. If no sign is found, a clearance survey is not required. A presence/absence survey is valid for 90 days or indefinitely if tortoise-proof fencing is installed around the Development site.

If fresh sign is located, the Development area must be fenced with tortoise-proof fencing and a clearance survey conducted during the clearance window. Desert tortoise clearance surveys shall be conducted during the clearance window from February 15 to

June 15 and September 1 to October 31 or in accordance with the most recent Wildlife Agency protocols. Clearance surveys must cover 100% of the Development area. A clearance survey must be conducted during different tortoise activity periods (morning and afternoon). All tortoises encountered will be moved from the Development site to a specified location. Prior to issuance of the Permits, CVCC will either use the *Permit Statement Pertaining to High Temperatures for Handling Desert Tortoises* and *Guidelines for Handling Desert Tortoises During Construction Projects*, revised July 1999, or develop a similar protocol for relocation and monitoring of desert tortoise, to be reviewed and approved by the Wildlife Agencies. Thereafter, the protocol will be revised as needed based on the results of monitoring and other information that becomes available.

For O&M activities in the Conservation Areas, the Permittees shall ensure that personnel conducting such activities are instructed to be alert for the presence of desert tortoise. If a tortoise is spotted, activities adjacent to the tortoise's location will be halted and the tortoise will be allowed to move away from the activity area. If the tortoise is not moving, it will be relocated by an Acceptable Biologist to nearby suitable Habitat and placed in the shade of a shrub. To the maximum extent Feasible, O&M activities will avoid the period from February 15 and October 31.

Utility development protocols have been developed to avoid or minimize potential adverse impacts to the desert tortoise in the Conservation Areas from utility and road right-of-way projects, such as the installation and maintenance of water, sewer, and electric lines and roadway maintenance. The objectives of these protocols are to provide reliable and consistent direction on utility development within the Conservation Areas. Two utility development protocols, inactive and active season, provide specific direction on site preparation and construction phases of utility projects in the Conservation Areas. The protocols include steps to be followed during the desert tortoise active and/or inactive season. The inactive season protocol must be used for utility maintenance or development within the November 1 to February 14 time frame; the active season protocol must be used for utility maintenance or development within the February 15 to October 31 time frame. Deviations from these time frames must be presented to the RMOC.

Inactive Season Protocol. This protocol is applicable to pre-construction and construction phases of utility Covered Activity projects occurring between November 1 and February 14. These protocols apply only to the site preparation and construction phases of projects. The project proponent must follow the eight pre-construction protocol requirements listed below.

1. A person from the entity contracting the construction shall act as the contact person with the representative of the appropriate RMUC. He/she will be responsible for overseeing compliance with the protective stipulations as stated in this protocol.
2. Prior to any construction activity within the Conservation Areas, the contact person will meet with the representative of the appropriate RMUC to review the

plans for the project. The representative of the appropriate RMUC will review alignment, pole spacing, clearing limits, burrow locations, and other specific project plans which have the potential to affect the desert tortoise. He or she may recommend modifications to the contact person to further avoid or minimize potential impacts to desert tortoise.

3. The construction area shall be clearly fenced, marked, or flagged at the outer boundaries to define the limits of construction activities. The construction right-of-way shall normally not exceed 50 feet in width for standard pipeline corridors, access roads and transmission corridors, and shall be minimized to the maximum extent Feasible. Existing access roads shall be used when available, and rights-of-way for new and existing access roads shall not exceed 20 feet in width unless topographic obstacles require greater road width. Other construction areas including well sites, storage tank sites, substation sites, turnarounds, and laydown/staging sites which require larger areas will be determined in the pre-construction phase. All construction workers shall be instructed that their activities shall be confined to locations within the fenced, flagged, or marked areas.

4. An Acceptable Biologist shall conduct pre-construction clearance surveys of all areas potentially disturbed by the proposed project. Any winter burrows discovered in the Conservation Areas during the pre-construction survey shall be avoided or mitigated. The survey shall be submitted to the representative of the appropriate RMUC as part of plan review.

5. All site mitigation criteria shall be determined in the pre-construction phase, including but not limited to seeding, barrier fences, leveling, and laydown/staging areas, and will be reviewed by the representative of the appropriate RMUC prior to implementation.

6. A worker education program shall be implemented prior to the onset of each construction project. All construction employees shall be required to read an educational brochure prepared by the representative of the appropriate RMUC and/or the RMOC and attend a tortoise education class prior to the onset of construction or site entry. The class will describe the sensitive species which may be found in the area, the purpose of the MSHCP Reserve System, and the appropriate measures to take upon discovery of a sensitive species. It will also cover construction techniques to minimize potential adverse impacts.

7. All pre-construction activities which could Take tortoises in any manner (e.g., driving off an established road, clearing vegetation, etc.) shall occur under the supervision of an Acceptable Biologist.

8. If there are unresolvable conflicts between the representative of the appropriate RMUC and the contact person, then the matter will be arbitrated by the RMOC and, if necessary, by CVCC.

The following terms are established to protect the desert tortoise during utility-related construction activities in the Conservation Areas and are to be conducted by an Acceptable Biologist.

- An Acceptable Biologist shall oversee construction activities to ensure compliance with the protective stipulations for the desert tortoise.
- Desert tortoises found above ground inside the project area during construction shall be moved by an Acceptable Biologist out of harm's way and placed in a winter den (at a distance no greater than 250 feet). If a winter den cannot be located, the USFWS or CDFG shall determine appropriate action with respect to the tortoise. Tortoises found above ground shall be turned over to the Acceptable Biologist
- No handling of tortoises will occur when the air temperature at 15 centimeters above ground exceeds 90 degrees Fahrenheit.
- Desert tortoise burrows shall be avoided to the maximum extent Feasible. An Acceptable Biologist shall excavate any burrows which cannot be avoided and will be disturbed by construction. Burrow excavation shall be conducted with the use of hand tools only, unless the Acceptable Biologist determines that the burrow is unoccupied immediately prior to burrow destruction.
- Only burrows within the limits of clearing and surface disturbance shall be excavated. Burrows outside these limits, but at risk from accidental crushing, shall be protected by the placement of deterrent barrier fencing between the burrow and the construction area. Installation and removal of such barrier fencing shall be under the direction and supervision of an Acceptable Biologist.
- For electrical transmission line and road construction projects, only burrows within the right-of-way shall be excavated. Burrows outside the right-of-way, but at risk from accidental crushing, shall be protected by the placement of deterrent barrier fencing between the burrow and the right-of-way. Installation and removal of such barrier fencing shall be under the direction and supervision of an Acceptable Biologist.
- Tortoises in the Conservation Areas are not to be removed from burrows until appropriate action is determined by USFWS or CDFG with respect to the tortoise. The response shall be carried out within 72 hours.
- Blasting is not permissible within 100 feet of an occupied tortoise burrow.

During construction, contractors will comply with the mitigation and minimization measures contained within this protocol. These measures are:

- All trenches, pits, or other excavations shall be inspected for tortoises by an Acceptable Biologist prior to filling.
- All pipes and culverts stored within desert tortoise Habitat shall have both ends capped to prevent entry by desert tortoises. During construction, all open ended pipeline segments that are welded in place shall be capped during periods of

construction inactivity to prevent entry by desert tortoises.

- Topsoil removed during trenching shall be re-spread on the pipeline construction area following compaction of the backfill. The area shall be restored as determined during the environmental review.
- All test pump water will be routed to the nearest wash or natural drainage. The route will be surveyed by an Acceptable Biologist. If tortoises are found in the drainage area the Acceptable Biologist will remove the tortoises.
- Powerlines associated with water development, such as to provide power for pumps, should be buried underground adjacent to the pipe. All above ground structures deemed to be necessary shall be equipped with functional anti-perching devices that would prevent their use by ravens and other predatory birds, and shall adhere to the electrical distribution protocol which follows.
- In order to perform routine O&M of the water systems such as wells, pumps, water lines and storage tanks, etc., employees are to be trained in the area of desert tortoise education. This training will be performed on a regular basis by an Acceptable Biologist for those personnel not previously trained. The training will include at a minimum the following: identification of tortoises, burrows, and other sign; and instructions on installing tortoise barrier fencing. During the course of basic O&M, desert tortoise will be avoided. Untrained employees shall not perform maintenance operations within the reserve.
- All disturbance areas around poles or concrete pads will be reduced to a size just large enough for the construction activity.
- Areas disturbed around poles or construction pads will be restored as determined during the pre-construction process.
- Poles or other above ground structures necessary for electrical distribution development shall be minimized as much as possible. All above ground structures shall be equipped with functional anti-perching devices that would prevent their use by ravens and other predatory birds.
- In order to perform routine O&M of the electrical distribution systems such as transmission lines and poles, substations, etc., employees are to be trained in the area of desert tortoise education. This training will be performed on a regular basis by a qualified biologist for those personnel not previously trained. The training will include at a minimum the following: identification of tortoises, burrows, and other sign; and instructions on installing tortoise barrier fencing. During the course of basic O&M, desert tortoise will be avoided. Untrained employees shall not perform maintenance operations within the non-Take areas.
- All trash and food items shall be promptly contained and removed daily from the project site to reduce the attractiveness of the area to common ravens and other desert tortoise predators.
- Construction activities which occur between dusk and dawn shall be limited to areas which have already been cleared of desert tortoises by the Acceptable Biologist and graded or located in a fenced right-of-way. Construction activities

shall not be permitted between dusk and dawn in areas not previously graded.

Active Season Protocol. This protocol is applicable to pre-construction and construction phases of utility development projects occurring between February 15 and November 1. It is identical to the Inactive Season Protocol with the following additions:

- Work areas shall be inspected for desert tortoises within 24 hours of the onset of construction. To facilitate implementation of this condition, burrow inspection and excavation may begin no more than seven (7) days in advance of construction activities, as long as a final check for desert tortoises is conducted at the time of construction.
- All pre-construction activities which could Take tortoises in any manner (e.g., driving off an established road, clearing vegetation, etc.) shall occur under the overall supervision of an Acceptable Biologist. Any hazards to tortoises created by this activity, such as drill holes, open trenches, pits, other excavations, or any steep-sided depressions, shall be checked three times a day for desert tortoises. These hazards shall be eliminated each day prior to the work crew leaving the site, which may include installing a barrier that will preclude entry by tortoises. Open trenches, pits or other excavations will be backfilled within 72 hours, whenever possible. A 3:1 slope shall be left at the end of every open trench to allow trapped desert tortoises to escape. Trenches not backfilled within 72 hours shall have a barrier installed around them to preclude entry by desert tortoises. All trenches, pits, or other excavations shall be inspected for tortoises by a biological monitor trained and approved by the Acceptable Biologist prior to filling.
- If a desert tortoise is found, the biological monitor shall notify the Acceptable Biologist who will remove the animal as soon as possible.
- Only burrows within the limits of clearing and surface disturbance shall be excavated. Burrows outside these limits, but at risk from accidental crushing, shall be protected by the placement of deterrent barrier fencing between the burrow and the construction area. The barrier fence shall be at least 20 feet long and shall be installed to direct the tortoise leaving the burrow away from the construction area. Installation and removal of such barrier fencing shall be under the direction and supervision of the biological monitor.
- If blasting is necessary for construction, all tortoises shall be removed from burrows within 100 feet of the blast area.

Disposition of Sick, Injured, or Dead Specimens. Upon locating dead, injured, or sick desert tortoises under any utility or road project, initial notification by the contact representative or Acceptable Biologist must be made to the USFWS or CDFG within three (3) working days of its finding. Written notification must be made within five (5) calendar days with the following information: date; time; location of the carcass; photograph of the carcass; and any other pertinent information. Care must be taken in handling sick or injured animals to ensure effective treatment and care. Injured animals shall be taken care of by the Acceptable Biologist or an appropriately trained

veterinarian. Should any treated tortoises survive, USFWS or CDFG should be contacted regarding the final disposition of the animals.

Fluvial Sand Transport. Activities, including O&M of facilities and construction of permitted new projects, in fluvial sand transport areas in the Cabazon, Stubbe and Cottonwood Canyons, Snow Creek/Windy Point, Whitewater Canyon, Whitewater Floodplain, Upper Mission Creek/Big Morongo Canyon, Mission Creek/Morongo Wash, Willow Hole, Long Canyon, Edom Hill, Thousand Palms, West Deception Canyon, and Indio Hills/Joshua Tree National Park Linkage Conservation Areas will be conducted in a manner to maintain the fluvial sand transport capacity of the system.

Le Conte's Thrasher. This measure does not apply to single-family residences and any non-commercial accessory uses and structures including but not limited to second units on an existing legal lot, or to O&M of Covered Activities. In modeled Le Conte's thrasher Habitat in all the Conservation Areas, during the nesting season, January 15 - June 15, prior to the start of construction activities, surveys will be conducted by an Acceptable Biologist on the construction site and within 500 feet of the construction site, or to the property boundary if less than 500 feet. If nesting Le Conte's thrashers are found, a 500 foot buffer, or to the property boundary if less than 500 feet, will be established around the nest site. The buffer will be staked and flagged. No construction will be permitted within the buffer during the breeding season of January 15 - June 15 or until the young have fledged.

Mesquite Hummocks and Mesquite Bosque Natural Communities. This measure does not apply to single-family residences and any non-commercial accessory uses and structures including but not limited to second units on an existing legal lot, or to O&M of Covered Activities. Construction activities in the Cabazon, Willow Hole, Thousand Palms, Indio Hills Palms, East Indio Hills, Dos Palmas, Coachella Valley Stormwater Channel and Delta, and Santa Rosa and San Jacinto Mountains Conservation Areas will avoid mesquite hummocks and mesquite bosque to the maximum extent Feasible.

Peninsular Bighorn Sheep Habitat. Completion of Covered Activities in Peninsular bighorn sheep Habitat in the Cabazon, Snow Creek/Windy Point, and Santa Rosa and San Jacinto Mountains Conservation Areas will be conducted outside of the January 1 - June 30 lambing season unless otherwise authorized through a Minor Amendment to the Plan with concurrence from the Wildlife Agencies. O&M of Covered Activities, including but not limited to refinishing the inside of water storage tanks, shall be scheduled to avoid the lambing season, but may extend into the January 1 – June 30 period if necessary to complete the activity, upon concurrence with the Wildlife Agencies.

For new projects in the above listed Conservation Areas, no toxic or invasive plant species may be used for landscaping. For existing public infrastructure facilities which have landscaping in Peninsular bighorn sheep Habitat in the Cabazon, Snow Creek/Windy Point, and Santa Rosa and San Jacinto Mountains Conservation Areas, the

Permittees who have such facilities will, with respect to those facilities, develop and implement a plan and schedule to remove or prevent access to oleander and any other plants known to be toxic to Peninsular bighorn sheep. The plan and schedule will be prepared within one (1) year of Permit issuance.

Triple-ribbed milkvetch. This measure does not apply to single-family residences and any non-commercial accessory uses and structures including but not limited to second units on an existing legal lot, or to O&M of Covered Activities. It is understood that O&M for infrastructure developed as part of a private development approved in compliance with the MSHCP that is later transferred to a public entity is included as a Covered Activity. For Covered Activities within modeled triple-ribbed milkvetch Habitat in the Whitewater Canyon, Whitewater Floodplain, Upper Mission Creek/Big Morongo Canyon, and Santa Rosa and San Jacinto Mountains Conservation Areas, surveys by an Acceptable Biologist will be required for activities during the growing and flowering period from February 1 - May 15. Any occurrences of the species will be flagged and public infrastructure projects shall avoid impacts to the plants to the maximum extent Feasible. In particular, known occurrences on a map maintained by CVCC shall not be disturbed.

Palm Springs Pocket Mouse. To avoid impacts to the Palm Springs pocket mouse and its habitat in the Upper Mission Creek/Big Morongo Canyon and Willow Hole Conservation Areas, Flood Control-related construction activities will comply with the following avoidance and minimization measures.

- **Clearing**: For construction that would involve disturbance to Palm Springs pocket mouse habitat, activity should be phased to the extent feasible and practicable so that suitable habitat islands are no farther than 300 feet apart at any given time to allow pocket mice to disperse between habitat patches across non-suitable habitat (i.e., unvegetated and/or compacted soils). Prior to project construction, a biological monitor familiar with this species should assist construction crews in planning access routes to avoid impacts to occupied habitat as much as feasible (i.e., placement of preferred routes on project plans and incorporation of methods to avoid as much suitable habitat/soil disturbance as possible). Furthermore, during construction activities, the biological monitor will ensure that connected, naturally vegetated areas with sandy soils and typical native vegetation remain intact to the extent feasible and practicable. Finally, construction that involves clearing of habitat should be avoided during the peak breeding season (approximately March to May), and activity should be limited as much as possible during the rest of the breeding season (January to February and June to August).
- **Revegetation**: Clearing of native vegetation (e.g., creosote, rabbitbrush, burrobush, cheesebush) should be followed by revegetation, including natural reestablishment and other means, resulting in habitat types of equal or superior biological value for Palm Springs pocket mouse.
- **Trapping/Holding**: All trapping activity should be conducted in accordance with accepted protocols and by a qualified biologist who possesses a Memorandum of

Understanding with CDFG for live-trapping of heteromyid species in Southern California.

- **Translocation**: Should translocation between distinct population groups be necessary, as determined through the Adaptive Management and Monitoring Program, activity should be conducted by a qualified biologist who possesses a Memorandum of Understanding with CDFG for live-trapping of heteromyid species in Southern California. Trapping and subsequent translocation activity should be conducted in accordance with accepted protocols. Translocation programs should be coordinated by or conducted by the CVCC and/or RMOC to determine the appropriate trapping, holding, marking, and handling methods and potential translocation sites.

Little San Bernardino Mountains Linanthus. This measure does not apply to single-family residences and any non-commercial accessory uses and structures, including but not limited to second units on an existing legal lot, or to O&M of Covered Activities. To avoid and minimize impacts to this species as much as possible, the following avoidance and minimization effort shall occur:

- **Salvage**: Salvage of top soil and/or seeds should occur prior to ground disturbance in accordance with Section 6.6.1. Salvage should be conducted by or in cooperation with the CVCC.

Appendix D CVMSHCP Covered Species

3.2 Species and Natural Communities Considered

This section delineates the species and natural communities identified in the Planning Agreement and identifies those now included in the Plan. Species considered but not covered by the Plan, and natural communities not included in the Conservation Areas are also identified. Information on the Covered Species and conserved natural communities that are protected in the Conservation Areas is presented in Sections 9 and 10.

3.2.1 Review of Species Identified in the Planning Agreement

The Planning Agreement among the local, state, and federal agencies comprising the Plan Participants that initiated development of the Plan identified 52 species to be considered for inclusion in the Plan and targeted all the natural communities in the Plan Area. As information was gathered through the planning process, the planning team continuously reviewed the list. Other experts on individual species were also consulted. The Covered Species in the Plan are listed in Table 3-1. These are species for which sufficient information existed or was gathered during the planning process to enable the development of Conservation measures.

Table 3-2 lists the species from the Planning Agreement that are not proposed for coverage under the Plan. Generally, the reasons for not covering a species include lack of known locations in the Plan Area or insufficient data to facilitate Conservation planning. Section 3.8 of Appendix I provides additional information on reasons why these species are not proposed for coverage.

Table 3-1: Species Covered under the Plan

Plants
Mecca aster, *Xylorhiza cognata*[1]
Coachella Valley milkvetch, *Astragalus lentiginosus* var. *coachellae* (FE)
Triple-ribbed milkvetch, *Astragalus tricarinatus* (FE)
Orocopia sage, *Salvia greatae*[1]
Little San Bernardino Mountains linanthus, *Linanthus maculatus (*or *Gilia maculata)*[1]

Invertebrates - Insects
Coachella Valley giant sand-treader cricket, *Macrobaenetes valgum*
Coachella Valley Jerusalem cricket, *Stenopelmatus cahuilaensis*

Fish
Desert pupfish, *Cyprinodon macularius* (FE/SE)

Table 3-1: Species Covered under the Plan (cont.)

Amphibians
Arroyo toad, *Bufo californicus* (FE/CSC)

Reptiles
Desert tortoise, *Gopherus agassizii* (FT/ST)
Flat-tailed horned lizard, *Phrynosoma mcallii* (CSC)
Coachella Valley fringe-toed lizard, *Uma inornata* (FT/SE)

Birds
Yuma clapper rail, *Rallus longirostris yumanensis* (FE/ST/SFP)
California black rail, *Laterallus jamaicensis* (ST/SFP)
Burrowing owl, *Athene cunicularia* (CSC)
Southwestern willow flycatcher, *Empidonax traillii extimus* (SE/FE)
Crissal thrasher, *Toxostoma crissale* (CSC)
Le Conte's thrasher, *Toxostoma lecontei* (CSC)
Least Bell's vireo, *Vireo bellii pusillus* (FE/SE)
Gray vireo, *Vireo vicinior* (CSC)
Yellow warbler, *Dendroica petechia brewsteri* (CSC)
Yellow-breasted chat, *Icteria virens* (CSC)
Summer tanager, *Piranga rubra*[1]

Mammals
Southern yellow bat, *Lasiurus ega* or *xanthinus*[1]
Coachella Valley round-tailed ground squirrel, *Spermophilus tereticaudus chlorus* (C/CSC)
Palm Springs pocket mouse, *Perognathus longimembris bangsi* (CSC)
Peninsular bighorn sheep, *Ovis canadensis nelsoni* (FE/ST/SFP)

(Footnotes are explained below.)

The status codes used in the table are identified in the following key, as listed in the *California Natural Diversity Data Base Special Animals List and Special Plants List* from July 2000 (CNDDB 2000).

Key:	FE	=	Federal Endangered
	FT	=	Federal Threatened
	FC	=	Federal Candidate
	SE	=	State Endangered
	ST	=	State Threatened
	SC	=	State Candidate
	SFP	=	State Fully Protected
	CSC	=	Species of Special Concern (a state list of species that are at risk due to habitat modification or destruction, over-collecting, disease, or other threats)
	CNPS	=	Rare in California

[1] These species have no official status at this time; however, USFWS, CDFG, and the SAC have recommended inclusion of the species because of the likelihood of their being elevated to listing status in the coming years due to their rarity and decline. Note, also, that the Department of the Interior eliminated the category of FC2 subsequent to the adoption of the Planning Agreement.

Table 3-2: Species Considered but Not Proposed for Coverage under the Plan

Plants
California ditaxis, *Ditaxis californica*
Cliff spurge, *Euphorbia misera*
Flat-seeded spurge, *Chamaesyce platysperma*
Glandular ditaxis, *Ditaxis clariana*
Robison's monardella, *Monardella robisonii*

Invertebrates - Insects
Casey's June beetle, *Dinacoma caseyi*
Coachella Valley grasshopper, *Spaniacris deserticola*
Pratt's dark aurora blue butterfly *Euphilotes enoptes cryptorufes*

Invertebrates - Other
Morongo desert snail, *Eremarionta morongoana*
Thousand Palms desert snail, *Eremarionta millepalmarum*

Amphibians
California red-legged frog, *Rana aurora draytonii* (FT)
Desert slender salamander, *Batrachoseps aridus* (FE)
Lowland leopard frog, *Rana yavapiensis*
Mountain yellow-legged frog, *Rana muscosa* (FE)

Reptiles
California legless lizard, *Anniella pulchra pulchra*
San Diego horned lizard, *Phrynosoma coronatum blainvillei*

Mammals
California leaf-nosed bat, *Macrotus californicus*
California (Western) mastiff bat, *Eumops perotis californicus*
Fringed myotis, *Myotis thysanodes*
Long-eared myotis, *Myotis evotis*
Long-legged myotis, *Myotis volans*
Pallid bat, *Antrozous pallidus*
Pocketed free-tailed bat, *Nyctinomops femorosaccus*
Townsend's (Western) big-eared bat, *Corynorhinus townsendii pallescens*
Western small-footed myotis, *Myotis ciliolabrum*
Yuma myotis, *Myotis yumanensis*

3.2.2 Review of Natural Communities Identified in the Planning Agreement

The Planning Agreement listed 23 natural communities known to occur in the Plan Area. Through the planning process a total of 46 natural communities were identified in the Plan Area. Of these, 27 natural communities provide Habitat for the Covered Species and are the focal point for the establishment of Conservation Areas. The conserved natural communities included in the

Plan's Conservation Areas are listed in Table 3-3, as named and described in *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986), with the addition of five new natural community types developed by the SAC to distinguish better among the blowsand communities in the Plan Area. Figure 3-1 depicts the natural communities within the Plan Area, as well as developed areas.

Table 3-3: Natural Communities Included in the Plan

Active desert dunes
Stabilized and partially stabilized desert dunes
Active desert sand fields
Ephemeral desert sand fields
Stabilized and partially stabilized desert sand fields
Stabilized shielded desert sand fields
Mesquite hummocks
Sonoran creosote bush scrub
Sonoran mixed woody and succulent scrub
Mojave mixed woody scrub
Desert saltbush scrub
Desert sink scrub
Chamise chaparral
Red shank chaparral
Semi-desert chaparral
Interior live oak chaparral
Cismontane alkali marsh
Coastal and valley freshwater marsh
Southern arroyo willow riparian forest
Sonoran cottonwood-willow riparian forest
Mesquite bosque
Desert dry wash woodland
Desert fan palm oasis woodland
Southern sycamore-alder riparian woodland
Arrowweed scrub
Mojavean pinyon and juniper woodland
Peninsular juniper woodland and scrub

The other natural communities are already adequately protected in the Plan Area on public lands outside the Conservation Areas, except for tamarisk scrub, active shielded desert dunes, and Riversidean desert scrub. This existing protection adds to the overall Conservation value of the Plan in protecting watersheds, providing Habitat for large predators, protecting overall biological diversity in the Plan Area, providing buffers for Conservation Areas established under this Plan, and providing areas that could become important to Covered Species under conditions of potential future climatic change. With regard to tamarisk scrub, it is not a "natural" community in that it is dominated by an exotic plant species, i.e. tamarisk. In areas where some tamarisk scrub is included in the Conservation Areas, the intent is to restore it to the appropriate natural community to the maximum extent possible. The natural communities that are not included in the Plan are listed in Table 3-4. Additional information about these natural communities and why they were not included in the Plan is found in Section 3.9 of Appendix I.

Table 3-4: Natural Communities Considered but Not Included in the Plan

Tamarisk scrub
Active shielded desert dunes
Riversidean desert scrub
Mojave mixed steppe
Blackbush scrub
Upper Sonoran mixed chaparral
Upper Sonoran manzanita chaparral
Mixed montane chaparral
Northern mixed chaparral
Scrub oak chaparral
Canyon live oak forest
Black oak forest
Coulter pine forest
Bigcone spruce-canyon oak forest
Westside ponderosa pine forest
Sierran mixed coniferous forest
Jeffrey pine forest
Jeffrey pine-fir forest
Southern California subalpine forest

Appendix E Regulations

Special status species are native species that have been afforded special legal or management protection because of concern for their continued existence. There are several categories of protection at both federal and state levels, depending on the magnitude of threat to continued existence and existing knowledge of population levels.

Federal Regulations

Endangered Species Act of 1973

Federally listed threatened and endangered species and their habitats are protected under provisions of the Federal Endangered Species Act (ESA). Section 9 of the ESA prohibits "take" of threatened or endangered species. "Take" under the ESA is defined as to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any of the specifically enumerated conduct." The presence of any federally threatened or endangered species that are in a project area generally imposes severe constraints on development, particularly if development would result in "take" of the species or its habitat. Under the regulations of the ESA, the United States Fish and Wildlife Service (USFWS) may authorize "take" when it is incidental to, but not the purpose of, an otherwise lawful act.

Critical Habitat is designated for the survival and recovery of species listed as threatened or endangered under the ESA. Critical Habitat includes those areas occupied by the species, in which are found physical and biological features that are essential to the conservation of an ESA listed species and which may require special management considerations or protection. Critical Habitat may also include unoccupied habitat if it is determined that the unoccupied habitat is essential for the conservation of the species.

Whenever federal agencies authorize, fund, or carry out actions that may adversely modify or destroy Critical Habitat, they must consult with USFWS under Section 7 of the ESA. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highway Administration or a permit from the U.S. Army Corps of Engineers (Corps)).

If USFWS determines that Critical Habitat will be adversely modified or destroyed from a proposed action, the USFWS will develop reasonable and prudent alternatives in cooperation with the federal institution to ensure the purpose of the proposed action can be achieved without loss of Critical Habitat. If the action is not likely to adversely modify or destroy Critical Habitat, USFWS will include a statement in its biological opinion concerning any incidental take that may be authorized and specify terms and conditions to ensure the agency is in compliance with the opinion.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 U.S. Government Code [USC] 703) makes it unlawful to pursue, capture, kill, possess, or attempt to do the same to any migratory bird or part, nest, or egg of any such bird listed in wildlife protection treaties between the United States, Great Britain, Mexico, Japan, and the countries of the former Soviet Union, and authorizes the U.S. Secretary of the Interior to protect and regulate the taking of migratory birds. It establishes seasons and bag limits for hunted species and protects migratory birds, their occupied nests, and their eggs (16 USC 703; 50 CFR 10, 21).

The MBTA covers the taking of any nests or eggs of migratory birds, except as allowed by permit pursuant to 50 CFR, Part 21. Disturbances causing nest abandonment and/or loss of reproductive effort (i.e., killing or abandonment of eggs or young) may also be considered "take." This regulation seeks to protect migratory birds and active nests.

In 1972, the MBTA was amended to include protection for migratory birds of prey (e.g., raptors). Six families of raptors occurring in North America were included in the amendment: Accipitridae (kites, hawks, and eagles); Cathartidae (New World vultures); Falconidae (falcons and caracaras); Pandionidae (ospreys); Strigidae (typical owls); and Tytonidae (barn owls). The provisions of the 1972 amendment to the MBTA protects all species and subspecies of the families listed above. The MBTA protects over 800 species including geese, ducks, shorebirds, raptors, songbirds and many relatively common species.

State Regulations

California Environmental Quality Act (CEQA)

The California Environmental Quality Act (CEQA) provides for the protection of the environment within the State of California by establishing State policy to prevent significant, avoidable damage to the environment through the use of alternatives or mitigation measures for projects. It applies to actions directly undertaken, financed, or permitted by State lead agencies. If a project is determined to be subject to CEQA, the lead agency will be required to conduct an Initial Study (IS); if the IS determines that the project may have significant impacts on the environment, the lead agency will subsequently be required to write an Environmental Impact Report (EIR). A finding of non-significant effects will require either a Negative Declaration or a Mitigated Negative Declaration instead of an EIR. Section 15380 of the CEQA Guidelines independently defines "endangered" and "rare" species separately from the definitions of the California Endangered Species Act (CESA). Under CEQA, "endangered" species of plants or animals are defined as those whose survival and reproduction in the wild are in immediate jeopardy, while "rare" species are defined as those who are in such low numbers that they could become endangered if their environment worsens.

California Endangered Species Act (CESA)

In addition to federal laws, the state of California implements the CESA which is enforced by CDFW. The CESA program maintains a separate listing of species beyond the FESA, although the provisions of each act are similar.

State-listed threatened and endangered species are protected under provisions of the CESA. Activities that may result in "take" of individuals (defined in CESA as; "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") are regulated by CDFW. Habitat degradation or modification is not included in the definition of "take" under CESA. Nonetheless, CDFW has interpreted "take" to include the destruction of nesting, denning, or foraging habitat necessary to maintain a viable breeding population of protected species.

The State of California considers an endangered species as one whose prospects of survival and reproduction are in immediate jeopardy. A threatened species is considered as one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the

absence of special protection or management. A rare species is one that is considered present in such small numbers throughout its range that it may become endangered if its present environment worsens. State threatened and endangered species are fully protected against take, as defined above.

The CDFW has also produced a species of special concern list to serve as a species watch list. Species on this list are either of limited distribution or their habitats have been reduced substantially, such that a threat to their populations may be imminent. Species of special concern may receive special attention during environmental review, but they do not have formal statutory protection. At the federal level, USFWS also uses the label species of concern, as an informal term that refers to species which might be in need of concentrated conservation actions. As the Species of Concern designated by USFWS do not receive formal legal protection, the use of the term does not necessarily ensure that the species will be proposed for listing as a threatened or endangered species.

Fish and Game Code

Fish and Game Code Sections 3503, 3503.5, 3511, and 3513 are applicable to natural resource management. For example, Section 3503 of the Code makes it unlawful to destroy any birds' nest or any birds' eggs that are protected under the MBTA. Further, any birds in the orders Falconiformes or Strigiformes (Birds of Prey, such as hawks, eagles, and owls) are protected under Section 3503.5 of the Fish and Game Code which makes it unlawful to take, possess, or destroy their nest or eggs. A consultation with CDFW may be required prior to the removal of any bird of prey nest that may occur on a project site. Section 3511 of the Fish and Game Code lists fully protected bird species, where the CDFW is unable to authorize the issuance of permits or licenses to take these species. Pertinent species that are State fully protected by the State include golden eagle (*Aquila chrysaetos*) and white-tailed kite (*Elanus leucurus*). Section 3513 of the Fish and Game Code makes it unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

Native Plant Protection Act

Sections 1900–1913 of the Fish and Game Code were developed to preserve, protect, and enhance Rare and Endangered plants in the state of California. The act requires all state agencies to use their authority to carry out programs to conserve Endangered and Rare native plants. Provisions of the Native Plant Protection Act prohibit the taking of listed plants from the wild and require notification of the CDFW at least ten days in advance of any change in land use which would adversely impact listed plants. This allows the CDFW to salvage listed plant species that would otherwise be destroyed.

California Native Plant Society Rare and Endangered Plant Species

Vascular plants listed as rare or endangered by the CNPS, but which have no designated status under FESA or CESA are defined as follows:

California Rare Plant Rank

1A- Plants Presumed Extirpated in California and either Rare or Extinct Elsewhere

1B- Plants Rare, Threatened, or Endangered in California and Elsewhere

2A- Plants Presumed Extirpated in California, But More Common Elsewhere

2B- Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere

3- Plants about Which More Information is Needed - A Review List

4- Plants of Limited Distribution - A Watch List

Threat Ranks

.1- Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)

.2- Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

.3- Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known).

Local Policies

Coachella Valley MSHCP

A Multiple Species Habitat Conservation Plan (Plan) was prepared for the entire Coachella Valley and surrounding mountains to address current and potential future state and federal Endangered Species Act issues in the Plan Area. A Memorandum of Understanding ("Planning Agreement") was developed to govern the preparation of the Plan. In late 1995 and early 1996, under the auspices of CVAG, the cities of Cathedral City, Coachella, Desert Hot Springs, Indian Wells, Indio, La Quinta, Palm Desert, Palm Springs, and Rancho Mirage; County of Riverside (County); U.S. Fish and Wildlife Service (USFWS); California Department of Fish and Game (CDFG); Bureau of Land Management (BLM); U.S. Forest Service (USFS); and National Park Service (NPS) signed the Planning Agreement to initiate the planning effort. Subsequently, Caltrans, Coachella Valley Water District (CVWD), Imperial Irrigation District (IID), Riverside County Flood Control and Water Conservation District (County Flood Control), Riverside County Regional Park and Open Space District (County Parks), Riverside County Waste Resources Management District (County Waste), California Department of Parks and Recreation (State Parks), and CVMC decided to participate in the Plan.

The Plan balances environmental protection and economic development objectives in the Plan Area and simplifies compliance with endangered species related laws. The Plan is intended to satisfy the legal requirements for the issuance of Permits that will allow the Take of species covered by the Plan in the course of otherwise lawful activities. The Plan will, to the maximum extent practicable, minimize and mitigate the impacts of the Taking and provide for Conservation of the Covered Species.

The Conservation Plan includes the establishment of an MSHCP Reserve System, setting Conservation Objectives to ensure the Conservation of the Covered Species and conserved natural communities in the MSHCP Reserve System, provisions for management of the MSHCP Reserve System, and a Monitoring Program, and Adaptive Management. The MSHCP Reserve System will be established from lands within

21 Conservation Areas. Because some Take Authorization is provided under the Plan for Development in Conservation Areas, the actual MSHCP Reserve System will be somewhat smaller than the total acres in the Conservation Areas. When assembled, the Reserve System will provide for the Conservation of the Covered Species in the Plan Area.

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Branch regulates activities pursuant to Section 404 of the Federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the CDFG regulates activities under the Fish and Game Code Section 1600-1616, and the Regional Board regulates activities pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act.

Federal Regulations

Section 404 of the Clean Water Act

In accordance with the Revised Definition of "Waters of the United States"; Conforming (September 8, 2023), "waters of the United Sates" are defined as follows:

(a) ***Waters of the United States*** means:

(1) Waters which are:
(i) Currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
(ii) The territorial seas; or
(iii) Interstate waters;

(2) Impoundments of waters otherwise defined as waters of the United States under this definition, other than impoundments of waters identified under paragraph (a)(5) of this section;

(3) Tributaries of waters identified in paragraph (a)(1) or (2) of this section that are relatively permanent, standing or continuously flowing bodies of water;

(4) Wetlands adjacent to the following waters:
(i) Waters identified in paragraph (a)(1) of this section; or
(ii) Relatively permanent, standing or continuously flowing bodies of water identified in paragraph (a)(2) or (a)(3) of this section and with a continuous surface connection to those waters;

(5) Intrastate lakes and ponds not identified in paragraphs (a)(1) through (4) of this section that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in paragraph (a)(1) or (a)(3) of this section

(b) The following are not "waters of the United States" even where they otherwise meet the terms of paragraphs (a)(2) through (5) of this section:

(1) Waste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the Clean Water Act;

(2) Prior converted cropland designated by the Secretary of Agriculture. The exclusion would cease upon a change of use, which means that the area is no longer available for the production of agricultural commodities. Notwithstanding the determination of an area's status as prior converted

cropland by any other Federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA;

(3) Ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water;

(4) Artificially irrigated areas that would revert to dry land if the irrigation ceased;
(5) Artificial lakes or ponds created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;
(6) Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating or diking dry land to retain water for primarily aesthetic reasons;

(7) Waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States; and

(8) Swales and erosional features (*e.g.,* gullies, small washes) characterized by low volume, infrequent, or short duration flow.

(c) In this section, the following definitions apply:

(1) ***Wetlands*** means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

(2) ***Adjacent*** means having a continuous surface connection

(3) ***High tide line*** means the line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

(4) ***Ordinary high water mark*** means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

(5) ***Tidal waters*** means those waters that rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by hydrologic, wind, or other effects.

Section 401 of the Clean Water Act

Pursuant to Section 401 of the CWA, any applicant for a federal license or permit to conduct any activity which may result in any discharge to waters of the United States must provide certification from the State or Indian tribe in which the discharge originates. This certification provides for the protection of the physical, chemical, and biological integrity of waters, addresses impacts to water quality that may result from issuance of federal permits, and helps insure that federal actions will not violate water quality standards of the State or Indian tribe. In California, there are nine Regional Water Quality Control Boards (Regional Board) that issue or deny certification for discharges to waters of the United States and waters of the State, including wetlands, within their geographical jurisdiction. The State Water Resources Control Board assumed this responsibility when a project has the potential to result in the discharge to waters within multiple Regional Boards.

State Regulations

Fish and Game Code

Fish and Game Code Sections 1600 et. seq. establishes a fee-based process to ensure that projects conducted in and around lakes, rivers, or streams do not adversely impact fish and wildlife resources, or, when adverse impacts cannot be avoided, ensures that adequate mitigation and/or compensation is provided.

Fish and Game Code Section 1602 requires any person, state, or local governmental agency or public utility to notify the CDFW before beginning any activity that will do one or more of the following:

(1) substantially obstruct or divert the natural flow of a river, stream, or lake;
(2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or
(3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake.

Fish and Game Code Section 1602 applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the State. CDFW's regulatory authority extends to include riparian habitat (including wetlands) supported by a river, stream, or lake regardless of the presence or absence of hydric soils and saturated soil conditions. Generally, the CDFW takes jurisdiction to the top of bank of the stream or to the outer limit of the adjacent riparian vegetation (outer drip line), whichever is greater. Notification is generally required for any project that will take place in or in the vicinity of a river, stream, lake, or their tributaries. This includes rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish or other aquatic life and watercourses having a surface or subsurface flow that support or have supported riparian vegetation. A Section 1602 Streambed Alteration Agreement would be required if impacts to identified CDFW jurisdictional areas occur.

Porter Cologne Act

The California *Porter-Cologne Water Quality Control Act* gives the State very broad authority to regulate waters of the State, which are defined as any surface water or groundwater, including saline waters. The Porter-Cologne Act has become an important tool in the post SWANCC and Rapanos regulatory environment, with respect to the state's authority over isolated and insignificant waters. Generally, any person proposing to discharge waste into a water body that could affect its water quality must file a Report of Waste Discharge in the event that there is no Section 404/401 nexus. Although "waste" is partially defined as any waste substance associated with human habitation, the Regional Board also interprets this to include fill discharged into water bodies.

CULTURAL RESOURCES SURVEY REPORT

RANCH AT COACHELLA PROJECT

Assessor's Parcel Numbers 780-040-001, 780-040-003, 780-060-001, and 780-060-002
City of Coachella, Riverside County, California

This document may contain sensitive information. Access may be requested at the City of Coachella Civic Center at 53-990 Enterprise Way.

GEOTECHNICAL INVESTIGATION
PROPOSED THE RANCH AT COACHELLA
MIXED-USE DEVELOPMENT
APNS 780-040-001, 003 &
780-060-001 & 002
COACHELLA, CALIFORNIA

-Prepared By-

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July 15, 2024

Project No. 544-24159
24-07-358

Relevant Living
6417 Selma Avenue, 2nd Floor
Los Angeles, California 90028

Subject: Geotechnical Investigation

Project: Proposed The Ranch at Coachella
Mixed-Use Development
APN's 780-040-001, 003, 780-060-001 & 002
SWC 52nd Avenue & Van Buren Street
Coachella, California

Sladden Engineering is pleased to present the results of the geotechnical investigation performed for The Ranch at Coachella mixed-used development proposed for the subject property identified by the County of Riverside as APN's 780-040-001, 003, 780-060-001 & 002 located at the southwest corner of 52nd Avenue and Van Buren Street in the City of Coachella, California. Our services were completed in accordance with our proposal for geotechnical engineering services dated May 10, 2024 and your authorization to proceed with the work. The purpose of our investigation was to explore the subsurface conditions at the site to provide recommendations for foundation design and the design of the various site improvements. Evaluation of environmental issues and hazardous wastes was not included within the scope of services provided.

The opinions, recommendations and design criteria presented in this report are based on our field exploration program, laboratory testing and engineering analyses. Based on the results of our investigation, it is our professional opinion that the proposed project should be feasible from a geotechnical perspective provided that the recommendations presented in this report are implemented in design and carried out through construction.

We appreciate the opportunity to provide service to you on this project. If you have any questions regarding this report, please contact the undersigned.

Respectfully submitted,
SLADDEN ENGINEERING

Carolin Patino-Aguirre
Staff Geologist

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GEOTECHNICAL INVESTIGATION
PROPOSED THE RANCH AT COACHELLA
MIXED-USE DEVELOPMENT
APN 780-040-001, 003, 780-060-001 &
780-060-002
COACHELLA, CALIFORNIA

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INTRODUCTION

This report presents the results of the geotechnical investigation performed by Sladden Engineering (Sladden) for The Ranch at Coachella mixed-use development proposed for the subject property identified by the County of Riverside as APN's 780-040-001, 003, 780-060-001, & 002 located on the southwest corner of 52nd Avenue and Van Buren Street in the City of Coachella, California. The site is located at approximately 33.6687 degrees north longitude and 116.2033 degrees west longitude. The approximate location of the site is indicated on the Site Location Map (Figure 1).

Our investigation was conducted to evaluate the engineering properties of the subsurface materials, to evaluate their *in-situ* characteristics, and to provide engineering recommendations and design criteria for site preparation, foundation design and the design of various site improvements. This study also includes a review of published and unpublished geotechnical and geological literature regarding seismicity at and near the subject site.

PROJECT DESCRIPTION

Based on the provided Site Plans (Uberion, undated), it is our understanding that the proposed mixed-use development project will consist of a residential development with restaurants, a main clubhouse, a lake, and fitness/sports facility. Paved driveways and parking areas, concrete flatwork, landscape areas and various associated site improvements are also proposed. For our analyses, we expect that the proposed structures will be of relatively lightweight wood-frame construction supported on conventional shallow spread footings and concrete slabs-on-grade.

Based on the relatively level nature of the site, Sladden expects that grading will be limited to minor cuts and fills to accomplish the desired elevations and to provide adequate gradients for site drainage. This does not include the removal and re-compaction of the loose compressible near surface soil within the proposed building pad areas. Upon completion of precise grading plans, Sladden should be retained in order to verify that the recommendations presented within in this report are properly incorporated into the design of the proposed project.

Structural foundation loads were not available at the time of this report. Based on our experience with relatively lightweight structures, we expect that isolated column loads will be less than 30 kips and continuous wall loads will be less than 3.0 kips per linear foot. If these assumed loads vary significantly from the actual loads, we should be consulted to verify the applicability of the recommendations provided.

SCOPE OF SERVICES

The purpose of our investigation was to determine specific engineering characteristics of the surface and near-surface soil to develop foundation design criteria and recommendations for site preparation. Specifically, our site characterization consisted of the following tasks:

- Site reconnaissance to assess the existing surface conditions on and adjacent to the site.
- Drilling ten (10) exploratory boreholes to depths between approximately 5 and 51 feet bgs to characterize the subsurface soil conditions. Representative samples of the soil were classified in the field and retained for laboratory testing and engineering analyses.
- Performing laboratory testing on selected samples to evaluate their engineering characteristics.
- Reviewing geologic literature and discussing geologic hazards.
- Performing site-specific ground motion procedures for the subject property.
- Performing engineering analyses to develop recommendations for foundation design and site preparation.
- The preparation of this report summarizing our work at the site.

SITE CONDITIONS

The project site is located at the southwest corner of 52nd Avenue and Van Buren Street in the City of Coachella, California. At the time of our investigation, the majority of the site was utilized for date palm tree and grape production. Two existing structures were observed in the central portion of the property. CVWD irrigation standpipes and a fenced irrigation pond and pump station was observed on the northern portion of the property. The site is near the elevation of the adjacent properties and roadways and is generally bounded by 52nd Avenue to the north, Van Buren Street to the east, and agricultural properties to the south and west.

Based on our review of the Indio 7.5-Minute Quadrangle Map (USGS, 2021) and Google Earth (2024), the site is situated at an approximate elevation of 50 feet below mean sea level (MSL).

No natural ponding of water or surface seeps were observed at or near the site during our field investigation conducted on June 6, 2024. Site drainage appears to be controlled via sheet flow and surface infiltration. Regional drainage is provided by the Whitewater River located approximately 3.96 km to the south of the project site.

GEOLOGIC SETTING

The project site is located within the Colorado Desert Physiographic Province (also referred to as the Salton Trough) that is characterized as a northwest-southeast trending structural depression extending from the Gulf of California to the Banning Pass. The Salton Trough is dominated by several northwest trending faults, most notably the San Andreas Fault system. The Salton Trough is bounded by the Santa Rosa – San Jacinto Mountains on the southwest, the San Bernardino Mountains on the north, the Little San Bernardino - Chocolate – Orocopia Mountains on the east and extends through the Imperial Valley into the Gulf of California on the south.

A relatively thick sequence (20,000 feet) of sediment has been deposited in the Coachella Valley portion of the Salton Trough from Miocene to present times. These sediments are predominately terrestrial in nature with some lacustrian (lake) and minor marine deposits. The major contributor of these sediments has been the Colorado River. The mountains surrounding the Coachella Valley are composed primarily of Precambrian metamorphic and Mesozoic "granitic" rock.

The Salton Trough is an internally draining area with no readily available outlet to Gulf of California and with portions well below sea level (-253' msl). The region is intermittently blocked from the Gulf of California by the damming effects of the Colorado River delta (current elevation +30'msl). Between about 300AD and 1600 AD (to 1700) the Salton Trough has been inundated by the River's water, forming ancient Lake Cahuilla (max. elevation +58' msl). Since that time the floor of the Trough has been repeatedly flooded with other "fresh" water lakes (1849, 1861, and 1891), the most recent and historically long lived being the current Salton Sea (1905). The sole outlet for these waters is evaporation, leaving behind vast amounts of terrestrial sediment materials and evaporite minerals.

The site has been mapped by Dibblee & Minch (2008) to be immediately underlain by Quaternary-age alluvium (Qa). The regional geologic setting for the site vicinity is presented on the Regional Geologic Map (Figure 2).

SUBSURFACE CONDITIONS

The subsurface conditions at the site were investigated by drilling ten (10) exploratory boreholes to depths between approximately 5 and 51 feet bgs. The approximate locations of the boreholes and test holes are illustrated on the Exploration Location Photograph (Figure 3). The boreholes were advanced using a truck-mounted Mobile B-61 drill-rig equipped with 8-inch outside diameter hollow stem augers. A representative of Sladden was on-site to log the materials encountered and retrieve samples for laboratory testing and engineering analysis.

During our field investigation, a thin mantle of artificial/disturbed fill soil was encountered to depths between approximately two (2) and three (3) feet bgs. Underlying the artificial/disturbed fill soil and extending to the maximum depths explored, native alluvium was encountered. The native soil throughout the site consists primarily of fine-grained silty sand (SM), sandy silt (ML), and clay (CL) that was encountered throughout the depth of our bores. Generally, granular soil was found to be slightly moist to moist, medium dense and grayish brown *in-situ* color. Cohesive soil layers were found to be moist, stiff, and orange to grayish brown *in-situ* color.

The final logs represent our interpretation of the contents of the field logs, and the results of the laboratory observations and tests of the field samples. The final logs are included in Appendix A of this report. The stratification lines represent the approximate boundaries between soil types although the transitions may be gradual and variable across the site.

Groundwater was encountered within our bores at a depth of approximately 35 feet bgs. Information regarding the approximate depth to groundwater is provided by the California Department of Water Resources online database (CDWR, 2024). The following table provides a summary of the highest recorded groundwater depths in the project vicinity.

TABLE 1
GROUNDWATER DEPTHS

STATE WELL	LAT/LONG	DISTANCE (KM)	DATE	DEPTH (FT)
Empire Polo 2	33.6784/-116.2359	3.2	05/31/2024	90.08
06S08E05R002S	33.6745/-116.1663	3.4	12/23/1963	-3.2
06S07E13M002S	33.6485/-116.2161	2.5	03/16/2017	25.2
06S07E13J003S	33.6482/-116.2006	2.3	02/22/2017	42.14
06S07E16A002S	33.6536/-116.2521	4.8	11/19/1987	74.1
06S07E04H001S	33.6806/-116.2533	4.8	02/27/2017	111.9

SEISMICITY AND FAULTING

The southwestern United States is a tectonically active and structurally complex region, dominated by northwest-trending dextral faults. The faults of the region are often part of complex fault systems, composed of numerous subparallel faults that splay or step from main fault traces. Strong seismic shaking could be produced by any of these faults during the design life of the proposed project.

We consider the most significant geologic hazard to the project to be the potential for moderate to strong seismic shaking that is likely to occur during the design life of the project. The proposed project is located in the highly seismic Southern California region within the influence of several fault systems. A Holocene-active active fault is defined by the State of California as a fault that has exhibited surface displacement within the Holocene time (about the last 11,700 years). A pre-Holocene fault is defined by the State as a fault whose recency of past movement is older than 11,700 years.

As previously stated, the site has been subjected to strong seismic shaking related to active faults that traverse through the region. Some of the more significant seismic events near the subject site in recent times include: M6.0 North Palm Springs (1986), M6.1 Joshua Tree (1992), M7.3 Landers (1992), M6.2 Big Bear (1992), M7.1 Hector Mine (1999), and M7.1 Ridgecrest (2019).

Table 2 lists the closest known potentially active faults that was generated in part using fault parameters from The Revised 2002 California Probabilistic Seismic Hazard Maps (Cao et al, 2003), The National Seismic Hazard Maps (2008) and the Fault and Fold Database of the United States (USGS, 2024a). This table does not identify the probability of reactivation or the on-site effects from earthquakes occurring on any faults in the region.

TABLE 2
CLOSEST KNOWN ACTIVE FAULTS

Fault Name	Distance (Km)	Maximum Event
San Andreas – Coachella	6.6	7.5
San Andreas – Southern	6.6	7.5
San Andreas – San Bernardino	6.6	7.5
Burnt Mountain	34.3	6.5
Eureka Peak	30.1	6.4
San Jacinto – Anza	26.7	7.2
Pinto Mountain	54	7.2

SITE-SPECIFIC GROUND MOTION PARAMETERS

Sladden has reviewed the 2022 California Building Code (CBC) and ASCE7-16 and developed site-specific ground motion parameters for the subject site. The project Seismic Design Maps and site-specific ground motion parameters are summarized in the following table and included within Appendix C. The project Structural Engineer should verify that all design parameters provided are applicable for the subject project.

TABLE 3
GROUND MOTION PARAMETERS

Latitude / Longitude	33.6687/-116.2033
Risk Category	II
Site Class	D
Code Reference Documents	ASCE 7-16; Chapter 11 & 21

Description	Type	Map Based	Site-Specific
MCE_R Ground Motion (0.2 second period)	S_S	1.793	---
MCE_R Ground Motion (1.0 second period)	S_1	0.745	---
Site-Modified Spectral Acceleration Value	S_{MS}	1.793	**1.980**
Site-Modified Spectral Acceleration Value	S_{M1}	null	**1.827**
Numeric Seismic Design Value at 0.2 second SA	S_{DS}	1.196	**1.320**
Numeric Seismic Design Value at 1.0 second SA	S_{D1}	null	**1.218**
Site Amplification Factor at 0.2 second	F_a	1.0	**1.0**
Site Amplification Factor at 1.0 second	F_v	null	**2.5**
Site Peak Ground Acceleration	PGA_M	0.857	**0.767**

GEOLOGIC HAZARDS

The subject site is located in an active seismic zone and will likely experience strong seismic shaking during the design life of the proposed project. In general, the intensity of ground shaking will depend on several factors including; the distance to the earthquake focus, the earthquake magnitude, the response characteristics of the underlying materials, and the quality and type of construction. Geologic hazards and their relationship to the site are discussed below.

I. Surface Rupture. Surface rupture is expected to occur along preexisting, known active fault traces. However, surface rupture could potentially splay or step from known active faults or rupture along unidentified traces. Based on our review of Rogers (1965), Jennings (1994), and CDOC (2024) known active faults are not mapped on the site. In addition, no signs of active surface faulting were observed during our review of non-stereo digitized photographs of the site and site vicinity (Google Earth, 2024). Finally, no signs of active surface fault rupture or secondary seismic effects (lateral spreading, lurching etc.) were identified during our field investigation. Therefore, it is our opinion that risks associated with primary surface ground rupture should be considered "low".

II. Ground Shaking. The site has been subjected to past ground shaking by faults that traverse through the region. Strong seismic shaking from nearby active faults is expected to produce strong seismic shaking during the design life of the proposed project. Based on site-specific ground motion parameters developed for the property (Appendix C), the site modified peak ground acceleration (PGAm) is estimated to be 0.767g.

III. Liquefaction. Liquefaction is the process in which loose, saturated granular soil loses strength as a result of cyclic loading. The strength loss is a result of a decrease in granular sand volume and a positive increase in pore pressures. Generally, liquefaction can occur if all of the following conditions apply; liquefaction-susceptible soil, groundwater within a depth of 50 feet or less, and strong seismic shaking.

We have performed seismic settlement calculations utilizing a magnitude of 7.5 (USGS, 2024) and a site-specific peak ground acceleration of 0.767g (PGAM). The anticipated high groundwater depth was estimated to be approximately 5 feet bgs. Screening of liquefaction susceptible fine-grained soil was completed in accordance with Bray and Sancio (2006). A review of the seismically induced settlement in the top 50 feet of the soil profile revealed total settlements of approximately 3.97 inches and 4.53 inches for BH-1 and BH-2, respectively. Based on the current depth to groundwater and the generally uniform soil conditions underlying the site, differential seismic settlements are expected to be less than 1 inch over a horizontal distance of approximately 100 feet. Our seismic settlement estimates are presented within Appendix D.

IV. Tsunamis and Seiches. Because the site is situated at an inland location and is not immediately adjacent to any impounded bodies of water, risks associated with tsunamis and seiches are considered "negligible".

V. Slope Failure, Landsliding, Rock Falls. Slope instability in the form of landslides and rock falls were not observed at or near the subject site. The site is situated on relatively flat ground and is not located immediately adjacent to any slopes. As such, risks associated with slope instability (landslides, mass wasting and rock falls) are considered "negligible".

VI. Expansive Soil. Generally, the near-surface soil consists of silty sand (SM). Based on the results of our laboratory testing (EI = 2), the materials underlying the site fall within the "very low" expansion category.

VII. Static Settlement. Static settlement resulting from the anticipated foundation loads should be tolerable provided that the recommendations included in this report are considered in foundation design and construction. The ultimate static settlement is expected to be less than 1 inch when using the recommended allowable bearing pressures. As a practical matter, differential static settlement between footings can be assumed as one-half of the total static settlement.

VIII. Subsidence. Land subsidence can occur in valleys where aquifer systems have been subjected to extensive groundwater pumping, such that groundwater pumping exceeds groundwater recharge. Generally, pore water reduction can result in a rearrangement of skeletal grains and could result in elastic (recoverable) or inelastic (unrecoverable) deformation of an aquifer system. Locally, no fissures or other surficial evidence of subsidence were observed at or near the subject site.

IX. Debris Flows. Debris flows are viscous flows consisting of poorly sorted mixtures of sediment and water and are generally initiated on slopes steeper than approximately six horizontal to one vertical (6H:1V) (Boggs, 2001). Based on the flat nature of the site and the composition of the surface soil, we judge that risks associated with debris flows should be considered "negligible".

X. Flooding and Erosion. No signs of flooding or erosion were observed during our field investigation. Risks associated with flooding and erosion should be evaluated and mitigated by the project design Civil Engineer.

CONCLUSIONS

Based on the results of our investigation, it is our professional opinion that the project should be feasible from a geotechnical perspective provided that the recommendations included in this report are incorporated into design and carried out through construction. The main geotechnical concerns are the presence of artificial fill soil, the presence of loose and potentially compressible near-surface soil throughout the project site, and the potential seismic settlements.

We recommend that remedial work within the proposed building areas include over-excavation and re-compaction of the primary foundation-bearing soil to provide uniform foundation support and to help mitigate potential differential settlements. Specific recommendations for foundation area preparation are presented in the Earthwork and Grading section of this report.

Caving did occur to varying degrees within each of our exploratory bores and the surface soil may be susceptible to caving within deeper excavations. All excavations should be constructed in accordance with the normal CalOSHA excavation criteria. Based on our observations of the materials encountered, we anticipate that the subsoil will conform to that described by CalOSHA as Type C. Soil conditions should be verified in the field by a "Competent person" employed by the Contractor.

The following recommendations present more detailed design criteria that have been developed based on our field and laboratory investigation.

EARTHWORK AND GRADING

All earthwork including excavation, backfill and preparation of the primary foundation and/or slab bearing soil should be performed in accordance with the geotechnical recommendations presented in this report and portions of the local regulatory requirements, as applicable. All earthwork should be performed under the observation and testing of a qualified soil engineer. The following geotechnical engineering recommendations for the proposed project are based on observations from the field investigation program, laboratory testing and geotechnical engineering analyses.

a. Site Clearing: Areas to be graded should be cleared of vegetation, associated root systems and debris. All areas scheduled to receive fill should be cleared of old fills and any irreducible matter. The unsuitable material should be removed off-site. Voids left by obstructions should be properly backfilled in accordance with the compaction recommendations of this report.

b. Preparation of the Building Areas. To provide firm and uniform bearing conditions, we recommend over-excavation and re-compaction throughout the proposed building areas. All artificial fill soil and native low density near surface native soil should be removed to a depth of at least 5 feet below existing grade or 4 feet below the bottom of the footings, whichever is deeper. Remedial grading should extend laterally, a minimum of five feet beyond the building limits. The native soil exposed by over-excavation should be scarified, moisture conditioned to near optimum moisture content and compacted to at least 90 percent relative compaction prior to fill placement. The previously removed soil may then be replaced as compacted engineered soil in accordance with the recommendations below.

c. Compaction: Soil to be used as engineered fill should be free of organic material, debris, and other deleterious substances. All fill material should be placed in thin lifts, not exceeding six inches in a loose condition. If import fill is required, the material should be of a low to non-expansive nature and should meet the following criteria:

Plastic Index	Less than 12
Liquid Limit	Less than 35
Percent Soil Passing #200 Sieve	Between 15% and 35%
Maximum Aggregate Size	3 inches

The subgrade and all fill should be compacted with acceptable compaction equipment, to at least 90 percent relative compaction. The bottom of the exposed subgrade should be observed by a representative of Sladden Engineering prior to fill placement. Compaction testing should be performed on all lifts in order to ensure proper placement of the fill materials. Table 4 provides a summary of the excavation and compaction recommendations.

TABLE 4
SUMMARY OF RECOMMENDATIONS

*Remedial Grading	Over-excavation and re-compaction within the building envelope and extending laterally for 5 feet beyond the building limits and to a minimum of 4 feet below existing grade or 3 feet below the bottom of the footings, whichever is deeper.
Native / Import Engineered Fill	Place in thin lifts not exceeding 6 inches in a loose condition, at near optimum moisture content and compact to a minimum of 90 percent relative compaction.
Asphalt Concrete Sections	Compact the top 12 inches to at least 95 percent compaction at near optimum moisture content.

*Actual depth may vary and should be determined by a representative of Sladden Engineering in the field during construction.

d. Shrinkage and Subsidence: Volumetric shrinkage of the material that is excavated and replaced as controlled compacted fill should be anticipated. We estimate that this shrinkage should be between 10 and 20 percent. Subsidence of the surfaces that are scarified and compacted should be between 1 tenth and 3 tenths of a foot. This will vary depending upon the type of equipment used, the moisture content of the soil at the time of grading and the actual degree of compaction attained.

CONVENTIONAL SHALLOW SPREAD FOOTINGS

Conventional shallow spread footings are expected to provide adequate support for the proposed buildings. All footings should be founded upon properly compacted engineered fill soil and should have a minimum embedment depth of 12 inches measured from the lowest adjacent finished grade. Continuous footings and isolated pad footings should have minimum widths of 12 inches and 24 inches, respectively. Continuous footings and isolated pad footings supported upon properly compacted engineered fill soil may be designed using allowable (net) bearing pressures of 1800 and 2000 pounds per square foot (psf), respectively. Allowable increases of 200 psf for each additional 1 foot of width and 250 psf for each additional 6 inches of depth may be used if desired. The maximum allowable bearing pressure should be 2500 psf. The allowable bearing pressures apply to combined dead and sustained live loads. The allowable bearing pressures may be increased by one-third when considering transient live loads, including seismic and wind forces.

Based on the recommended allowable bearing pressures, the total static settlement of the shallow footings is anticipated to be less than one-inch provided foundation preparations conform to the recommendations described in this report. Static differential settlement is anticipated to be approximately one-half of the total settlement for similarly loaded footings spaced up to approximately 40 feet apart.

Lateral load resistance for the spread footings will be developed by passive pressure against the sides of the footings below grade and by friction acting at the base of the footings. An allowable passive pressure of 250 psf per foot of depth may be used for design purposes. An allowable coefficient of friction 0.45 may be used for dead and sustained live loads to compute the frictional resistance of the footing placed directly on compacted fill. Under seismic and wind loading conditions, the passive pressure and frictional resistance may be increased by one-third.

All footing excavations should be observed by a representative of the project geotechnical consultant to verify adequate embedment depths prior to placement of forms, steel reinforcement or concrete. The excavations should be trimmed neat, level and square. All loose, disturbed, sloughed or moisture-softened soils and/or any construction debris should be removed prior to concrete placement. All footings should be reinforced in accordance with the project Structural Engineer's recommendations.

SLABS-ON-GRADE

In order to provide uniform and adequate support, concrete slabs-on-grade must be placed on properly compacted engineered fill soil as outlined in the previous sections of this report. The slab subgrade should remain near optimum moisture content and should not be permitted to dry prior to concrete placement. Slab subgrade should be firm and unyielding. Disturbed soil should be removed and replaced with engineered fill soil compacted to a minimum of 90 percent relative compaction.

Slab thickness and reinforcement should be determined by the Structural Engineer. We recommend a minimum slab thickness of 4.0 inches and minimum reinforcement of #3 bars at 18 inches on center in both directions. All slab reinforcement should be supported on concrete chairs to ensure that reinforcement is placed at slab mid-height. Final floor slab design and reinforcement should be determined by the Structural Engineer.

Slabs with moisture sensitive surfaces should be underlain with a moisture vapor retarder consisting of a polyvinyl chloride membrane such as 10-mil visqueen, or equivalent. All laps within the membrane should be sealed and at least 2 inches of clean sand should be placed over the membrane to promote uniform curing of the concrete. To reduce the potential for punctures, the membrane should be placed on a pad surface that has been graded smooth without any sharp protrusions. If a smooth surface can not be achieved by grading, consideration should be given to placing a thin leveling course of sand across the pad surface prior to placement of the membrane.

RETAINING WALLS

Minor retaining walls may be necessary to accomplish the proposed construction. Cantilever retaining walls may be designed using "active" pressures. Active pressures may be estimated using an equivalent fluid weight of 35 pcf for level native backfill soil acting in a triangular pressure distribution with drained backfill conditions. "At Rest" pressures should be utilized for restrained walls. At rest pressures may be estimated using an equivalent fluid weight of 55 pcf for native backfill soil with level drained backfill conditions.

We recommend that a back drain system be provided behind all retaining walls or that the walls be designed for full hydrostatic pressures. The back drains should consist of a heavy walled, four inch diameter, perforated pipe sloped to drain to outlets by gravity, and of clean, free-draining, three-quarter to one and one-half inch crushed rock or gravel. The crushed rock or gravel should extend to within one foot of the surface. The upper one foot should be backfilled with compacted, fine-grained soil to exclude surface water. A Mirafi 140N (or equivalent) filter cloth should be placed between the on-site native material and the drain rock.

We recommend that the ground surface behind retaining walls be sloped to drain. Under no circumstances should the surface water be diverted into back drains. Where migration of moisture through walls would be detrimental, the walls should be waterproofed.

CORROSION SERIES

The soluble sulfate concentrations of the surface soil were determined to be 540 parts per million (ppm). The soil falls within the "negligible – S0" sulfate exposure category. The use of Type V cement and special sulfate-resistant concrete mixes may be necessary depending upon the surface soil conditions after grading. The soluble sulfate content of the surface soil should be reevaluated after grading and appropriate concrete mix designs should be established based upon post-grading test results.

The pH level of the surface soil was 7.8. Based on soluble chloride concentration testing (260 ppm) the soil falls within the "moderate – C1" chloride exposure category. The minimum resistivity of the surface soil was found to be 940 ohm-cm that suggests the site soil is considered to have "severe" corrosion potential with respect to ferrous metal installations. A corrosion expert should be consulted regarding appropriate corrosion protection measures for corrosion sensitive installations.

UTILITY TRENCH BACKFILL

All utility trench backfill should be compacted to a minimum of 90 percent relative compaction. Trench backfill materials should be placed in lifts no greater than six inches in a loose condition, moisture conditioned (or air-dried) as necessary to achieve near optimum moisture content, and mechanically compacted to a minimum of 90 percent relative compaction. A representative of the project soil engineer should test the backfill to verify adequate compaction.

EXTERIOR CONCRETE FLATWORK

In order to provide uniform support and minimize settlement related cracking of concrete flatwork, the subgrade soil within concrete flatwork areas should be compacted to a minimum of 90 percent relative compaction. A representative of the project geotechnical consultant should observe and verify the density and moisture content of the soil prior to concrete placement.

DRAINAGE

All final grades should be provided with positive gradients away from foundations to provide rapid removal of surface water runoff to an adequate discharge point. No water should be allowed to be pond on or immediately adjacent to foundation elements. In order to reduce water infiltration into the subgrade soil, surface water should be directed away from building foundations to an adequate discharge point. Subgrade drainage should be evaluated upon completion of the precise grading plans and in the field during grading.

LIMITATIONS

The findings and recommendations presented in this report are based upon an interpolation of the soil conditions between the exploratory bore locations and extrapolation of these conditions throughout the proposed building areas. Should conditions encountered during grading appear different than those indicated in this report, this office should be notified.

The use of this report by other parties or for other projects is not authorized. The recommendations of this report are contingent upon monitoring of the grading operation by a representative of Sladden Engineering. All recommendations are considered to be tentative pending our review of the grading operation and additional testing, if indicated. If others are employed to perform any soil testing, this office should be notified prior to such testing in order to coordinate any required site visits by our representative and to assure indemnification of Sladden Engineering.

We recommend that a pre-job conference be held on the site prior to the initiation of site grading. The purpose of this meeting will be to ensure a complete understanding of the recommendations presented in this report as they apply to the actual grading performed.

ADDITIONAL SERVICES

Once completed, final project plans and specifications should be reviewed by use prior to construction to confirm that the full intent of the recommendations presented herein have been applied to design and construction. Following review of plans and specifications, observation should be performed by the Soil Engineer during construction to document that foundation elements are founded on/or extend into the properly compacted soil, and that suitable backfill soil is placed upon competent materials and properly compacted at the recommended moisture content.

Tests and observations should be performed during grading by the Soil Engineer or his representative in order to verify that the grading is being performed in accordance with the project specifications. Field density testing shall be performed in accordance with acceptable ASTM test methods. The minimum acceptable degree of compaction should be 90 percent for engineered fill soil and 95 percent for Class II aggregate base as obtained by ASTM Test Method D1557. Where testing indicates insufficient density, additional compactive effort shall be applied until retesting indicates satisfactory compaction.

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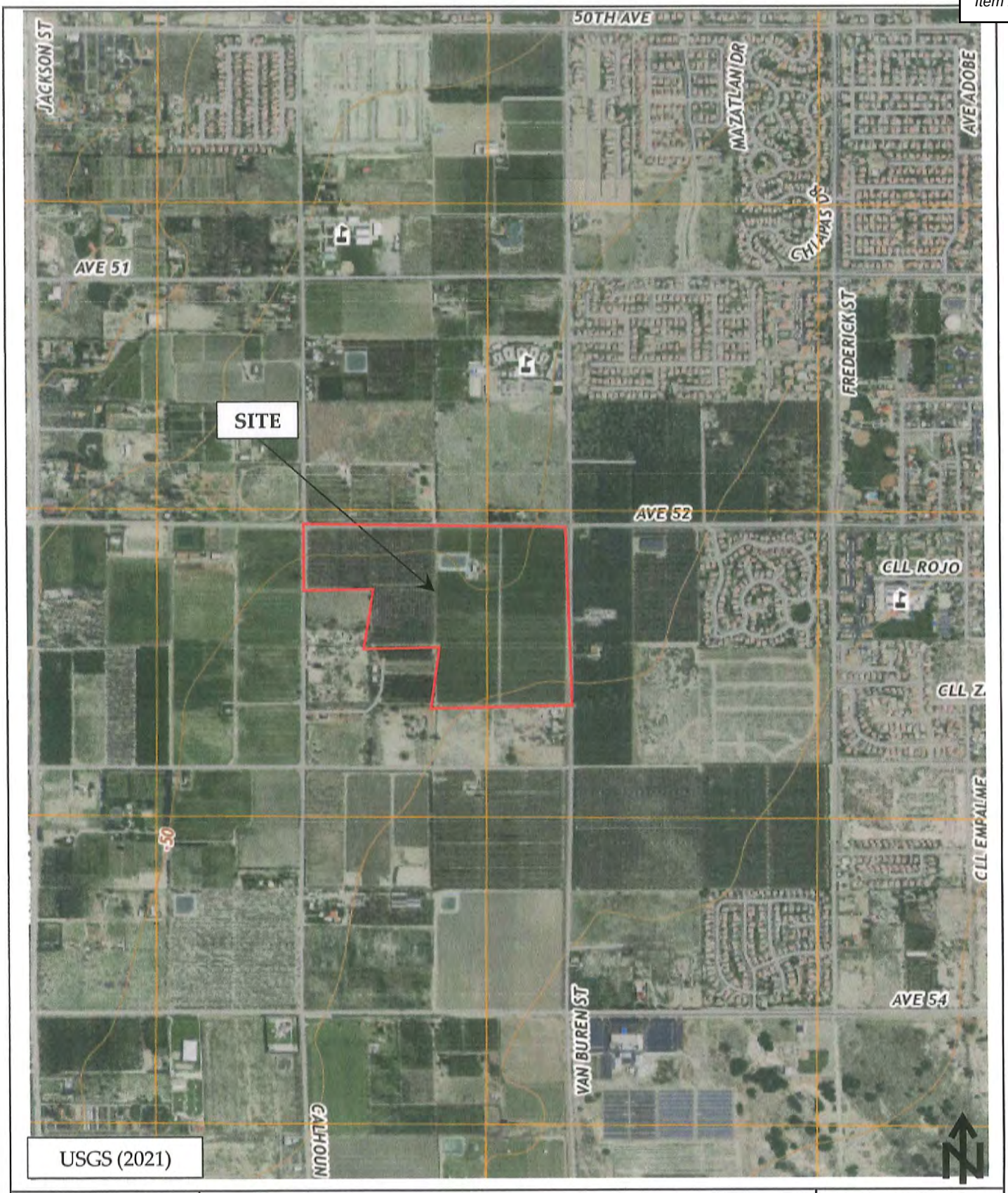
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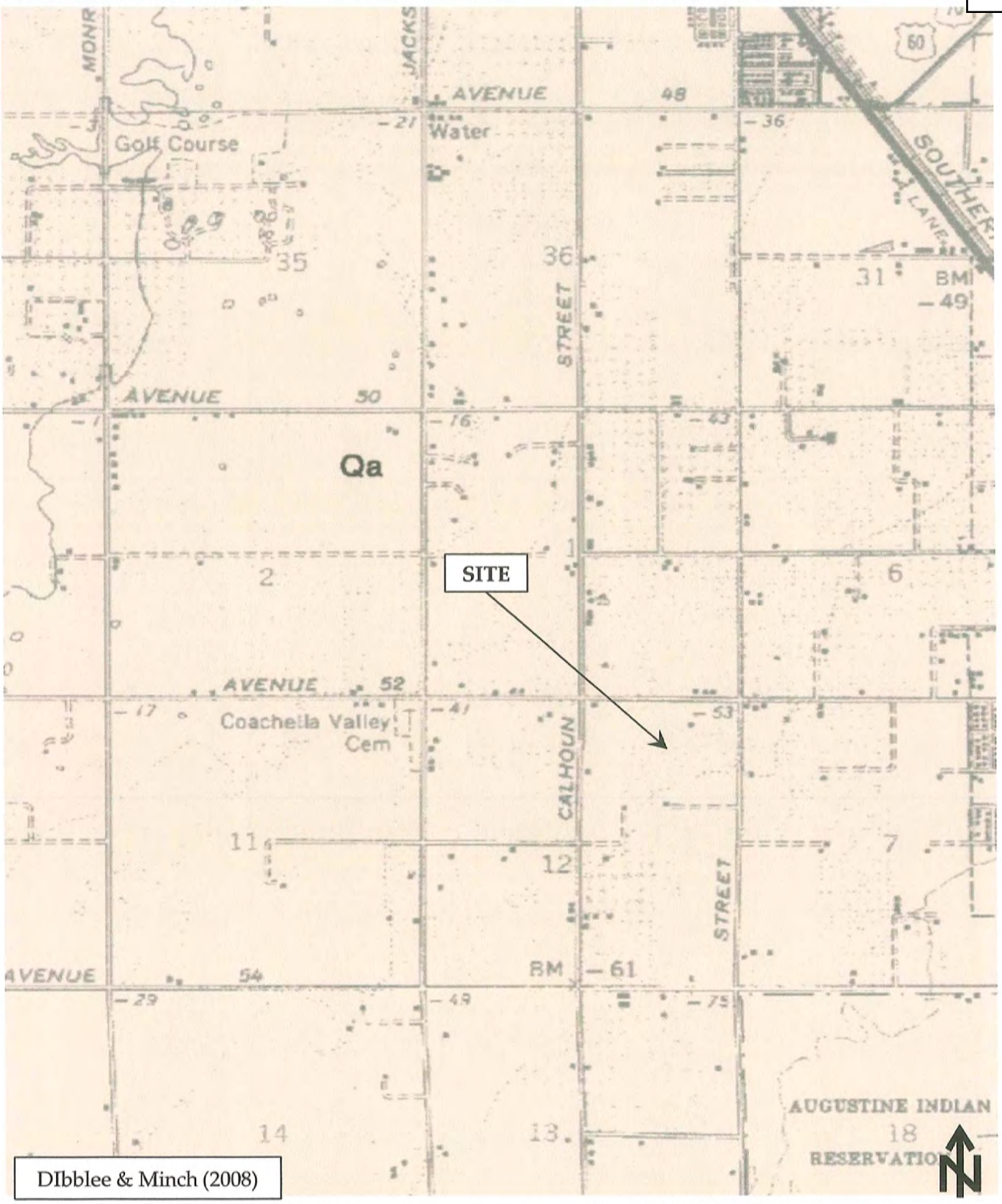
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FIGURES

SITE LOCATION MAP
REGIONAL GEOLOGIC MAP
EXPLORATION LOCATION PHOTOGRAPH
SITE PLAN



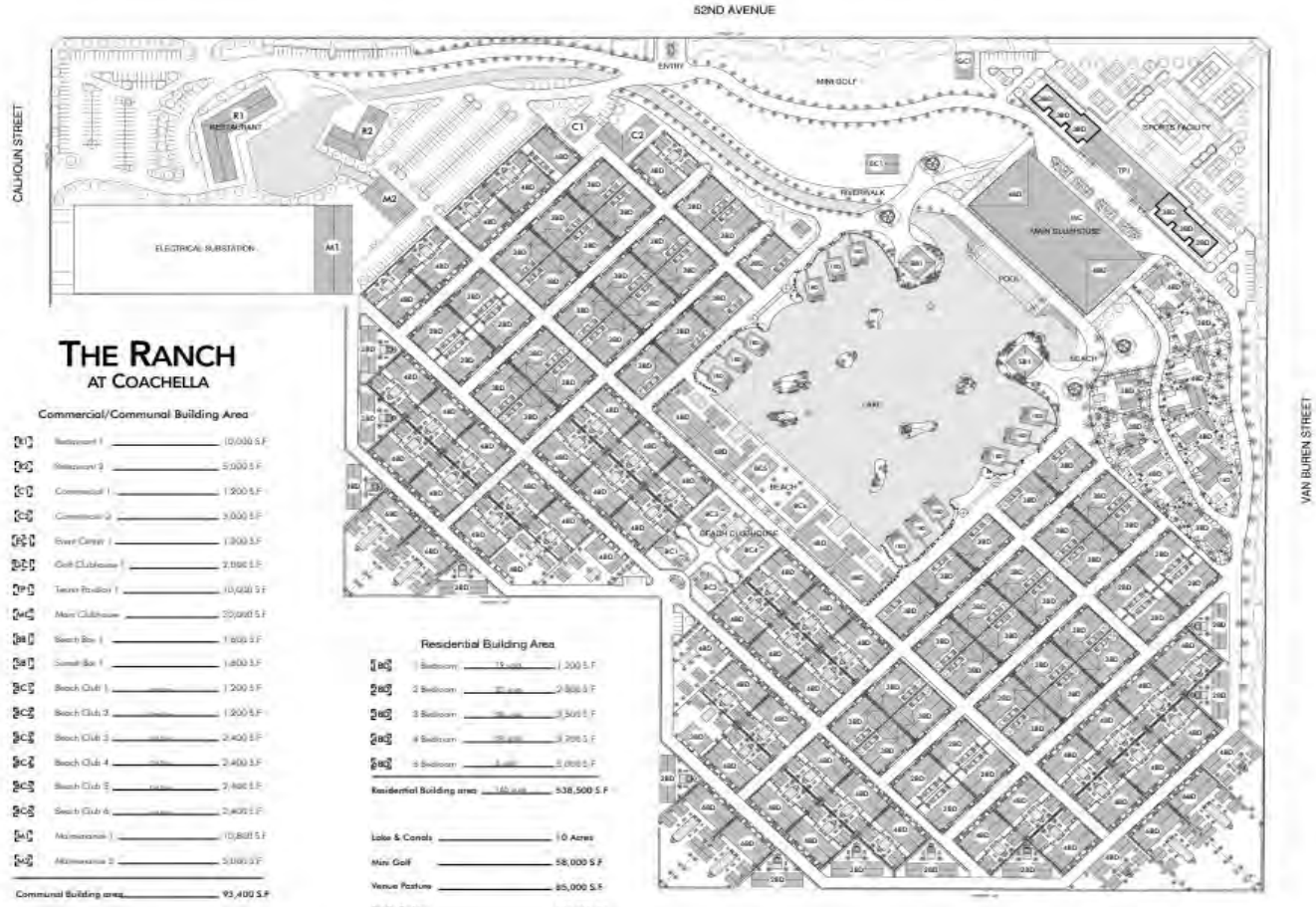
	SITE LOCATION MAP	FIGURE
Sladden Engineering	Project Number: 544-24159 Report Number: 24-07-358 Date: July 11, 2024	1



Sladden Engineering	REGIONAL GEOLOGIC MAP	FIGURE 2
	Project Number: 544-24159	
	Report Number: 24-07-358	
	Date: July 11, 2024	



Sladden Engineering	EXPLORATION LOCATION PLAN	FIGURE 3
	Project Number: 544-24159	
	Report Number: 24-07-358	
	Date: July 11, 2024	



Sladden Engineering

Project Number:	544-24159
Report Number:	24-07-358
Date:	July 11, 2024

FIGURE

4

APPENDIX A

FIELD EXPLORATION

APPENDIX A

FIELD EXPLORATION

For our field investigation ten (10) exploratory boreholes were excavated on June 6, 2024 utilizing a truck mounted hollow stem auger rig (Mobile B-61). Continuous logs of the materials encountered were made by a representative of Sladden Engineering. Materials encountered in the boreholes were classified in accordance with the Unified Soil Classification System which is presented in this appendix.

Representative undisturbed samples were obtained within our borings by driving a thin-walled steel penetration sampler (California split spoon sampler) or a Standard Penetration Test (SPT) sampler with a 140 pound automatic-trip hammer dropping approximately 30 inches (ASTM D1586). The number of blows required to drive the samplers 18 inches was recorded in 6-inch increments and blowcounts are indicated on the boring logs.

The California samplers are 3.0 inches in diameter, carrying brass sample rings having inner diameters of 2.5 inches. The standard penetration samplers are 2.0 inches in diameter with an inner diameter of 1.5 inches. Undisturbed samples were removed from the sampler and placed in moisture sealed containers in order to preserve the natural soil moisture content. Bulk samples were obtained from the excavation spoils and samples were then transported to our laboratory for further observations and testing.

Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	6/6/2024
Elevation:	-50 FT MSL	Boring No:	BH-1

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
■	5 7 10	1	2	32.3	7.8	103.7	2		Silty Sand (SM); grayish brown, slightly moist, medium dense, fine to coarse-grained, micaceous (Qa).
■	4 7 12			28.1	9.2	100.7	6		Silty Sand (SM); grayish brown, slightly moist, medium dense, fine to coarse-grained, micaceous (Qa).
■	4 5 5			45.8	16.6		10		Silty Sand (SM); grayish brown, moist, loose, fine to coarse-grained, interbedded clay (Qa).
■	7 11 20			22.7	11.6	102.3	16		Silty Sand (SM); grayish brown, slightly moist, medium dense, fine to coarse-grained, micaceous (Qa).
■	3 4 7			79.0	28.2		20		Sandy Silt (ML); orange-brown, moist, stiff, non plastic, with clay (Qa).
■	7 9 11			9.9	5.0	100.8	26		Sand w/ Silt (SW-SM), grayish brown, dry to slightly moist, medium dense, fine to coarse-grained, micaceous (Qa).
■	2 2 3			91.5	34.4		30		Clay (CL); orange-brown, moist, medium stiff, low plasticity (Qa).
■	10 19 28			23.4	18.6	112.4	36		Silty Sand (SM); grayish brown, moist, dense, fine to coarse-grained, micaceous, with clay (Qa).
■	2 3 4			91.7	34.1		40		Sandy Clay (CL); orange-brown, moist to saturated, medium stiff, low plasticity (Qa).
■	5 7 10			84.6	32.0	92.6	46		Sandy Clay (CL); orange-brown, saturated, stiff, low plasticity (Qa).
■	5 8 10			94.6	38.8		50		Sandy Clay (CL); orange-brown, saturated, very stiff, low plasticity (Qa).

Completion Notes:
Terminated at ~ 51.5 ft bgs.
No Bedrock Encountered.
Groundwater Encountered at ~ 39 ft bgs.

MIXED-USE DEVELOPMENT
SWC 52ND AVENUE & VAN BUREN, COACHELLA

Project No:	544-24159	Page	1
Report No:	24-07-358		

Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	6/6/2024
Elevation:	-50 FT MSL	Boring No:	BH-2

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							2		
							4		
	2 2 2			51.1	14.5		6		Silty Sand (SM); grayish brown, moist, very loose, fine to coarse-grained, micaceous, with organics (Qa).
							8		
	8 12 19			17.4	2.2	109.0	10		Silty Sand (SM); grayish brown, dry, medium dense, fine to coarse-grained (Qa).
							12		
							14		
	5 5 6			56.8	6.7		16		Sandy Silt (ML); grayish brown, slightly moist, stiff, non-plastic, interbedded clay (Qa).
							18		
	7 8 9			47.4	17.0	96.9	20		Silty Sand (SM): grayish brown, moist, medium dense, fine to coarse-grained (Qa).
							22		
							24		
	4 5 5			89.7	30.9		26		Sandy Silt (ML); orange-brown, moist, stiff, non plastic (Qa).
							28		
	8 12 20			39.9	26.4	100.7	30		Silty Sand (SM); grayish brown, moist, medium dense, fine to coarse-grained, micaceous (Qa).
							32		
							34		
	2 4 4			59.1	28.0		36		Sandy Silt (ML); orange-brown, saturated, medium stiff, non plastic, with clay (Qa).
							38		
	8 12 15			45.9	24.7	103.2	40		Silty Sand (SM); grayish brown, saturated, medium dense, fine to coarse-grained, micaceous (Qa).
							42		
							44		
	4 8 13			80.9	34.2		46		Sandy Clay (CL); orange-brown, saturated, very stiff, non to low plasticity (Qa).
							48		
	6 7 9						50		No Recovery.

Completion Notes:
Terminated at ~ 51.5 ft bgs.
No Bedrock Encountered.
Groundwater Encountered at ~ 35 ft bgs.

MIXED-USE DEVELOPMENT
SWC 52ND AVENUE & VAN BUREN, COACHELLA

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Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	6/6/2024
Elevation:	-50 FT MSL	Boring No:	BH-3

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							2		Silty Sand (SM): grayish brown, slightly moist, fine-grained, micaceous (Qa).
							4		
	3 4 6			92.2	36.6	81.9	6		Sandy Clay (CL); orange-brown, moist, medium stiff, low plasticity (Qa).
							8		
	5 7 7			12.7	7.2		10		Silty Sand (SM); grayish brown, slightly moist, medium dense, fine to coarse-grained, micaceous (Qa).
							12		
							14		
	9 18 23			11.7	5.4	106.7	16		Silty Sand (SM); grayish brown, slightly moist, medium dense, fine to coarse-grained, micaceous (Qa).
							18		
	6 3 5			88.1	34.2		20		Sandy Clay (CL); orange brown, moist, medium stiff, low plasticity (Qa).
							22		
							24		Terminated at ~ 21.5 ft bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered.
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

MIXED-USE DEVELOPMENT
SWC 52ND AVENUE & VAN BUREN, COACHELLA

Project No:	544-24159	Page	3
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Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	6/6/2024
Elevation:	-50 FT MSL	Boring No:	BH-4

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
X	5 7 12						2 4 6 8		No Recovery.
	5 7 8			18.2	6.5		10 12		Silty Sand (SM); grayish brown, slightly moist, medium dense, fine to coarse-grained, micaceous (Qa).
	7 13 16			51.5	16.2	102.4	14 16 18		Silty Sand (SM); grayish brown, slightly moist, medium dense, fine to coarse-grained, micaceous (Qa).
X	2 2 4						20		No Recovery.
							22 24 26 28 30 32 34 36 38 40 42 44 46 48 50		Terminated at ~ 21 ft bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered.

Completion Notes:

MIXED-USE DEVELOPMENT
SWC 52ND AVENUE & VAN BUREN, COACHELLA

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Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	6/6/2024
Elevation:	-50 FT MSL	Boring No:	BH-5

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
	3 5 4			64.4	10.0		2 4 6 8 10 12 14		Silty Sand (ML); grayish brown, slightly moist, loose, fine to coarse-grained, micaceous (Qa).
	6 9 17			71.6	2.1	111.7			Silty Sand (ML); grayish brown, dry, medium dense, fine to coarse-grained, micaceous (Qa).
	4 6 8			4.5	2.5		16 18 20		Sand (SW); grayish brown, dry, medium dense, fine to coarse-grained (Qa).
	8 12 21			8.3	2.5	105.1			Sand (SW); grayish brown, dry, medium dense, fine to coarse-grained (Qa).
							22 24 26 28 30 32 34 36 38 40 42 44 46 48 50		Terminated at ~ 21 ft bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered.

Completion Notes:

MIXED-USE DEVELOPMENT
SWC 52ND AVENUE & VAN BUREN, COACHELLA

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Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	6/6/2024
Elevation:	-50 FT MSL	Boring No:	BH-6

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
■	3 4 12			50.7	21.1	103.1	2–6		Sandy Silt (ML); grayish brown, moist, stiff, non plastic (Qa).
■	3 5 6			8.3	4.0		10–14		Sand (SW-SM) with silt, grayish brown, dry, medium dense, fine to coarse-grained, micaceous (Qa).
■	5 8 9			35.1	10.0	101.3	16–18		Silty Sand (SM); grayish brown, slightly moist, medium dense, fine to coarse-grained (Qa).
■	2 5 5			91.9	34.9		20		Sandy Clay (CL); grayish brown, moist, stiff, low plasticity (Qa).
							22–50		Terminated at ~ 21.5 ft bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered.

Completion Notes:

MIXED-USE DEVELOPMENT
SWC 52ND AVENUE & VAN BUREN, COACHELLA

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Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	6/6/2024
Elevation:	-50 FT MSL	Boring No:	BH-7

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							2		Silty Sand (SM); slightly moist, fine to coarse-grained, micaceous, with trace clay (Qa).
							4		
							6		Terminated at ~ 5 ft bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered.
							8		
							10		
							12		
							14		
							16		
							18		
							20		
							22		
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

MIXED-USE DEVELOPMENT
SWC 52ND AVENUE & VAN BUREN, COACHELLA

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Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	6/6/2024
Elevation:	-50 FT MSL	Boring No:	BH-8

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
	2 2 3			35.1	11.8		2–6		Silty Sand (SM); grayish brown, moist, loose, fine to coarse-grained, micaceous (Qa).
	5 8 13			17.3	10.1	102.8	10–12		Silty Sand (SM); grayish brown, moist, medium dense, fine to coarse-grained, micaceous (Qa).
	5 8 9			27.1	10.7		16		Silty Sand (SM); grayish brown, moist, medium dense, fine to coarse-grained, micaceous (Qa).
	9 13 26			14.6	8.0	105.9	20–22		Silty Sand (SM); grayish brown, moist, medium dense, fine to coarse-grained, micaceous (Qa).
							24		Terminated at ~ 21.5 ft bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered.

Completion Notes:

MIXED-USE DEVELOPMENT
SWC 52ND AVENUE & VAN BUREN, COACHELLA

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Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	6/6/2024
Elevation:	-50 FT MSL	Boring No:	BH-9

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							2		Silty Sand (SM); grayish brown, dry to slightly moist, fine to coarse-grained, micaceous.
	5 6 10			83.4	13.0	97.7	6		Silty Clay (CL); grayish brown, moist, stiff, micaceous, low plasticity (Qa).
	4 5 6			20.0	4.3		10		Silty Sand (SM); grayish brown, dry, medium dense, fine to coarse grained, micaceous (Qa).
							12		Terminated at ~ 11.5 ft bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered.
							14		
							16		
							18		
							20		
							22		
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

MIXED-USE DEVELOPMENT
SWC 52ND AVENUE & VAN BUREN, COACHELLA

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BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	6/6/2024
Elevation:	-50 FT MSL	Boring No:	BH-10

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							2		Silty Sand (SM); grayish brown, dry to slightly moist, fine to coarse-grained, micaceous.
	3 5 7			70.7	21.5		6		Silty Clay (CL); grayish brown, moist, stiff, low plasticity (Qa).
	4 5 7			15.5	5.6		10		Silty Sand (SM); grayish brown, dry to slightly moist, fine to coarse-grained, micaceous (Qa).
							12		Terminated at ~ 11.5 ft bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered.
							14		
							16		
							18		
							20		
							22		
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

MIXED-USE DEVELOPMENT
SWC 52ND AVENUE & VAN BUREN, COACHELLA

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APPENDIX B

LABORATORY TESTING

APPENDIX B

LABORATORY TESTING

Representative bulk and relatively undisturbed soil samples were obtained in the field and returned to our laboratory for additional observations and testing. Laboratory testing was generally performed in two phases. The first phase consisted of testing in order to determine the compaction of the existing natural soil and the general engineering classifications of the soils underlying the site. This testing was performed in order to estimate the engineering characteristics of the soil and to serve as a basis for selecting samples for the second phase of testing. The second phase consisted of soil mechanics testing. This testing including consolidation, shear strength and expansion testing was performed in order to provide a means of developing specific design recommendations based on the mechanical properties of the soil.

CLASSIFICATION AND COMPACTION TESTING

Unit Weight and Moisture Content Determinations: Each undisturbed sample was weighed and measured in order to determine its unit weight. A small portion of each sample was then subjected to testing in order to determine its moisture content. This was used in order to determine the dry density of the soil in its natural condition. The results of this testing are shown on the Boring Logs.

Maximum Density-Optimum Moisture Determinations: Representative soil types were selected for maximum density determinations. This testing was performed in accordance with the ASTM Standard D1557-91, Test Method A. Graphic representations of the results of this testing are presented in this appendix. The maximum densities are compared to the field densities of the soil in order to determine the existing relative compaction to the soil.

Classification Testing: Soil samples were selected for classification testing. This testing consists of mechanical grain size analyses. This provides information for developing classifications for the soil in accordance with the Unified Soil Classification System which is presented in the preceding appendix. This classification system categorizes the soil into groups having similar engineering characteristics. The results of this testing is very useful in detecting variations in the soil and in selecting samples for further testing.

SOIL MECHANIC'S TESTING

Expansion Testing: One (1) bulk sample was selected for Expansion testing. Expansion testing was performed in accordance with the UBC Standard 18-2. This testing consists of remolding 4-inch diameter by 1-inch thick test specimens to a moisture content and dry density corresponding to approximately 50 percent saturation. The samples are subjected to a surcharge of 144 pounds per square foot and allowed to reach equilibrium. At that point the specimens are inundated with distilled water. The linear expansion is then measured until complete.

Direct Shear Testing: One (1) bulk sample was selected for Direct Shear testing. This test measures the shear strength of the soil under various normal pressures and is used to develop parameters for foundation design and lateral design. Tests were performed using a recompacted test specimen that was saturated prior to tests. Tests were performed using a strain controlled test apparatus with normal pressures ranging from 800 to 2300 pounds per square foot.

Consolidation/Hydro-Collapse Testing: One (1) relatively undisturbed sample was selected for consolidation testing. For this test, a one-inch thick test specimen was subjected to vertical loads varying from 575 psf to 11520 psf applied progressively. The consolidation at each load increment was recorded prior to placement of each subsequent load.

Corrosion Series Testing: The soluble sulfate concentrations of the surface soil were determined in accordance with California Test Method Number (CA) 417. The pH and Minimum Resistivity were determined in accordance with CA 643. The soluble chloride concentrations were determined in accordance with CA 422.

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45090 Golf Center Pkwy, Suite F, Indio, CA 92201 (760) 863-0713 Fax (760) 863-0847
450 Egan Avenue, Beaumont, CA 92223 (951) 845-7743 Fax (951) 845-8863

Date: June 28, 2024

Account No.: 544-24159

Customer: Relevant Living

Location: APN 780-040-001, 003 & 780-060-001 & 2 SWC 52Nd Ave & Van Buren, Coachella

Analytical Report

Corrosion Series

	pH per CA 643	Soluble Sulfates per CA 417 ppm	Soluble Chloride per CA 422 ppm	Min. Resistivity per CA 643 ohm-cm
BH-1 @ 0-5'	7.8	540	260	940

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Maximum Density/Optimum Moisture

ASTM D698/D1557

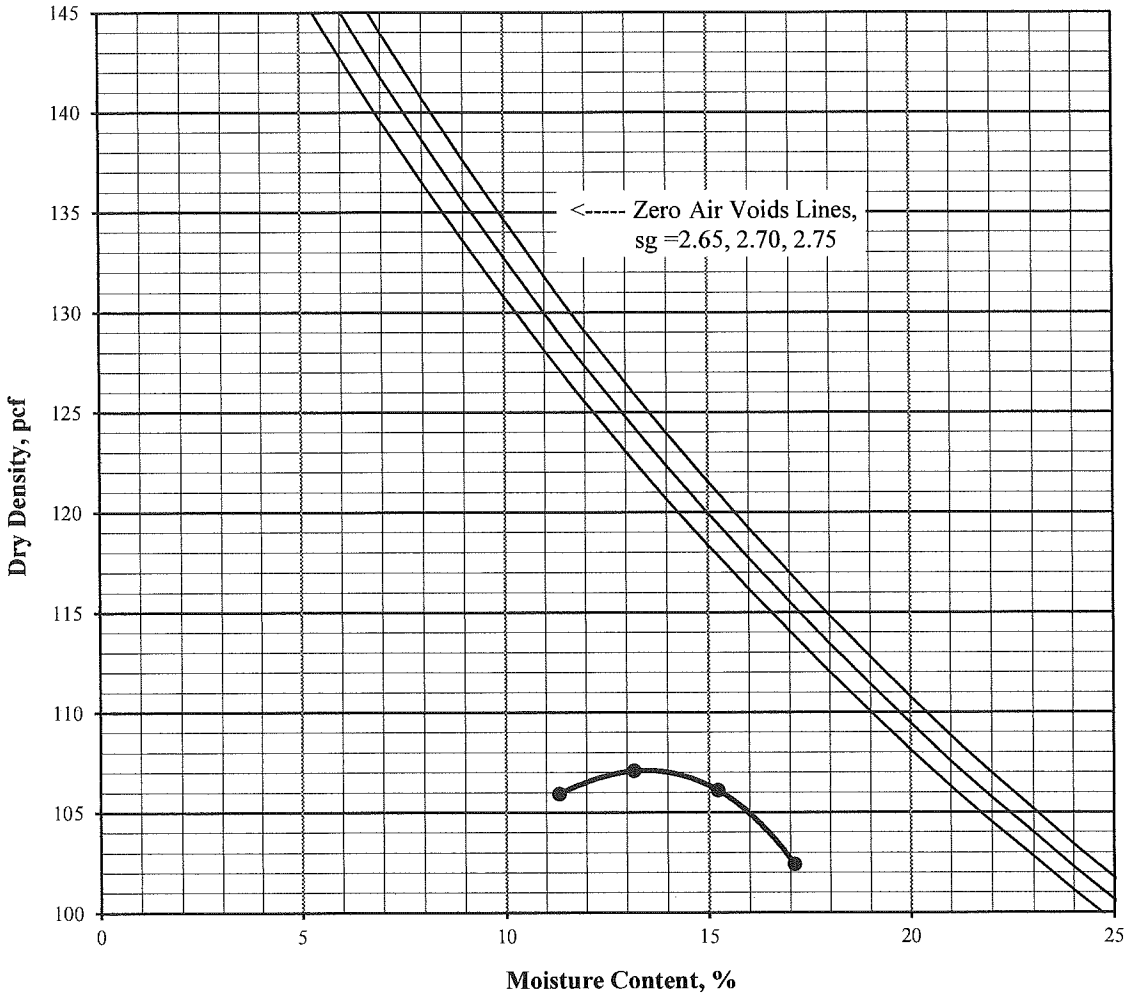
Project Number: 544-24159
Project Name: 52nd Avenue & Van Buren
Lab ID Number: LN6-24287
Sample Location: BH-1 Bulk 1 @ 0-5'
Description: Olive Brown Silty Sand (SM)

June 28, 2024

ASTM D-1557 A
Rammer Type: Machine

Maximum Density: 108 pcf
Optimum Moisture: 14.5%

Sieve Size	% Retained
3/4"	
3/8"	
#4	0.5



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Expansion Index

ASTM D 4829

Job Number: 544-24159
Job Name: 52nd Avenue & Van Buren
Lab ID Number: LN6-24287
Sample ID: BH-1 Bulk 1 @ 0-5'
Soil Description: Olive Brown Silty Sand (SM)

June 28, 2024

Wt of Soil + Ring:	543.6
Weight of Ring:	190.9
Wt of Wet Soil:	352.7
Percent Moisture:	12.5%
Sample Height, in	0.95
Wet Density, pcf:	112.9
Dry Denstiy, pcf:	100.3

% Saturation:	49.7

Expansion **Rack # 2**

Date/Time	6/19/2024	2:49 AM
Initial Reading	0.0000	
Final Reading	0.0015	

Expansion Index **2**

(Final - Initial) x 1000

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Gradation

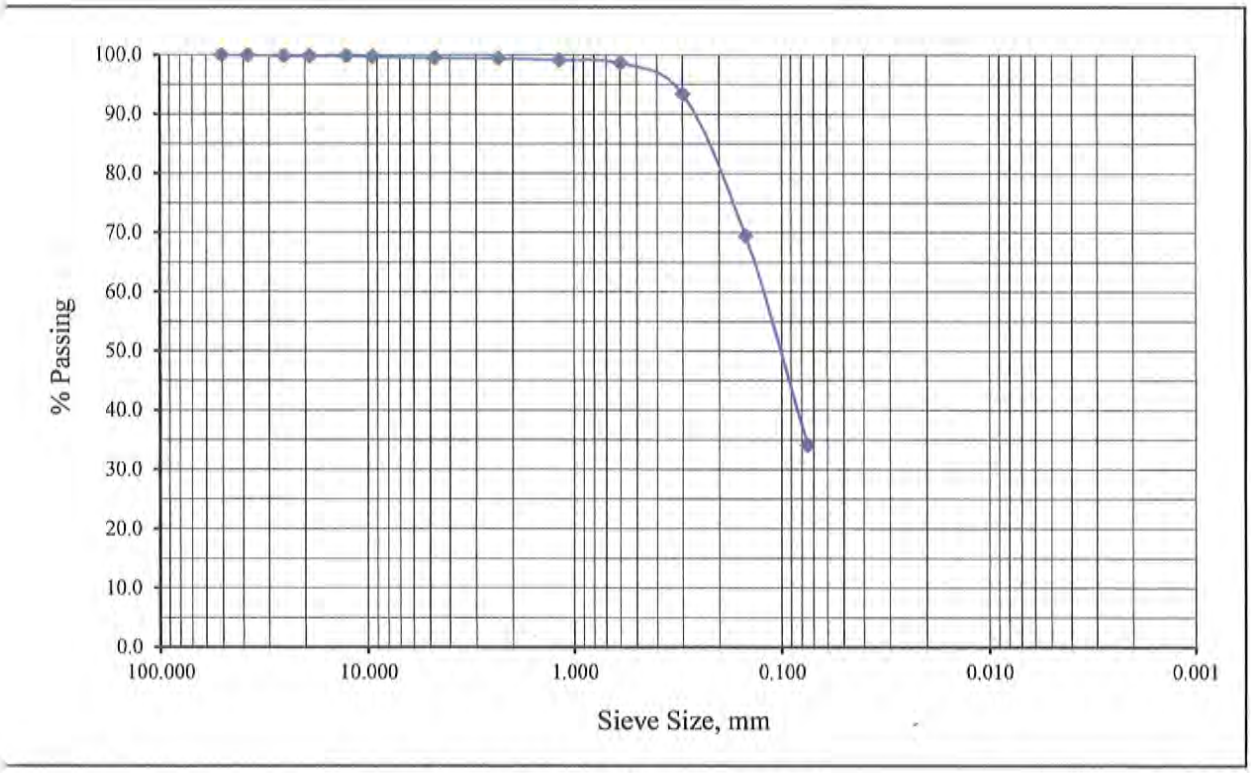
ASTM C117 & C136

Project Number: 544-24159
Project Name: 52nd Avenue & Van Buren
Lab ID Number: LN6-24287
Sample ID: BH-1 Bulk 1 @ -5'

June 28, 2024

Soil Classification: SM

Sieve Size, in	Sieve Size, mm	Percent Passing
2"	50.8	100.0
1 1/2"	38.1	100.0
1"	25.4	99.8
3/4"	19.1	99.8
1/2"	12.7	99.8
3/8"	9.53	99.7
#4	4.75	99.5
#8	2.36	99.4
#16	1.18	99.1
#30	0.60	98.6
#50	0.30	93.4
#100	0.15	69.4
#200	0.075	34.1



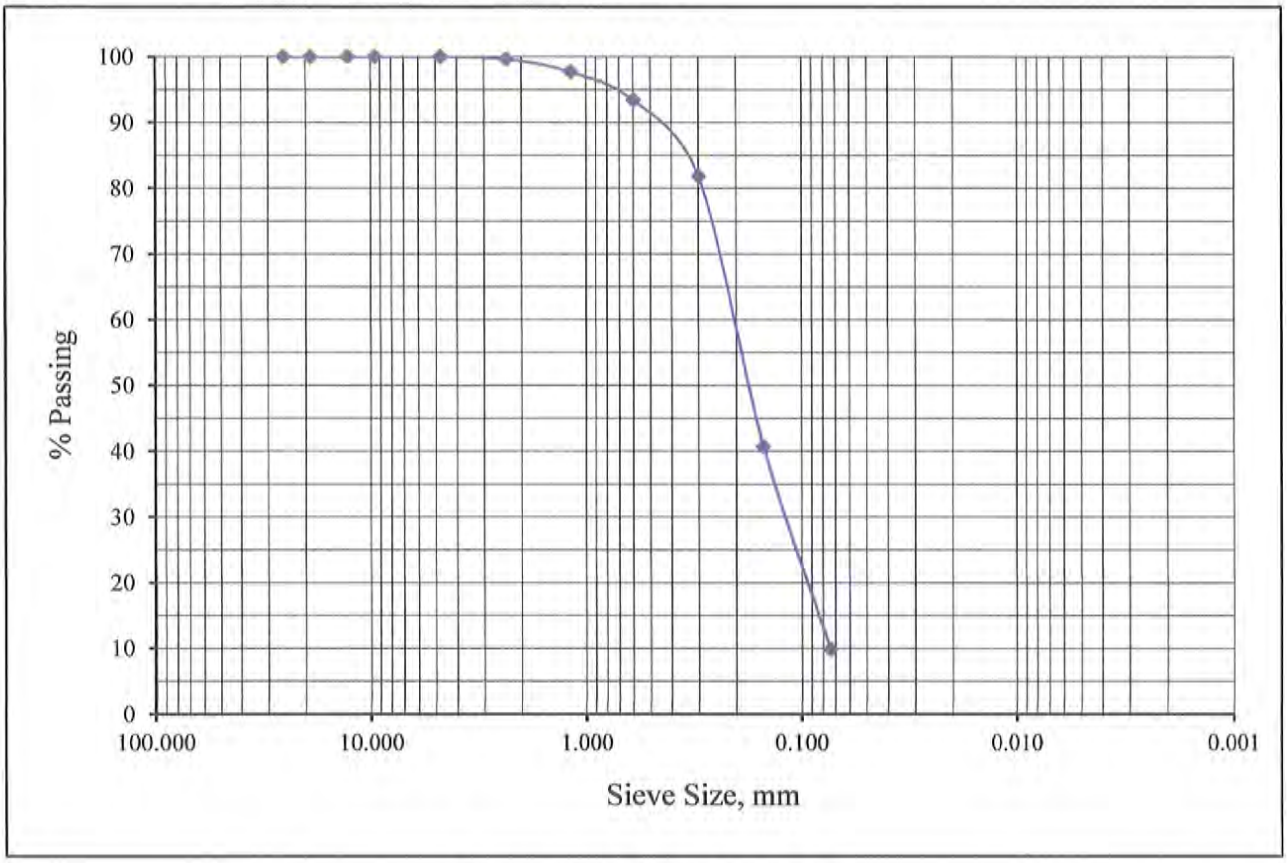
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Gradation

ASTM C117 & C136

Project Number: 544-24159 June 28, 2024
Project Name: 52nd Avenue & Van Buren
Lab ID Number: LN6-24287
Sample ID: BH-1 R-6 @ 25' Soil Classification: SW-SM

Sieve Size, in	Sieve Size, mm	Percent Passing
1"	25.4	100.0
3/4"	19.1	100.0
1/2"	12.7	100.0
3/8"	9.53	100.0
#4	4.75	100.0
#8	2.36	99.7
#16	1.18	97.7
#30	0.60	93.4
#50	0.30	81.8
#100	0.15	40.7
#200	0.074	9.9



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Gradation

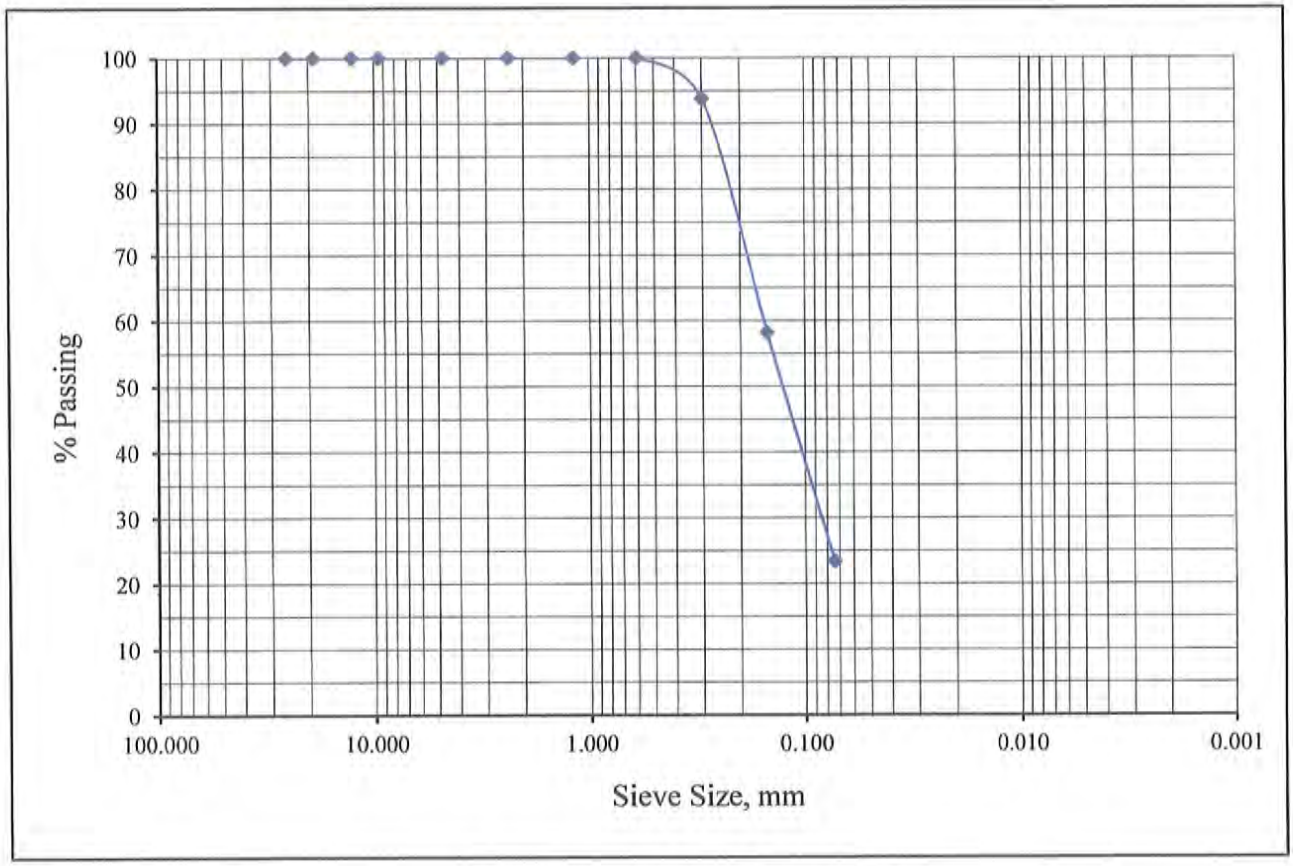
ASTM C117 & C136

Project Number: 544-24159
Project Name: 52nd Avenue & Van Buren
Lab ID Number: LN6-24287
Sample ID: BH-1 R-8 @ 35'

June 28, 2024

Soil Classification: SM

Sieve Size, in	Sieve Size, mm	Percent Passing
1"	25.4	100.0
3/4"	19.1	100.0
1/2"	12.7	100.0
3/8"	9.53	100.0
#4	4.75	100.0
#8	2.36	100.0
#16	1.18	100.0
#30	0.60	100.0
#50	0.30	93.8
#100	0.15	58.2
#200	0.074	23.4



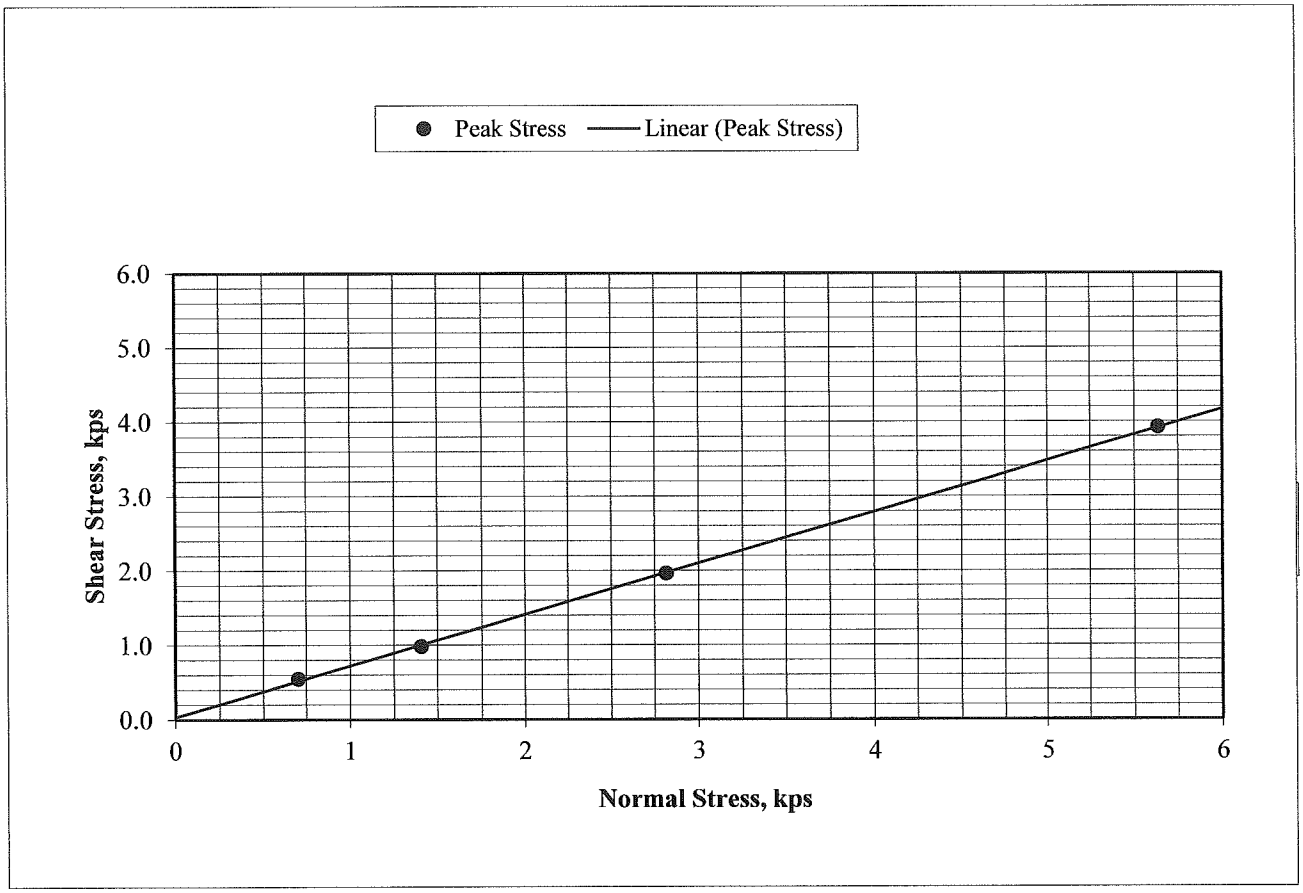
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Direct Shear ASTM D 3080-04
(modified for unconsolidated condition)

Job Number: 544-24159
Job Name 52nd Avenue & Van Buren
Lab ID No. LN6-24287
Sample ID BH-1 Bulk 1 @ 0-5'
Classification Olive Brown Silty Sand (SM)
Sample Type Remolded @ 90% of Maximum Density

June 28, 2024
Initial Dry Density: 98.2 pcf
Initial Mosture Content: 13.3 %
Peak Friction Angle (Ø): 35°
Cohesion (c): 30 psf

Test Results	1	2	3	4	Average
Moisture Content, %	21.9	21.9	21.9	21.9	21.9
Saturation, %	82.5	82.5	82.5	82.5	82.5
Normal Stress, kps	0.704	1.409	2.817	5.635	
Peak Stress, kps	0.545	0.981	1.962	3.924	



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One Dimensional Consolidation

ASTM D2435 & D5333

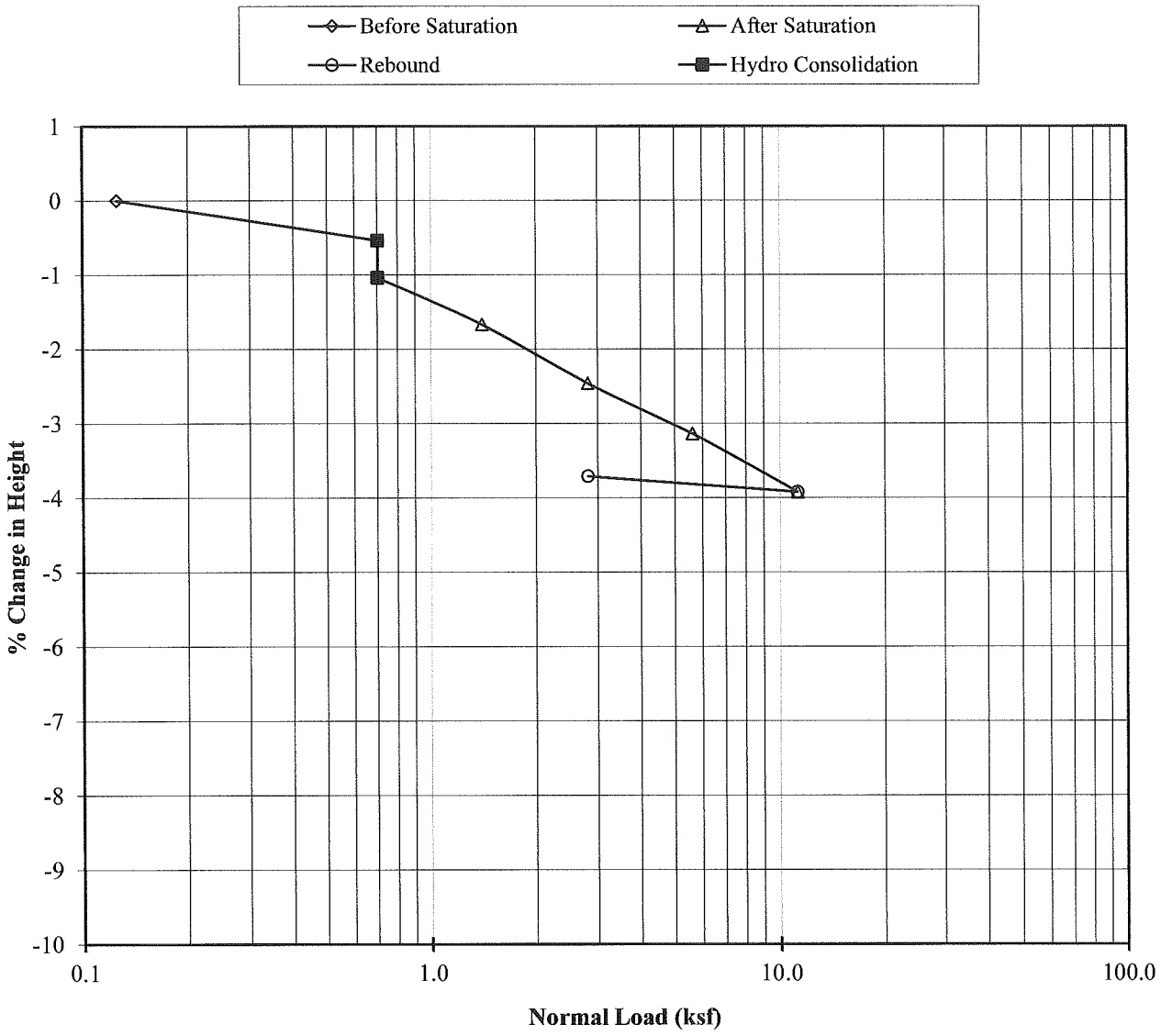
Job Number: 544-24159
Job Name: 52nd Avenue & Van Buren
Lab ID Number: LN6-24287
Sample ID: BH-2 R-2 @ 10'
Soil Description: Light Brown Silty Sand

June 28, 2024

Initial Dry Density, pcf: 100.9
Initial Moisture, %: 2.2
Initial Void Ratio: 0.652
Specific Gravity: 2.67

Hydrocollapse: 0.5% @ 0.702 ksf

% Change in Height vs Normal Presssure Diagram



Sladden Engineering
450 Egan Avenue, Beaumont, CA 92223 (951) 845-7743 Fax (951) 845-8863

Plasticity Index

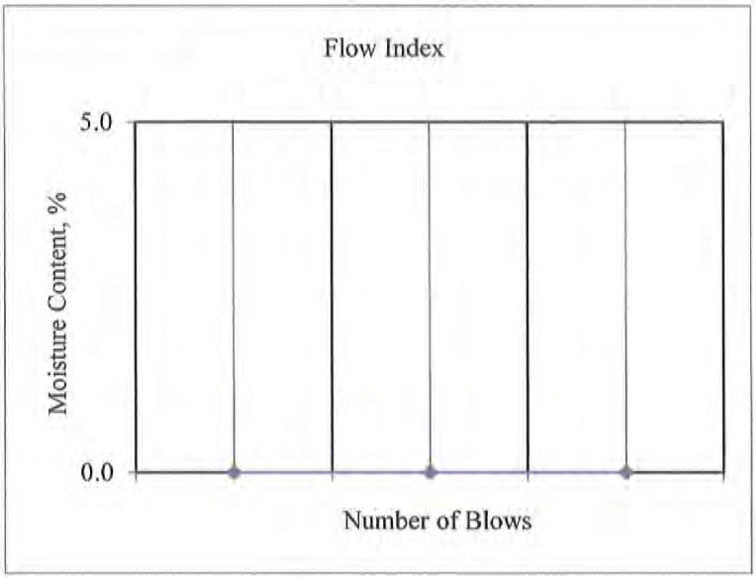
ASTM D4318

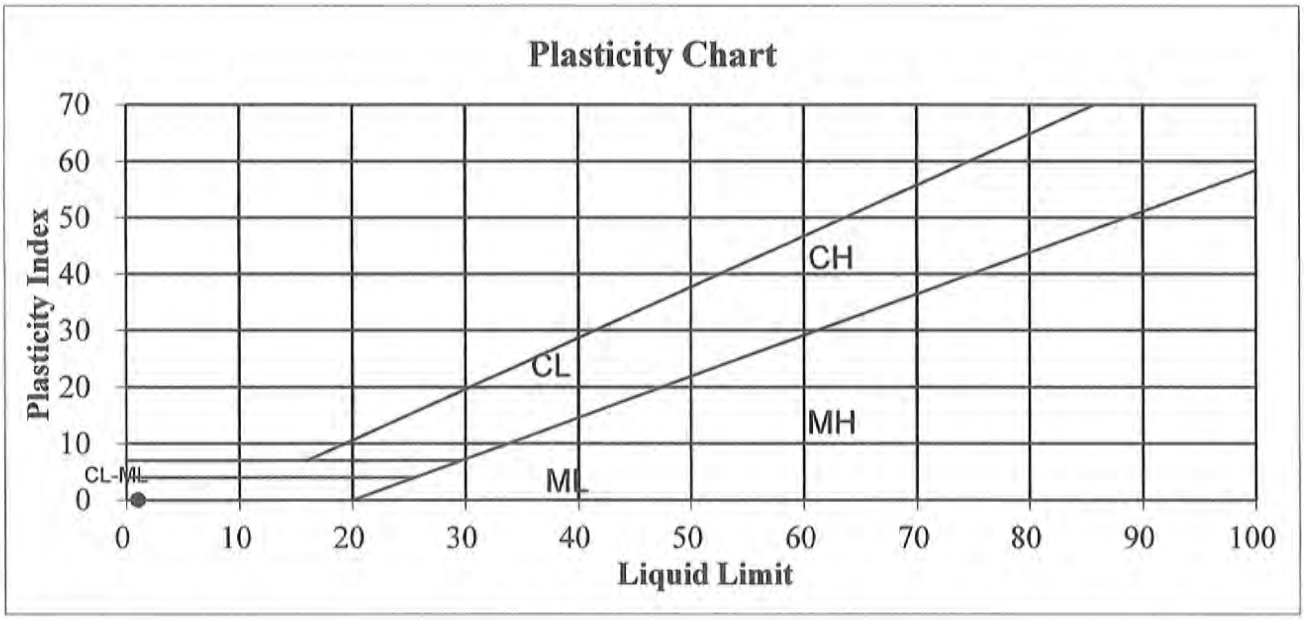
Project Number: 544-24159
Project Name: 52nd Avenue & Van Buren
Lab ID Number: LN6-24287
Sample Location: BH-1 S-5 @ 20'
Description: Olive Brown Sandy Silt (NP)

June 28, 2024

Test Results

Liquid Limit:
Plastic Limit:
Plasticity Index:





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Plasticity Index

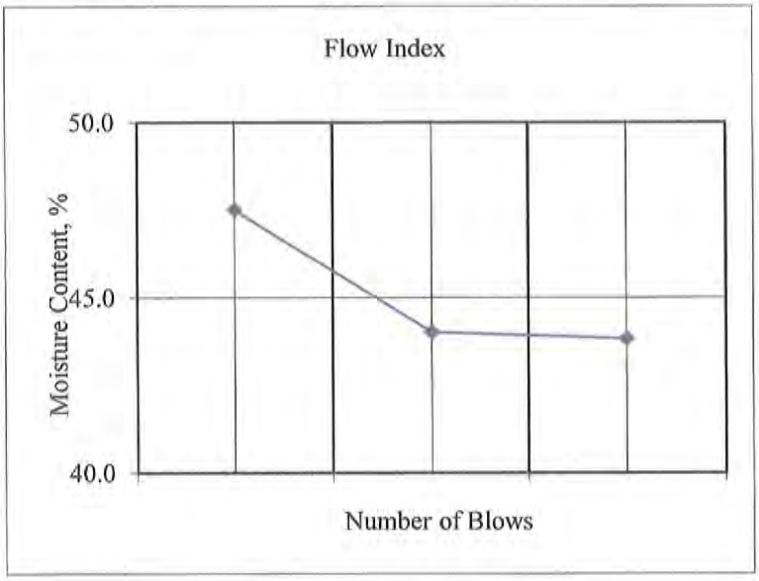
ASTM D4318

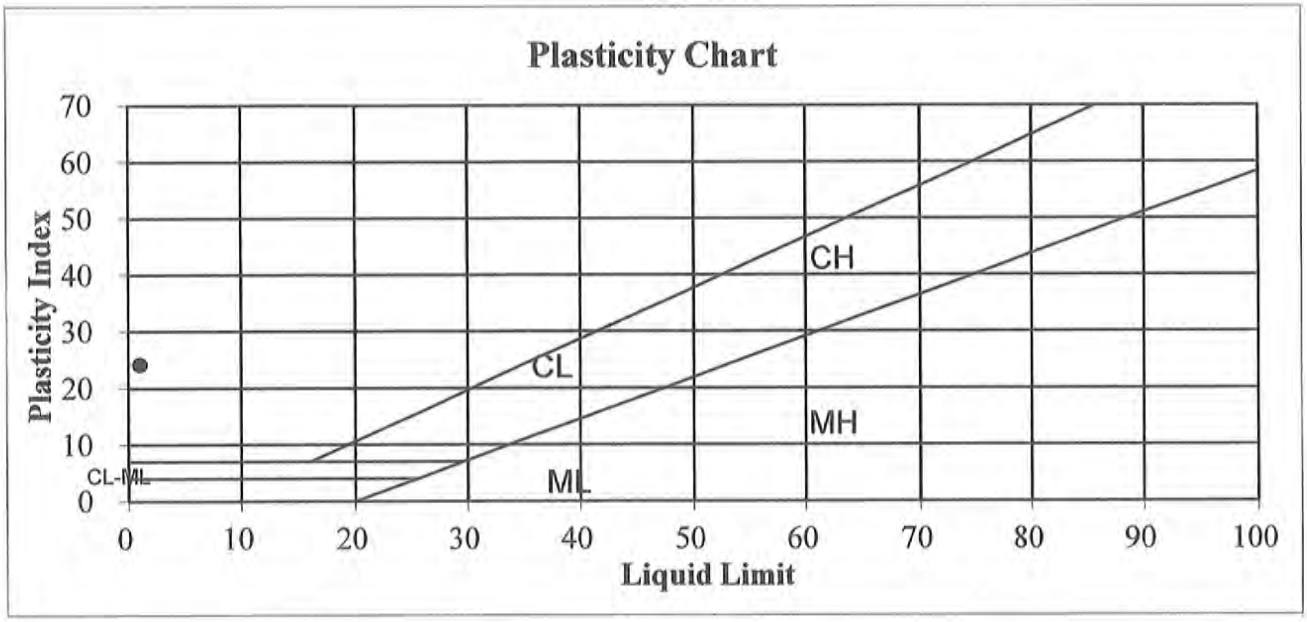
Project Number: 544-24159
Project Name: 52nd Avenue & Van Buren
Lab ID Number: LN6-24287
Sample Location: BH-1 S-7 @ 30'
Description: Olive Brown Clay (CL)

June 28, 2024

Test Results

Liquid Limit:	**46**
Plastic Limit:	**22**
Plasticity Index:	**24**





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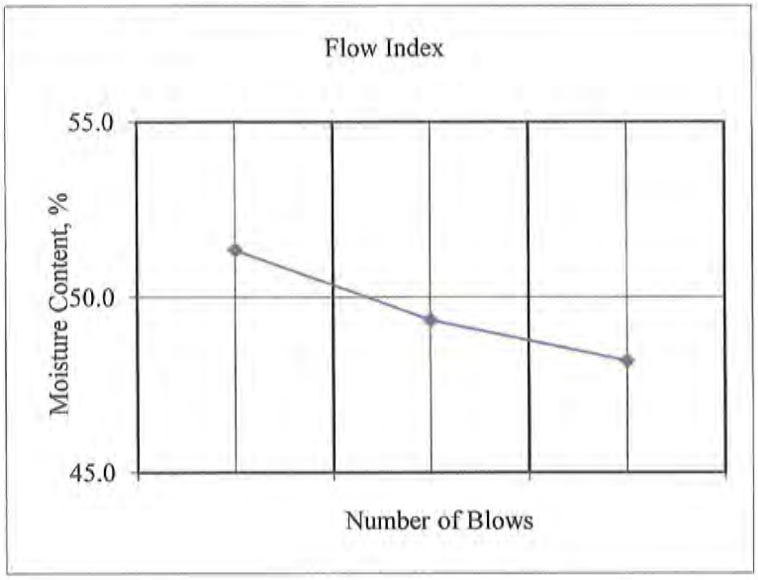
Plasticity Index

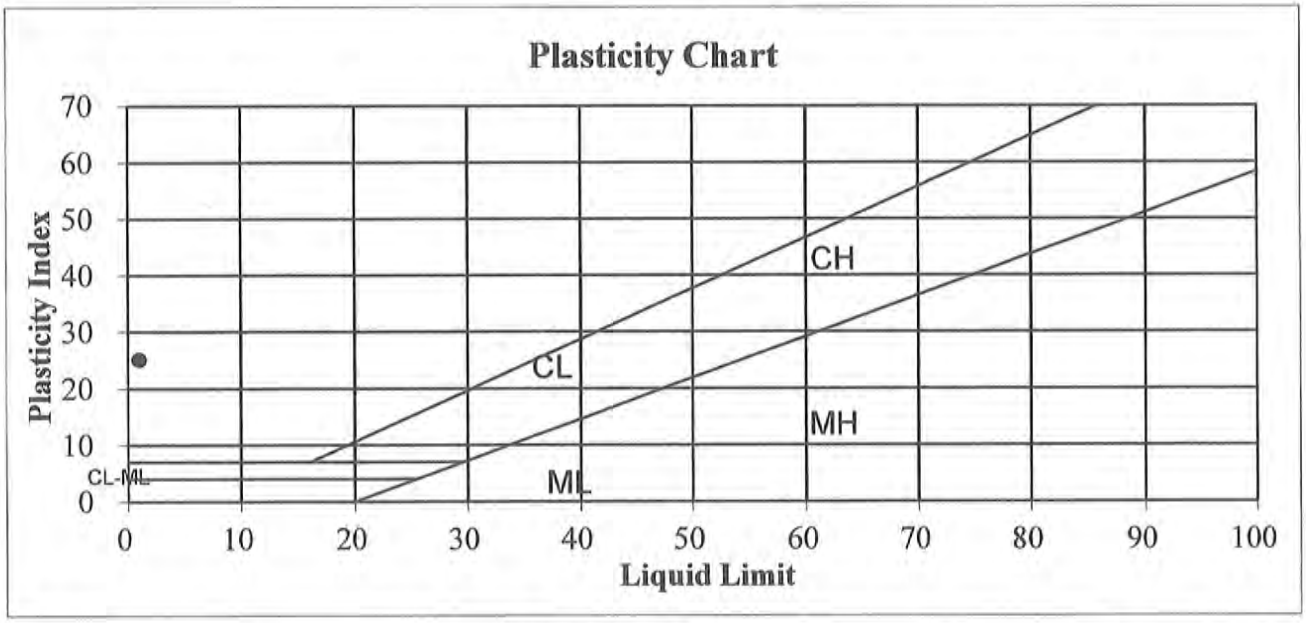
ASTM D4318

Project Number: 544-24159
Project Name: 52nd Avenue & Van Buren
Lab ID Number: LN6-24287
Sample Location: BH-1 R-10 @ 45'
Description: Olive Brown Clay (CL)

June 28, 2024

Test Results	
Liquid Limit:	**48**
Plastic Limit:	**23**
Plasticity Index:	**25**





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Plasticity Index

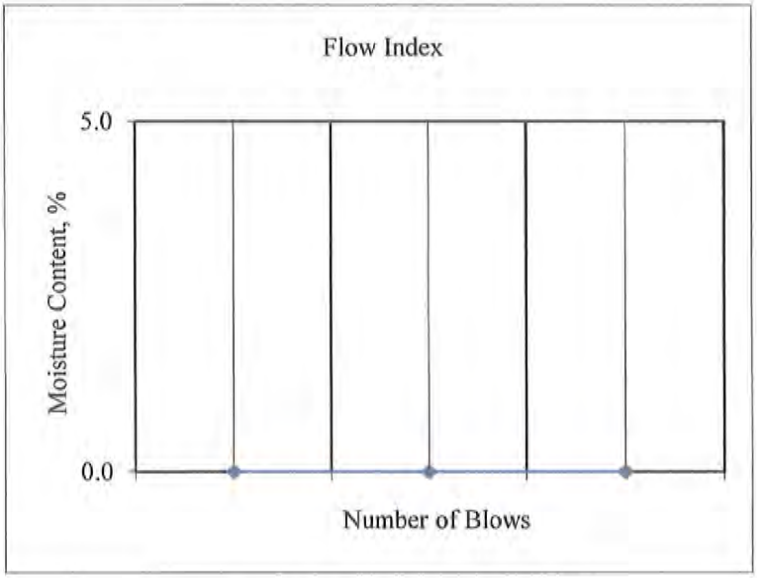
ASTM D4318

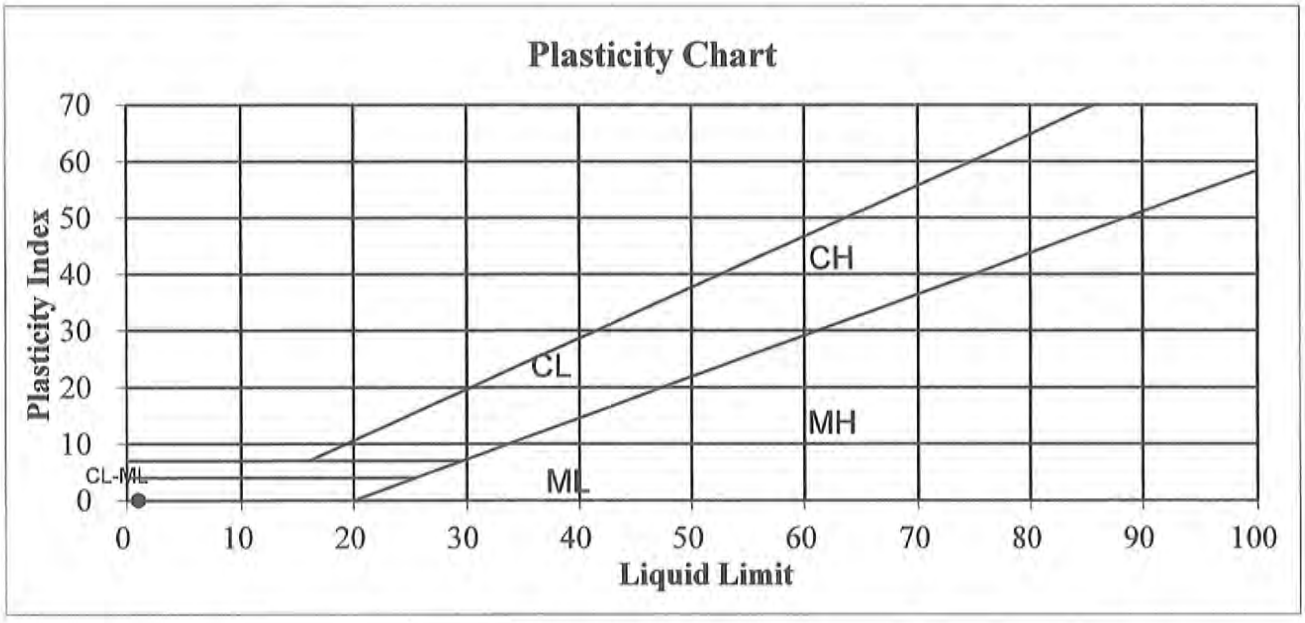
Project Number: 544-24159
Project Name: 52nd Avenue & Van Buren
Lab ID Number: LN6-24287
Sample Location: BH-2 S-7 @ 35'
Description: Olive Brown Sandy Silt (NP)

June 28, 2024

Test Results

Liquid Limit:
Plastic Limit:
Plasticity Index:





APPENDIX C

SEISMIC DESIGN PARAMETERS
SEISMIC DESIGN MAPS

USGS web services were down for some period of time and as a result this tool wasn't operational, resulting in *timeout* error.
USGS web services are now operational so this tool should work as expected.

OSHPD

544-24159

Latitude, Longitude: 33.6687, -116.2033



Date	7/10/2024, 1:32:52 PM
Design Code Reference Document	ASCE7-16
Risk Category	II
Site Class	D - Stiff Soil

Type	Value	Description
S_S	1.793	MCE_R ground motion. (for 0.2 second period)
S_1	0.745	MCE_R ground motion. (for 1.0s period)
S_{MS}	1.793	Site-modified spectral acceleration value
S_{M1}	null -See Section 11.4.8	Site-modified spectral acceleration value
S_{DS}	1.196	Numeric seismic design value at 0.2 second SA
S_{D1}	null -See Section 11.4.8	Numeric seismic design value at 1.0 second SA

Type	Value	Description
SDC	null -See Section 11.4.8	Seismic design category
F_a	1	Site amplification factor at 0.2 second
F_v	null -See Section 11.4.8	Site amplification factor at 1.0 second
PGA	0.779	MCE_G peak ground acceleration
F_{PGA}	1.1	Site amplification factor at PGA
PGA_M	0.857	Site modified peak ground acceleration
T_L	8	Long-period transition period in seconds
SsRT	2.092	Probabilistic risk-targeted ground motion. (0.2 second)
SsUH	2.351	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration
SsD	1.793	Factored deterministic acceleration value. (0.2 second)
S1RT	0.832	Probabilistic risk-targeted ground motion. (1.0 second)
S1UH	0.948	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration.
S1D	0.745	Factored deterministic acceleration value. (1.0 second)
PGAd	0.779	Factored deterministic acceleration value. (Peak Ground Acceleration)

Type	Value	Description
PGA_{UH}	0.93	Uniform-hazard (2% probability of exceedance in 50 years) Peak Ground Acceleration
C_{RS}	0.89	Mapped value of the risk coefficient at short periods
C_{R1}	0.878	Mapped value of the risk coefficient at a period of 1 s
C_V	1.459	Vertical coefficient

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SITE-SPECIFIC GROUND MOTION ANALYSIS
(ASCE 7-16)

Project: MIXED-USE DEVELOPMENT
Project Number: 544-24159
Client: RELEVANT LIVING
Site Lat/Long: 33.6687/-116.2033
Controlling Seismic Source: SAN ANDREAS FAULT

REFERENCE	NOTATION	VALUE
Site Class	C, D, D default, or E	D measured
Site Class D - Table 11.4-1	F_a	1.0
Site Class D - 21.3(ii)	F_v	2.5
$0.2*(S_{D1}/S_{DS})$	T_0	0.208
S_{D1}/S_{DS}	T_S	1.039
Fundamental Period (12.8.2)	T	Period
Seismic Design Maps or Fig 22-14	T_L	8
Equation 11.4-4 - $2/3*S_{M1}$	S_{D1}	1.2417
Equation 11.4-2 - F_V*S_1 [1]	S_{M1}	1.8625

[1] - F_V as determined by Section 21.3

REFERENCE	NOTATION	VALUE
Fv (Table 11.4-2)[Used for General Spectrum]	F_v	1.7
Design Maps	S_s	1.793
Design Maps	S_1	0.745
Equation 11.4-1 - F_A*S_S	S_{MS}	1.793*
Equation 11.4-3 - $2/3*S_{MS}$	S_{DS}	1.195*
Design Maps	PGA	0.779
Table 11.8-1	F_{PGA}	1.1
Equation 11.8-1 - F_{PGA}*PGA	PGA_M	0.857*
Section 21.5.3	80% of PGA_M	0.686
Design Maps	C_{RS}	0.890
Design Maps	C_{R1}	0.878

REFERENCE	NOTATION	VALUE
$0.2*(S_{D1}/S_{DS})$	T_0	0.141*
S_{D1}/S_{DS}	T_S	0.709*
Equation 11.4-4 - $2/3*S_{M1}$	S_{D1}	0.8443*
Equation 11.4-2 - F_V*S_1	S_{M1}	1.2665*

RISK COEFFICIENT

Cr - At Perods <=0.2, Cr=C_{RS}	C_{RS}	0.890
Cr - At Periods >=1.0, Cr=C_{R1}	C_{R1}	0.878

Cr - At Periods between 0.2 and 1.0 use trendline formula to complete

Period	Cr
0.200	0.890
0.300	0.889
0.400	0.887
0.500	0.886
0.600	0.884
0.680	0.883
1.000	0.878

* Code based design value. See accompanying data for Site Specific Design values.

Mapped values from https://hazards.atcouncil.org/
https://www.seismicmaps.org/

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PROBABILISTIC SPECTRA[1]
2% in 50 year Exceedence

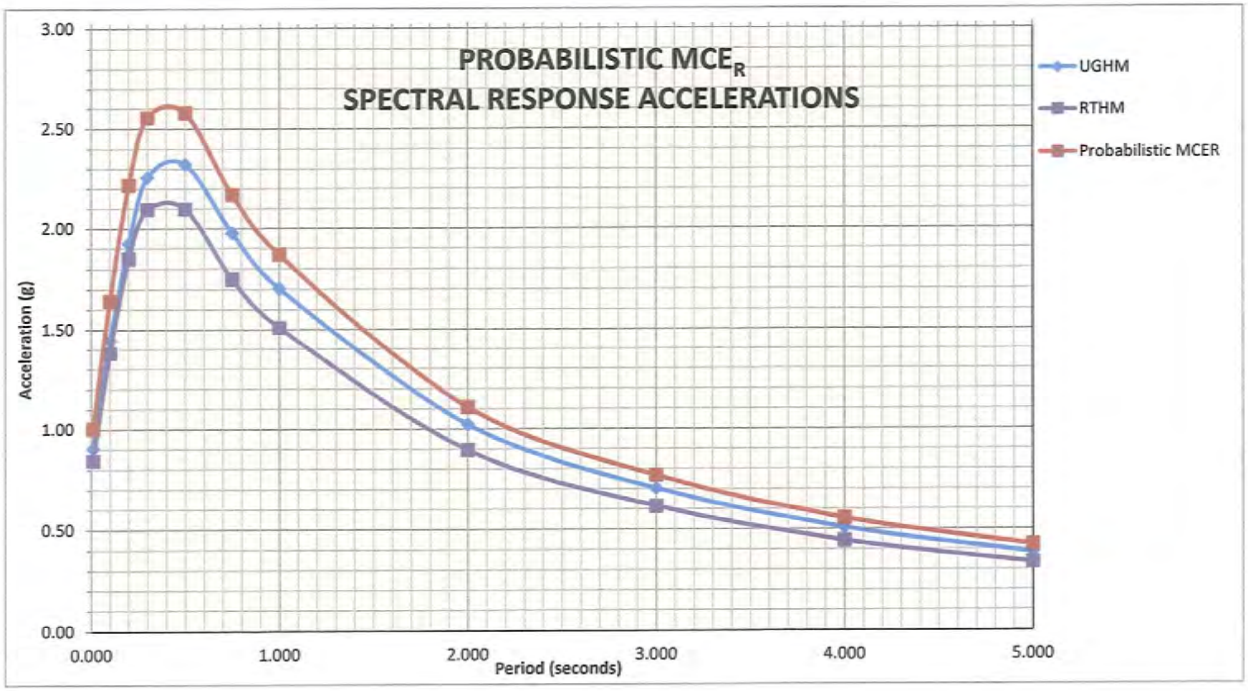
Project No: 544-24159

Period	UGHM	RTGM	Max Directional Scale Factor[2]	Probabilistic MCE
0.010	0.904	0.842	1.19	1.002
0.100	1.443	1.380	1.19	1.642
0.200	1.923	1.849	1.20	2.219
0.300	2.258	2.094	1.22	2.555
0.500	2.322	2.096	1.23	2.578
0.750	1.976	1.749	1.24	2.169
1.000	1.703	1.507	1.24	1.869
2.000	1.021	0.893	1.24	1.107
3.000	0.701	0.613	1.25	0.766
4.000	0.505	0.442	1.25	0.553
5.000	0.384	0.336	1.26	0.423

Probabilistic PGA: 0.904
Is Probabilistic $Sa_{(max)}$<1.2F_a? NO

[1] Data Sources:
https://earthquake.usgs.gov/hazards/interactive/
https://earthquake.usgs.gov/designmaps/rtgm/

[2] Shahi-Baker RotD100/RotD50 Factors (2014)



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DETERMINISTIC SPECTRUM

Largest Amplitudes of Ground Motions Considering All Sources Calculated using Weighted Mean of Attenuation Equations[1]

Controlling Source: SAN ANDREAS FAULT

Is Probabilistic $Sa_{(max)}$<1.2Fa? NO

Project No: 544-24159

Period	Deterministic PSa Median + 1.σ for 5% Damping	Max Directional Scale Factor[2]	Deterministic MCE	Section 21.2.2 Scaling Factor Applied
0.010	0.767	1.19	0.912	0.912
0.020	0.767	1.19	0.913	0.913
0.030	0.778	1.19	0.926	0.926
0.050	0.821	1.19	0.977	0.977
0.075	0.977	1.19	1.163	1.163
0.100	1.156	1.19	1.375	1.375
0.150	1.415	1.20	1.699	1.699
0.200	1.588	1.20	1.905	1.905
0.250	1.717	1.21	2.078	2.078
0.300	1.791	1.22	2.185	2.185
0.400	1.835	1.23	2.256	2.256
0.500	1.789	1.23	2.200	2.200
0.750	1.471	1.24	1.824	1.824
1.000	1.250	1.24	1.551	1.551
1.500	0.912	1.24	1.130	1.130
2.000	0.701	1.24	0.869	0.869
3.000	0.487	1.25	0.609	0.609
4.000	0.343	1.25	0.429	0.429
5.000	0.256	1.26	0.322	0.322

Is Determinstic $Sa_{(max)}$<1.5*Fa? NO

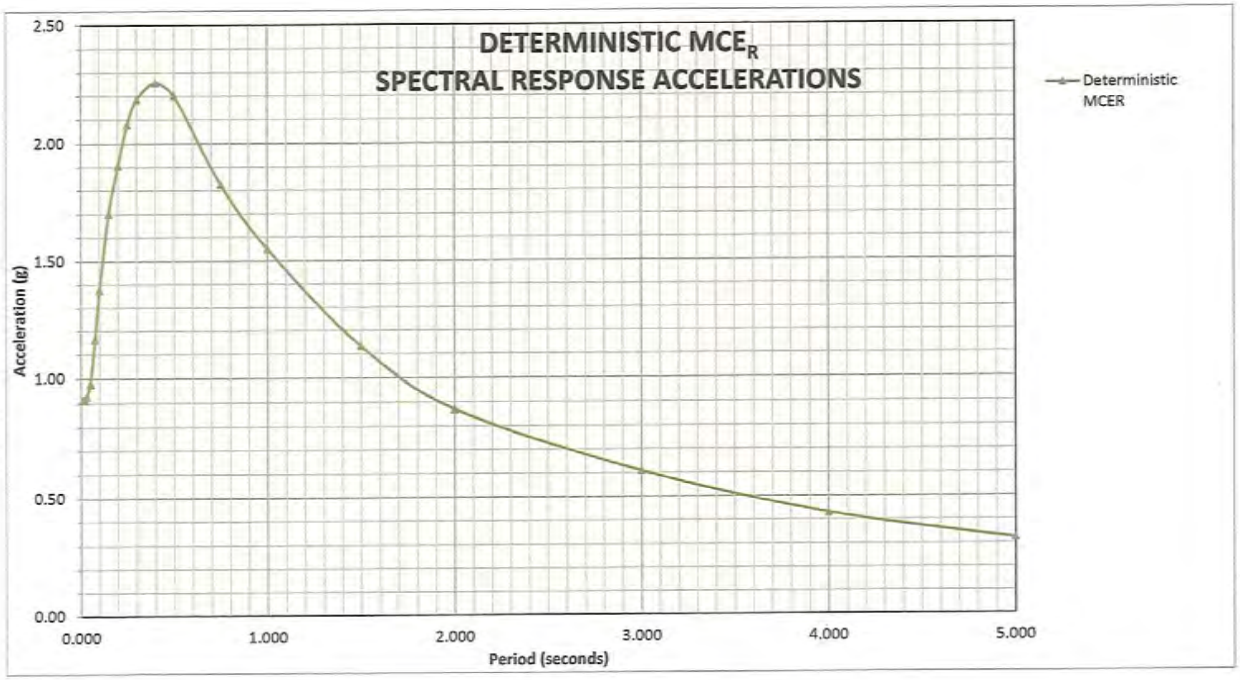
Section 21.2.2 Scaling Factor: N/A

Deterministic PGA: 0.767

Is Deterministic PGA >=F_{PGA}*0.5? YES

[1] NGAWest 2 GMPE worksheet and Uniform California Earthquake Rupture Forecast, Version 3 (UCERF3) - Time Dependent Model

[2] Shahi-Baker RotD100/RotD50 Factors (2014)



Sladden Engineering

SITE SPECIFIC SPECTRA

Period	Probabilistic MCE	Deterministic MCE	Site-Specific MCE	Design Response Spectrum (Sa)
0.010	1.002	0.912	0.912	0.608
0.100	1.642	1.375	1.375	0.917
0.200	2.219	1.905	1.905	1.270
0.300	2.555	2.185	2.185	1.457
0.500	2.578	2.200	2.200	1.467
0.750	2.169	1.824	1.824	1.216
1.000	1.869	1.551	1.551	1.034
2.000	1.107	0.869	0.869	0.580
3.000	0.766	0.609	0.609	0.406
4.000	0.553	0.429	0.429	0.286
5.000	0.423	0.322	0.322	0.215

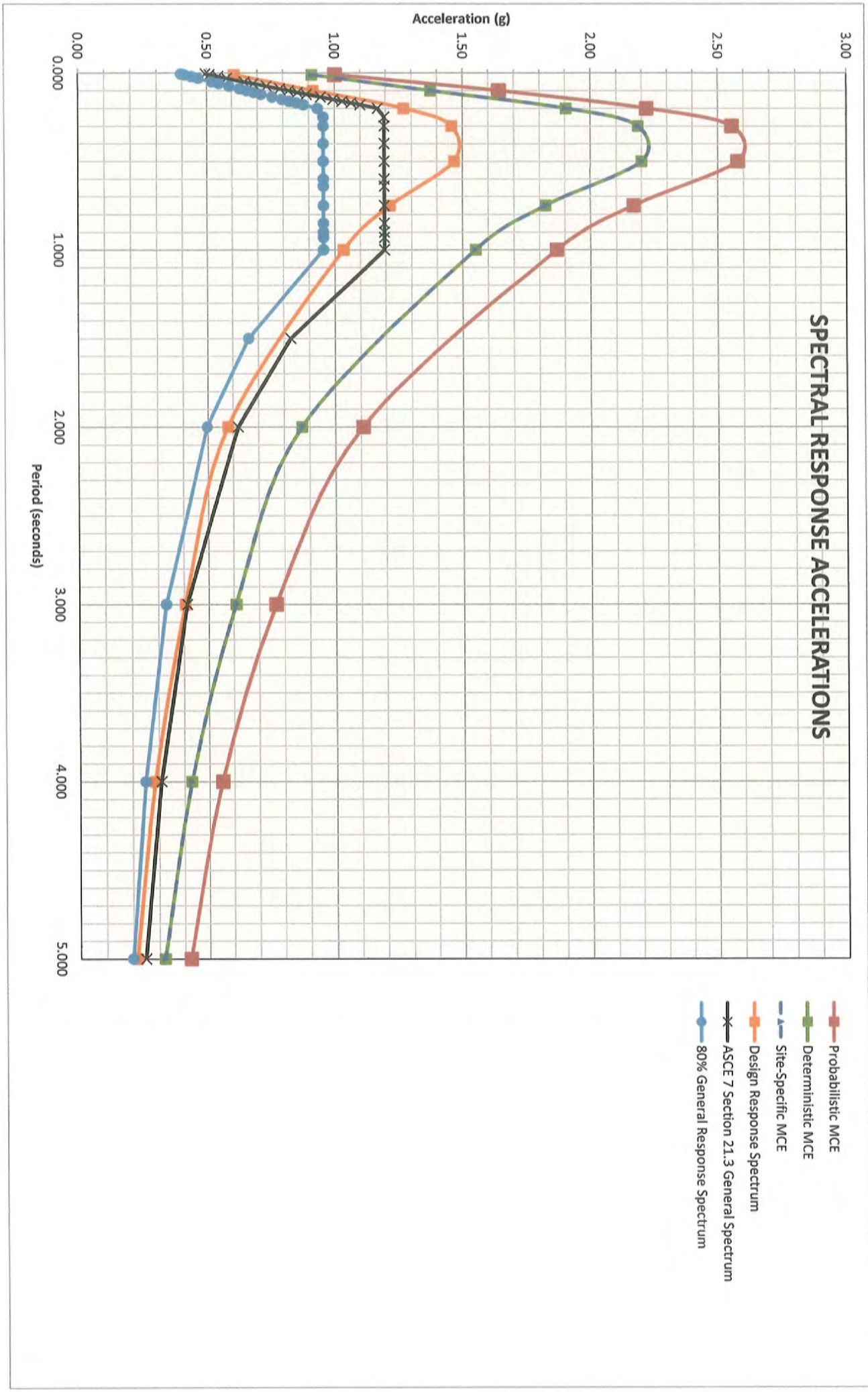
ASCE 7-16: Section 21.4

	Site Specific	
	Calculated Value	Design Value
SDS:	1.320	1.320
SD1:	1.218	1.218
SMS:	1.980	1.980
SM1:	1.827	1.827
Site Specific PGAm:	0.767	0.767
Site Class:	D measured	

Seismic Design Category - Short*	D
Seismic Design Category - 1s*	D

* Risk Categories I, II, or III

Period	ASCE 7 SECTION 21.3 General Spectrum	80% General Response Spectrum
0.005	0.495	0.396
0.010	0.513	0.410
0.020	0.547	0.438
0.030	0.582	0.465
0.050	0.651	0.521
0.060	0.685	0.548
0.075	0.737	0.590
0.090	0.789	0.631
0.100	0.823	0.659
0.110	0.858	0.686
0.120	0.892	0.714
0.136	0.948	0.758
0.150	0.996	0.797
0.160	1.030	0.824
0.170	1.065	0.852
0.180	1.100	0.880
0.200	1.169	0.935
0.250	1.195	0.956
0.300	1.195	0.956
0.400	1.195	0.956
0.500	1.195	0.956
0.600	1.195	0.956
0.640	1.195	0.956
0.750	1.195	0.956
0.850	1.195	0.956
0.900	1.195	0.956
0.930	1.195	0.956
1.000	1.195	0.956
1.500	0.828	0.662
2.000	0.621	0.497
3.000	0.414	0.331
4.000	0.310	0.248
5.000	0.248	0.199


SPECTRAL RESPONSE ACCELERATIONS
Acceleration (g)
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.000
1.000
2.000
3.000
4.000
5.000
Period (seconds)
Probabilistic MCE
Deterministic MCE
Site-Specific MCE
Design Response Spectrum
ASCE 7 Section 21.3 General Spectrum
80% General Response Spectrum

APPENDIX D

LIQUEFACTION ANALYSIS

****
****

LIQUEFACTION ANALYSIS SUMMARY

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Font: Courier New, Regular, Size 8 is recommended for this report.
Licensed to , 7/10/2024 2:31:06 PM

Input File Name: F:\Liquefy5\544-24159 BH1.liq
Title: 52 nd Ave & Van Buren, Coachella
Subtitle: 544-24159

Surface Elev.=-55
Hole No.=BH-1
Depth of Hole= 51.00 ft
Water Table during Earthquake= 5.00 ft
Water Table during In-Situ Testing= 35.00 ft
Max. Acceleration= 0.77 g
Earthquake Magnitude= 7.45

Input Data:
Surface Elev.=-55
Hole No.=BH-1
Depth of Hole=51.00 ft
Water Table during Earthquake= 5.00 ft
Water Table during In-Situ Testing= 35.00 ft
Max. Acceleration=0.77 g
Earthquake Magnitude=7.45
No-Liquefiable Soils: Based on Analysis

1. SPT or BPT Calculation.
2. Settlement Analysis Method: Tokimatsu, M-correction
3. Fines Correction for Liquefaction: Modify Stark/Olson
4. Fine Correction for Settlement: During Liquefaction*
5. Settlement Calculation in: All zones*
6. Hammer Energy Ratio, Ce = 1.25
7. Borehole Diameter, Cb= 1.15
8. Sampling Method, Cs= 1
9. User request factor of safety (apply to CSR) , User= 1.3
   Plot one CSR curve (fs1=User)
10. Use Curve Smoothing: Yes*
* Recommended Options

In-Situ Test Data:
Depth SPT gamma Fines

ft		pcf	%
0.00	11.33	111.80	32.30
2.00	11.33	111.80	32.30
5.00	12.67	109.90	28.10
10.00	10.00	109.90	45.80
15.00	14.00	114.20	22.70
20.00	11.00	114.20	79.00
25.00	13.33	105.80	9.90
30.00	5.00	105.80	NoLiq
35.00	31.33	133.30	23.40
40.00	7.00	133.30	NoLiq
45.00	11.33	122.30	NoLiq
50.00	18.00	122.30	NoLiq

Output Results:

Settlement of Saturated Sands=3.69 in.
Settlement of Unsaturated Sands=0.29 in.
Total Settlement of Saturated and Unsaturated Sands=3.97 in.
Differential Settlement=1.987 to 2.622 in.

Depth ft	CRRm	CSRfs	F.S.	S_sat. in.	S_dry in.	S_all in.
0.00	0.33	0.65	5.00	3.69	0.29	3.97
0.05	0.33	0.65	5.00	3.69	0.29	3.97
0.10	0.33	0.65	5.00	3.69	0.29	3.97
0.15	0.33	0.65	5.00	3.69	0.29	3.97
0.20	0.33	0.65	5.00	3.69	0.29	3.97
0.25	0.33	0.65	5.00	3.69	0.29	3.97
0.30	0.33	0.65	5.00	3.69	0.29	3.97
0.35	0.33	0.65	5.00	3.69	0.29	3.97
0.40	0.33	0.65	5.00	3.69	0.29	3.97
0.45	0.33	0.65	5.00	3.69	0.29	3.97
0.50	0.33	0.65	5.00	3.69	0.29	3.97
0.55	0.33	0.65	5.00	3.69	0.28	3.97
0.60	0.33	0.65	5.00	3.69	0.28	3.97
0.65	0.33	0.65	5.00	3.69	0.28	3.97
0.70	0.33	0.65	5.00	3.69	0.28	3.97
0.75	0.33	0.65	5.00	3.69	0.28	3.97
0.80	0.33	0.65	5.00	3.69	0.28	3.97
0.85	0.33	0.65	5.00	3.69	0.28	3.97
0.90	0.33	0.65	5.00	3.69	0.28	3.97
0.95	0.33	0.65	5.00	3.69	0.28	3.97
1.00	0.33	0.65	5.00	3.69	0.28	3.97
1.05	0.33	0.65	5.00	3.69	0.28	3.97
1.10	0.33	0.65	5.00	3.69	0.28	3.97
1.15	0.33	0.65	5.00	3.69	0.28	3.97
1.20	0.33	0.65	5.00	3.69	0.28	3.97

1.25	0.33	0.65	5.00	3.69	0.28	3.97
1.30	0.33	0.65	5.00	3.69	0.28	3.97
1.35	0.33	0.65	5.00	3.69	0.28	3.97
1.40	0.33	0.65	5.00	3.69	0.28	3.97
1.45	0.33	0.65	5.00	3.69	0.28	3.97
1.50	0.33	0.65	5.00	3.69	0.28	3.97
1.55	0.33	0.65	5.00	3.69	0.28	3.97
1.60	0.33	0.65	5.00	3.69	0.28	3.97
1.65	0.33	0.65	5.00	3.69	0.28	3.97
1.70	0.33	0.65	5.00	3.69	0.28	3.97
1.75	0.33	0.65	5.00	3.69	0.28	3.97
1.80	0.33	0.65	5.00	3.69	0.28	3.97
1.85	0.33	0.65	5.00	3.69	0.28	3.97
1.90	0.33	0.65	5.00	3.69	0.28	3.97
1.95	0.33	0.65	5.00	3.69	0.28	3.96
2.00	0.33	0.65	5.00	3.69	0.28	3.96
2.05	0.33	0.65	5.00	3.69	0.28	3.96
2.10	0.33	0.64	5.00	3.69	0.28	3.96
2.15	0.33	0.64	5.00	3.69	0.28	3.96
2.20	0.33	0.64	5.00	3.69	0.28	3.96
2.25	0.33	0.64	5.00	3.69	0.27	3.96
2.30	0.34	0.64	5.00	3.69	0.27	3.96
2.35	0.34	0.64	5.00	3.69	0.27	3.96
2.40	0.34	0.64	5.00	3.69	0.27	3.96
2.45	0.34	0.64	5.00	3.69	0.27	3.96
2.50	0.34	0.64	5.00	3.69	0.27	3.96
2.55	0.34	0.64	5.00	3.69	0.27	3.96
2.60	0.34	0.64	5.00	3.69	0.27	3.95
2.65	0.34	0.64	5.00	3.69	0.26	3.95
2.70	0.34	0.64	5.00	3.69	0.26	3.95
2.75	0.34	0.64	5.00	3.69	0.26	3.95
2.80	0.34	0.64	5.00	3.69	0.26	3.94
2.85	0.34	0.64	5.00	3.69	0.25	3.94
2.90	0.34	0.64	5.00	3.69	0.25	3.94
2.95	0.34	0.64	5.00	3.69	0.24	3.93
3.00	0.34	0.64	5.00	3.69	0.24	3.93
3.05	0.34	0.64	5.00	3.69	0.23	3.92
3.10	0.34	0.64	5.00	3.69	0.22	3.91
3.15	0.35	0.64	5.00	3.69	0.22	3.90
3.20	0.35	0.64	5.00	3.69	0.21	3.90
3.25	0.35	0.64	5.00	3.69	0.20	3.89
3.30	0.35	0.64	5.00	3.69	0.19	3.88
3.35	0.35	0.64	5.00	3.69	0.19	3.87
3.40	0.35	0.64	5.00	3.69	0.18	3.86
3.45	0.35	0.64	5.00	3.69	0.17	3.86
3.50	0.35	0.64	5.00	3.69	0.16	3.85
3.55	0.35	0.64	5.00	3.69	0.15	3.84
3.60	0.35	0.64	5.00	3.69	0.15	3.83
3.65	0.35	0.64	5.00	3.69	0.14	3.83
3.70	0.35	0.64	5.00	3.69	0.13	3.82

3.75	0.35	0.64	5.00	3.69	0.12	3.81
3.80	0.35	0.64	5.00	3.69	0.11	3.80
3.85	0.35	0.64	5.00	3.69	0.11	3.79
3.90	0.36	0.64	5.00	3.69	0.10	3.79
3.95	0.36	0.64	5.00	3.69	0.09	3.78
4.00	0.36	0.64	5.00	3.69	0.08	3.77
4.05	0.36	0.64	5.00	3.69	0.08	3.76
4.10	0.36	0.64	5.00	3.69	0.07	3.75
4.15	0.36	0.64	5.00	3.69	0.06	3.75
4.20	0.36	0.64	5.00	3.69	0.05	3.74
4.25	0.36	0.64	5.00	3.69	0.04	3.73
4.30	0.36	0.64	5.00	3.69	0.04	3.72
4.35	0.36	0.64	5.00	3.69	0.03	3.72
4.40	0.36	0.64	5.00	3.69	0.02	3.71
4.45	0.36	0.64	5.00	3.69	0.02	3.71
4.50	0.36	0.64	5.00	3.69	0.02	3.71
4.55	0.36	0.64	5.00	3.69	0.02	3.70
4.60	0.37	0.64	5.00	3.69	0.02	3.70
4.65	0.37	0.64	5.00	3.69	0.01	3.70
4.70	0.37	0.64	5.00	3.69	0.01	3.70
4.75	0.37	0.64	5.00	3.69	0.01	3.70
4.80	0.37	0.64	5.00	3.69	0.01	3.70
4.85	0.37	0.64	5.00	3.69	0.01	3.69
4.90	0.37	0.64	5.00	3.69	0.00	3.69
4.95	0.37	0.64	5.00	3.69	0.00	3.69
5.00	0.37	0.64	0.58*	3.69	0.00	3.69
5.05	0.37	0.64	0.58*	3.68	0.00	3.68
5.10	0.37	0.65	0.57*	3.68	0.00	3.68
5.15	0.37	0.65	0.57*	3.67	0.00	3.67
5.20	0.37	0.65	0.57*	3.67	0.00	3.67
5.25	0.37	0.66	0.56*	3.66	0.00	3.66
5.30	0.37	0.66	0.56*	3.65	0.00	3.65
5.35	0.37	0.66	0.56*	3.65	0.00	3.65
5.40	0.37	0.67	0.55*	3.64	0.00	3.64
5.45	0.37	0.67	0.55*	3.64	0.00	3.64
5.50	0.37	0.67	0.55*	3.63	0.00	3.63
5.55	0.37	0.68	0.55*	3.63	0.00	3.63
5.60	0.37	0.68	0.54*	3.62	0.00	3.62
5.65	0.37	0.68	0.54*	3.62	0.00	3.62
5.70	0.37	0.69	0.54*	3.61	0.00	3.61
5.75	0.37	0.69	0.53*	3.61	0.00	3.61
5.80	0.37	0.69	0.53*	3.60	0.00	3.60
5.85	0.37	0.70	0.53*	3.59	0.00	3.59
5.90	0.37	0.70	0.53*	3.59	0.00	3.59
5.95	0.37	0.70	0.52*	3.58	0.00	3.58
6.00	0.37	0.71	0.52*	3.58	0.00	3.58
6.05	0.37	0.71	0.52*	3.57	0.00	3.57
6.10	0.37	0.71	0.52*	3.57	0.00	3.57
6.15	0.37	0.71	0.51*	3.56	0.00	3.56
6.20	0.37	0.72	0.51*	3.56	0.00	3.56

6.25	0.37	0.72	0.51*	3.55	0.00	3.55
6.30	0.37	0.72	0.51*	3.54	0.00	3.54
6.35	0.37	0.73	0.51*	3.54	0.00	3.54
6.40	0.37	0.73	0.50*	3.53	0.00	3.53
6.45	0.37	0.73	0.50*	3.53	0.00	3.53
6.50	0.37	0.73	0.50*	3.52	0.00	3.52
6.55	0.37	0.74	0.50*	3.52	0.00	3.52
6.60	0.37	0.74	0.49*	3.51	0.00	3.51
6.65	0.36	0.74	0.49*	3.51	0.00	3.51
6.70	0.36	0.74	0.48*	3.50	0.00	3.50
6.75	0.36	0.75	0.48*	3.49	0.00	3.49
6.80	0.35	0.75	0.47*	3.49	0.00	3.49
6.85	0.35	0.75	0.47*	3.48	0.00	3.48
6.90	0.35	0.75	0.46*	3.48	0.00	3.48
6.95	0.35	0.76	0.46*	3.47	0.00	3.47
7.00	0.35	0.76	0.46*	3.46	0.00	3.46
7.05	0.34	0.76	0.45*	3.46	0.00	3.46
7.10	0.34	0.76	0.45*	3.45	0.00	3.45
7.15	0.34	0.77	0.44*	3.45	0.00	3.45
7.20	0.34	0.77	0.44*	3.44	0.00	3.44
7.25	0.34	0.77	0.44*	3.43	0.00	3.43
7.30	0.33	0.77	0.43*	3.43	0.00	3.43
7.35	0.33	0.78	0.43*	3.42	0.00	3.42
7.40	0.33	0.78	0.43*	3.41	0.00	3.41
7.45	0.33	0.78	0.42*	3.41	0.00	3.41
7.50	0.33	0.78	0.42*	3.40	0.00	3.40
7.55	0.33	0.79	0.42*	3.40	0.00	3.40
7.60	0.33	0.79	0.41*	3.39	0.00	3.39
7.65	0.32	0.79	0.41*	3.38	0.00	3.38
7.70	0.32	0.79	0.41*	3.38	0.00	3.38
7.75	0.32	0.80	0.40*	3.37	0.00	3.37
7.80	0.32	0.80	0.40*	3.36	0.00	3.36
7.85	0.32	0.80	0.40*	3.36	0.00	3.36
7.90	0.32	0.80	0.40*	3.35	0.00	3.35
7.95	0.32	0.80	0.39*	3.34	0.00	3.34
8.00	0.32	0.81	0.39*	3.34	0.00	3.34
8.05	0.31	0.81	0.39*	3.33	0.00	3.33
8.10	0.31	0.81	0.39*	3.32	0.00	3.32
8.15	0.31	0.81	0.38*	3.32	0.00	3.32
8.20	0.31	0.81	0.38*	3.31	0.00	3.31
8.25	0.37	0.82	0.45*	3.30	0.00	3.30
8.30	0.37	0.82	0.45*	3.30	0.00	3.30
8.35	0.36	0.82	0.44*	3.29	0.00	3.29
8.40	0.36	0.82	0.44*	3.29	0.00	3.29
8.45	0.36	0.83	0.44*	3.28	0.00	3.28
8.50	0.36	0.83	0.43*	3.28	0.00	3.28
8.55	0.36	0.83	0.43*	3.27	0.00	3.27
8.60	0.35	0.83	0.43*	3.27	0.00	3.27
8.65	0.35	0.83	0.42*	3.26	0.00	3.26
8.70	0.35	0.84	0.42*	3.25	0.00	3.25

8.75	0.35	0.84	0.42*	3.25	0.00	3.25
8.80	0.35	0.84	0.41*	3.24	0.00	3.24
8.85	0.35	0.84	0.41*	3.24	0.00	3.24
8.90	0.34	0.84	0.41*	3.23	0.00	3.23
8.95	0.34	0.84	0.41*	3.22	0.00	3.22
9.00	0.34	0.85	0.40*	3.22	0.00	3.22
9.05	0.34	0.85	0.40*	3.21	0.00	3.21
9.10	0.34	0.85	0.40*	3.20	0.00	3.20
9.15	0.34	0.85	0.40*	3.20	0.00	3.20
9.20	0.34	0.85	0.39*	3.19	0.00	3.19
9.25	0.33	0.86	0.39*	3.19	0.00	3.19
9.30	0.33	0.86	0.39*	3.18	0.00	3.18
9.35	0.33	0.86	0.39*	3.17	0.00	3.17
9.40	0.33	0.86	0.38*	3.17	0.00	3.17
9.45	0.33	0.86	0.38*	3.16	0.00	3.16
9.50	0.33	0.86	0.38*	3.15	0.00	3.15
9.55	0.33	0.87	0.38*	3.15	0.00	3.15
9.60	0.33	0.87	0.38*	3.14	0.00	3.14
9.65	0.33	0.87	0.37*	3.14	0.00	3.14
9.70	0.32	0.87	0.37*	3.13	0.00	3.13
9.75	0.32	0.87	0.37*	3.12	0.00	3.12
9.80	0.32	0.88	0.37*	3.12	0.00	3.12
9.85	0.32	0.88	0.37*	3.11	0.00	3.11
9.90	0.32	0.88	0.36*	3.10	0.00	3.10
9.95	0.32	0.88	0.36*	3.10	0.00	3.10
10.00	0.32	0.88	0.36*	3.09	0.00	3.09
10.05	0.32	0.88	0.36*	3.08	0.00	3.08
10.10	0.32	0.89	0.36*	3.08	0.00	3.08
10.15	0.32	0.89	0.36*	3.07	0.00	3.07
10.20	0.32	0.89	0.36*	3.06	0.00	3.06
10.25	0.32	0.89	0.35*	3.06	0.00	3.06
10.30	0.31	0.89	0.35*	3.05	0.00	3.05
10.35	0.31	0.89	0.35*	3.05	0.00	3.05
10.40	0.31	0.89	0.35*	3.04	0.00	3.04
10.45	0.31	0.90	0.35*	3.03	0.00	3.03
10.50	0.31	0.90	0.35*	3.03	0.00	3.03
10.55	0.31	0.90	0.35*	3.02	0.00	3.02
10.60	0.31	0.90	0.35*	3.01	0.00	3.01
10.65	0.31	0.90	0.34*	3.01	0.00	3.01
10.70	0.31	0.90	0.34*	3.00	0.00	3.00
10.75	0.31	0.91	0.34*	2.99	0.00	2.99
10.80	0.31	0.91	0.34*	2.99	0.00	2.99
10.85	0.31	0.91	0.34*	2.98	0.00	2.98
10.90	0.31	0.91	0.34*	2.97	0.00	2.97
10.95	0.31	0.91	0.34*	2.97	0.00	2.97
11.00	0.31	0.91	0.34*	2.96	0.00	2.96
11.05	0.31	0.91	0.33*	2.95	0.00	2.95
11.10	0.31	0.92	0.33*	2.95	0.00	2.95
11.15	0.30	0.92	0.33*	2.94	0.00	2.94
11.20	0.30	0.92	0.33*	2.93	0.00	2.93

11.25	0.30	0.92	0.33*	2.92	0.00	2.92
11.30	0.30	0.92	0.33*	2.92	0.00	2.92
11.35	0.30	0.92	0.33*	2.91	0.00	2.91
11.40	0.30	0.92	0.33*	2.90	0.00	2.90
11.45	0.30	0.92	0.33*	2.90	0.00	2.90
11.50	0.30	0.93	0.32*	2.89	0.00	2.89
11.55	0.30	0.93	0.32*	2.88	0.00	2.88
11.60	0.30	0.93	0.32*	2.88	0.00	2.88
11.65	0.30	0.93	0.32*	2.87	0.00	2.87
11.70	0.30	0.93	0.32*	2.86	0.00	2.86
11.75	0.30	0.93	0.32*	2.86	0.00	2.86
11.80	0.30	0.93	0.32*	2.85	0.00	2.85
11.85	0.30	0.94	0.32*	2.84	0.00	2.84
11.90	0.30	0.94	0.32*	2.84	0.00	2.84
11.95	0.30	0.94	0.32*	2.83	0.00	2.83
12.00	0.30	0.94	0.31*	2.82	0.00	2.82
12.05	0.29	0.94	0.31*	2.81	0.00	2.81
12.10	0.29	0.94	0.31*	2.81	0.00	2.81
12.15	0.29	0.94	0.31*	2.80	0.00	2.80
12.20	0.29	0.94	0.31*	2.79	0.00	2.79
12.25	0.29	0.95	0.31*	2.79	0.00	2.79
12.30	0.29	0.95	0.31*	2.78	0.00	2.78
12.35	0.29	0.95	0.31*	2.77	0.00	2.77
12.40	0.29	0.95	0.31*	2.77	0.00	2.77
12.45	0.29	0.95	0.31*	2.76	0.00	2.76
12.50	0.29	0.95	0.30*	2.75	0.00	2.75
12.55	0.29	0.95	0.30*	2.74	0.00	2.74
12.60	0.29	0.95	0.30*	2.74	0.00	2.74
12.65	0.29	0.95	0.30*	2.73	0.00	2.73
12.70	0.29	0.96	0.30*	2.72	0.00	2.72
12.75	0.29	0.96	0.30*	2.72	0.00	2.72
12.80	0.29	0.96	0.30*	2.71	0.00	2.71
12.85	0.29	0.96	0.30*	2.70	0.00	2.70
12.90	0.29	0.96	0.30*	2.69	0.00	2.69
12.95	0.29	0.96	0.30*	2.69	0.00	2.69
13.00	0.28	0.96	0.30*	2.68	0.00	2.68
13.05	0.28	0.96	0.30*	2.67	0.00	2.67
13.10	0.28	0.96	0.29*	2.67	0.00	2.67
13.15	0.28	0.97	0.29*	2.66	0.00	2.66
13.20	0.28	0.97	0.29*	2.65	0.00	2.65
13.25	0.28	0.97	0.29*	2.64	0.00	2.64
13.30	0.28	0.97	0.29*	2.64	0.00	2.64
13.35	0.28	0.97	0.29*	2.63	0.00	2.63
13.40	0.28	0.97	0.29*	2.62	0.00	2.62
13.45	0.28	0.97	0.29*	2.62	0.00	2.62
13.50	0.28	0.97	0.29*	2.61	0.00	2.61
13.55	0.28	0.97	0.29*	2.60	0.00	2.60
13.60	0.28	0.97	0.29*	2.59	0.00	2.59
13.65	0.28	0.98	0.29*	2.59	0.00	2.59
13.70	0.28	0.98	0.28*	2.58	0.00	2.58

13.75	0.28	0.98	0.28*	2.57	0.00	2.57
13.80	0.28	0.98	0.28*	2.56	0.00	2.56
13.85	0.28	0.98	0.28*	2.56	0.00	2.56
13.90	0.28	0.98	0.28*	2.55	0.00	2.55
13.95	0.28	0.98	0.28*	2.54	0.00	2.54
14.00	0.27	0.98	0.28*	2.53	0.00	2.53
14.05	0.27	0.98	0.28*	2.53	0.00	2.53
14.10	0.27	0.98	0.28*	2.52	0.00	2.52
14.15	0.27	0.99	0.28*	2.51	0.00	2.51
14.20	0.27	0.99	0.28*	2.50	0.00	2.50
14.25	0.27	0.99	0.28*	2.50	0.00	2.50
14.30	0.27	0.99	0.27*	2.49	0.00	2.49
14.35	0.27	0.99	0.27*	2.48	0.00	2.48
14.40	0.27	0.99	0.27*	2.47	0.00	2.47
14.45	0.27	0.99	0.27*	2.47	0.00	2.47
14.50	0.27	0.99	0.27*	2.46	0.00	2.46
14.55	0.27	0.99	0.27*	2.45	0.00	2.45
14.60	0.27	0.99	0.27*	2.44	0.00	2.44
14.65	0.27	0.99	0.27*	2.44	0.00	2.44
14.70	0.27	1.00	0.27*	2.43	0.00	2.43
14.75	0.27	1.00	0.27*	2.42	0.00	2.42
14.80	0.30	1.00	0.30*	2.41	0.00	2.41
14.85	0.30	1.00	0.30*	2.41	0.00	2.41
14.90	0.30	1.00	0.30*	2.40	0.00	2.40
14.95	0.30	1.00	0.30*	2.39	0.00	2.39
15.00	0.30	1.00	0.30*	2.39	0.00	2.39
15.05	0.30	1.00	0.30*	2.38	0.00	2.38
15.10	0.30	1.00	0.30*	2.37	0.00	2.37
15.15	0.30	1.00	0.30*	2.37	0.00	2.37
15.20	0.31	1.00	0.30*	2.36	0.00	2.36
15.25	0.31	1.00	0.30*	2.35	0.00	2.35
15.30	0.31	1.00	0.31*	2.35	0.00	2.35
15.35	0.31	1.01	0.31*	2.34	0.00	2.34
15.40	0.31	1.01	0.31*	2.33	0.00	2.33
15.45	0.31	1.01	0.31*	2.33	0.00	2.33
15.50	0.31	1.01	0.31*	2.32	0.00	2.32
15.55	0.31	1.01	0.31*	2.31	0.00	2.31
15.60	0.31	1.01	0.31*	2.31	0.00	2.31
15.65	0.31	1.01	0.31*	2.30	0.00	2.30
15.70	0.32	1.01	0.31*	2.29	0.00	2.29
15.75	0.32	1.01	0.31*	2.29	0.00	2.29
15.80	0.32	1.01	0.31*	2.28	0.00	2.28
15.85	0.32	1.01	0.31*	2.27	0.00	2.27
15.90	0.32	1.01	0.32*	2.27	0.00	2.27
15.95	0.32	1.01	0.32*	2.26	0.00	2.26
16.00	0.32	1.02	0.32*	2.25	0.00	2.25
16.05	0.32	1.02	0.32*	2.25	0.00	2.25
16.10	0.33	1.02	0.32*	2.24	0.00	2.24
16.15	0.33	1.02	0.32*	2.23	0.00	2.23
16.20	0.33	1.02	0.32*	2.23	0.00	2.23

16.25	0.33	1.02	0.32*	2.22	0.00	2.22
16.30	0.33	1.02	0.32*	2.22	0.00	2.22
16.35	0.33	1.02	0.33*	2.21	0.00	2.21
16.40	0.33	1.02	0.33*	2.20	0.00	2.20
16.45	0.33	1.02	0.33*	2.20	0.00	2.20
16.50	0.34	1.02	0.33*	2.19	0.00	2.19
16.55	0.34	1.02	0.33*	2.18	0.00	2.18
16.60	0.34	1.02	0.33*	2.18	0.00	2.18
16.65	0.34	1.02	0.33*	2.17	0.00	2.17
16.70	0.34	1.03	0.33*	2.17	0.00	2.17
16.75	0.34	1.03	0.34*	2.16	0.00	2.16
16.80	0.35	1.03	0.34*	2.15	0.00	2.15
16.85	0.35	1.03	0.34*	2.15	0.00	2.15
16.90	0.35	1.03	0.34*	2.14	0.00	2.14
16.95	0.35	1.03	0.34*	2.14	0.00	2.14
17.00	0.35	1.03	0.34*	2.13	0.00	2.13
17.05	0.35	1.03	0.34*	2.12	0.00	2.12
17.10	0.36	1.03	0.35*	2.12	0.00	2.12
17.15	0.36	1.03	0.35*	2.11	0.00	2.11
17.20	0.36	1.03	0.35*	2.11	0.00	2.11
17.25	0.36	1.03	0.35*	2.10	0.00	2.10
17.30	0.36	1.03	0.35*	2.09	0.00	2.09
17.35	0.37	1.03	0.35*	2.09	0.00	2.09
17.40	0.37	1.03	0.36*	2.08	0.00	2.08
17.45	0.37	1.04	0.36*	2.08	0.00	2.08
17.50	0.37	1.04	0.36*	2.07	0.00	2.07
17.55	0.38	1.04	0.36*	2.07	0.00	2.07
17.60	0.38	1.04	0.36*	2.06	0.00	2.06
17.65	0.38	1.04	0.37*	2.06	0.00	2.06
17.70	0.38	1.04	0.37*	2.05	0.00	2.05
17.75	0.39	1.04	0.37*	2.05	0.00	2.05
17.80	0.39	1.04	0.37*	2.04	0.00	2.04
17.85	0.39	1.04	0.38*	2.04	0.00	2.04
17.90	0.40	1.04	0.38*	2.03	0.00	2.03
17.95	0.40	1.04	0.38*	2.03	0.00	2.03
18.00	0.40	1.04	0.39*	2.02	0.00	2.02
18.05	0.41	1.04	0.39*	2.02	0.00	2.02
18.10	0.41	1.04	0.40*	2.01	0.00	2.01
18.15	0.42	1.04	0.40*	2.01	0.00	2.01
18.20	0.43	1.04	0.41*	2.00	0.00	2.00
18.25	0.43	1.04	0.42*	2.00	0.00	2.00
18.30	0.44	1.05	0.42*	1.99	0.00	1.99
18.35	0.45	1.05	0.44*	1.99	0.00	1.99
18.40	0.47	1.05	0.45*	1.98	0.00	1.98
18.45	0.49	1.05	0.47*	1.98	0.00	1.98
18.50	0.51	1.05	0.49*	1.97	0.00	1.97
18.55	0.51	1.05	0.49*	1.97	0.00	1.97
18.60	0.51	1.05	0.48*	1.96	0.00	1.96
18.65	0.51	1.05	0.48*	1.96	0.00	1.96
18.70	0.51	1.05	0.48*	1.96	0.00	1.96

18.75	0.51	1.05	0.48*	1.95	0.00	1.95
18.80	0.51	1.05	0.48*	1.95	0.00	1.95
18.85	0.51	1.05	0.48*	1.94	0.00	1.94
18.90	0.51	1.05	0.48*	1.94	0.00	1.94
18.95	0.51	1.05	0.48*	1.94	0.00	1.94
19.00	0.51	1.05	0.48*	1.93	0.00	1.93
19.05	0.51	1.05	0.48*	1.93	0.00	1.93
19.10	0.51	1.05	0.48*	1.92	0.00	1.92
19.15	0.51	1.05	0.48*	1.92	0.00	1.92
19.20	0.51	1.05	0.48*	1.92	0.00	1.92
19.25	0.51	1.06	0.48*	1.91	0.00	1.91
19.30	0.51	1.06	0.48*	1.91	0.00	1.91
19.35	0.51	1.06	0.48*	1.91	0.00	1.91
19.40	0.51	1.06	0.48*	1.90	0.00	1.90
19.45	0.51	1.06	0.48*	1.90	0.00	1.90
19.50	0.51	1.06	0.48*	1.90	0.00	1.90
19.55	0.51	1.06	0.48*	1.89	0.00	1.89
19.60	0.51	1.06	0.48*	1.89	0.00	1.89
19.65	0.51	1.06	0.48*	1.89	0.00	1.89
19.70	0.51	1.06	0.48*	1.88	0.00	1.88
19.75	0.51	1.06	0.48*	1.88	0.00	1.88
19.80	0.51	1.06	0.48*	1.88	0.00	1.88
19.85	0.51	1.06	0.48*	1.87	0.00	1.87
19.90	0.51	1.06	0.48*	1.87	0.00	1.87
19.95	0.51	1.06	0.48*	1.87	0.00	1.87
20.00	0.51	1.06	0.48*	1.87	0.00	1.87
20.05	0.51	1.06	0.48*	1.86	0.00	1.86
20.10	0.51	1.06	0.48*	1.86	0.00	1.86
20.15	0.51	1.06	0.48*	1.86	0.00	1.86
20.20	0.51	1.06	0.48*	1.86	0.00	1.86
20.25	0.51	1.06	0.48*	1.85	0.00	1.85
20.30	0.51	1.07	0.48*	1.85	0.00	1.85
20.35	0.51	1.07	0.48*	1.85	0.00	1.85
20.40	0.51	1.07	0.48*	1.84	0.00	1.84
20.45	0.51	1.07	0.48*	1.84	0.00	1.84
20.50	0.51	1.07	0.48*	1.83	0.00	1.83
20.55	0.51	1.07	0.48*	1.83	0.00	1.83
20.60	0.51	1.07	0.48*	1.83	0.00	1.83
20.65	0.51	1.07	0.48*	1.82	0.00	1.82
20.70	0.51	1.07	0.48*	1.82	0.00	1.82
20.75	0.49	1.07	0.45*	1.81	0.00	1.81
20.80	0.45	1.07	0.42*	1.81	0.00	1.81
20.85	0.43	1.07	0.40*	1.81	0.00	1.81
20.90	0.41	1.07	0.39*	1.80	0.00	1.80
20.95	0.40	1.07	0.38*	1.80	0.00	1.80
21.00	0.40	1.07	0.37*	1.79	0.00	1.79
21.05	0.39	1.07	0.36*	1.79	0.00	1.79
21.10	0.38	1.07	0.36*	1.78	0.00	1.78
21.15	0.37	1.07	0.35*	1.78	0.00	1.78
21.20	0.37	1.07	0.34*	1.77	0.00	1.77

21.25	0.36	1.07	0.34*	1.76	0.00	1.76
21.30	0.36	1.07	0.33*	1.76	0.00	1.76
21.35	0.36	1.07	0.33*	1.75	0.00	1.75
21.40	0.35	1.08	0.33*	1.75	0.00	1.75
21.45	0.35	1.08	0.32*	1.74	0.00	1.74
21.50	0.34	1.08	0.32*	1.74	0.00	1.74
21.55	0.34	1.08	0.31*	1.73	0.00	1.73
21.60	0.34	1.08	0.31*	1.72	0.00	1.72
21.65	0.33	1.08	0.31*	1.72	0.00	1.72
21.70	0.33	1.08	0.30*	1.71	0.00	1.71
21.75	0.32	1.08	0.30*	1.70	0.00	1.70
21.80	0.32	1.08	0.30*	1.70	0.00	1.70
21.85	0.32	1.08	0.30*	1.69	0.00	1.69
21.90	0.32	1.08	0.29*	1.69	0.00	1.69
21.95	0.31	1.08	0.29*	1.68	0.00	1.68
22.00	0.31	1.08	0.29*	1.67	0.00	1.67
22.05	0.31	1.08	0.28*	1.67	0.00	1.67
22.10	0.30	1.08	0.28*	1.66	0.00	1.66
22.15	0.30	1.08	0.28*	1.65	0.00	1.65
22.20	0.30	1.08	0.28*	1.64	0.00	1.64
22.25	0.30	1.08	0.27*	1.64	0.00	1.64
22.30	0.29	1.08	0.27*	1.63	0.00	1.63
22.35	0.29	1.08	0.27*	1.62	0.00	1.62
22.40	0.29	1.08	0.27*	1.62	0.00	1.62
22.45	0.29	1.08	0.26*	1.61	0.00	1.61
22.50	0.28	1.08	0.26*	1.60	0.00	1.60
22.55	0.28	1.09	0.26*	1.60	0.00	1.60
22.60	0.28	1.09	0.26*	1.59	0.00	1.59
22.65	0.28	1.09	0.25*	1.58	0.00	1.58
22.70	0.27	1.09	0.25*	1.57	0.00	1.57
22.75	0.27	1.09	0.25*	1.57	0.00	1.57
22.80	0.27	1.09	0.25*	1.56	0.00	1.56
22.85	0.27	1.09	0.24*	1.55	0.00	1.55
22.90	0.26	1.09	0.24*	1.54	0.00	1.54
22.95	0.26	1.09	0.24*	1.54	0.00	1.54
23.00	0.26	1.09	0.24*	1.53	0.00	1.53
23.05	0.26	1.09	0.24*	1.52	0.00	1.52
23.10	0.26	1.09	0.23*	1.51	0.00	1.51
23.15	0.25	1.09	0.23*	1.50	0.00	1.50
23.20	0.25	1.09	0.23*	1.50	0.00	1.50
23.25	0.25	1.09	0.23*	1.49	0.00	1.49
23.30	0.25	1.09	0.23*	1.48	0.00	1.48
23.35	0.25	1.09	0.22*	1.47	0.00	1.47
23.40	0.24	1.09	0.22*	1.46	0.00	1.46
23.45	0.24	1.09	0.22*	1.46	0.00	1.46
23.50	0.24	1.09	0.22*	1.45	0.00	1.45
23.55	0.24	1.09	0.22*	1.44	0.00	1.44
23.60	0.24	1.09	0.22*	1.43	0.00	1.43
23.65	0.23	1.09	0.21*	1.42	0.00	1.42
23.70	0.23	1.09	0.21*	1.41	0.00	1.41

23.75	0.23	1.10	0.21*	1.40	0.00	1.40
23.80	0.23	1.10	0.21*	1.40	0.00	1.40
23.85	0.23	1.10	0.21*	1.39	0.00	1.39
23.90	0.22	1.10	0.20*	1.38	0.00	1.38
23.95	0.22	1.10	0.20*	1.37	0.00	1.37
24.00	0.22	1.10	0.20*	1.36	0.00	1.36
24.05	0.22	1.10	0.20*	1.35	0.00	1.35
24.10	0.22	1.10	0.20*	1.34	0.00	1.34
24.15	0.22	1.10	0.20*	1.33	0.00	1.33
24.20	0.21	1.10	0.19*	1.32	0.00	1.32
24.25	0.21	1.10	0.19*	1.31	0.00	1.31
24.30	0.21	1.10	0.19*	1.31	0.00	1.31
24.35	0.21	1.10	0.19*	1.30	0.00	1.30
24.40	0.21	1.10	0.19*	1.29	0.00	1.29
24.45	0.21	1.10	0.19*	1.28	0.00	1.28
24.50	0.20	1.10	0.19*	1.27	0.00	1.27
24.55	0.20	1.10	0.18*	1.26	0.00	1.26
24.60	0.20	1.10	0.18*	1.25	0.00	1.25
24.65	0.20	1.10	0.18*	1.24	0.00	1.24
24.70	0.20	1.10	0.18*	1.23	0.00	1.23
24.75	0.20	1.10	0.18*	1.22	0.00	1.22
24.80	0.19	1.10	0.18*	1.21	0.00	1.21
24.85	0.19	1.10	0.17*	1.20	0.00	1.20
24.90	0.19	1.10	0.17*	1.19	0.00	1.19
24.95	0.19	1.10	0.17*	1.18	0.00	1.18
25.00	0.19	1.11	0.17*	1.17	0.00	1.17
25.05	0.19	1.11	0.17*	1.16	0.00	1.16
25.10	0.19	1.11	0.17*	1.15	0.00	1.15
25.15	0.19	1.11	0.17*	1.13	0.00	1.13
25.20	0.19	1.11	0.17*	1.12	0.00	1.12
25.25	0.19	1.11	0.17*	1.11	0.00	1.11
25.30	0.19	1.11	0.18*	1.10	0.00	1.10
25.35	0.19	1.11	0.18*	1.09	0.00	1.09
25.40	0.20	1.11	0.18*	1.08	0.00	1.08
25.45	0.20	1.11	0.18*	1.07	0.00	1.07
25.50	0.20	1.11	0.18*	1.06	0.00	1.06
25.55	0.20	1.11	0.18*	1.05	0.00	1.05
25.60	0.20	1.11	0.18*	1.04	0.00	1.04
25.65	0.20	1.11	0.18*	1.03	0.00	1.03
25.70	0.20	1.11	0.18*	1.02	0.00	1.02
25.75	0.20	1.11	0.18*	1.01	0.00	1.01
25.80	0.21	1.11	0.18*	1.00	0.00	1.00
25.85	0.21	1.11	0.19*	0.99	0.00	0.99
25.90	0.21	1.11	0.19*	0.99	0.00	0.99
25.95	0.21	1.11	0.19*	0.98	0.00	0.98
26.00	0.21	1.11	0.19*	0.97	0.00	0.97
26.05	0.21	1.11	0.19*	0.96	0.00	0.96
26.10	0.21	1.11	0.19*	0.95	0.00	0.95
26.15	0.21	1.11	0.19*	0.94	0.00	0.94
26.20	0.22	1.11	0.19*	0.93	0.00	0.93

26.25	0.22	1.11	0.19*	0.92	0.00	0.92
26.30	0.22	1.12	0.20*	0.91	0.00	0.91
26.35	0.22	1.12	0.20*	0.90	0.00	0.90
26.40	0.22	1.12	0.20*	0.89	0.00	0.89
26.45	0.22	1.12	0.20*	0.88	0.00	0.88
26.50	0.22	1.12	0.20*	0.87	0.00	0.87
26.55	0.22	1.12	0.20*	0.87	0.00	0.87
26.60	0.23	1.12	0.20*	0.86	0.00	0.86
26.65	0.23	1.12	0.20*	0.85	0.00	0.85
26.70	0.23	1.12	0.20*	0.84	0.00	0.84
26.75	0.23	1.12	0.21*	0.83	0.00	0.83
26.80	0.23	1.12	0.21*	0.82	0.00	0.82
26.85	0.23	1.12	0.21*	0.81	0.00	0.81
26.90	0.23	1.12	0.21*	0.80	0.00	0.80
26.95	0.24	1.12	0.21*	0.80	0.00	0.80
27.00	0.24	1.12	0.21*	0.79	0.00	0.79
27.05	0.24	1.12	0.21*	0.78	0.00	0.78
27.10	0.24	1.12	0.21*	0.77	0.00	0.77
27.15	0.24	1.12	0.21*	0.76	0.00	0.76
27.20	0.24	1.12	0.22*	0.75	0.00	0.75
27.25	0.24	1.12	0.22*	0.75	0.00	0.75
27.30	0.25	1.12	0.22*	0.74	0.00	0.74
27.35	0.25	1.12	0.22*	0.73	0.00	0.73
27.40	0.25	1.12	0.22*	0.72	0.00	0.72
27.45	0.25	1.12	0.22*	0.71	0.00	0.71
27.50	0.25	1.12	0.22*	0.70	0.00	0.70
27.55	0.25	1.12	0.22*	0.70	0.00	0.70
27.60	0.25	1.12	0.23*	0.69	0.00	0.69
27.65	0.26	1.12	0.23*	0.68	0.00	0.68
27.70	0.26	1.12	0.23*	0.67	0.00	0.67
27.75	0.26	1.13	0.23*	0.66	0.00	0.66
27.80	0.26	1.13	0.23*	0.66	0.00	0.66
27.85	0.26	1.13	0.23*	0.65	0.00	0.65
27.90	0.27	1.13	0.24*	0.64	0.00	0.64
27.95	0.27	1.13	0.24*	0.63	0.00	0.63
28.00	0.27	1.13	0.24*	0.63	0.00	0.63
28.05	0.28	1.13	0.25*	0.62	0.00	0.62
28.10	0.28	1.13	0.25*	0.61	0.00	0.61
28.15	0.28	1.13	0.25*	0.60	0.00	0.60
28.20	0.28	1.13	0.25*	0.60	0.00	0.60
28.25	0.28	1.13	0.25*	0.59	0.00	0.59
28.30	0.29	1.13	0.25*	0.58	0.00	0.58
28.35	0.29	1.13	0.25*	0.57	0.00	0.57
28.40	0.29	1.13	0.26*	0.57	0.00	0.57
28.45	0.29	1.13	0.26*	0.56	0.00	0.56
28.50	0.29	1.13	0.26*	0.55	0.00	0.55
28.55	0.29	1.13	0.26*	0.55	0.00	0.55
28.60	0.30	1.13	0.26*	0.54	0.00	0.54
28.65	0.30	1.13	0.26*	0.53	0.00	0.53
28.70	0.30	1.13	0.27*	0.53	0.00	0.53

28.75	0.30	1.13	0.27*	0.52	0.00	0.52
28.80	0.30	1.13	0.27*	0.51	0.00	0.51
28.85	0.31	1.13	0.27*	0.51	0.00	0.51
28.90	0.31	1.13	0.27*	0.50	0.00	0.50
28.95	0.31	1.13	0.27*	0.49	0.00	0.49
29.00	0.31	1.13	0.28*	0.49	0.00	0.49
29.05	0.32	1.13	0.28*	0.48	0.00	0.48
29.10	0.32	1.13	0.28*	0.47	0.00	0.47
29.15	0.32	1.13	0.28*	0.47	0.00	0.47
29.20	0.32	1.13	0.28*	0.46	0.00	0.46
29.25	0.33	1.13	0.29*	0.45	0.00	0.45
29.30	0.33	1.13	0.29*	0.45	0.00	0.45
29.35	0.33	1.13	0.29*	0.44	0.00	0.44
29.40	0.33	1.13	0.29*	0.43	0.00	0.43
29.45	0.34	1.14	0.30*	0.43	0.00	0.43
29.50	0.34	1.14	0.30*	0.42	0.00	0.42
29.55	0.34	1.14	0.30*	0.41	0.00	0.41
29.60	0.35	1.14	0.30*	0.41	0.00	0.41
29.65	0.35	1.14	0.31*	0.40	0.00	0.40
29.70	0.35	1.14	0.31*	0.40	0.00	0.40
29.75	0.36	1.14	0.31*	0.39	0.00	0.39
29.80	0.36	1.14	0.32*	0.38	0.00	0.38
29.85	0.36	1.14	0.32*	0.38	0.00	0.38
29.90	0.37	1.14	0.32*	0.37	0.00	0.37
29.95	0.37	1.14	0.32*	0.37	0.00	0.37
30.00	0.37	1.14	0.32*	0.37	0.00	0.37
30.05	0.38	1.14	0.33*	0.37	0.00	0.37
30.10	0.38	1.14	0.34*	0.37	0.00	0.37
30.15	0.39	1.14	0.34*	0.36	0.00	0.36
30.20	0.39	1.14	0.34*	0.36	0.00	0.36
30.25	0.40	1.14	0.35*	0.35	0.00	0.35
30.30	0.40	1.14	0.36*	0.35	0.00	0.35
30.35	0.41	1.14	0.36*	0.34	0.00	0.34
30.40	0.42	1.14	0.37*	0.34	0.00	0.34
30.45	0.43	1.14	0.38*	0.33	0.00	0.33
30.50	0.44	1.14	0.39*	0.33	0.00	0.33
30.55	0.46	1.14	0.41*	0.32	0.00	0.32
30.60	0.49	1.14	0.43*	0.32	0.00	0.32
30.65	0.51	1.14	0.45*	0.31	0.00	0.31
30.70	0.51	1.14	0.45*	0.31	0.00	0.31
30.75	0.51	1.14	0.45*	0.31	0.00	0.31
30.80	0.51	1.14	0.45*	0.30	0.00	0.30
30.85	0.51	1.14	0.45*	0.30	0.00	0.30
30.90	0.51	1.14	0.45*	0.29	0.00	0.29
30.95	0.51	1.14	0.45*	0.29	0.00	0.29
31.00	0.51	1.14	0.45*	0.29	0.00	0.29
31.05	0.51	1.14	0.45*	0.28	0.00	0.28
31.10	0.51	1.13	0.45*	0.28	0.00	0.28
31.15	0.51	1.13	0.45*	0.27	0.00	0.27
31.20	0.51	1.13	0.45*	0.27	0.00	0.27

31.25	0.51	1.13	0.45*	0.27	0.00	0.27
31.30	0.51	1.13	0.45*	0.26	0.00	0.26
31.35	0.51	1.13	0.45*	0.26	0.00	0.26
31.40	0.51	1.13	0.45*	0.26	0.00	0.26
31.45	0.51	1.13	0.45*	0.25	0.00	0.25
31.50	0.51	1.13	0.45*	0.25	0.00	0.25
31.55	0.51	1.13	0.45*	0.25	0.00	0.25
31.60	0.51	1.13	0.45*	0.25	0.00	0.25
31.65	0.51	1.13	0.45*	0.24	0.00	0.24
31.70	0.51	1.13	0.45*	0.24	0.00	0.24
31.75	0.51	1.13	0.45*	0.24	0.00	0.24
31.80	0.51	1.13	0.45*	0.23	0.00	0.23
31.85	0.51	1.13	0.45*	0.23	0.00	0.23
31.90	0.50	1.13	0.45*	0.23	0.00	0.23
31.95	0.50	1.13	0.45*	0.23	0.00	0.23
32.00	0.50	1.13	0.45*	0.23	0.00	0.23
32.05	0.50	1.13	0.45*	0.22	0.00	0.22
32.10	0.50	1.13	0.45*	0.22	0.00	0.22
32.15	0.50	1.13	0.45*	0.22	0.00	0.22
32.20	0.50	1.13	0.45*	0.22	0.00	0.22
32.25	0.50	1.13	0.45*	0.22	0.00	0.22
32.30	0.50	1.13	0.45*	0.22	0.00	0.22
32.35	0.50	1.13	0.45*	0.21	0.00	0.21
32.40	0.50	1.13	0.45*	0.21	0.00	0.21
32.45	0.50	1.13	0.45*	0.21	0.00	0.21
32.50	0.50	1.13	0.45*	0.21	0.00	0.21
32.55	0.50	1.13	0.45*	0.21	0.00	0.21
32.60	0.50	1.13	0.45*	0.21	0.00	0.21
32.65	0.50	1.13	0.45*	0.21	0.00	0.21
32.70	0.50	1.13	0.45*	0.21	0.00	0.21
32.75	0.50	1.13	0.45*	0.21	0.00	0.21
32.80	0.50	1.13	0.45*	0.20	0.00	0.20
32.85	0.50	1.12	0.45*	0.20	0.00	0.20
32.90	0.50	1.12	0.45*	0.20	0.00	0.20
32.95	0.50	1.12	0.45*	0.20	0.00	0.20
33.00	0.50	1.12	0.45*	0.20	0.00	0.20
33.05	0.50	1.12	0.45*	0.20	0.00	0.20
33.10	0.50	1.12	0.45*	0.20	0.00	0.20
33.15	0.50	1.12	0.45*	0.20	0.00	0.20
33.20	0.50	1.12	0.45*	0.20	0.00	0.20
33.25	0.50	1.12	0.45*	0.20	0.00	0.20
33.30	0.50	1.12	0.45*	0.19	0.00	0.19
33.35	0.50	1.12	0.45*	0.19	0.00	0.19
33.40	0.50	1.12	0.45*	0.19	0.00	0.19
33.45	0.50	1.12	0.45*	0.19	0.00	0.19
33.50	0.50	1.12	0.45*	0.19	0.00	0.19
33.55	0.50	1.12	0.45*	0.19	0.00	0.19
33.60	0.50	1.12	0.45*	0.19	0.00	0.19
33.65	0.50	1.12	0.45*	0.19	0.00	0.19
33.70	0.50	1.12	0.45*	0.19	0.00	0.19

33.75	0.50	1.12	0.45*	0.19	0.00	0.19
33.80	0.50	1.12	0.45*	0.19	0.00	0.19
33.85	0.50	1.12	0.45*	0.19	0.00	0.19
33.90	0.50	1.12	0.45*	0.18	0.00	0.18
33.95	0.50	1.12	0.45*	0.18	0.00	0.18
34.00	0.50	1.11	0.45*	0.18	0.00	0.18
34.05	0.50	1.11	0.45*	0.18	0.00	0.18
34.10	0.50	1.11	0.45*	0.18	0.00	0.18
34.15	0.50	1.11	0.45*	0.18	0.00	0.18
34.20	0.50	1.11	0.45*	0.18	0.00	0.18
34.25	0.50	1.11	0.45*	0.18	0.00	0.18
34.30	0.50	1.11	0.45*	0.18	0.00	0.18
34.35	0.50	1.11	0.45*	0.18	0.00	0.18
34.40	0.50	1.11	0.45*	0.18	0.00	0.18
34.45	0.50	1.11	0.45*	0.18	0.00	0.18
34.50	0.50	1.11	0.45*	0.18	0.00	0.18
34.55	0.50	1.11	0.45*	0.18	0.00	0.18
34.60	0.50	1.11	0.45*	0.18	0.00	0.18
34.65	0.50	1.11	0.45*	0.18	0.00	0.18
34.70	0.50	1.11	0.45*	0.18	0.00	0.18
34.75	0.50	1.11	0.45*	0.18	0.00	0.18
34.80	0.50	1.11	0.45*	0.18	0.00	0.18
34.85	0.50	1.11	0.45*	0.18	0.00	0.18
34.90	0.50	1.11	0.45*	0.18	0.00	0.18
34.95	0.50	1.11	0.45*	0.18	0.00	0.18
35.00	0.50	1.10	0.45*	0.18	0.00	0.18
35.05	0.50	1.10	0.45*	0.18	0.00	0.18
35.10	0.50	1.10	0.45*	0.18	0.00	0.18
35.15	0.50	1.10	0.45*	0.18	0.00	0.18
35.20	0.50	1.10	0.45*	0.18	0.00	0.18
35.25	0.50	1.10	0.45*	0.18	0.00	0.18
35.30	0.50	1.10	0.45*	0.18	0.00	0.18
35.35	0.50	1.10	0.45*	0.18	0.00	0.18
35.40	0.49	1.10	0.45*	0.18	0.00	0.18
35.45	0.49	1.10	0.45*	0.18	0.00	0.18
35.50	0.49	1.10	0.45*	0.18	0.00	0.18
35.55	0.49	1.10	0.45*	0.18	0.00	0.18
35.60	0.49	1.10	0.45*	0.18	0.00	0.18
35.65	0.49	1.10	0.45*	0.18	0.00	0.18
35.70	0.49	1.10	0.45*	0.18	0.00	0.18
35.75	0.49	1.10	0.45*	0.18	0.00	0.18
35.80	0.49	1.10	0.45*	0.18	0.00	0.18
35.85	0.49	1.10	0.45*	0.17	0.00	0.17
35.90	0.49	1.10	0.45*	0.17	0.00	0.17
35.95	0.49	1.09	0.45*	0.17	0.00	0.17
36.00	0.49	1.09	0.45*	0.17	0.00	0.17
36.05	0.49	1.09	0.45*	0.17	0.00	0.17
36.10	0.49	1.09	0.45*	0.17	0.00	0.17
36.15	0.49	1.09	0.45*	0.17	0.00	0.17
36.20	0.49	1.09	0.45*	0.17	0.00	0.17

36.25	0.49	1.09	0.45*	0.17	0.00	0.17
36.30	0.49	1.09	0.45*	0.17	0.00	0.17
36.35	0.49	1.09	0.45*	0.17	0.00	0.17
36.40	0.49	1.09	0.45*	0.17	0.00	0.17
36.45	0.49	1.09	0.45*	0.17	0.00	0.17
36.50	0.49	1.09	0.45*	0.16	0.00	0.16
36.55	0.49	1.09	0.45*	0.16	0.00	0.16
36.60	0.49	1.09	0.45*	0.16	0.00	0.16
36.65	0.49	1.09	0.45*	0.16	0.00	0.16
36.70	0.49	1.09	0.45*	0.16	0.00	0.16
36.75	0.49	1.09	0.45*	0.16	0.00	0.16
36.80	0.49	1.09	0.45*	0.16	0.00	0.16
36.85	0.49	1.08	0.45*	0.16	0.00	0.16
36.90	0.49	1.08	0.45*	0.16	0.00	0.16
36.95	0.49	1.08	0.45*	0.16	0.00	0.16
37.00	0.49	1.08	0.45*	0.15	0.00	0.15
37.05	0.49	1.08	0.45*	0.15	0.00	0.15
37.10	0.49	1.08	0.45*	0.15	0.00	0.15
37.15	0.49	1.08	0.45*	0.15	0.00	0.15
37.20	0.49	1.08	0.46*	0.15	0.00	0.15
37.25	0.49	1.08	0.46*	0.15	0.00	0.15
37.30	0.49	1.08	0.46*	0.15	0.00	0.15
37.35	0.49	1.08	0.46*	0.15	0.00	0.15
37.40	0.49	1.08	0.46*	0.15	0.00	0.15
37.45	0.49	1.08	0.46*	0.14	0.00	0.14
37.50	0.49	1.08	0.46*	0.14	0.00	0.14
37.55	0.49	1.08	0.46*	0.14	0.00	0.14
37.60	0.49	1.08	0.46*	0.14	0.00	0.14
37.65	0.49	1.08	0.46*	0.14	0.00	0.14
37.70	0.49	1.08	0.46*	0.14	0.00	0.14
37.75	0.49	1.08	0.46*	0.14	0.00	0.14
37.80	0.49	1.07	0.46*	0.14	0.00	0.14
37.85	0.49	1.07	0.46*	0.13	0.00	0.13
37.90	0.49	1.07	0.46*	0.13	0.00	0.13
37.95	0.49	1.07	0.46*	0.13	0.00	0.13
38.00	0.49	1.07	0.46*	0.13	0.00	0.13
38.05	0.49	1.07	0.46*	0.13	0.00	0.13
38.10	0.49	1.07	0.46*	0.12	0.00	0.12
38.15	0.49	1.07	0.46*	0.12	0.00	0.12
38.20	0.49	1.07	0.46*	0.12	0.00	0.12
38.25	0.49	1.07	0.46*	0.12	0.00	0.12
38.30	0.49	1.07	0.46*	0.11	0.00	0.11
38.35	0.49	1.07	0.46*	0.11	0.00	0.11
38.40	0.49	1.07	0.46*	0.11	0.00	0.11
38.45	0.49	1.07	0.46*	0.11	0.00	0.11
38.50	0.49	1.07	0.46*	0.10	0.00	0.10
38.55	0.49	1.07	0.46*	0.10	0.00	0.10
38.60	0.49	1.07	0.46*	0.10	0.00	0.10
38.65	0.49	1.07	0.46*	0.10	0.00	0.10
38.70	0.49	1.07	0.46*	0.09	0.00	0.09

38.75	0.49	1.06	0.46*	0.09	0.00	0.09
38.80	0.49	1.06	0.46*	0.09	0.00	0.09
38.85	0.49	1.06	0.46*	0.08	0.00	0.08
38.90	0.49	1.06	0.46*	0.08	0.00	0.08
38.95	0.49	1.06	0.46*	0.08	0.00	0.08
39.00	0.49	1.06	0.46*	0.07	0.00	0.07
39.05	0.49	1.06	0.46*	0.07	0.00	0.07
39.10	0.49	1.06	0.46*	0.07	0.00	0.07
39.15	0.49	1.06	0.46*	0.06	0.00	0.06
39.20	0.49	1.06	0.46*	0.06	0.00	0.06
39.25	0.49	1.06	0.46*	0.06	0.00	0.06
39.30	0.49	1.06	0.46*	0.05	0.00	0.05
39.35	0.49	1.06	0.46*	0.05	0.00	0.05
39.40	0.49	1.06	0.46*	0.04	0.00	0.04
39.45	0.49	1.06	0.46*	0.04	0.00	0.04
39.50	0.49	1.06	0.46*	0.04	0.00	0.04
39.55	0.49	1.06	0.46*	0.03	0.00	0.03
39.60	0.49	1.06	0.46*	0.03	0.00	0.03
39.65	0.49	1.05	0.46*	0.03	0.00	0.03
39.70	0.49	1.05	0.46*	0.02	0.00	0.02
39.75	0.49	1.05	0.46*	0.02	0.00	0.02
39.80	0.49	1.05	0.46*	0.01	0.00	0.01
39.85	0.49	1.05	0.46*	0.01	0.00	0.01
39.90	0.49	1.05	0.46*	0.00	0.00	0.00
39.95	0.49	1.05	0.46*	0.00	0.00	0.00
40.00	0.43	1.05	0.41*	0.00	0.00	0.00
40.05	2.00	1.05	5.00	0.00	0.00	0.00
40.10	2.00	1.05	5.00	0.00	0.00	0.00
40.15	2.00	1.05	5.00	0.00	0.00	0.00
40.20	2.00	1.05	5.00	0.00	0.00	0.00
40.25	2.00	1.05	5.00	0.00	0.00	0.00
40.30	2.00	1.05	5.00	0.00	0.00	0.00
40.35	2.00	1.05	5.00	0.00	0.00	0.00
40.40	2.00	1.05	5.00	0.00	0.00	0.00
40.45	2.00	1.05	5.00	0.00	0.00	0.00
40.50	2.00	1.05	5.00	0.00	0.00	0.00
40.55	2.00	1.05	5.00	0.00	0.00	0.00
40.60	2.00	1.04	5.00	0.00	0.00	0.00
40.65	2.00	1.04	5.00	0.00	0.00	0.00
40.70	2.00	1.04	5.00	0.00	0.00	0.00
40.75	2.00	1.04	5.00	0.00	0.00	0.00
40.80	2.00	1.04	5.00	0.00	0.00	0.00
40.85	2.00	1.04	5.00	0.00	0.00	0.00
40.90	2.00	1.04	5.00	0.00	0.00	0.00
40.95	2.00	1.04	5.00	0.00	0.00	0.00
41.00	2.00	1.04	5.00	0.00	0.00	0.00
41.05	2.00	1.04	5.00	0.00	0.00	0.00
41.10	2.00	1.04	5.00	0.00	0.00	0.00
41.15	2.00	1.04	5.00	0.00	0.00	0.00
41.20	2.00	1.04	5.00	0.00	0.00	0.00

41.25	2.00	1.04	5.00	0.00	0.00	0.00
41.30	2.00	1.04	5.00	0.00	0.00	0.00
41.35	2.00	1.04	5.00	0.00	0.00	0.00
41.40	2.00	1.04	5.00	0.00	0.00	0.00
41.45	2.00	1.04	5.00	0.00	0.00	0.00
41.50	2.00	1.04	5.00	0.00	0.00	0.00
41.55	2.00	1.04	5.00	0.00	0.00	0.00
41.60	2.00	1.03	5.00	0.00	0.00	0.00
41.65	2.00	1.03	5.00	0.00	0.00	0.00
41.70	2.00	1.03	5.00	0.00	0.00	0.00
41.75	2.00	1.03	5.00	0.00	0.00	0.00
41.80	2.00	1.03	5.00	0.00	0.00	0.00
41.85	2.00	1.03	5.00	0.00	0.00	0.00
41.90	2.00	1.03	5.00	0.00	0.00	0.00
41.95	2.00	1.03	5.00	0.00	0.00	0.00
42.00	2.00	1.03	5.00	0.00	0.00	0.00
42.05	2.00	1.03	5.00	0.00	0.00	0.00
42.10	2.00	1.03	5.00	0.00	0.00	0.00
42.15	2.00	1.03	5.00	0.00	0.00	0.00
42.20	2.00	1.03	5.00	0.00	0.00	0.00
42.25	2.00	1.03	5.00	0.00	0.00	0.00
42.30	2.00	1.03	5.00	0.00	0.00	0.00
42.35	2.00	1.03	5.00	0.00	0.00	0.00
42.40	2.00	1.03	5.00	0.00	0.00	0.00
42.45	2.00	1.03	5.00	0.00	0.00	0.00
42.50	2.00	1.03	5.00	0.00	0.00	0.00
42.55	2.00	1.03	5.00	0.00	0.00	0.00
42.60	2.00	1.03	5.00	0.00	0.00	0.00
42.65	2.00	1.02	5.00	0.00	0.00	0.00
42.70	2.00	1.02	5.00	0.00	0.00	0.00
42.75	2.00	1.02	5.00	0.00	0.00	0.00
42.80	2.00	1.02	5.00	0.00	0.00	0.00
42.85	2.00	1.02	5.00	0.00	0.00	0.00
42.90	2.00	1.02	5.00	0.00	0.00	0.00
42.95	2.00	1.02	5.00	0.00	0.00	0.00
43.00	2.00	1.02	5.00	0.00	0.00	0.00
43.05	2.00	1.02	5.00	0.00	0.00	0.00
43.10	2.00	1.02	5.00	0.00	0.00	0.00
43.15	2.00	1.02	5.00	0.00	0.00	0.00
43.20	2.00	1.02	5.00	0.00	0.00	0.00
43.25	2.00	1.02	5.00	0.00	0.00	0.00
43.30	2.00	1.02	5.00	0.00	0.00	0.00
43.35	2.00	1.02	5.00	0.00	0.00	0.00
43.40	2.00	1.02	5.00	0.00	0.00	0.00
43.45	2.00	1.02	5.00	0.00	0.00	0.00
43.50	2.00	1.02	5.00	0.00	0.00	0.00
43.55	2.00	1.02	5.00	0.00	0.00	0.00
43.60	2.00	1.02	5.00	0.00	0.00	0.00
43.65	2.00	1.02	5.00	0.00	0.00	0.00
43.70	2.00	1.02	5.00	0.00	0.00	0.00

43.75	2.00	1.01	5.00	0.00	0.00	0.00
43.80	2.00	1.01	5.00	0.00	0.00	0.00
43.85	2.00	1.01	5.00	0.00	0.00	0.00
43.90	2.00	1.01	5.00	0.00	0.00	0.00
43.95	2.00	1.01	5.00	0.00	0.00	0.00
44.00	2.00	1.01	5.00	0.00	0.00	0.00
44.05	2.00	1.01	5.00	0.00	0.00	0.00
44.10	2.00	1.01	5.00	0.00	0.00	0.00
44.15	2.00	1.01	5.00	0.00	0.00	0.00
44.20	2.00	1.01	5.00	0.00	0.00	0.00
44.25	2.00	1.01	5.00	0.00	0.00	0.00
44.30	2.00	1.01	5.00	0.00	0.00	0.00
44.35	2.00	1.01	5.00	0.00	0.00	0.00
44.40	2.00	1.01	5.00	0.00	0.00	0.00
44.45	2.00	1.01	5.00	0.00	0.00	0.00
44.50	2.00	1.01	5.00	0.00	0.00	0.00
44.55	2.00	1.01	5.00	0.00	0.00	0.00
44.60	2.00	1.01	5.00	0.00	0.00	0.00
44.65	2.00	1.01	5.00	0.00	0.00	0.00
44.70	2.00	1.01	5.00	0.00	0.00	0.00
44.75	2.00	1.01	5.00	0.00	0.00	0.00
44.80	2.00	1.01	5.00	0.00	0.00	0.00
44.85	2.00	1.00	5.00	0.00	0.00	0.00
44.90	2.00	1.00	5.00	0.00	0.00	0.00
44.95	2.00	1.00	5.00	0.00	0.00	0.00
45.00	2.00	1.00	5.00	0.00	0.00	0.00
45.05	2.00	1.00	5.00	0.00	0.00	0.00
45.10	2.00	1.00	5.00	0.00	0.00	0.00
45.15	2.00	1.00	5.00	0.00	0.00	0.00
45.20	2.00	1.00	5.00	0.00	0.00	0.00
45.25	2.00	1.00	5.00	0.00	0.00	0.00
45.30	2.00	1.00	5.00	0.00	0.00	0.00
45.35	2.00	1.00	5.00	0.00	0.00	0.00
45.40	2.00	1.00	5.00	0.00	0.00	0.00
45.45	2.00	1.00	5.00	0.00	0.00	0.00
45.50	2.00	1.00	5.00	0.00	0.00	0.00
45.55	2.00	1.00	5.00	0.00	0.00	0.00
45.60	2.00	1.00	5.00	0.00	0.00	0.00
45.65	2.00	1.00	5.00	0.00	0.00	0.00
45.70	2.00	1.00	5.00	0.00	0.00	0.00
45.75	2.00	1.00	5.00	0.00	0.00	0.00
45.80	2.00	1.00	5.00	0.00	0.00	0.00
45.85	2.00	1.00	5.00	0.00	0.00	0.00
45.90	2.00	1.00	5.00	0.00	0.00	0.00
45.95	2.00	1.00	5.00	0.00	0.00	0.00
46.00	2.00	0.99	5.00	0.00	0.00	0.00
46.05	2.00	0.99	5.00	0.00	0.00	0.00
46.10	2.00	0.99	5.00	0.00	0.00	0.00
46.15	2.00	0.99	5.00	0.00	0.00	0.00
46.20	2.00	0.99	5.00	0.00	0.00	0.00

46.25	2.00	0.99	5.00	0.00	0.00	0.00
46.30	2.00	0.99	5.00	0.00	0.00	0.00
46.35	2.00	0.99	5.00	0.00	0.00	0.00
46.40	2.00	0.99	5.00	0.00	0.00	0.00
46.45	2.00	0.99	5.00	0.00	0.00	0.00
46.50	2.00	0.99	5.00	0.00	0.00	0.00
46.55	2.00	0.99	5.00	0.00	0.00	0.00
46.60	2.00	0.99	5.00	0.00	0.00	0.00
46.65	2.00	0.99	5.00	0.00	0.00	0.00
46.70	2.00	0.99	5.00	0.00	0.00	0.00
46.75	2.00	0.99	5.00	0.00	0.00	0.00
46.80	2.00	0.99	5.00	0.00	0.00	0.00
46.85	2.00	0.99	5.00	0.00	0.00	0.00
46.90	2.00	0.99	5.00	0.00	0.00	0.00
46.95	2.00	0.99	5.00	0.00	0.00	0.00
47.00	2.00	0.99	5.00	0.00	0.00	0.00
47.05	2.00	0.99	5.00	0.00	0.00	0.00
47.10	2.00	0.99	5.00	0.00	0.00	0.00
47.15	2.00	0.98	5.00	0.00	0.00	0.00
47.20	2.00	0.98	5.00	0.00	0.00	0.00
47.25	2.00	0.98	5.00	0.00	0.00	0.00
47.30	2.00	0.98	5.00	0.00	0.00	0.00
47.35	2.00	0.98	5.00	0.00	0.00	0.00
47.40	2.00	0.98	5.00	0.00	0.00	0.00
47.45	2.00	0.98	5.00	0.00	0.00	0.00
47.50	2.00	0.98	5.00	0.00	0.00	0.00
47.55	2.00	0.98	5.00	0.00	0.00	0.00
47.60	2.00	0.98	5.00	0.00	0.00	0.00
47.65	2.00	0.98	5.00	0.00	0.00	0.00
47.70	2.00	0.98	5.00	0.00	0.00	0.00
47.75	2.00	0.98	5.00	0.00	0.00	0.00
47.80	2.00	0.98	5.00	0.00	0.00	0.00
47.85	2.00	0.98	5.00	0.00	0.00	0.00
47.90	2.00	0.98	5.00	0.00	0.00	0.00
47.95	2.00	0.98	5.00	0.00	0.00	0.00
48.00	2.00	0.98	5.00	0.00	0.00	0.00
48.05	2.00	0.98	5.00	0.00	0.00	0.00
48.10	2.00	0.98	5.00	0.00	0.00	0.00
48.15	2.00	0.98	5.00	0.00	0.00	0.00
48.20	2.00	0.98	5.00	0.00	0.00	0.00
48.25	2.00	0.97	5.00	0.00	0.00	0.00
48.30	2.00	0.97	5.00	0.00	0.00	0.00
48.35	2.00	0.97	5.00	0.00	0.00	0.00
48.40	2.00	0.97	5.00	0.00	0.00	0.00
48.45	2.00	0.97	5.00	0.00	0.00	0.00
48.50	2.00	0.97	5.00	0.00	0.00	0.00
48.55	2.00	0.97	5.00	0.00	0.00	0.00
48.60	2.00	0.97	5.00	0.00	0.00	0.00
48.65	2.00	0.97	5.00	0.00	0.00	0.00
48.70	2.00	0.97	5.00	0.00	0.00	0.00

48.75	2.00	0.97	5.00	0.00	0.00	0.00
48.80	2.00	0.97	5.00	0.00	0.00	0.00
48.85	2.00	0.97	5.00	0.00	0.00	0.00
48.90	2.00	0.97	5.00	0.00	0.00	0.00
48.95	2.00	0.97	5.00	0.00	0.00	0.00
49.00	2.00	0.97	5.00	0.00	0.00	0.00
49.05	2.00	0.97	5.00	0.00	0.00	0.00
49.10	2.00	0.97	5.00	0.00	0.00	0.00
49.15	2.00	0.97	5.00	0.00	0.00	0.00
49.20	2.00	0.97	5.00	0.00	0.00	0.00
49.25	2.00	0.97	5.00	0.00	0.00	0.00
49.30	2.00	0.97	5.00	0.00	0.00	0.00
49.35	2.00	0.96	5.00	0.00	0.00	0.00
49.40	2.00	0.96	5.00	0.00	0.00	0.00
49.45	2.00	0.96	5.00	0.00	0.00	0.00
49.50	2.00	0.96	5.00	0.00	0.00	0.00
49.55	2.00	0.96	5.00	0.00	0.00	0.00
49.60	2.00	0.96	5.00	0.00	0.00	0.00
49.65	2.00	0.96	5.00	0.00	0.00	0.00
49.70	2.00	0.96	5.00	0.00	0.00	0.00
49.75	2.00	0.96	5.00	0.00	0.00	0.00
49.80	2.00	0.96	5.00	0.00	0.00	0.00
49.85	2.00	0.96	5.00	0.00	0.00	0.00
49.90	2.00	0.96	5.00	0.00	0.00	0.00
49.95	2.00	0.96	5.00	0.00	0.00	0.00
50.00	2.00	0.96	5.00	0.00	0.00	0.00
50.05	2.00	0.96	5.00	0.00	0.00	0.00
50.10	2.00	0.96	5.00	0.00	0.00	0.00
50.15	2.00	0.96	5.00	0.00	0.00	0.00
50.20	2.00	0.96	5.00	0.00	0.00	0.00
50.25	2.00	0.96	5.00	0.00	0.00	0.00
50.30	2.00	0.96	5.00	0.00	0.00	0.00
50.35	2.00	0.96	5.00	0.00	0.00	0.00
50.40	2.00	0.96	5.00	0.00	0.00	0.00
50.45	2.00	0.96	5.00	0.00	0.00	0.00
50.50	2.00	0.95	5.00	0.00	0.00	0.00
50.55	2.00	0.95	5.00	0.00	0.00	0.00
50.60	2.00	0.95	5.00	0.00	0.00	0.00
50.65	2.00	0.95	5.00	0.00	0.00	0.00
50.70	2.00	0.95	5.00	0.00	0.00	0.00
50.75	2.00	0.95	5.00	0.00	0.00	0.00
50.80	2.00	0.95	5.00	0.00	0.00	0.00
50.85	2.00	0.95	5.00	0.00	0.00	0.00
50.90	2.00	0.95	5.00	0.00	0.00	0.00
50.95	2.00	0.95	5.00	0.00	0.00	0.00
51.00	2.00	0.95	5.00	0.00	0.00	0.00

* F.S.<1, Liquefaction Potential Zone
(F.S. is limited to 5, CRR is limited to 2, CSR is limited to 2)

Units: Unit: qc, fs, Stress or Pressure = atm (1.0581tsf); Unit Weight = pcf; Depth = ft; Settlement = in.

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1 atm (atmosphere) = 1 tsf (ton/ft2)

CRRm	Cyclic resistance ratio from soils
CSRsf	Cyclic stress ratio induced by a given earthquake (with user request factor of safety)
F.S.	Factor of Safety against liquefaction, F.S.=CRRm/CSRsf
S_sat	Settlement from saturated sands
S_dry	Settlement from Unsaturated Sands
S_all	Total Settlement from Saturated and Unsaturated Sands
NoLiq	No-Liquefy Soils

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LIQUEFACTION ANALYSIS SUMMARY

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Input File Name: F:\Liquefy5\544-24159 BH2.liq
Title: 52 nd Ave & Van Buren, Coachella
Subtitle: 544-24159

Surface Elev.=-55
Hole No.=BH-2
Depth of Hole= 51.00 ft
Water Table during Earthquake= 5.00 ft
Water Table during In-Situ Testing= 35.00 ft
Max. Acceleration= 0.77 g
Earthquake Magnitude= 7.45

Input Data:
Surface Elev.=-55
Hole No.=BH-2
Depth of Hole=51.00 ft
Water Table during Earthquake= 5.00 ft
Water Table during In-Situ Testing= 35.00 ft
Max. Acceleration=0.77 g
Earthquake Magnitude=7.45
No-Liquefiable Soils: Based on Analysis

1. SPT or BPT Calculation.
2. Settlement Analysis Method: Tokimatsu, M-correction
3. Fines Correction for Liquefaction: Modify Stark/Olson
4. Fine Correction for Settlement: During Liquefaction*
5. Settlement Calculation in: All zones*
6. Hammer Energy Ratio, Ce = 1.25
7. Borehole Diameter, Cb= 1.15
8. Sampling Method, Cs= 1
9. User request factor of safety (apply to CSR) , User= 1.3
   Plot one CSR curve (fs1=User)
10. Use Curve Smoothing: Yes*
* Recommended Options

In-Situ Test Data:
Depth SPT gamma Fines

ft		pcf	%
0.00	11.33	111.80	32.30
5.00	4.00	111.80	51.50
10.00	20.67	111.40	17.40
15.00	11.00	111.40	56.80
20.00	11.33	113.50	47.40
25.00	10.00	113.50	89.70
30.00	21.33	127.20	39.90
35.00	8.00	127.20	59.10
40.00	18.00	128.70	45.90
45.00	11.00	128.70	NoLiq
50.00	10.67	128.70	NoLiq

Output Results:

Settlement of Saturated Sands=3.92 in.
Settlement of Unsaturated Sands=0.61 in.
Total Settlement of Saturated and Unsaturated Sands=4.53 in.
Differential Settlement=2.266 to 2.991 in.

Depth ft	CRRm	CSRfs	F.S.	S_sat. in.	S_dry in.	S_all in.
0.00	0.33	0.65	5.00	3.92	0.61	4.53
0.05	0.33	0.65	5.00	3.92	0.61	4.53
0.10	0.33	0.65	5.00	3.92	0.61	4.53
0.15	0.33	0.65	5.00	3.92	0.61	4.53
0.20	0.32	0.65	5.00	3.92	0.61	4.53
0.25	0.32	0.65	5.00	3.92	0.61	4.53
0.30	0.32	0.65	5.00	3.92	0.61	4.53
0.35	0.32	0.65	5.00	3.92	0.61	4.53
0.40	0.32	0.65	5.00	3.92	0.61	4.53
0.45	0.31	0.65	5.00	3.92	0.61	4.53
0.50	0.31	0.65	5.00	3.92	0.61	4.53
0.55	0.31	0.65	5.00	3.92	0.61	4.53
0.60	0.31	0.65	5.00	3.92	0.61	4.53
0.65	0.31	0.65	5.00	3.92	0.61	4.53
0.70	0.31	0.65	5.00	3.92	0.61	4.53
0.75	0.30	0.65	5.00	3.92	0.61	4.53
0.80	0.30	0.65	5.00	3.92	0.61	4.53
0.85	0.30	0.65	5.00	3.92	0.61	4.53
0.90	0.30	0.65	5.00	3.92	0.61	4.53
0.95	0.30	0.65	5.00	3.92	0.61	4.53
1.00	0.30	0.65	5.00	3.92	0.61	4.53
1.05	0.30	0.65	5.00	3.92	0.60	4.53
1.10	0.29	0.65	5.00	3.92	0.60	4.53
1.15	0.29	0.65	5.00	3.92	0.60	4.53
1.20	0.29	0.65	5.00	3.92	0.60	4.53
1.25	0.29	0.65	5.00	3.92	0.60	4.53

1.30	0.29	0.65	5.00	3.92	0.60	4.53
1.35	0.29	0.65	5.00	3.92	0.60	4.53
1.40	0.28	0.65	5.00	3.92	0.60	4.53
1.45	0.28	0.65	5.00	3.92	0.60	4.53
1.50	0.28	0.65	5.00	3.92	0.60	4.53
1.55	0.28	0.65	5.00	3.92	0.60	4.53
1.60	0.28	0.65	5.00	3.92	0.60	4.52
1.65	0.28	0.65	5.00	3.92	0.60	4.52
1.70	0.28	0.65	5.00	3.92	0.60	4.52
1.75	0.28	0.65	5.00	3.92	0.60	4.52
1.80	0.27	0.65	5.00	3.92	0.60	4.52
1.85	0.27	0.65	5.00	3.92	0.60	4.52
1.90	0.27	0.65	5.00	3.92	0.60	4.52
1.95	0.27	0.65	5.00	3.92	0.60	4.52
2.00	0.27	0.65	5.00	3.92	0.60	4.52
2.05	0.27	0.65	5.00	3.92	0.60	4.52
2.10	0.27	0.64	5.00	3.92	0.60	4.52
2.15	0.26	0.64	5.00	3.92	0.59	4.52
2.20	0.26	0.64	5.00	3.92	0.59	4.52
2.25	0.26	0.64	5.00	3.92	0.59	4.51
2.30	0.26	0.64	5.00	3.92	0.59	4.51
2.35	0.26	0.64	5.00	3.92	0.59	4.51
2.40	0.26	0.64	5.00	3.92	0.58	4.51
2.45	0.26	0.64	5.00	3.92	0.58	4.50
2.50	0.26	0.64	5.00	3.92	0.58	4.50
2.55	0.25	0.64	5.00	3.92	0.57	4.50
2.60	0.25	0.64	5.00	3.92	0.57	4.49
2.65	0.25	0.64	5.00	3.92	0.56	4.48
2.70	0.25	0.64	5.00	3.92	0.55	4.47
2.75	0.25	0.64	5.00	3.92	0.54	4.46
2.80	0.25	0.64	5.00	3.92	0.53	4.45
2.85	0.25	0.64	5.00	3.92	0.52	4.44
2.90	0.25	0.64	5.00	3.92	0.50	4.43
2.95	0.25	0.64	5.00	3.92	0.49	4.42
3.00	0.24	0.64	5.00	3.92	0.48	4.41
3.05	0.24	0.64	5.00	3.92	0.47	4.40
3.10	0.24	0.64	5.00	3.92	0.46	4.38
3.15	0.24	0.64	5.00	3.92	0.45	4.37
3.20	0.24	0.64	5.00	3.92	0.44	4.36
3.25	0.24	0.64	5.00	3.92	0.43	4.35
3.30	0.24	0.64	5.00	3.92	0.42	4.34
3.35	0.24	0.64	5.00	3.92	0.41	4.33
3.40	0.24	0.64	5.00	3.92	0.39	4.32
3.45	0.23	0.64	5.00	3.92	0.38	4.31
3.50	0.23	0.64	5.00	3.92	0.37	4.30
3.55	0.23	0.64	5.00	3.92	0.36	4.28
3.60	0.23	0.64	5.00	3.92	0.35	4.27
3.65	0.23	0.64	5.00	3.92	0.34	4.26
3.70	0.23	0.64	5.00	3.92	0.33	4.25
3.75	0.23	0.64	5.00	3.92	0.31	4.24

3.80	0.23	0.64	5.00	3.92	0.30	4.23
3.85	0.23	0.64	5.00	3.92	0.29	4.21
3.90	0.22	0.64	5.00	3.92	0.28	4.20
3.95	0.22	0.64	5.00	3.92	0.27	4.19
4.00	0.22	0.64	5.00	3.92	0.25	4.18
4.05	0.22	0.64	5.00	3.92	0.24	4.17
4.10	0.22	0.64	5.00	3.92	0.23	4.15
4.15	0.22	0.64	5.00	3.92	0.22	4.14
4.20	0.22	0.64	5.00	3.92	0.20	4.13
4.25	0.22	0.64	5.00	3.92	0.19	4.12
4.30	0.22	0.64	5.00	3.92	0.18	4.10
4.35	0.22	0.64	5.00	3.92	0.17	4.09
4.40	0.21	0.64	5.00	3.92	0.15	4.08
4.45	0.21	0.64	5.00	3.92	0.14	4.07
4.50	0.21	0.64	5.00	3.92	0.13	4.06
4.55	0.21	0.64	5.00	3.92	0.12	4.04
4.60	0.21	0.64	5.00	3.92	0.11	4.03
4.65	0.21	0.64	5.00	3.92	0.09	4.02
4.70	0.21	0.64	5.00	3.92	0.08	4.00
4.75	0.21	0.64	5.00	3.92	0.07	3.99
4.80	0.21	0.64	5.00	3.92	0.05	3.98
4.85	0.21	0.64	5.00	3.92	0.04	3.96
4.90	0.20	0.64	5.00	3.92	0.03	3.95
4.95	0.20	0.64	5.00	3.92	0.01	3.94
5.00	0.20	0.64	0.32*	3.92	0.00	3.92
5.05	0.21	0.64	0.32*	3.91	0.00	3.91
5.10	0.21	0.65	0.32*	3.90	0.00	3.90
5.15	0.21	0.65	0.32*	3.89	0.00	3.89
5.20	0.21	0.65	0.33*	3.89	0.00	3.89
5.25	0.22	0.66	0.33*	3.88	0.00	3.88
5.30	0.22	0.66	0.33*	3.87	0.00	3.87
5.35	0.22	0.66	0.33*	3.86	0.00	3.86
5.40	0.22	0.67	0.33*	3.85	0.00	3.85
5.45	0.23	0.67	0.34*	3.84	0.00	3.84
5.50	0.23	0.67	0.34*	3.83	0.00	3.83
5.55	0.23	0.68	0.34*	3.82	0.00	3.82
5.60	0.23	0.68	0.34*	3.81	0.00	3.81
5.65	0.24	0.68	0.35*	3.80	0.00	3.80
5.70	0.24	0.69	0.35*	3.80	0.00	3.80
5.75	0.24	0.69	0.35*	3.79	0.00	3.79
5.80	0.25	0.69	0.35*	3.78	0.00	3.78
5.85	0.25	0.70	0.36*	3.77	0.00	3.77
5.90	0.25	0.70	0.36*	3.76	0.00	3.76
5.95	0.25	0.70	0.36*	3.76	0.00	3.76
6.00	0.26	0.70	0.36*	3.75	0.00	3.75
6.05	0.26	0.71	0.37*	3.74	0.00	3.74
6.10	0.26	0.71	0.37*	3.73	0.00	3.73
6.15	0.27	0.71	0.37*	3.72	0.00	3.72
6.20	0.27	0.72	0.38*	3.72	0.00	3.72
6.25	0.27	0.72	0.38*	3.71	0.00	3.71

6.30	0.28	0.72	0.38*	3.70	0.00	3.70
6.35	0.28	0.72	0.39*	3.69	0.00	3.69
6.40	0.28	0.73	0.39*	3.69	0.00	3.69
6.45	0.29	0.73	0.39*	3.68	0.00	3.68
6.50	0.29	0.73	0.40*	3.67	0.00	3.67
6.55	0.29	0.74	0.40*	3.66	0.00	3.66
6.60	0.30	0.74	0.40*	3.66	0.00	3.66
6.65	0.30	0.74	0.41*	3.65	0.00	3.65
6.70	0.30	0.74	0.41*	3.64	0.00	3.64
6.75	0.31	0.75	0.41*	3.64	0.00	3.64
6.80	0.31	0.75	0.41*	3.63	0.00	3.63
6.85	0.31	0.75	0.42*	3.62	0.00	3.62
6.90	0.31	0.75	0.42*	3.62	0.00	3.62
6.95	0.32	0.76	0.42*	3.61	0.00	3.61
7.00	0.32	0.76	0.42*	3.60	0.00	3.60
7.05	0.32	0.76	0.43*	3.60	0.00	3.60
7.10	0.33	0.76	0.43*	3.59	0.00	3.59
7.15	0.33	0.77	0.43*	3.58	0.00	3.58
7.20	0.33	0.77	0.43*	3.58	0.00	3.58
7.25	0.34	0.77	0.44*	3.57	0.00	3.57
7.30	0.34	0.77	0.44*	3.57	0.00	3.57
7.35	0.34	0.78	0.44*	3.56	0.00	3.56
7.40	0.35	0.78	0.45*	3.55	0.00	3.55
7.45	0.35	0.78	0.45*	3.55	0.00	3.55
7.50	0.35	0.78	0.45*	3.54	0.00	3.54
7.55	0.36	0.78	0.46*	3.54	0.00	3.54
7.60	0.36	0.79	0.46*	3.53	0.00	3.53
7.65	0.37	0.79	0.46*	3.52	0.00	3.52
7.70	0.37	0.79	0.47*	3.52	0.00	3.52
7.75	0.38	0.79	0.47*	3.51	0.00	3.51
7.80	0.38	0.80	0.48*	3.51	0.00	3.51
7.85	0.39	0.80	0.48*	3.50	0.00	3.50
7.90	0.39	0.80	0.49*	3.50	0.00	3.50
7.95	0.40	0.80	0.50*	3.49	0.00	3.49
8.00	0.41	0.80	0.50*	3.49	0.00	3.49
8.05	0.41	0.81	0.51*	3.48	0.00	3.48
8.10	0.42	0.81	0.53*	3.48	0.00	3.48
8.15	0.44	0.81	0.54*	3.47	0.00	3.47
8.20	0.46	0.81	0.56*	3.47	0.00	3.47
8.25	0.51	0.81	0.62*	3.46	0.00	3.46
8.30	0.51	0.82	0.62*	3.46	0.00	3.46
8.35	0.51	0.82	0.62*	3.46	0.00	3.46
8.40	0.51	0.82	0.62*	3.46	0.00	3.46
8.45	0.51	0.82	0.62*	3.46	0.00	3.46
8.50	0.51	0.82	0.62*	3.46	0.00	3.46
8.55	0.51	0.83	0.61*	3.46	0.00	3.46
8.60	0.51	0.83	0.61*	3.46	0.00	3.46
8.65	0.51	0.83	0.61*	3.45	0.00	3.45
8.70	0.51	0.83	0.61*	3.45	0.00	3.45
8.75	0.51	0.83	0.61*	3.45	0.00	3.45

8.80	0.51	0.84	0.61*	3.45	0.00	3.45
8.85	0.51	0.84	0.61*	3.45	0.00	3.45
8.90	0.51	0.84	0.61*	3.45	0.00	3.45
8.95	0.51	0.84	0.60*	3.45	0.00	3.45
9.00	0.51	0.84	0.60*	3.45	0.00	3.45
9.05	0.51	0.85	0.60*	3.45	0.00	3.45
9.10	0.51	0.85	0.60*	3.45	0.00	3.45
9.15	0.51	0.85	0.60*	3.45	0.00	3.45
9.20	0.51	0.85	0.60*	3.44	0.00	3.44
9.25	0.51	0.85	0.60*	3.44	0.00	3.44
9.30	0.51	0.85	0.59*	3.44	0.00	3.44
9.35	0.51	0.86	0.59*	3.44	0.00	3.44
9.40	0.51	0.86	0.59*	3.44	0.00	3.44
9.45	0.51	0.86	0.59*	3.44	0.00	3.44
9.50	0.51	0.86	0.59*	3.44	0.00	3.44
9.55	0.51	0.86	0.59*	3.44	0.00	3.44
9.60	0.51	0.87	0.59*	3.44	0.00	3.44
9.65	0.51	0.87	0.59*	3.44	0.00	3.44
9.70	0.51	0.87	0.59*	3.44	0.00	3.44
9.75	0.51	0.87	0.58*	3.44	0.00	3.44
9.80	0.51	0.87	0.58*	3.44	0.00	3.44
9.85	0.51	0.87	0.58*	3.44	0.00	3.44
9.90	0.51	0.88	0.58*	3.44	0.00	3.44
9.95	0.51	0.88	0.58*	3.44	0.00	3.44
10.00	0.51	0.88	0.58*	3.44	0.00	3.44
10.05	0.51	0.88	0.58*	3.44	0.00	3.44
10.10	0.51	0.88	0.58*	3.44	0.00	3.44
10.15	0.51	0.88	0.58*	3.44	0.00	3.44
10.20	0.51	0.88	0.57*	3.44	0.00	3.44
10.25	0.51	0.89	0.57*	3.44	0.00	3.44
10.30	0.51	0.89	0.57*	3.44	0.00	3.44
10.35	0.51	0.89	0.57*	3.44	0.00	3.44
10.40	0.51	0.89	0.57*	3.44	0.00	3.44
10.45	0.51	0.89	0.57*	3.44	0.00	3.44
10.50	0.51	0.89	0.57*	3.44	0.00	3.44
10.55	0.51	0.90	0.57*	3.44	0.00	3.44
10.60	0.51	0.90	0.57*	3.44	0.00	3.44
10.65	0.51	0.90	0.57*	3.44	0.00	3.44
10.70	0.51	0.90	0.57*	3.44	0.00	3.44
10.75	0.51	0.90	0.56*	3.44	0.00	3.44
10.80	0.51	0.90	0.56*	3.43	0.00	3.43
10.85	0.51	0.90	0.56*	3.43	0.00	3.43
10.90	0.51	0.91	0.56*	3.43	0.00	3.43
10.95	0.51	0.91	0.56*	3.43	0.00	3.43
11.00	0.51	0.91	0.56*	3.43	0.00	3.43
11.05	0.51	0.91	0.56*	3.43	0.00	3.43
11.10	0.51	0.91	0.56*	3.43	0.00	3.43
11.15	0.51	0.91	0.56*	3.43	0.00	3.43
11.20	0.51	0.91	0.56*	3.43	0.00	3.43
11.25	0.51	0.92	0.56*	3.43	0.00	3.43

11.30	0.51	0.92	0.55*	3.43	0.00	3.43
11.35	0.51	0.92	0.55*	3.42	0.00	3.42
11.40	0.51	0.92	0.55*	3.42	0.00	3.42
11.45	0.51	0.92	0.55*	3.42	0.00	3.42
11.50	0.51	0.92	0.55*	3.42	0.00	3.42
11.55	0.51	0.92	0.55*	3.42	0.00	3.42
11.60	0.51	0.92	0.55*	3.42	0.00	3.42
11.65	0.51	0.93	0.55*	3.42	0.00	3.42
11.70	0.51	0.93	0.55*	3.42	0.00	3.42
11.75	0.51	0.93	0.55*	3.41	0.00	3.41
11.80	0.51	0.93	0.55*	3.41	0.00	3.41
11.85	0.51	0.93	0.55*	3.41	0.00	3.41
11.90	0.51	0.93	0.55*	3.41	0.00	3.41
11.95	0.51	0.93	0.54*	3.41	0.00	3.41
12.00	0.51	0.93	0.54*	3.40	0.00	3.40
12.05	0.51	0.94	0.54*	3.40	0.00	3.40
12.10	0.51	0.94	0.54*	3.40	0.00	3.40
12.15	0.51	0.94	0.54*	3.40	0.00	3.40
12.20	0.51	0.94	0.54*	3.39	0.00	3.39
12.25	0.51	0.94	0.54*	3.39	0.00	3.39
12.30	0.51	0.94	0.54*	3.39	0.00	3.39
12.35	0.51	0.94	0.54*	3.39	0.00	3.39
12.40	0.51	0.94	0.54*	3.38	0.00	3.38
12.45	0.51	0.95	0.54*	3.38	0.00	3.38
12.50	0.51	0.95	0.54*	3.38	0.00	3.38
12.55	0.51	0.95	0.54*	3.37	0.00	3.37
12.60	0.51	0.95	0.54*	3.37	0.00	3.37
12.65	0.51	0.95	0.54*	3.37	0.00	3.37
12.70	0.51	0.95	0.53*	3.36	0.00	3.36
12.75	0.51	0.95	0.53*	3.36	0.00	3.36
12.80	0.51	0.95	0.53*	3.36	0.00	3.36
12.85	0.51	0.95	0.53*	3.35	0.00	3.35
12.90	0.51	0.96	0.53*	3.35	0.00	3.35
12.95	0.51	0.96	0.53*	3.34	0.00	3.34
13.00	0.51	0.96	0.53*	3.34	0.00	3.34
13.05	0.51	0.96	0.53*	3.34	0.00	3.34
13.10	0.51	0.96	0.53*	3.33	0.00	3.33
13.15	0.51	0.96	0.53*	3.33	0.00	3.33
13.20	0.51	0.96	0.53*	3.32	0.00	3.32
13.25	0.51	0.96	0.53*	3.32	0.00	3.32
13.30	0.48	0.96	0.50*	3.31	0.00	3.31
13.35	0.46	0.97	0.48*	3.31	0.00	3.31
13.40	0.45	0.97	0.46*	3.31	0.00	3.31
13.45	0.43	0.97	0.45*	3.30	0.00	3.30
13.50	0.43	0.97	0.44*	3.30	0.00	3.30
13.55	0.42	0.97	0.43*	3.29	0.00	3.29
13.60	0.41	0.97	0.42*	3.29	0.00	3.29
13.65	0.41	0.97	0.42*	3.28	0.00	3.28
13.70	0.40	0.97	0.41*	3.28	0.00	3.28
13.75	0.40	0.97	0.41*	3.27	0.00	3.27

13.80	0.39	0.97	0.40*	3.27	0.00	3.27
13.85	0.39	0.98	0.40*	3.26	0.00	3.26
13.90	0.38	0.98	0.39*	3.26	0.00	3.26
13.95	0.38	0.98	0.39*	3.25	0.00	3.25
14.00	0.38	0.98	0.39*	3.25	0.00	3.25
14.05	0.38	0.98	0.38*	3.24	0.00	3.24
14.10	0.37	0.98	0.38*	3.24	0.00	3.24
14.15	0.37	0.98	0.38*	3.23	0.00	3.23
14.20	0.37	0.98	0.37*	3.22	0.00	3.22
14.25	0.37	0.98	0.37*	3.22	0.00	3.22
14.30	0.36	0.98	0.37*	3.21	0.00	3.21
14.35	0.36	0.99	0.37*	3.21	0.00	3.21
14.40	0.36	0.99	0.36*	3.20	0.00	3.20
14.45	0.36	0.99	0.36*	3.20	0.00	3.20
14.50	0.35	0.99	0.36*	3.19	0.00	3.19
14.55	0.35	0.99	0.36*	3.18	0.00	3.18
14.60	0.35	0.99	0.35*	3.18	0.00	3.18
14.65	0.35	0.99	0.35*	3.17	0.00	3.17
14.70	0.35	0.99	0.35*	3.17	0.00	3.17
14.75	0.35	0.99	0.35*	3.16	0.00	3.16
14.80	0.42	0.99	0.42*	3.15	0.00	3.15
14.85	0.41	0.99	0.41*	3.15	0.00	3.15
14.90	0.41	1.00	0.41*	3.15	0.00	3.15
14.95	0.40	1.00	0.40*	3.14	0.00	3.14
15.00	0.40	1.00	0.40*	3.14	0.00	3.14
15.05	0.39	1.00	0.39*	3.13	0.00	3.13
15.10	0.39	1.00	0.39*	3.13	0.00	3.13
15.15	0.39	1.00	0.39*	3.12	0.00	3.12
15.20	0.39	1.00	0.39*	3.12	0.00	3.12
15.25	0.39	1.00	0.38*	3.11	0.00	3.11
15.30	0.38	1.00	0.38*	3.10	0.00	3.10
15.35	0.38	1.00	0.38*	3.10	0.00	3.10
15.40	0.38	1.00	0.38*	3.09	0.00	3.09
15.45	0.38	1.00	0.38*	3.09	0.00	3.09
15.50	0.38	1.01	0.37*	3.08	0.00	3.08
15.55	0.37	1.01	0.37*	3.08	0.00	3.08
15.60	0.37	1.01	0.37*	3.07	0.00	3.07
15.65	0.37	1.01	0.37*	3.07	0.00	3.07
15.70	0.37	1.01	0.37*	3.06	0.00	3.06
15.75	0.37	1.01	0.36*	3.06	0.00	3.06
15.80	0.37	1.01	0.36*	3.05	0.00	3.05
15.85	0.37	1.01	0.36*	3.05	0.00	3.05
15.90	0.36	1.01	0.36*	3.04	0.00	3.04
15.95	0.36	1.01	0.36*	3.03	0.00	3.03
16.00	0.36	1.01	0.36*	3.03	0.00	3.03
16.05	0.36	1.01	0.35*	3.02	0.00	3.02
16.10	0.36	1.02	0.35*	3.02	0.00	3.02
16.15	0.36	1.02	0.35*	3.01	0.00	3.01
16.20	0.36	1.02	0.35*	3.01	0.00	3.01
16.25	0.35	1.02	0.35*	3.00	0.00	3.00

16.30	0.35	1.02	0.35*	2.99	0.00	2.99
16.35	0.35	1.02	0.35*	2.99	0.00	2.99
16.40	0.35	1.02	0.34*	2.98	0.00	2.98
16.45	0.35	1.02	0.34*	2.98	0.00	2.98
16.50	0.35	1.02	0.34*	2.97	0.00	2.97
16.55	0.35	1.02	0.34*	2.96	0.00	2.96
16.60	0.35	1.02	0.34*	2.96	0.00	2.96
16.65	0.35	1.02	0.34*	2.95	0.00	2.95
16.70	0.34	1.02	0.34*	2.95	0.00	2.95
16.75	0.34	1.02	0.34*	2.94	0.00	2.94
16.80	0.34	1.03	0.33*	2.93	0.00	2.93
16.85	0.34	1.03	0.33*	2.93	0.00	2.93
16.90	0.34	1.03	0.33*	2.92	0.00	2.92
16.95	0.34	1.03	0.33*	2.92	0.00	2.92
17.00	0.34	1.03	0.33*	2.91	0.00	2.91
17.05	0.34	1.03	0.33*	2.90	0.00	2.90
17.10	0.34	1.03	0.33*	2.90	0.00	2.90
17.15	0.34	1.03	0.33*	2.89	0.00	2.89
17.20	0.33	1.03	0.32*	2.88	0.00	2.88
17.25	0.33	1.03	0.32*	2.88	0.00	2.88
17.30	0.33	1.03	0.32*	2.87	0.00	2.87
17.35	0.33	1.03	0.32*	2.87	0.00	2.87
17.40	0.33	1.03	0.32*	2.86	0.00	2.86
17.45	0.33	1.03	0.32*	2.85	0.00	2.85
17.50	0.33	1.03	0.32*	2.85	0.00	2.85
17.55	0.33	1.04	0.32*	2.84	0.00	2.84
17.60	0.33	1.04	0.32*	2.83	0.00	2.83
17.65	0.33	1.04	0.31*	2.83	0.00	2.83
17.70	0.33	1.04	0.31*	2.82	0.00	2.82
17.75	0.32	1.04	0.31*	2.82	0.00	2.82
17.80	0.32	1.04	0.31*	2.81	0.00	2.81
17.85	0.32	1.04	0.31*	2.80	0.00	2.80
17.90	0.32	1.04	0.31*	2.80	0.00	2.80
17.95	0.32	1.04	0.31*	2.79	0.00	2.79
18.00	0.32	1.04	0.31*	2.78	0.00	2.78
18.05	0.32	1.04	0.31*	2.78	0.00	2.78
18.10	0.32	1.04	0.31*	2.77	0.00	2.77
18.15	0.32	1.04	0.30*	2.76	0.00	2.76
18.20	0.32	1.04	0.30*	2.76	0.00	2.76
18.25	0.32	1.04	0.30*	2.75	0.00	2.75
18.30	0.32	1.04	0.30*	2.74	0.00	2.74
18.35	0.31	1.05	0.30*	2.74	0.00	2.74
18.40	0.31	1.05	0.30*	2.73	0.00	2.73
18.45	0.31	1.05	0.30*	2.72	0.00	2.72
18.50	0.31	1.05	0.30*	2.72	0.00	2.72
18.55	0.31	1.05	0.30*	2.71	0.00	2.71
18.60	0.31	1.05	0.30*	2.70	0.00	2.70
18.65	0.31	1.05	0.30*	2.70	0.00	2.70
18.70	0.31	1.05	0.29*	2.69	0.00	2.69
18.75	0.31	1.05	0.29*	2.68	0.00	2.68

18.80	0.31	1.05	0.29*	2.68	0.00	2.68
18.85	0.31	1.05	0.29*	2.67	0.00	2.67
18.90	0.31	1.05	0.29*	2.66	0.00	2.66
18.95	0.31	1.05	0.29*	2.66	0.00	2.66
19.00	0.30	1.05	0.29*	2.65	0.00	2.65
19.05	0.30	1.05	0.29*	2.64	0.00	2.64
19.10	0.30	1.05	0.29*	2.64	0.00	2.64
19.15	0.30	1.05	0.29*	2.63	0.00	2.63
19.20	0.30	1.05	0.29*	2.62	0.00	2.62
19.25	0.30	1.06	0.29*	2.62	0.00	2.62
19.30	0.30	1.06	0.28*	2.61	0.00	2.61
19.35	0.30	1.06	0.28*	2.60	0.00	2.60
19.40	0.30	1.06	0.28*	2.60	0.00	2.60
19.45	0.30	1.06	0.28*	2.59	0.00	2.59
19.50	0.30	1.06	0.28*	2.58	0.00	2.58
19.55	0.30	1.06	0.28*	2.58	0.00	2.58
19.60	0.30	1.06	0.28*	2.57	0.00	2.57
19.65	0.30	1.06	0.28*	2.56	0.00	2.56
19.70	0.30	1.06	0.28*	2.55	0.00	2.55
19.75	0.29	1.06	0.28*	2.55	0.00	2.55
19.80	0.29	1.06	0.28*	2.54	0.00	2.54
19.85	0.29	1.06	0.28*	2.53	0.00	2.53
19.90	0.29	1.06	0.28*	2.53	0.00	2.53
19.95	0.29	1.06	0.27*	2.52	0.00	2.52
20.00	0.29	1.06	0.27*	2.51	0.00	2.51
20.05	0.29	1.06	0.27*	2.51	0.00	2.51
20.10	0.29	1.06	0.28*	2.50	0.00	2.50
20.15	0.29	1.06	0.28*	2.49	0.00	2.49
20.20	0.30	1.06	0.28*	2.48	0.00	2.48
20.25	0.30	1.07	0.28*	2.48	0.00	2.48
20.30	0.30	1.07	0.28*	2.47	0.00	2.47
20.35	0.30	1.07	0.28*	2.46	0.00	2.46
20.40	0.30	1.07	0.28*	2.46	0.00	2.46
20.45	0.30	1.07	0.28*	2.45	0.00	2.45
20.50	0.30	1.07	0.28*	2.44	0.00	2.44
20.55	0.30	1.07	0.28*	2.44	0.00	2.44
20.60	0.31	1.07	0.29*	2.43	0.00	2.43
20.65	0.31	1.07	0.29*	2.42	0.00	2.42
20.70	0.31	1.07	0.29*	2.42	0.00	2.42
20.75	0.31	1.07	0.29*	2.41	0.00	2.41
20.80	0.31	1.07	0.29*	2.40	0.00	2.40
20.85	0.31	1.07	0.29*	2.40	0.00	2.40
20.90	0.31	1.07	0.29*	2.39	0.00	2.39
20.95	0.31	1.07	0.29*	2.38	0.00	2.38
21.00	0.32	1.07	0.29*	2.38	0.00	2.38
21.05	0.32	1.07	0.30*	2.37	0.00	2.37
21.10	0.32	1.07	0.30*	2.36	0.00	2.36
21.15	0.32	1.07	0.30*	2.36	0.00	2.36
21.20	0.32	1.07	0.30*	2.35	0.00	2.35
21.25	0.32	1.07	0.30*	2.34	0.00	2.34

21.30	0.32	1.07	0.30*	2.34	0.00	2.34
21.35	0.33	1.07	0.30*	2.33	0.00	2.33
21.40	0.33	1.08	0.30*	2.32	0.00	2.32
21.45	0.33	1.08	0.31*	2.32	0.00	2.32
21.50	0.33	1.08	0.31*	2.31	0.00	2.31
21.55	0.33	1.08	0.31*	2.31	0.00	2.31
21.60	0.33	1.08	0.31*	2.30	0.00	2.30
21.65	0.33	1.08	0.31*	2.29	0.00	2.29
21.70	0.34	1.08	0.31*	2.29	0.00	2.29
21.75	0.34	1.08	0.31*	2.28	0.00	2.28
21.80	0.34	1.08	0.31*	2.27	0.00	2.27
21.85	0.34	1.08	0.32*	2.27	0.00	2.27
21.90	0.34	1.08	0.32*	2.26	0.00	2.26
21.95	0.34	1.08	0.32*	2.26	0.00	2.26
22.00	0.35	1.08	0.32*	2.25	0.00	2.25
22.05	0.35	1.08	0.32*	2.24	0.00	2.24
22.10	0.35	1.08	0.32*	2.24	0.00	2.24
22.15	0.35	1.08	0.33*	2.23	0.00	2.23
22.20	0.35	1.08	0.33*	2.23	0.00	2.23
22.25	0.36	1.08	0.33*	2.22	0.00	2.22
22.30	0.36	1.08	0.33*	2.21	0.00	2.21
22.35	0.36	1.08	0.33*	2.21	0.00	2.21
22.40	0.36	1.08	0.33*	2.20	0.00	2.20
22.45	0.36	1.08	0.34*	2.20	0.00	2.20
22.50	0.37	1.08	0.34*	2.19	0.00	2.19
22.55	0.37	1.08	0.34*	2.19	0.00	2.19
22.60	0.37	1.08	0.34*	2.18	0.00	2.18
22.65	0.37	1.08	0.34*	2.17	0.00	2.17
22.70	0.38	1.09	0.35*	2.17	0.00	2.17
22.75	0.38	1.09	0.35*	2.16	0.00	2.16
22.80	0.38	1.09	0.35*	2.16	0.00	2.16
22.85	0.39	1.09	0.35*	2.15	0.00	2.15
22.90	0.39	1.09	0.36*	2.15	0.00	2.15
22.95	0.39	1.09	0.36*	2.14	0.00	2.14
23.00	0.40	1.09	0.36*	2.14	0.00	2.14
23.05	0.40	1.09	0.37*	2.13	0.00	2.13
23.10	0.40	1.09	0.37*	2.13	0.00	2.13
23.15	0.41	1.09	0.37*	2.12	0.00	2.12
23.20	0.41	1.09	0.38*	2.12	0.00	2.12
23.25	0.42	1.09	0.38*	2.11	0.00	2.11
23.30	0.43	1.09	0.39*	2.11	0.00	2.11
23.35	0.43	1.09	0.40*	2.10	0.00	2.10
23.40	0.44	1.09	0.41*	2.10	0.00	2.10
23.45	0.45	1.09	0.42*	2.09	0.00	2.09
23.50	0.47	1.09	0.43*	2.09	0.00	2.09
23.55	0.49	1.09	0.45*	2.09	0.00	2.09
23.60	0.51	1.09	0.47*	2.08	0.00	2.08
23.65	0.51	1.09	0.47*	2.08	0.00	2.08
23.70	0.51	1.09	0.47*	2.07	0.00	2.07
23.75	0.51	1.09	0.47*	2.07	0.00	2.07

23.80	0.51	1.09	0.47*	2.06	0.00	2.06
23.85	0.51	1.09	0.47*	2.06	0.00	2.06
23.90	0.51	1.09	0.47*	2.06	0.00	2.06
23.95	0.51	1.09	0.46*	2.05	0.00	2.05
24.00	0.51	1.09	0.46*	2.05	0.00	2.05
24.05	0.51	1.09	0.46*	2.04	0.00	2.04
24.10	0.51	1.09	0.46*	2.04	0.00	2.04
24.15	0.51	1.09	0.46*	2.04	0.00	2.04
24.20	0.51	1.10	0.46*	2.03	0.00	2.03
24.25	0.51	1.10	0.46*	2.03	0.00	2.03
24.30	0.51	1.10	0.46*	2.03	0.00	2.03
24.35	0.51	1.10	0.46*	2.02	0.00	2.02
24.40	0.51	1.10	0.46*	2.02	0.00	2.02
24.45	0.51	1.10	0.46*	2.01	0.00	2.01
24.50	0.51	1.10	0.46*	2.01	0.00	2.01
24.55	0.51	1.10	0.46*	2.01	0.00	2.01
24.60	0.51	1.10	0.46*	2.00	0.00	2.00
24.65	0.51	1.10	0.46*	2.00	0.00	2.00
24.70	0.51	1.10	0.46*	2.00	0.00	2.00
24.75	0.51	1.10	0.46*	1.99	0.00	1.99
24.80	0.51	1.10	0.46*	1.99	0.00	1.99
24.85	0.51	1.10	0.46*	1.99	0.00	1.99
24.90	0.51	1.10	0.46*	1.99	0.00	1.99
24.95	0.51	1.10	0.46*	1.98	0.00	1.98
25.00	0.51	1.10	0.46*	1.98	0.00	1.98
25.05	0.51	1.10	0.46*	1.98	0.00	1.98
25.10	0.51	1.10	0.46*	1.97	0.00	1.97
25.15	0.51	1.10	0.46*	1.97	0.00	1.97
25.20	0.51	1.10	0.46*	1.97	0.00	1.97
25.25	0.51	1.10	0.46*	1.97	0.00	1.97
25.30	0.51	1.10	0.46*	1.96	0.00	1.96
25.35	0.51	1.10	0.46*	1.96	0.00	1.96
25.40	0.51	1.10	0.46*	1.96	0.00	1.96
25.45	0.51	1.10	0.46*	1.96	0.00	1.96
25.50	0.51	1.10	0.46*	1.95	0.00	1.95
25.55	0.51	1.10	0.46*	1.95	0.00	1.95
25.60	0.51	1.10	0.46*	1.95	0.00	1.95
25.65	0.51	1.10	0.46*	1.94	0.00	1.94
25.70	0.51	1.10	0.46*	1.94	0.00	1.94
25.75	0.51	1.10	0.46*	1.94	0.00	1.94
25.80	0.51	1.10	0.46*	1.94	0.00	1.94
25.85	0.51	1.10	0.46*	1.93	0.00	1.93
25.90	0.51	1.10	0.46*	1.93	0.00	1.93
25.95	0.51	1.10	0.46*	1.93	0.00	1.93
26.00	0.51	1.10	0.46*	1.93	0.00	1.93
26.05	0.51	1.11	0.46*	1.92	0.00	1.92
26.10	0.51	1.11	0.46*	1.92	0.00	1.92
26.15	0.51	1.11	0.46*	1.92	0.00	1.92
26.20	0.51	1.11	0.46*	1.91	0.00	1.91
26.25	0.51	1.11	0.46*	1.91	0.00	1.91

26.30	0.51	1.11	0.46*	1.91	0.00	1.91
26.35	0.51	1.11	0.46*	1.91	0.00	1.91
26.40	0.51	1.11	0.46*	1.90	0.00	1.90
26.45	0.51	1.11	0.46*	1.90	0.00	1.90
26.50	0.51	1.11	0.46*	1.90	0.00	1.90
26.55	0.51	1.11	0.46*	1.90	0.00	1.90
26.60	0.51	1.11	0.46*	1.89	0.00	1.89
26.65	0.51	1.11	0.46*	1.89	0.00	1.89
26.70	0.51	1.11	0.46*	1.89	0.00	1.89
26.75	0.51	1.11	0.46*	1.88	0.00	1.88
26.80	0.51	1.11	0.46*	1.88	0.00	1.88
26.85	0.51	1.11	0.46*	1.88	0.00	1.88
26.90	0.51	1.11	0.46*	1.88	0.00	1.88
26.95	0.51	1.11	0.46*	1.87	0.00	1.87
27.00	0.51	1.11	0.46*	1.87	0.00	1.87
27.05	0.51	1.11	0.46*	1.87	0.00	1.87
27.10	0.51	1.11	0.46*	1.86	0.00	1.86
27.15	0.51	1.11	0.46*	1.86	0.00	1.86
27.20	0.51	1.11	0.46*	1.86	0.00	1.86
27.25	0.51	1.11	0.46*	1.86	0.00	1.86
27.30	0.51	1.11	0.46*	1.85	0.00	1.85
27.35	0.51	1.11	0.46*	1.85	0.00	1.85
27.40	0.51	1.11	0.46*	1.85	0.00	1.85
27.45	0.51	1.11	0.46*	1.84	0.00	1.84
27.50	0.51	1.11	0.46*	1.84	0.00	1.84
27.55	0.51	1.11	0.46*	1.84	0.00	1.84
27.60	0.51	1.11	0.46*	1.84	0.00	1.84
27.65	0.51	1.11	0.46*	1.83	0.00	1.83
27.70	0.51	1.11	0.46*	1.83	0.00	1.83
27.75	0.51	1.11	0.46*	1.83	0.00	1.83
27.80	0.51	1.11	0.46*	1.82	0.00	1.82
27.85	0.51	1.11	0.46*	1.82	0.00	1.82
27.90	0.51	1.11	0.46*	1.82	0.00	1.82
27.95	0.51	1.11	0.46*	1.82	0.00	1.82
28.00	0.51	1.11	0.46*	1.81	0.00	1.81
28.05	0.51	1.11	0.46*	1.81	0.00	1.81
28.10	0.51	1.11	0.46*	1.81	0.00	1.81
28.15	0.51	1.11	0.46*	1.81	0.00	1.81
28.20	0.51	1.11	0.46*	1.81	0.00	1.81
28.25	0.51	1.11	0.46*	1.81	0.00	1.81
28.30	0.51	1.11	0.46*	1.80	0.00	1.80
28.35	0.51	1.11	0.46*	1.80	0.00	1.80
28.40	0.51	1.11	0.46*	1.80	0.00	1.80
28.45	0.51	1.11	0.46*	1.80	0.00	1.80
28.50	0.51	1.11	0.46*	1.80	0.00	1.80
28.55	0.51	1.11	0.46*	1.79	0.00	1.79
28.60	0.51	1.11	0.46*	1.79	0.00	1.79
28.65	0.51	1.11	0.46*	1.79	0.00	1.79
28.70	0.51	1.11	0.46*	1.79	0.00	1.79
28.75	0.51	1.11	0.46*	1.79	0.00	1.79

28.80	0.51	1.11	0.46*	1.78	0.00	1.78
28.85	0.51	1.11	0.46*	1.78	0.00	1.78
28.90	0.51	1.11	0.46*	1.78	0.00	1.78
28.95	0.51	1.11	0.46*	1.78	0.00	1.78
29.00	0.51	1.11	0.46*	1.78	0.00	1.78
29.05	0.51	1.11	0.46*	1.77	0.00	1.77
29.10	0.51	1.11	0.46*	1.77	0.00	1.77
29.15	0.51	1.11	0.46*	1.77	0.00	1.77
29.20	0.51	1.11	0.46*	1.77	0.00	1.77
29.25	0.51	1.11	0.46*	1.77	0.00	1.77
29.30	0.51	1.11	0.46*	1.76	0.00	1.76
29.35	0.51	1.11	0.46*	1.76	0.00	1.76
29.40	0.51	1.11	0.46*	1.76	0.00	1.76
29.45	0.51	1.11	0.46*	1.76	0.00	1.76
29.50	0.51	1.11	0.46*	1.76	0.00	1.76
29.55	0.51	1.11	0.46*	1.75	0.00	1.75
29.60	0.51	1.11	0.46*	1.75	0.00	1.75
29.65	0.51	1.11	0.46*	1.75	0.00	1.75
29.70	0.51	1.11	0.46*	1.75	0.00	1.75
29.75	0.51	1.11	0.46*	1.74	0.00	1.74
29.80	0.51	1.11	0.46*	1.74	0.00	1.74
29.85	0.51	1.11	0.46*	1.74	0.00	1.74
29.90	0.51	1.11	0.46*	1.74	0.00	1.74
29.95	0.51	1.11	0.46*	1.74	0.00	1.74
30.00	0.51	1.11	0.46*	1.73	0.00	1.73
30.05	0.51	1.11	0.46*	1.73	0.00	1.73
30.10	0.51	1.11	0.46*	1.73	0.00	1.73
30.15	0.51	1.11	0.46*	1.73	0.00	1.73
30.20	0.51	1.11	0.46*	1.72	0.00	1.72
30.25	0.51	1.11	0.46*	1.72	0.00	1.72
30.30	0.51	1.11	0.46*	1.72	0.00	1.72
30.35	0.51	1.11	0.46*	1.71	0.00	1.71
30.40	0.51	1.11	0.46*	1.71	0.00	1.71
30.45	0.51	1.11	0.46*	1.71	0.00	1.71
30.50	0.51	1.11	0.46*	1.70	0.00	1.70
30.55	0.51	1.11	0.46*	1.70	0.00	1.70
30.60	0.51	1.11	0.46*	1.70	0.00	1.70
30.65	0.51	1.11	0.46*	1.69	0.00	1.69
30.70	0.51	1.11	0.46*	1.69	0.00	1.69
30.75	0.51	1.11	0.46*	1.69	0.00	1.69
30.80	0.51	1.11	0.46*	1.68	0.00	1.68
30.85	0.51	1.11	0.46*	1.68	0.00	1.68
30.90	0.51	1.11	0.46*	1.67	0.00	1.67
30.95	0.50	1.11	0.46*	1.67	0.00	1.67
31.00	0.48	1.10	0.43*	1.66	0.00	1.66
31.05	0.45	1.10	0.41*	1.66	0.00	1.66
31.10	0.43	1.10	0.39*	1.66	0.00	1.66
31.15	0.42	1.10	0.38*	1.65	0.00	1.65
31.20	0.41	1.10	0.37*	1.65	0.00	1.65
31.25	0.40	1.10	0.36*	1.64	0.00	1.64

31.30	0.39	1.10	0.36*	1.64	0.00	1.64
31.35	0.39	1.10	0.35*	1.63	0.00	1.63
31.40	0.38	1.10	0.35*	1.63	0.00	1.63
31.45	0.38	1.10	0.34*	1.62	0.00	1.62
31.50	0.37	1.10	0.34*	1.62	0.00	1.62
31.55	0.37	1.10	0.33*	1.61	0.00	1.61
31.60	0.36	1.10	0.33*	1.60	0.00	1.60
31.65	0.36	1.10	0.33*	1.60	0.00	1.60
31.70	0.36	1.10	0.32*	1.59	0.00	1.59
31.75	0.35	1.10	0.32*	1.59	0.00	1.59
31.80	0.35	1.10	0.32*	1.58	0.00	1.58
31.85	0.35	1.10	0.31*	1.58	0.00	1.58
31.90	0.34	1.10	0.31*	1.57	0.00	1.57
31.95	0.34	1.10	0.31*	1.56	0.00	1.56
32.00	0.34	1.10	0.31*	1.56	0.00	1.56
32.05	0.33	1.10	0.30*	1.55	0.00	1.55
32.10	0.33	1.10	0.30*	1.55	0.00	1.55
32.15	0.33	1.10	0.30*	1.54	0.00	1.54
32.20	0.33	1.10	0.30*	1.53	0.00	1.53
32.25	0.32	1.10	0.29*	1.53	0.00	1.53
32.30	0.32	1.09	0.29*	1.52	0.00	1.52
32.35	0.32	1.09	0.29*	1.51	0.00	1.51
32.40	0.32	1.09	0.29*	1.51	0.00	1.51
32.45	0.31	1.09	0.29*	1.50	0.00	1.50
32.50	0.31	1.09	0.28*	1.49	0.00	1.49
32.55	0.31	1.09	0.28*	1.49	0.00	1.49
32.60	0.31	1.09	0.28*	1.48	0.00	1.48
32.65	0.30	1.09	0.28*	1.48	0.00	1.48
32.70	0.30	1.09	0.28*	1.47	0.00	1.47
32.75	0.30	1.09	0.27*	1.46	0.00	1.46
32.80	0.30	1.09	0.27*	1.46	0.00	1.46
32.85	0.30	1.09	0.27*	1.45	0.00	1.45
32.90	0.29	1.09	0.27*	1.44	0.00	1.44
32.95	0.29	1.09	0.27*	1.43	0.00	1.43
33.00	0.29	1.09	0.27*	1.43	0.00	1.43
33.05	0.29	1.09	0.26*	1.42	0.00	1.42
33.10	0.29	1.09	0.26*	1.41	0.00	1.41
33.15	0.28	1.09	0.26*	1.41	0.00	1.41
33.20	0.28	1.09	0.26*	1.40	0.00	1.40
33.25	0.28	1.09	0.26*	1.39	0.00	1.39
33.30	0.28	1.09	0.26*	1.39	0.00	1.39
33.35	0.28	1.09	0.25*	1.38	0.00	1.38
33.40	0.27	1.09	0.25*	1.37	0.00	1.37
33.45	0.27	1.09	0.25*	1.36	0.00	1.36
33.50	0.27	1.09	0.25*	1.36	0.00	1.36
33.55	0.27	1.09	0.25*	1.35	0.00	1.35
33.60	0.27	1.08	0.25*	1.34	0.00	1.34
33.65	0.27	1.08	0.25*	1.33	0.00	1.33
33.70	0.26	1.08	0.24*	1.33	0.00	1.33
33.75	0.26	1.08	0.24*	1.32	0.00	1.32

33.80	0.26	1.08	0.24*	1.31	0.00	1.31
33.85	0.26	1.08	0.24*	1.30	0.00	1.30
33.90	0.26	1.08	0.24*	1.30	0.00	1.30
33.95	0.26	1.08	0.24*	1.29	0.00	1.29
34.00	0.26	1.08	0.24*	1.28	0.00	1.28
34.05	0.25	1.08	0.23*	1.27	0.00	1.27
34.10	0.25	1.08	0.23*	1.27	0.00	1.27
34.15	0.25	1.08	0.23*	1.26	0.00	1.26
34.20	0.25	1.08	0.23*	1.25	0.00	1.25
34.25	0.25	1.08	0.23*	1.24	0.00	1.24
34.30	0.25	1.08	0.23*	1.23	0.00	1.23
34.35	0.25	1.08	0.23*	1.23	0.00	1.23
34.40	0.24	1.08	0.23*	1.22	0.00	1.22
34.45	0.24	1.08	0.23*	1.21	0.00	1.21
34.50	0.24	1.08	0.22*	1.20	0.00	1.20
34.55	0.24	1.08	0.22*	1.19	0.00	1.19
34.60	0.24	1.08	0.22*	1.19	0.00	1.19
34.65	0.24	1.08	0.22*	1.18	0.00	1.18
34.70	0.24	1.08	0.22*	1.17	0.00	1.17
34.75	0.23	1.08	0.22*	1.16	0.00	1.16
34.80	0.23	1.08	0.22*	1.15	0.00	1.15
34.85	0.23	1.07	0.22*	1.14	0.00	1.14
34.90	0.23	1.07	0.21*	1.14	0.00	1.14
34.95	0.23	1.07	0.21*	1.13	0.00	1.13
35.00	0.23	1.07	0.21*	1.12	0.00	1.12
35.05	0.23	1.07	0.21*	1.11	0.00	1.11
35.10	0.23	1.07	0.21*	1.10	0.00	1.10
35.15	0.23	1.07	0.21*	1.09	0.00	1.09
35.20	0.23	1.07	0.22*	1.08	0.00	1.08
35.25	0.23	1.07	0.22*	1.08	0.00	1.08
35.30	0.23	1.07	0.22*	1.07	0.00	1.07
35.35	0.23	1.07	0.22*	1.06	0.00	1.06
35.40	0.23	1.07	0.22*	1.05	0.00	1.05
35.45	0.24	1.07	0.22*	1.04	0.00	1.04
35.50	0.24	1.07	0.22*	1.03	0.00	1.03
35.55	0.24	1.07	0.22*	1.03	0.00	1.03
35.60	0.24	1.07	0.22*	1.02	0.00	1.02
35.65	0.24	1.07	0.22*	1.01	0.00	1.01
35.70	0.24	1.07	0.22*	1.00	0.00	1.00
35.75	0.24	1.07	0.22*	0.99	0.00	0.99
35.80	0.24	1.07	0.23*	0.98	0.00	0.98
35.85	0.24	1.07	0.23*	0.98	0.00	0.98
35.90	0.24	1.07	0.23*	0.97	0.00	0.97
35.95	0.24	1.07	0.23*	0.96	0.00	0.96
36.00	0.24	1.07	0.23*	0.95	0.00	0.95
36.05	0.25	1.07	0.23*	0.94	0.00	0.94
36.10	0.25	1.06	0.23*	0.94	0.00	0.94
36.15	0.25	1.06	0.23*	0.93	0.00	0.93
36.20	0.25	1.06	0.23*	0.92	0.00	0.92
36.25	0.25	1.06	0.23*	0.91	0.00	0.91

36.30	0.25	1.06	0.23*	0.90	0.00	0.90
36.35	0.25	1.06	0.24*	0.90	0.00	0.90
36.40	0.25	1.06	0.24*	0.89	0.00	0.89
36.45	0.25	1.06	0.24*	0.88	0.00	0.88
36.50	0.25	1.06	0.24*	0.87	0.00	0.87
36.55	0.25	1.06	0.24*	0.87	0.00	0.87
36.60	0.25	1.06	0.24*	0.86	0.00	0.86
36.65	0.26	1.06	0.24*	0.85	0.00	0.85
36.70	0.26	1.06	0.24*	0.84	0.00	0.84
36.75	0.26	1.06	0.24*	0.84	0.00	0.84
36.80	0.26	1.06	0.24*	0.83	0.00	0.83
36.85	0.26	1.06	0.24*	0.82	0.00	0.82
36.90	0.26	1.06	0.25*	0.81	0.00	0.81
36.95	0.26	1.06	0.25*	0.80	0.00	0.80
37.00	0.26	1.06	0.25*	0.80	0.00	0.80
37.05	0.26	1.06	0.25*	0.79	0.00	0.79
37.10	0.26	1.06	0.25*	0.78	0.00	0.78
37.15	0.26	1.06	0.25*	0.77	0.00	0.77
37.20	0.27	1.06	0.25*	0.77	0.00	0.77
37.25	0.27	1.05	0.25*	0.76	0.00	0.76
37.30	0.27	1.05	0.25*	0.75	0.00	0.75
37.35	0.27	1.05	0.25*	0.75	0.00	0.75
37.40	0.27	1.05	0.26*	0.74	0.00	0.74
37.45	0.27	1.05	0.26*	0.73	0.00	0.73
37.50	0.27	1.05	0.26*	0.72	0.00	0.72
37.55	0.27	1.05	0.26*	0.72	0.00	0.72
37.60	0.27	1.05	0.26*	0.71	0.00	0.71
37.65	0.27	1.05	0.26*	0.70	0.00	0.70
37.70	0.27	1.05	0.26*	0.69	0.00	0.69
37.75	0.28	1.05	0.26*	0.69	0.00	0.69
37.80	0.28	1.05	0.26*	0.68	0.00	0.68
37.85	0.28	1.05	0.26*	0.67	0.00	0.67
37.90	0.28	1.05	0.27*	0.67	0.00	0.67
37.95	0.28	1.05	0.27*	0.66	0.00	0.66
38.00	0.28	1.05	0.27*	0.65	0.00	0.65
38.05	0.28	1.05	0.27*	0.64	0.00	0.64
38.10	0.28	1.05	0.27*	0.64	0.00	0.64
38.15	0.28	1.05	0.27*	0.63	0.00	0.63
38.20	0.28	1.05	0.27*	0.62	0.00	0.62
38.25	0.29	1.05	0.27*	0.62	0.00	0.62
38.30	0.29	1.05	0.27*	0.61	0.00	0.61
38.35	0.29	1.05	0.28*	0.60	0.00	0.60
38.40	0.29	1.05	0.28*	0.60	0.00	0.60
38.45	0.29	1.04	0.28*	0.59	0.00	0.59
38.50	0.29	1.04	0.28*	0.58	0.00	0.58
38.55	0.29	1.04	0.28*	0.58	0.00	0.58
38.60	0.29	1.04	0.28*	0.57	0.00	0.57
38.65	0.29	1.04	0.28*	0.56	0.00	0.56
38.70	0.30	1.04	0.28*	0.56	0.00	0.56
38.75	0.30	1.04	0.28*	0.55	0.00	0.55

38.80	0.30	1.04	0.29*	0.54	0.00	0.54
38.85	0.30	1.04	0.29*	0.54	0.00	0.54
38.90	0.30	1.04	0.29*	0.53	0.00	0.53
38.95	0.30	1.04	0.29*	0.52	0.00	0.52
39.00	0.30	1.04	0.29*	0.52	0.00	0.52
39.05	0.30	1.04	0.29*	0.51	0.00	0.51
39.10	0.30	1.04	0.29*	0.50	0.00	0.50
39.15	0.31	1.04	0.29*	0.50	0.00	0.50
39.20	0.31	1.04	0.30*	0.49	0.00	0.49
39.25	0.31	1.04	0.30*	0.48	0.00	0.48
39.30	0.31	1.04	0.30*	0.48	0.00	0.48
39.35	0.31	1.04	0.30*	0.47	0.00	0.47
39.40	0.31	1.04	0.30*	0.46	0.00	0.46
39.45	0.31	1.04	0.30*	0.46	0.00	0.46
39.50	0.31	1.04	0.30*	0.45	0.00	0.45
39.55	0.32	1.03	0.31*	0.44	0.00	0.44
39.60	0.32	1.03	0.31*	0.44	0.00	0.44
39.65	0.32	1.03	0.31*	0.43	0.00	0.43
39.70	0.32	1.03	0.31*	0.43	0.00	0.43
39.75	0.32	1.03	0.31*	0.42	0.00	0.42
39.80	0.32	1.03	0.31*	0.41	0.00	0.41
39.85	0.32	1.03	0.31*	0.41	0.00	0.41
39.90	0.33	1.03	0.32*	0.40	0.00	0.40
39.95	0.33	1.03	0.32*	0.40	0.00	0.40
40.00	0.33	1.03	0.32*	0.39	0.00	0.39
40.05	0.33	1.03	0.32*	0.38	0.00	0.38
40.10	0.33	1.03	0.32*	0.38	0.00	0.38
40.15	0.33	1.03	0.32*	0.37	0.00	0.37
40.20	0.33	1.03	0.32*	0.36	0.00	0.36
40.25	0.34	1.03	0.33*	0.36	0.00	0.36
40.30	0.34	1.03	0.33*	0.35	0.00	0.35
40.35	0.34	1.03	0.33*	0.35	0.00	0.35
40.40	0.34	1.03	0.33*	0.34	0.00	0.34
40.45	0.34	1.03	0.33*	0.34	0.00	0.34
40.50	0.34	1.03	0.33*	0.33	0.00	0.33
40.55	0.34	1.03	0.34*	0.32	0.00	0.32
40.60	0.35	1.03	0.34*	0.32	0.00	0.32
40.65	0.35	1.03	0.34*	0.31	0.00	0.31
40.70	0.35	1.02	0.34*	0.31	0.00	0.31
40.75	0.35	1.02	0.34*	0.30	0.00	0.30
40.80	0.35	1.02	0.34*	0.30	0.00	0.30
40.85	0.35	1.02	0.35*	0.29	0.00	0.29
40.90	0.36	1.02	0.35*	0.28	0.00	0.28
40.95	0.36	1.02	0.35*	0.28	0.00	0.28
41.00	0.36	1.02	0.35*	0.27	0.00	0.27
41.05	0.36	1.02	0.35*	0.27	0.00	0.27
41.10	0.36	1.02	0.36*	0.26	0.00	0.26
41.15	0.37	1.02	0.36*	0.26	0.00	0.26
41.20	0.37	1.02	0.36*	0.25	0.00	0.25
41.25	0.37	1.02	0.36*	0.25	0.00	0.25

41.30	0.37	1.02	0.37*	0.24	0.00	0.24
41.35	0.38	1.02	0.37*	0.24	0.00	0.24
41.40	0.38	1.02	0.37*	0.23	0.00	0.23
41.45	0.38	1.02	0.38*	0.23	0.00	0.23
41.50	0.39	1.02	0.38*	0.22	0.00	0.22
41.55	0.39	1.02	0.38*	0.22	0.00	0.22
41.60	0.40	1.02	0.39*	0.21	0.00	0.21
41.65	0.40	1.02	0.39*	0.21	0.00	0.21
41.70	0.40	1.02	0.40*	0.20	0.00	0.20
41.75	0.41	1.02	0.40*	0.20	0.00	0.20
41.80	0.42	1.01	0.41*	0.19	0.00	0.19
41.85	0.43	1.01	0.42*	0.19	0.00	0.19
41.90	0.44	1.01	0.43*	0.19	0.00	0.19
41.95	0.45	1.01	0.44*	0.18	0.00	0.18
42.00	0.46	1.01	0.46*	0.18	0.00	0.18
42.05	0.48	1.01	0.48*	0.17	0.00	0.17
42.10	0.48	1.01	0.48*	0.17	0.00	0.17
42.15	0.48	1.01	0.48*	0.16	0.00	0.16
42.20	0.48	1.01	0.48*	0.16	0.00	0.16
42.25	0.48	1.01	0.48*	0.15	0.00	0.15
42.30	0.48	1.01	0.48*	0.15	0.00	0.15
42.35	0.48	1.01	0.48*	0.15	0.00	0.15
42.40	0.48	1.01	0.48*	0.14	0.00	0.14
42.45	0.48	1.01	0.48*	0.14	0.00	0.14
42.50	0.48	1.01	0.48*	0.13	0.00	0.13
42.55	0.48	1.01	0.48*	0.13	0.00	0.13
42.60	0.48	1.01	0.48*	0.13	0.00	0.13
42.65	0.48	1.01	0.48*	0.12	0.00	0.12
42.70	0.48	1.01	0.48*	0.12	0.00	0.12
42.75	0.48	1.01	0.48*	0.11	0.00	0.11
42.80	0.48	1.01	0.48*	0.11	0.00	0.11
42.85	0.48	1.01	0.48*	0.11	0.00	0.11
42.90	0.48	1.00	0.48*	0.10	0.00	0.10
42.95	0.48	1.00	0.48*	0.10	0.00	0.10
43.00	0.48	1.00	0.48*	0.10	0.00	0.10
43.05	0.48	1.00	0.48*	0.09	0.00	0.09
43.10	0.48	1.00	0.48*	0.09	0.00	0.09
43.15	0.48	1.00	0.48*	0.09	0.00	0.09
43.20	0.48	1.00	0.48*	0.08	0.00	0.08
43.25	0.48	1.00	0.48*	0.08	0.00	0.08
43.30	0.48	1.00	0.48*	0.08	0.00	0.08
43.35	0.48	1.00	0.48*	0.07	0.00	0.07
43.40	0.48	1.00	0.48*	0.07	0.00	0.07
43.45	0.48	1.00	0.48*	0.07	0.00	0.07
43.50	0.48	1.00	0.48*	0.06	0.00	0.06
43.55	0.48	1.00	0.48*	0.06	0.00	0.06
43.60	0.48	1.00	0.48*	0.06	0.00	0.06
43.65	0.48	1.00	0.48*	0.05	0.00	0.05
43.70	0.48	1.00	0.48*	0.05	0.00	0.05
43.75	0.48	1.00	0.48*	0.05	0.00	0.05

43.80	0.48	1.00	0.48*	0.04	0.00	0.04
43.85	0.48	1.00	0.48*	0.04	0.00	0.04
43.90	0.48	1.00	0.48*	0.04	0.00	0.04
43.95	0.48	1.00	0.48*	0.04	0.00	0.04
44.00	0.48	0.99	0.48*	0.03	0.00	0.03
44.05	0.48	0.99	0.48*	0.03	0.00	0.03
44.10	0.48	0.99	0.48*	0.03	0.00	0.03
44.15	0.48	0.99	0.48*	0.03	0.00	0.03
44.20	0.48	0.99	0.48*	0.03	0.00	0.03
44.25	0.48	0.99	0.48*	0.02	0.00	0.02
44.30	0.48	0.99	0.48*	0.02	0.00	0.02
44.35	0.48	0.99	0.48*	0.02	0.00	0.02
44.40	0.48	0.99	0.48*	0.02	0.00	0.02
44.45	0.48	0.99	0.48*	0.01	0.00	0.01
44.50	0.48	0.99	0.48*	0.01	0.00	0.01
44.55	0.48	0.99	0.48*	0.01	0.00	0.01
44.60	0.48	0.99	0.48*	0.01	0.00	0.01
44.65	0.48	0.99	0.48*	0.01	0.00	0.01
44.70	0.48	0.99	0.48*	0.01	0.00	0.01
44.75	0.48	0.99	0.48*	0.01	0.00	0.01
44.80	0.48	0.99	0.48*	0.00	0.00	0.00
44.85	0.48	0.99	0.48*	0.00	0.00	0.00
44.90	0.48	0.99	0.48*	0.00	0.00	0.00
44.95	0.48	0.99	0.48*	0.00	0.00	0.00
45.00	0.48	0.99	0.49*	0.00	0.00	0.00
45.05	2.00	0.99	5.00	0.00	0.00	0.00
45.10	2.00	0.98	5.00	0.00	0.00	0.00
45.15	2.00	0.98	5.00	0.00	0.00	0.00
45.20	2.00	0.98	5.00	0.00	0.00	0.00
45.25	2.00	0.98	5.00	0.00	0.00	0.00
45.30	2.00	0.98	5.00	0.00	0.00	0.00
45.35	2.00	0.98	5.00	0.00	0.00	0.00
45.40	2.00	0.98	5.00	0.00	0.00	0.00
45.45	2.00	0.98	5.00	0.00	0.00	0.00
45.50	2.00	0.98	5.00	0.00	0.00	0.00
45.55	2.00	0.98	5.00	0.00	0.00	0.00
45.60	2.00	0.98	5.00	0.00	0.00	0.00
45.65	2.00	0.98	5.00	0.00	0.00	0.00
45.70	2.00	0.98	5.00	0.00	0.00	0.00
45.75	2.00	0.98	5.00	0.00	0.00	0.00
45.80	2.00	0.98	5.00	0.00	0.00	0.00
45.85	2.00	0.98	5.00	0.00	0.00	0.00
45.90	2.00	0.98	5.00	0.00	0.00	0.00
45.95	2.00	0.98	5.00	0.00	0.00	0.00
46.00	2.00	0.98	5.00	0.00	0.00	0.00
46.05	2.00	0.98	5.00	0.00	0.00	0.00
46.10	2.00	0.98	5.00	0.00	0.00	0.00
46.15	2.00	0.97	5.00	0.00	0.00	0.00
46.20	2.00	0.97	5.00	0.00	0.00	0.00
46.25	2.00	0.97	5.00	0.00	0.00	0.00

46.30	2.00	0.97	5.00	0.00	0.00	0.00
46.35	2.00	0.97	5.00	0.00	0.00	0.00
46.40	2.00	0.97	5.00	0.00	0.00	0.00
46.45	2.00	0.97	5.00	0.00	0.00	0.00
46.50	2.00	0.97	5.00	0.00	0.00	0.00
46.55	2.00	0.97	5.00	0.00	0.00	0.00
46.60	2.00	0.97	5.00	0.00	0.00	0.00
46.65	2.00	0.97	5.00	0.00	0.00	0.00
46.70	2.00	0.97	5.00	0.00	0.00	0.00
46.75	2.00	0.97	5.00	0.00	0.00	0.00
46.80	2.00	0.97	5.00	0.00	0.00	0.00
46.85	2.00	0.97	5.00	0.00	0.00	0.00
46.90	2.00	0.97	5.00	0.00	0.00	0.00
46.95	2.00	0.97	5.00	0.00	0.00	0.00
47.00	2.00	0.97	5.00	0.00	0.00	0.00
47.05	2.00	0.97	5.00	0.00	0.00	0.00
47.10	2.00	0.97	5.00	0.00	0.00	0.00
47.15	2.00	0.97	5.00	0.00	0.00	0.00
47.20	2.00	0.97	5.00	0.00	0.00	0.00
47.25	2.00	0.96	5.00	0.00	0.00	0.00
47.30	2.00	0.96	5.00	0.00	0.00	0.00
47.35	2.00	0.96	5.00	0.00	0.00	0.00
47.40	2.00	0.96	5.00	0.00	0.00	0.00
47.45	2.00	0.96	5.00	0.00	0.00	0.00
47.50	2.00	0.96	5.00	0.00	0.00	0.00
47.55	2.00	0.96	5.00	0.00	0.00	0.00
47.60	2.00	0.96	5.00	0.00	0.00	0.00
47.65	2.00	0.96	5.00	0.00	0.00	0.00
47.70	2.00	0.96	5.00	0.00	0.00	0.00
47.75	2.00	0.96	5.00	0.00	0.00	0.00
47.80	2.00	0.96	5.00	0.00	0.00	0.00
47.85	2.00	0.96	5.00	0.00	0.00	0.00
47.90	2.00	0.96	5.00	0.00	0.00	0.00
47.95	2.00	0.96	5.00	0.00	0.00	0.00
48.00	2.00	0.96	5.00	0.00	0.00	0.00
48.05	2.00	0.96	5.00	0.00	0.00	0.00
48.10	2.00	0.96	5.00	0.00	0.00	0.00
48.15	2.00	0.96	5.00	0.00	0.00	0.00
48.20	2.00	0.96	5.00	0.00	0.00	0.00
48.25	2.00	0.96	5.00	0.00	0.00	0.00
48.30	2.00	0.95	5.00	0.00	0.00	0.00
48.35	2.00	0.95	5.00	0.00	0.00	0.00
48.40	2.00	0.95	5.00	0.00	0.00	0.00
48.45	2.00	0.95	5.00	0.00	0.00	0.00
48.50	2.00	0.95	5.00	0.00	0.00	0.00
48.55	2.00	0.95	5.00	0.00	0.00	0.00
48.60	2.00	0.95	5.00	0.00	0.00	0.00
48.65	2.00	0.95	5.00	0.00	0.00	0.00
48.70	2.00	0.95	5.00	0.00	0.00	0.00
48.75	2.00	0.95	5.00	0.00	0.00	0.00

48.80	2.00	0.95	5.00	0.00	0.00	0.00
48.85	2.00	0.95	5.00	0.00	0.00	0.00
48.90	2.00	0.95	5.00	0.00	0.00	0.00
48.95	2.00	0.95	5.00	0.00	0.00	0.00
49.00	2.00	0.95	5.00	0.00	0.00	0.00
49.05	2.00	0.95	5.00	0.00	0.00	0.00
49.10	2.00	0.95	5.00	0.00	0.00	0.00
49.15	2.00	0.95	5.00	0.00	0.00	0.00
49.20	2.00	0.95	5.00	0.00	0.00	0.00
49.25	2.00	0.95	5.00	0.00	0.00	0.00
49.30	2.00	0.95	5.00	0.00	0.00	0.00
49.35	2.00	0.95	5.00	0.00	0.00	0.00
49.40	2.00	0.94	5.00	0.00	0.00	0.00
49.45	2.00	0.94	5.00	0.00	0.00	0.00
49.50	2.00	0.94	5.00	0.00	0.00	0.00
49.55	2.00	0.94	5.00	0.00	0.00	0.00
49.60	2.00	0.94	5.00	0.00	0.00	0.00
49.65	2.00	0.94	5.00	0.00	0.00	0.00
49.70	2.00	0.94	5.00	0.00	0.00	0.00
49.75	2.00	0.94	5.00	0.00	0.00	0.00
49.80	2.00	0.94	5.00	0.00	0.00	0.00
49.85	2.00	0.94	5.00	0.00	0.00	0.00
49.90	2.00	0.94	5.00	0.00	0.00	0.00
49.95	2.00	0.94	5.00	0.00	0.00	0.00
50.00	2.00	0.94	5.00	0.00	0.00	0.00
50.05	2.00	0.94	5.00	0.00	0.00	0.00
50.10	2.00	0.94	5.00	0.00	0.00	0.00
50.15	2.00	0.94	5.00	0.00	0.00	0.00
50.20	2.00	0.94	5.00	0.00	0.00	0.00
50.25	2.00	0.94	5.00	0.00	0.00	0.00
50.30	2.00	0.94	5.00	0.00	0.00	0.00
50.35	2.00	0.94	5.00	0.00	0.00	0.00
50.40	2.00	0.94	5.00	0.00	0.00	0.00
50.45	2.00	0.93	5.00	0.00	0.00	0.00
50.50	2.00	0.93	5.00	0.00	0.00	0.00
50.55	2.00	0.93	5.00	0.00	0.00	0.00
50.60	2.00	0.93	5.00	0.00	0.00	0.00
50.65	2.00	0.93	5.00	0.00	0.00	0.00
50.70	2.00	0.93	5.00	0.00	0.00	0.00
50.75	2.00	0.93	5.00	0.00	0.00	0.00
50.80	2.00	0.93	5.00	0.00	0.00	0.00
50.85	2.00	0.93	5.00	0.00	0.00	0.00
50.90	2.00	0.93	5.00	0.00	0.00	0.00
50.95	2.00	0.93	5.00	0.00	0.00	0.00
51.00	2.00	0.93	5.00	0.00	0.00	0.00

---

* F.S.<1, Liquefaction Potential Zone
(F.S. is limited to 5, CRR is limited to 2, CSR is limited to 2)

Units: Unit: qc, fs, Stress or Pressure = atm (1.0581tsf); Unit Weight =

pcf; Depth = ft; Settlement = in.

---

1 atm (atmosphere) = 1 tsf (ton/ft2)
CRRm Cyclic resistance ratio from soils
CSRsf Cyclic stress ratio induced by a given earthquake (with user request factor of safety)
F.S. Factor of Safety against liquefaction, F.S.=CRRm/CSRsf
S_sat Settlement from saturated sands
S_dry Settlement from Unsaturated Sands
S_all Total Settlement from Saturated and Unsaturated Sands
NoLiq No-Liquefy Soils

Sladden Engineering

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www.sladdenengineering.com

October 22, 2024

Project No. 544-24159
24-10-561

Relevant Living
6417 Selma Avenue, 2nd Floor
Los Angeles, California 90028

Project: Proposed The Ranch at Coachella
Mixed-Use Development
APN's 780-040-001, 003, 780-060-001 & 002
SWC 52nd Avenue & Van Buren Street
Coachella, California

Subject: Percolation/Infiltration Testing for Stormwater Management

Ref: Geotechnical Investigation report, Proposed "The Ranch at Coachella" Mixed-Use Development, APNs 780-040-001, 003 & 780-060-001 & 002 Coachella, California, Project No. 544-24159, Report No. 24-07-358.

In accordance with your request, we have performed percolation testing on the subject site to evaluate the infiltration potential of the near-surface soil to assist in stormwater management system design. It is our understanding that on-site stormwater retention including infiltration is planned for the proposed project.

Percolation testing has been performed within 8 shallow test holes excavated on the site. Testing was performed at a depth of approximately 4 and 6 feet below the existing ground surface. The approximate locations of the test holes are presented on the attached Test Location Photograph (Figure 3). Proposed testing locations were provided to Sladden Engineering by MSA Consulting, Inc. However, final locations were adjusted based on encountered field conditions and by on site tenant's request.

Testing was performed by placing water within the test bores and recording the drop in the water surface with time. Testing was performed in general accordance with Section 2.3 of Riverside County – Low Impact Development BMP Design Handbook for percolation testing. Test results are summarized in the following table.

PERCOLATION/INFILTRATION TEST RESULTS

Test No.	Depth (Ft)	USCS	Percolation Rate (in/hr)	Infiltration Rate (in/hr)
P-1	6.00	SM	24.00	3.00
P-2	6.00	SM	27.50	3.64
P-3	4.00	SM	40.00	6.67
P-4	6.00	SM	40.00	6.67

P-5	6.00	SM	32.50	4.68
P-6	4.00	SM	40.00	6.67
P-7	4.00	SM	40.00	6.67
P-8	4.00	SM	40.00	6.67

The percolation rates determined represent the ultimate field rates that do not include a safety factor. The corresponding infiltration rates were calculated using the Porchet Method. An appropriate safety factor should be incorporated into stormwater retention/infiltration system design.

If you have any questions regarding this memo, please contact the undersigned.

Respectfully submitted,
SLADDEN ENGINEERING

James W. Minor III
Senior Geologist

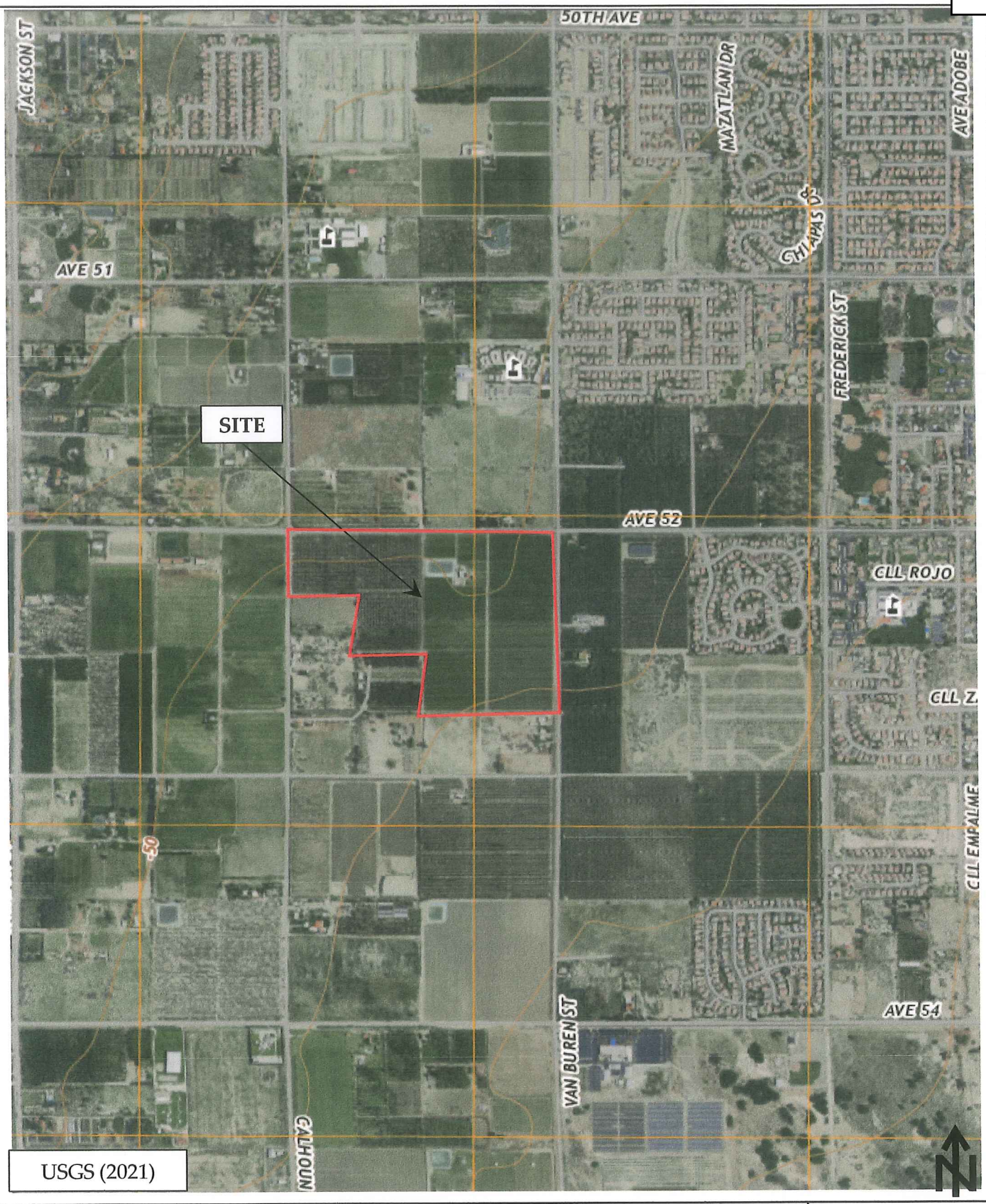
PROFESSIONAL GEOLOGIST
JAMES W. MINOR III
No. 9735
STATE OF CALIFORNIA

Brett L. Anderson
Principal Engineer

REGISTERED PROFESSIONAL ENGINEER
BRETT L. ANDERSON
No. C45389
CIVIL ENGINEERING
STATE OF CALIFORNIA

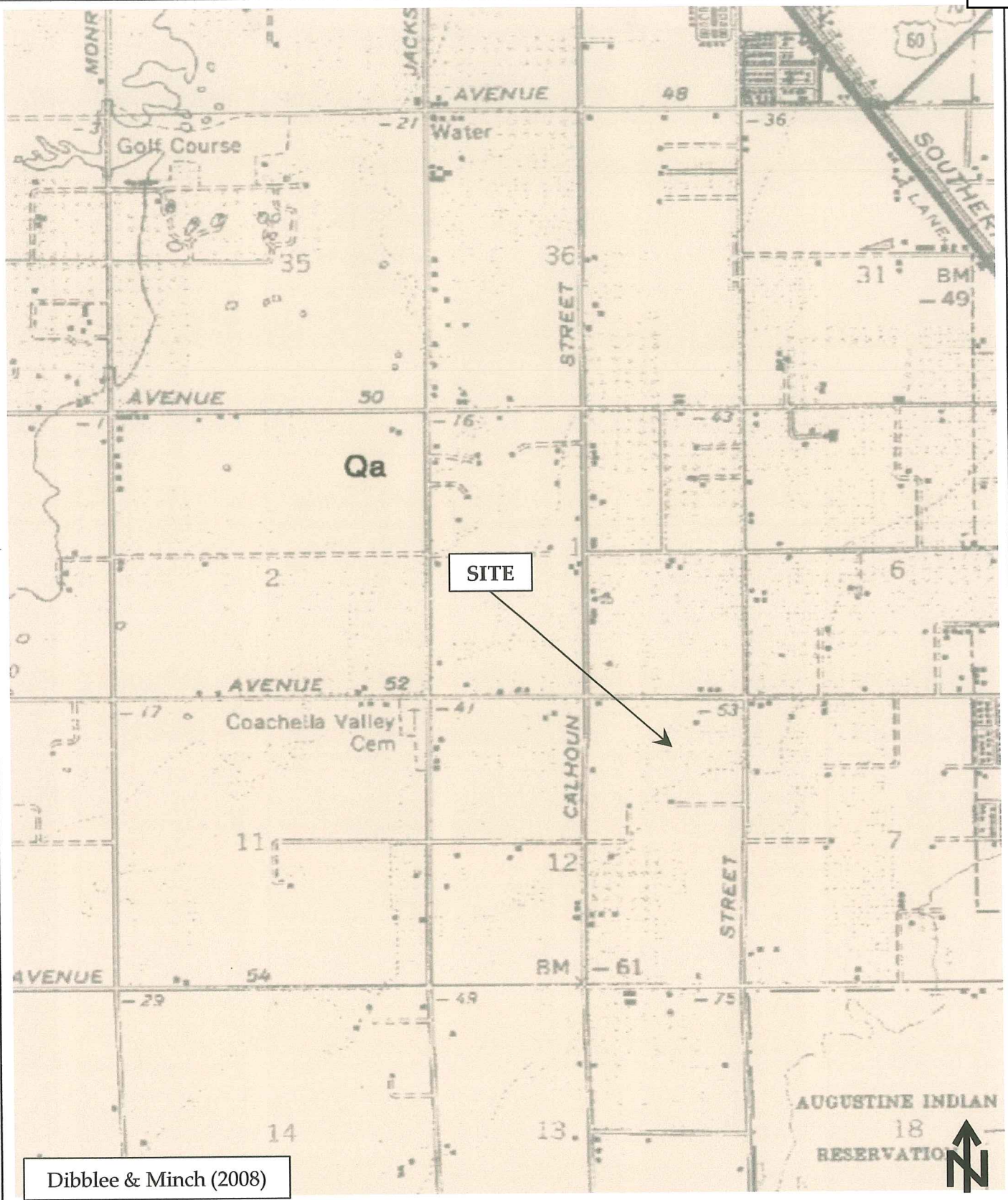
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SITE LOCATION MAP
REGIONAL GEOLOGIC MAP
TEST LOCATION PHOTOGRAPH



USGS (2021)

	SITE LOCATION MAP	FIGURE
Sladden Engineering	Project Number: 544-24159	1
	Report Number: 24-10-561	
	Date: October 22, 2024	



Dibblee & Minch (2008)

Sladden Engineering	REGIONAL GEOLOGIC MAP	FIGURE 2
	Project Number: 544-24159	
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	Date: October 22, 2024	



LEGEND

P-8 Approximate Percolation Testing Location

Google Earth (2024)

	TEST LOCATION PHOTOGRAPH	FIGURE
Sladden Engineering		3
Project Number:	544-24159	
Report Number:	24-10-561	
Date:	October 22, 2024	

BORING LOGS
STORMWATER TESTING DATA SHEETS

Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	9/26/2024
Elevation:	-50 FT MSL	Boring No:	P-1

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							2		Silty Sand (SM); grayish brown, moist, fine-to coarse-grained, micaceous, with trace of clay.
							4		
							6		
							8		Terminated at ~ 6 ft bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered. Borehole Cased with Perforated Pipe for Percolation Testing.
							10		
							12		
							14		
							16		
							18		
							20		
							22		
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

MIXED-USE DEVELOPMENT
SWC 52ND AVENUE & VAN BUREN, COACHELLA

Project No:	544-24159	Page	1
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Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	9/26/2024
Elevation:	-50 FT MSL	Boring No:	P-2

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							2		Silty Sand (SM); grayish brown, moist, fine-to coarse-grained, micaceous, with trace of clay.
							4		
							6		
							8		Terminated at ~ 6 ft bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered. Borehole Cased with Perforated Pipe for Percolation Testing.
							10		
							12		
							14		
							16		
							18		
							20		
							22		
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

MIXED-USE DEVELOPMENT
SWC 52ND AVENUE & VAN BUREN, COACHELLA

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Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	9/26/2024
Elevation:	-50 FT MSL	Boring No:	P-3

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							2		Silty Sand (SM); grayish brown, slightly moist, fine-to coarse-grained, micaceous.
							4		
							6		
							8		
							10		Terminated at ~ 4 ft bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered. Borehole Cased with Perforated Pipe for Percolation Testing.
							12		
							14		
							16		
							18		
							20		
							22		
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

MIXED-USE DEVELOPMENT
SWC 52ND AVENUE & VAN BUREN, COACHELLA

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Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	9/26/2024
Elevation:	-50 FT MSL	Boring No:	P-4

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							2		Silty Sand (SM); grayish brown, slightly moist, fine-to coarse-grained, micaceous.
							4		
							6		
							8		Terminated at ~ 6 ft bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered. Borehole Cased with Perforated Pipe for Percolation Testing.
							10		
							12		
							14		
							16		
							18		
							20		
							22		
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

MIXED-USE DEVELOPMENT
SWC 52ND AVENUE & VAN BUREN, COACHELLA

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Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	9/26/2024
Elevation:	-50 FT MSL	Boring No:	P-5

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							2		Silty Sand (SM); grayish brown, slightly moist, fine-to coarse-grained, micaceous.
							4		
							6		
							8		Terminated at ~ 6 ft bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered. Borehole Cased with Perforated Pipe for Percolation Testing.
							10		
							12		
							14		
							16		
							18		
							20		
							22		
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

MIXED-USE DEVELOPMENT
SWC 52ND AVENUE & VAN BUREN, COACHELLA

Project No:	544-24159	Page	5
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Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	9/26/2024
Elevation:	-50 FT MSL	Boring No:	P-6

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							2		Silty Sand (SM); grayish brown, slightly moist, fine-to coarse-grained, micaceous.
							4		
							6		
							8		
							10		Terminated at ~ 4 ft bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered. Borehole Cased with Perforated Pipe for Percolation Testing.
							12		
							14		
							16		
							18		
							20		
							22		
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

MIXED-USE DEVELOPMENT
SWC 52ND AVENUE & VAN BUREN, COACHELLA

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Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	9/26/2024
Elevation:	-50 FT MSL	Boring No:	P-7

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							2		Silty Sand (SM); grayish brown, slightly moist, fine-to coarse-grained, micaceous.
							4		
							6		
							8		
							10		Terminated at ~ 4 ft bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered. Borehole Cased with Perforated Pipe for Percolation Testing.
							12		
							14		
							16		
							18		
							20		
							22		
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

MIXED-USE DEVELOPMENT
SWC 52ND AVENUE & VAN BUREN, COACHELLA

Project No:	544-24159	Page	7
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Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	9/26/2024
Elevation:	-50 FT MSL	Boring No:	P-8

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							2		Silty Sand (SM); grayish brown, slightly moist, fine-to coarse-grained, micaceous.
							4		
							6		
							8		
							10		Terminated at ~ 4 ft bgs.
							12		No Bedrock Encountered.
							14		No Groundwater or Seepage Encountered.
							16		Borehole Cased with Perforated Pipe for Percolation Testing.
							18		
							20		
							22		
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

MIXED-USE DEVELOPMENT
SWC 52ND AVENUE & VAN BUREN, COACHELLA

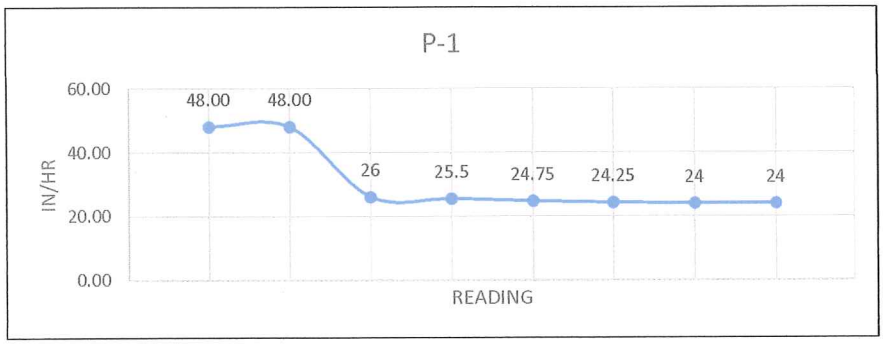
Project No:	544-24159	Page	8
Report No:	24-10-561		

STORMWATER PERCOLATION SHEET (LESS THAN 10 FT)

Project:	Mixed-Use Development	Depth (ft):	6.00
Job No. :	544-24159	USCS Soil Class:	SM
Date:	10/21/2024	Sandy Soil:	Favorable
Test Hole #:	P-1	Tested By:	Robert

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
A	25.00	6.00	20	0	20	48.00
B	25.00	6.00	20	0	20	48.00

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
1	30.00	6.00	20	7	13	26
2	30.00	6.00	20	7 2/8	12 6/8	25.5
3	30.00	6.00	20	7 5/8	12 3/8	24.75
4	30.00	6.00	20	7 7/8	12 1/8	24.25
5	30.00	6.00	20	8	12	24
6	30.00	6.00	20	8	12	24



PERCOLATION RATE CONVERSION (PORCHET METHOD)

$$I_{t=} \quad \frac{\Delta H\ 60\ R}{\Delta t(r+2H_{avg})}$$

Δt =	30.00
D_f =	64.00
r =	4.00
D_0 =	52
D_t =	72.00
H_0 =	20
H_f =	8
ΔH =	12.00
H_{avg} =	14.00

Δt (minutes)
D_f (Final Depth to water)
r (hole radius in inches)
D_0 (Initial Depth to water)
D_t (Total Depth of test hole)
H_0 (initial height of water at selected time interval)

$$H_0 = D_t - D_0$$

H_f (final height of water at the selected time interval)

$$H_f = D_t - D_f$$

ΔH (change in head over the time interval)

$$\Delta H = H_0 - H_f$$

H_{avg} (average head height over the time interval)

$$H_{avg} = (H_0 + H_f)/2$$

Field Rate:	24 in/hr
Infiltration Rate:	3.00 in/hr

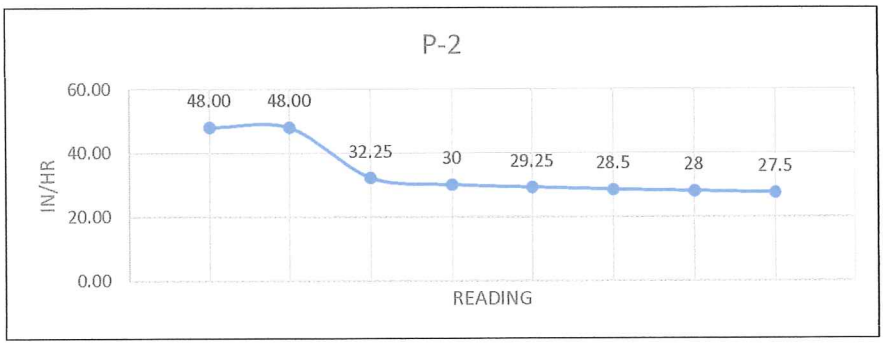
SLADDEN ENGINEERING

STORMWATER PERCOLATION SHEET (LESS THAN 10 FT)

Project:	Mixed-Use Development	Depth (ft):	6.00
Job No. :	544-24159	USCS Soil Class:	SM
Date:	10/21/2024	Sandy Soil:	Favorable
Test Hole #:	P-2	Tested By:	Robert

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
A	25.00	6.00	20	0	20	48.00
B	25.00	6.00	20	0	20	48.00

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
1	30.00	6.00	20	3 7/8	16 1/8	32.25
2	30.00	6.00	20	5	15	30
3	30.00	6.00	20	5 3/8	14 5/8	29.25
4	30.00	6.00	20	5 6/8	14 2/8	28.5
5	30.00	6.00	20	6	14	28
6	30.00	6.00	20	6 2/8	13 6/8	27.5



PERCOLATION RATE CONVERSION (PORCHET METHOD)

$$I_{t=} \quad \frac{\Delta H \; 60 \; R}{\Delta t(r+2H_{avg})}$$

Δt =	30.00
D_f =	65.75
r =	4.00
D_0 =	52
D_t =	72.00
H_0 =	20
H_f =	6.25
ΔH =	13.75
H_{avg} =	13.13

Δt (minutes)

D_f (Final Depth to water)

r (hole radius in inches)

D_0 (Initial Depth to water)

D_t (Total Depth of test hole)

H_0 (initial height of water at selected time interval)

$$H_0 = D_t - D_0$$

H_f (final height of water at the selected time interval)

$$H_f = D_t - D_f$$

ΔH (change in head over the time interval)

$$\Delta H = H_0 - H_f$$

H_{avg} (average head height over the time interval)

$$H_{avg} = (H_0 + H_f)/2$$

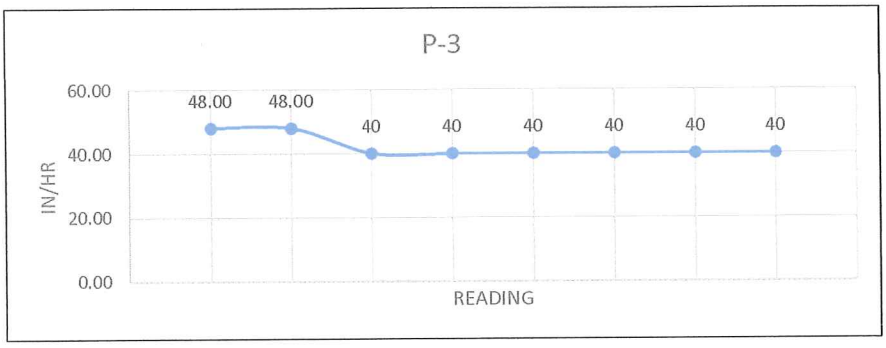
Field Rate:	27.5 in/hr
Infiltration Rate:	3.64 in/hr

STORMWATER PERCOLATION SHEET (LESS THAN 10 FT)

Project:	Mixed-Use Development	Depth (ft):	4.00
Job No. :	544-24159	USCS Soil Class:	SM
Date:	10/21/2024	Sandy Soil:	Favorable
Test Hole #:	P-3	Tested By:	Robert

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
A	25.00	4.00	20	0	20	48.00
B	25.00	4.00	20	0	20	48.00

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
1	30.00	4.00	20	0	20	40
2	30.00	4.00	20	0	20	40
3	30.00	4.00	20	0	20	40
4	30.00	4.00	20	0	20	40
5	30.00	4.00	20	0	20	40
6	30.00	4.00	20	0	20	40



PERCOLATION RATE CONVERSION (PORCHET METHOD)

$$I_{t=} \quad \frac{\Delta H\ 60\ R}{\Delta t(r+2H_{avg})}$$

Δt =	30.00
D_f =	48.00
r =	4.00
D_0 =	28
D_t =	48.00
H_0 =	20
H_f =	0
ΔH =	20.00
H_{avg} =	10.00

Δt (minutes)
D_f (Final Depth to water)
r (hole radius in inches)
D_0 (Initial Depth to water)
D_t (Total Depth of test hole)
H_0 (initial height of water at selected time interval)

$$H_0 = D_t - D_0$$

H_f (final height of water at the selected time interval)

$$H_f = D_t - D_f$$

ΔH (change in head over the time interval)

$$\Delta H = H_0 - H_f$$

H_{avg} (average head height over the time interval)

$$H_{avg} = (H_0 + H_f)/2$$

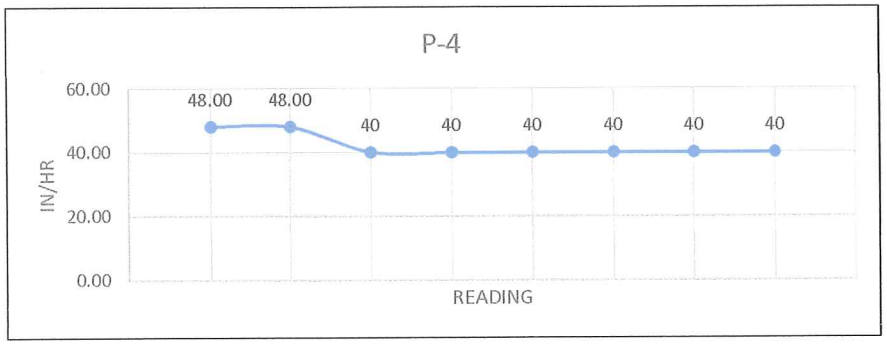
Field Rate:	40 in/hr
Infiltration Rate:	6.67 in/hr

STORMWATER PERCOLATION SHEET (LESS THAN 10 FT)

Project:	Mixed-Use Development	Depth (ft):	6.00
Job No. :	544-24159	USCS Soil Class:	SM
Date:	10/21/2024	Sandy Soil:	Favorable
Test Hole #:	P-4	Tested By:	Robert

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
A	25.00	6.00	20	0	20	48.00
B	25.00	6.00	20	0	20	48.00

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
1	30.00	6.00	20	0	20	40
2	30.00	6.00	20	0	20	40
3	30.00	6.00	20	0	20	40
4	30.00	6.00	20	0	20	40
5	30.00	6.00	20	0	20	40
6	30.00	6.00	20	0	20	40



PERCOLATION RATE CONVERSION (PORCHET METHOD)

$$I_{t=} \quad \frac{\Delta H\ 60\ R}{\Delta t(r+2H_{avg})}$$

Δt =	30.00
D_f =	72.00
r =	4.00
D_0 =	52
D_t =	72.00
H_0 =	20
H_f =	0
ΔH =	20.00
H_{avg} =	10.00

Δt (minutes)

D_f (Final Depth to water)

r (hole radius in inches)

D_0 (Initial Depth to water)

D_t (Total Depth of test hole)

H_0 (initial height of water at selected time interval)

$$H_0 = D_t - D_0$$

H_f (final height of water at the selected time interval)

$$H_f = D_t - D_f$$

ΔH (change in head over the time interval)

$$\Delta H = H_0 - H_f$$

H_{avg} (average head height over the time interval)

$$H_{avg} = (H_0 + H_f)/2$$

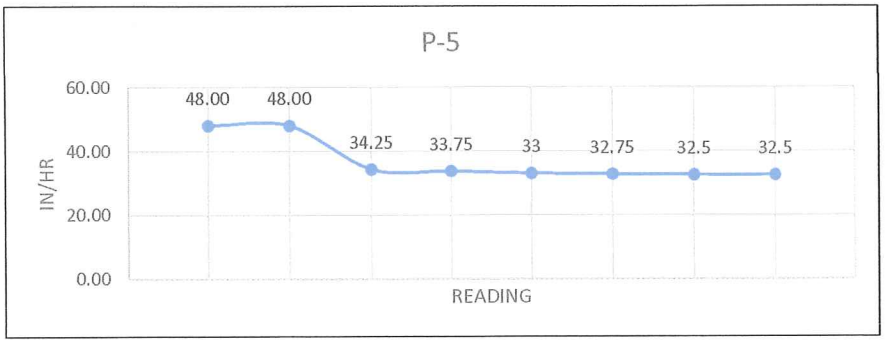
Field Rate:	40 in/hr
Infiltration Rate:	6.67 in/hr

STORMWATER PERCOLATION SHEET (LESS THAN 10 FT)

Project:	Mixed-Use Development	Depth (ft):	6.00
Job No. :	544-24159	USCS Soil Class:	SM
Date:	10/21/2024	Sandy Soil:	Favorable
Test Hole #:	P-5	Tested By:	Robert

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
A	25.00	6.00	20	0	20	48.00
B	25.00	6.00	20	0	20	48.00

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
1	30.00	6.00	20	2 7/8	17 1/8	34.25
2	30.00	6.00	20	3 1/8	16 7/8	33.75
3	30.00	6.00	20	3 4/8	16 4/8	33
4	30.00	6.00	20	3 5/8	16 3/8	32.75
5	30.00	6.00	20	3 6/8	16 2/8	32.5
6	30.00	6.00	20	3 6/8	16 2/8	32.5



PERCOLATION RATE CONVERSION (PORCHET METHOD)

$$I_{t=} \quad \frac{\Delta H\ 60\ R}{\Delta t(r+2H_{avg})}$$

Δt =	30.00
D_f =	68.25
r =	4.00
D_0 =	52
D_t =	72.00
H_0 =	20
H_f =	3.75
ΔH =	16.25
H_{avg} =	11.88

Δt (minutes)
D_f (Final Depth to water)
r (hole radius in inches)
D_0 (Initial Depth to water)
D_t (Total Depth of test hole)
H_0 (initial height of water at selected time interval)

$$H_0 = D_t - D_0$$

H_f (final height of water at the selected time interval)

$$H_f = D_t - D_f$$

ΔH (change in head over the time interval)

$$\Delta H = H_0 - H_f$$

H_{avg} (average head height over the time interval)

$$H_{avg} = (H_0 + H_f)/2$$

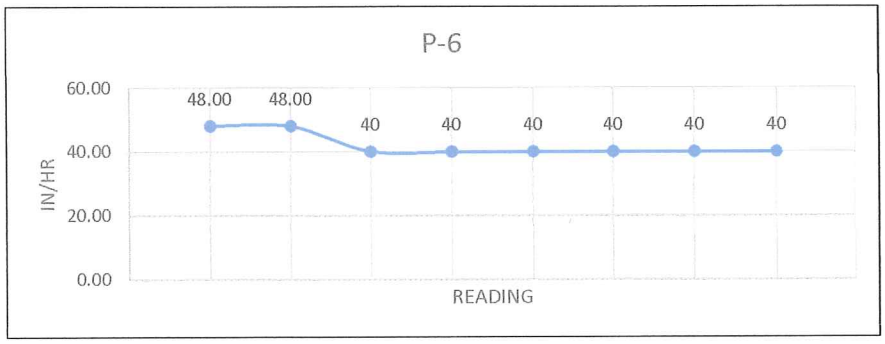
Field Rate:	32.5 in/hr
Infiltration Rate:	4.68 in/hr

STORMWATER PERCOLATION SHEET (LESS THAN 10 FT)

Project:	Mixed-Use Development	Depth (ft):	4.00
Job No. :	544-24159	USCS Soil Class:	SM
Date:	10/21/2024	Sandy Soil:	Favorable
Test Hole #:	P-6	Tested By:	Robert

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
A	25.00	4.00	20	0	20	48.00
B	25.00	4.00	20	0	20	48.00

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
1	30.00	4.00	20	0	20	40
2	30.00	4.00	20	0	20	40
3	30.00	4.00	20	0	20	40
4	30.00	4.00	20	0	20	40
5	30.00	4.00	20	0	20	40
6	30.00	4.00	20	0	20	40



PERCOLATION RATE CONVERSION (PORCHET METHOD)

$$I_{t=} \quad \frac{\Delta H\ 60\ R}{\Delta t(r+2H_{avg})}$$

Δt =	30.00
D_f =	48.00
r =	4.00
D_0 =	28
D_t =	48.00
H_0 =	20
H_f =	0
ΔH =	20.00
H_{avg} =	10.00

Δt (minutes)

D_f (Final Depth to water)

r (hole radius in inches)

D_0 (Initial Depth to water)

D_t (Total Depth of test hole)

H_0 (initial height of water at selected time interval)

$$H_0 = D_t - D_0$$

H_f (final height of water at the selected time interval)

$$H_f = D_t - D_f$$

ΔH (change in head over the time interval)

$$\Delta H = H_0 - H_f$$

H_{avg} (average head height over the time interval)

$$H_{avg} = (H_0 + H_f)/2$$

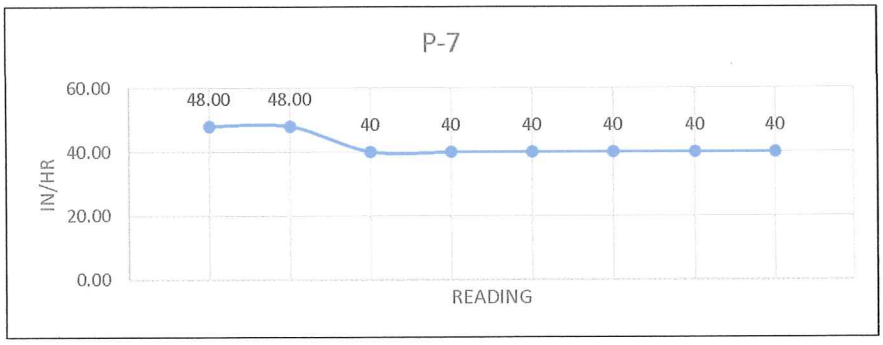
Field Rate:	40 in/hr
Infiltration Rate:	6.67 in/hr

STORMWATER PERCOLATION SHEET (LESS THAN 10 FT)

Project:	Mixed-Use Development	Depth (ft):	4.00
Job No. :	544-24159	USCS Soil Class:	SM
Date:	10/21/2024	Sandy Soil:	Favorable
Test Hole #:	P-7	Tested By:	Robert

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
A	25.00	4.00	20	0	20	48.00
B	25.00	4.00	20	0	20	48.00

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
1	30.00	4.00	20	0	20	40
2	30.00	4.00	20	0	20	40
3	30.00	4.00	20	0	20	40
4	30.00	4.00	20	0	20	40
5	30.00	4.00	20	0	20	40
6	30.00	4.00	20	0	20	40



PERCOLATION RATE CONVERSION (PORCHET METHOD)

$$I_{t=} \quad \frac{\Delta H\ 60\ R}{\Delta t(r+2H_{avg})}$$

Δt =	30.00
D_f =	48.00
r =	4.00
D_0 =	28
D_t =	48.00
H_0 =	20
H_f =	0
ΔH =	20.00
H_{avg} =	10.00

Δt (minutes)
D_f (Final Depth to water)
r (hole radius in inches)
D_0 (Initial Depth to water)
D_t (Total Depth of test hole)
H_0 (initial height of water at selected time interval)

$$H_0 = D_t - D_0$$

H_f (final height of water at the selected time interval)

$$H_f = D_t - D_f$$

ΔH (change in head over the time interval)

$$\Delta H = H_0 - H_f$$

H_{avg} (average head height over the time interval)

$$H_{avg} = (H_0 + H_f)/2$$

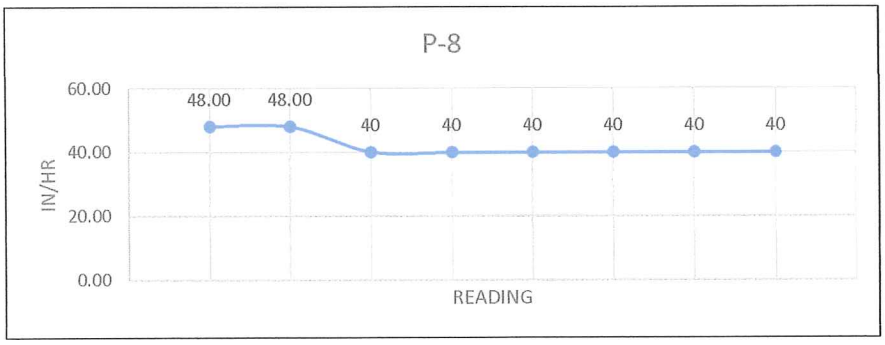
Field Rate:	40 in/hr
Infiltration Rate:	6.67 in/hr

STORMWATER PERCOLATION SHEET (LESS THAN 10 FT)

Project:	Mixed-Use Development	Depth (ft):	4.00
Job No. :	544-24159	USCS Soil Class:	SM
Date:	10/21/2024	Sandy Soil:	Favorable
Test Hole #:	P-8	Tested By:	Robert

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
A	25.00	4.00	20	0	20	48.00
B	25.00	4.00	20	0	20	48.00

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
1	30.00	4.00	20	0	20	40
2	30.00	4.00	20	0	20	40
3	30.00	4.00	20	0	20	40
4	30.00	4.00	20	0	20	40
5	30.00	4.00	20	0	20	40
6	30.00	4.00	20	0	20	40



PERCOLATION RATE CONVERSION (PORCHET METHOD)

$$I_{t=} \quad \frac{\Delta H\ 60\ R}{\Delta t(r+2H_{avg})}$$

Δt =	30.00
D_f =	48.00
r =	4.00
D_0 =	28
D_t =	48.00
H_0 =	20
H_f =	0
ΔH =	20.00
H_{avg} =	10.00

Δt (minutes)

D_f (Final Depth to water)

r (hole radius in inches)

D_0 (Initial Depth to water)

D_t (Total Depth of test hole)

H_0 (initial height of water at selected time interval)

$$H_0 = D_t - D_0$$

H_f (final height of water at the selected time interval)

$$H_f = D_t - D_f$$

ΔH (change in head over the time interval)

$$\Delta H = H_0 - H_f$$

H_{avg} (average head height over the time interval)

$$H_{avg} = (H_0 + H_f)/2$$

Field Rate:	40 in/hr
Infiltration Rate:	6.67 in/hr

COVA

GREENHOUSE GAS ANALYSIS

Prepared By:

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Alyssa Barnett | abarnett@urbanxroads.com

Reference Number	Agency	Date
16552-02 GHG Report	City of Coachella	December 1, 2025



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LIST OF ABBREVIATED TERMS

%	Percent
°C	Degrees Celsius
°F	Degrees Fahrenheit
(1)	Reference
2017 Scoping Plan	Final 2017 Scoping Plan Update
2022 Scoping Plan	2022 Scoping Plan for Achieving Carbon Neutrality
AB	Assembly Bill
AB 32	Global Warming Solutions Act of 2006
AB 1493	Pavley Fuel Efficiency Standards
AB 1881	California Water Conservation Landscaping Act of 2006
Annex I	Industrialized Nations
AQIA	COVA Air Quality Impact Analysis
BAU	Business as Usual
C_2F_6	Hexafluoroethane
C_2H_6	Ethane
CAA	Federal Clean Air Act
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGAPS	California LBNL GHG Analysis of Policies Spreadsheet
CALGreen	California Green Building Standards Code
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resource Board
CEC	California Energy Commission
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CEQA Guidelines	2025 CEQA Statute and Guidelines
CDFA	California Department of Food and Agriculture
CF_4	Tetrafluoromethane
CFC	Chlorofluorocarbons
CFC-113	Trichlorotrifluoroethane
CH_4	Methane
City	City of Coachella
CNRA	California Natural Resources Agency
CNRA 2009	2009 California Climate Adaptation Strategy
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
Convention	United Nation's Framework Convention on Climate Change
COP	Conference of the Parties
CPUC	California Public Utilities Commission
DWR	Department of Water Resources
EPA	Environmental Protection Agency

GCC	Global Climate Change
Gg	Gigagram
GHGA	Greenhouse Gas Analysis
GWP	Global Warming Potential
H_2O	Water
HFC	Hydrofluorocarbons
HDT	Heavy-Duty Trucks
HFC-23	Fluoroform
HFC-134a	1,1,1,2-tetrafluoroethane
HFC-152a	1,1-difluoroethane
IPCC	Intergovernmental Panel on Climate Change
ISO	Independent System Operator
ITE	Institute of Transportation Engineers
kWh	Kilowatt Hour
lbs	Pounds
LBNL	Lawrence Berkeley National Laboratory
LCA	Life-Cycle Analysis
LCD	Liquid Crystal Display
LCFS	Low Carbon Fuel Standard or Executive Order S-01-07
LEV III	Low-Emission Vehicle
LULUCF	Land-Use, Land-Use Change and Forestry
$MMTCO_2e$	Million Metric Ton of Carbon Dioxide Equivalent
mpg	Miles Per Gallon
MPOs	Metropolitan Planning Organizations
$MMTCO_2e/yr$	Million Metric Ton of Carbon Dioxide Equivalent Per Year
MT/yr	Metric Tons Per Year
$MTCO_2e$	Metric Ton of Carbon Dioxide Equivalent
$MTCO_2e/yr$	Metric Ton of Carbon Dioxide Equivalent Per Year
MW	Megawatts
MWh	Megawatt Hour
MWELO	California Department of Water Resources' Model Water Efficient Landscape Ordinance
N_2O	Nitrous Oxide
NDC	Nationally Determined Contributions
NF_3	Nitrogen Trifluoride
NHTSA	National Highway Traffic Safety Administration
NIOSH	National Institute for Occupational Safety and Health
NO_X	Nitrogen Oxides
Non-Annex I	Developing Nations
OAL	Office of Administrative Law
OPR	Office of Planning and Research
PFC	Perfluorocarbons
ppb	Parts Per Billion
ppm	Parts Per Million

ppt	Parts Per Trillion
Project	COVA
RTP	Regional Transportation Plan
SAFE	Safer Affordable Fuel-Efficient Vehicles Rule
SB	Senate Bill
SB 32	California Global Warming Solutions Act of 2006
SB 375	Regional GHG Emissions Reduction Targets/Sustainable Communities Strategies
SB 1078	Renewable Portfolio Standards
SB 1368	Statewide Retail Provider Emissions Performance Standards
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
Scoping Plan	California Air Resources Board Climate Change Scoping Plan
SCS	Sustainable Communities Strategy
sf	Square Feet
SF_6	Sulfur Hexaflouride
SLPS	Short-Lived Climate Pollutant Strategy
SP	Service Population
SSAB	Salton Sea Air Basin
TDM	Transportation Demand Management
Title 20	Appliance Energy Efficiency Standards
Title 24	California Building Code
U.N.	United Nations
U.S.	United States
UNFCCC	United Nations' Framework Convention on Climate Change
VMT	Vehicle Miles Traveled
WCI	Western Climate Initiative
WRI	World Resources Institute
ZE/NZE	Zero and Near-Zero Emissions
ZEV	Zero-Emissions Vehicles

EXECUTIVE SUMMARY

ES.1 SUMMARY OF FINDINGS

The results of this COVA Greenhouse Gas Analysis (GHGA) are summarized below based on the significance criteria in Section 3 of this report consistent with Appendix G of the Guidelines for Implementation of the California Environmental Quality Act (CEQA Guidelines) (1). Table ES-1 shows the findings of significance for potential greenhouse gas (GHG) impacts under the California Environmental Quality Act (CEQA).

TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS

Analysis	Report Section	Significance Findings	
		Unmitigated	Mitigated
GHG Impact #1: Would the Project generate GHG emissions either directly or indirectly, that may have a significant impact on the environment?	3.9	*Potentially Significant*	*Less Than Significant*
GHG Impact #2: Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?	3.9	*Less Than Significant*	*n/a*

ES.2 REGULATORY REQUIREMENTS

The Project would be required to comply with regulations imposed by the State of California, the South Coast Air Quality Management District (SCAQMD), and the City of Coachella aimed at the reduction of air pollutant emissions. Those that are directly and indirectly applicable to the Project and that would assist in the reduction of GHG emissions include.

- Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32) (2).
- Regional GHG Emissions Reduction Targets/Sustainable Communities Strategies (Senate Bill [SB] 375) (3).
- Pavley Fuel Efficiency Standards (AB 1493). Establishes fuel efficiency ratings for new vehicles (4).
- California Building Code (Title 24 California Code of Regulations [CCR]). Establishes energy efficiency requirements for new construction (5).
- Appliance Energy Efficiency Standards (Title 20 CCR). Establishes energy efficiency requirements for appliances (6).
- Low Carbon Fuel Standard (LCFS). Requires carbon content of fuel sold in California to be 10 percent (%) less by 2020 (7).
- Statewide Retail Provider Emissions Performance Standards (SB 1368). Requires energy generators to achieve performance standards for GHG emissions (8).
- Renewable Portfolio Standards (RPS). Requires electric corporations to increase the amount of energy obtained from eligible renewable energy resources to 20% by 2010 and 33% by

2020. SB 350 mandated a 50% RPS by 2030. SB 100 increased the RPS requirements to 60% by 2030 with new interim targets of 44% by 2024 and 52% by 2027 (9).

- California Global Warming Solutions Act of 2006 (SB 32). Requires the state to reduce statewide GHG emissions to 40% below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15 (10).

Promulgated regulations that would affect the Project's emissions are accounted for in the Project's GHG calculations provided in this report. In particular, AB 1493, LCFS, and RPS are accounted for in the Project's emission calculations.

ES.3 Mitigation Measures

The following measures (MM GHG-1 through MM GHG-5) are designed to reduce Project operational-source GHG emissions. These measures are quantifiable, and the associated emission reductions have been calculated and presented in this report.

MM GHG-1

All residential buildings (single-family homes and condos/townhomes) will be fully electrified, eliminating the use of natural gas.

MM GHG-2

On-site photovoltaic (PV) systems will provide 50% of electricity for single-family homes, condos/townhomes, movie theaters, and restaurants.

MM GHG-3

Water fixtures in residential and commercial buildings will be low-flow, with a 30% reduction in water use for toilets, showerheads, and faucets in residential buildings.

MM GHG-4

Landscaping will use low-water plants and efficient irrigation techniques, such as drip irrigation, to reduce water consumption.

MM GHG-5

The Project will implement a program that results in a 20% reduction in waste generation through enhanced recycling, composting, and waste minimization practices.

1 INTRODUCTION

This report presents the results of the GHGA prepared by Urban Crossroads, Inc., for the proposed COVA Project (Project). The purpose of this GHGA is to evaluate Project-related construction and operational emissions and determine the level of GHG impacts as a result of constructing and operating the Project.

1.1 SITE LOCATION

The Project is located at the southwest corner of the Van Buren Street and Avenue 52 intersection in the City of Coachella. The Project is surrounded by agricultural uses to the north, east, south, and west, as shown in Exhibit 1-A.

1.2 PROJECT DESCRIPTION

The proposed Project consists of 409 units: 165 two-story single-family residences (SFR) and 244 condo hotel units. The development includes a crystal lagoon, and other residential amenities including restaurants, a beach club, event space, pop-up shops, outdoor amphitheater, pools, recreation areas and kids play spaces. A preliminary site plan for the Project is shown in Exhibit 1-B.

EXHIBIT 1-A: LOCATION MAP

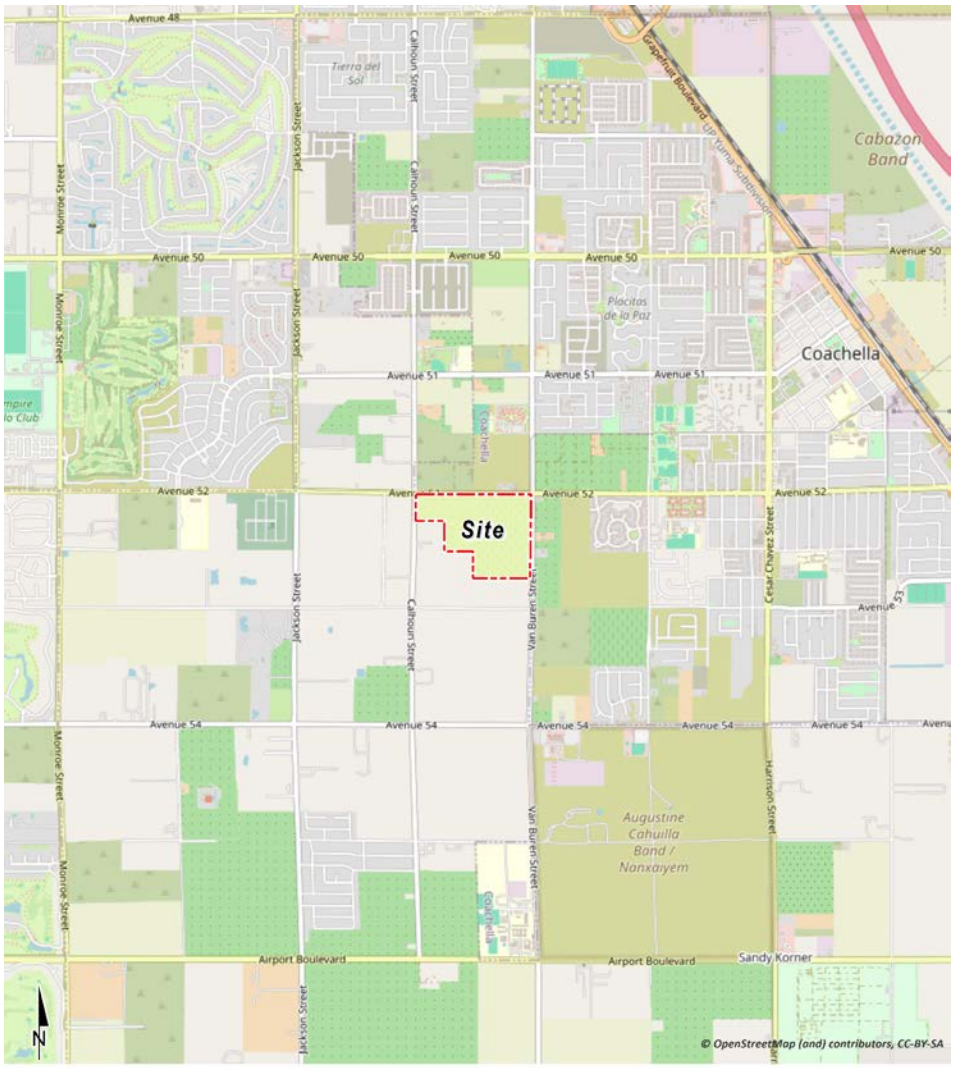
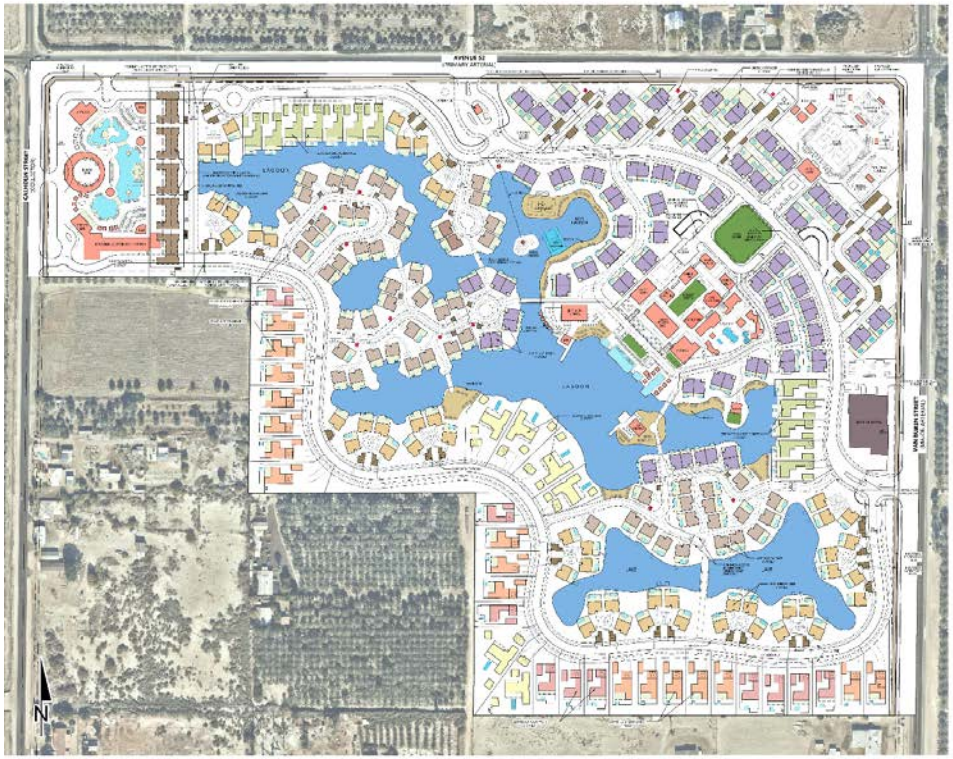


EXHIBIT 1-B: SITE PLAN



THE CITY OF COACHELLA OF THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

TECHNICAL SITE PLAN

EXHIBIT DATE: JULY 3, 2023

REVISIONS

NO.	DATE	DESCRIPTION

DATA TABLE

APPLICANT / LAND OWNER	
ADDRESS	
CONTACT	
EXHIBIT PREPARER	
ADDRESS	
CONTACT	TELEPHONE
SOURCE OF TOPOGRAPHY	
ADDRESS	
DATE OF TOPOGRAPHY	TELEPHONE
ASSESSOR'S PARCEL NUMBERS	

LEGAL DESCRIPTION

LAND USE DESCRIPTION	ACREAGE
GROSS AREA	
PROPOSED PUBLIC RIGHT-OF-WAY DEDICATION	
PROPOSED NET AREA	

PROJECT STATISTICS

SINGLE-FAMILY RESIDENTIAL	LOT SIZE	# BEDS	# STORIES	# UNITS	FLOOR AREA (SF)
GRAND ESTATE LOT					
ESTATE LOT (STANDARD + ADU)					
ESTATE LOT (COMPACT)					
ZERO LOT LINE RESIDENCE					
LAGOON BUNGALOW					
LAKE BUNGALOW					
TOTAL					

CONDO HOTEL					
HOTEL COTTAGES (1ST + 2ND)					
HOTEL COTTAGES (2ND FLR ADDED)					
TOTAL					

BEACH CLUB					
BEACH CLUB VIP VILLAS					
TOTAL					
MAIN CLUB AMENITIES					
PUBLIC BEACH AREA					
SPORTS CENTER					

PARKING PROVIDED	CAR SPACES	PARKING RATIO	CART SPACES
HOTEL (2-LEVEL BASEMENT PARKING GARAGE)			
BEACH CLUB (2-LEVEL PARKING GARAGE)			
HOTEL COTTAGES			
BUNGALOWS			
ZERO LOT LINE LOTS			
ESTATE LOTS			
GRAND ESTATE LOTS			
TOTAL			

NOTES:

WATER AMENITIES	AREA
HOTEL LAGOON	
LAKE	
BEACH CLUB LAGOON	
TOTAL	

2 CLIMATE CHANGE SETTING

2.1 INTRODUCTION TO GLOBAL CLIMATE CHANGE (GCC)

GCC is defined as the change in average meteorological conditions on the earth with respect to temperature, precipitation, and storms. The majority of scientists believe that the climate shift taking place since the Industrial Revolution is occurring at a quicker rate and magnitude than in the past. Scientific evidence suggests that GCC is the result of increased concentrations of GHGs in the earth's atmosphere, including carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorinated gases. The majority of scientists believe that this increased rate of climate change is the result of GHGs resulting from human activity and industrialization over the past 200 years.

An individual project, like the Project evaluated in this GHGA, cannot generate enough GHG emissions to affect a discernible change in global climate. However, the Project may participate in the potential for GCC by its incremental contribution of GHGs combined with the cumulative increase of all other sources of GHGs, which when taken together constitute potential influences on GCC. Because these changes may have serious environmental consequences, Section 3 will evaluate the potential for the Project to have a significant effect upon the environment as a result of its potential contribution to the greenhouse effect.

2.2 GLOBAL CLIMATE CHANGE DEFINED

GCC refers to the change in average meteorological conditions on the earth with respect to temperature, wind patterns, precipitation, and storms. Global temperatures are regulated by naturally occurring atmospheric gases such as water vapor, CO_2, N_2O, CH_4, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). These particular gases are important due to their residence time (duration they stay) in the atmosphere, which ranges from 10 years to more than 100 years. These gases allow solar radiation into the earth's atmosphere, but prevent radiative heat from escaping, thus warming the earth's atmosphere. GCC can occur naturally as it has in the past with the previous ice ages.

Gases that trap heat in the atmosphere are often referred to as GHGs. GHGs are released into the atmosphere by both natural and anthropogenic activity. Without the natural GHG effect, the earth's average temperature would be approximately 61 degrees Fahrenheit (°F) cooler than it is currently. The cumulative accumulation of these gases in the earth's atmosphere is considered to be the cause for the observed increase in the earth's temperature.

2.3 GHGS

2.3.1 GHGs and Health Effects

GHGs trap heat in the atmosphere, creating a GHG effect that results in global warming and climate change. Many gases demonstrate these properties as discussed in Table 2-1. For the purposes of this analysis, emissions of CO_2, CH_4, and N_2O were evaluated (see Table 3-4 later in this report) because these gases are the primary contributors to GCC from development projects. Although there are other substances such as fluorinated gases that also contribute to GCC, these fluorinated gases were not evaluated as their sources are not well-defined and do not contain accepted emissions factors or methodology to accurately calculate these gases.

TABLE 2-1: GHGS (1 OF 6)

GHGs	Description	Sources	Health Effects
Water	Water is the most abundant, important, and variable GHG in the atmosphere. Water vapor is not considered a pollutant; in the atmosphere, it maintains a climate necessary for life. Changes in its concentration are primarily considered to be a result of climate feedbacks related to the warming of the atmosphere rather than a direct result of industrialization. Climate feedback is an indirect, or secondary, change, either positive or negative, that occurs within the climate system in response to a forcing mechanism. The feedback loop in which water is involved is critically important to projecting future climate change. As the temperature of the atmosphere rises, more water is evaporated from ground storage (rivers, oceans, reservoirs, soil). Because the air is warmer, the relative humidity can be higher (in essence, the air is able to 'hold' more water when it is warmer), leading to more water vapor in the atmosphere. As a GHG, the higher concentration of water vapor is then able to absorb more thermal indirect energy radiated from the earth, thus	The main source of water vapor is evaporation from the oceans (approximately 85%). Other sources include evaporation from other water bodies, sublimation (change from solid to gas) from sea ice and snow, and transpiration from plant leaves.	There are no known direct health effects related to water vapor at this time. It should be noted however that when some pollutants react with water vapor, the reaction forms a transport mechanism for some of these pollutants to enter the human body through water vapor.

TABLE 2-1: GHGS (2 OF 6)

GHGs	Description	Sources	Health Effects
Water (Continued)	further warming the atmosphere. The warmer atmosphere can then hold more water vapor and so on. This is referred to as a "positive feedback loop." The extent to which this positive feedback loop would continue is unknown as there are also dynamics that hold the positive feedback loop in check. As an example, when water vapor increases in the atmosphere, more of it would eventually condense into clouds, which are more able to reflect incoming solar radiation (thus allowing less energy to reach the earth's surface and heat it up) (11).		
CO_2	CO_2 is an odorless and colorless GHG. Since the industrial revolution began in the mid-1700s, the sort of human activity that increases GHG emissions has increased dramatically in scale and distribution. Data from the past 50 years suggests a corollary increase in levels and concentrations. As an example, prior to the industrial revolution, CO_2 concentrations were fairly stable at 280 parts per million (ppm). Today, they are around 370 ppm, an increase of more than 30%. Left unchecked, the concentration of CO_2 in the atmosphere is projected to increase to a minimum of 540	CO_2 is emitted from natural and manmade sources. Natural sources include: the decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources include: the burning of coal, oil, natural gas, and wood. CO_2 is naturally removed from the air by photosynthesis, dissolution into	Outdoor levels of CO_2 are not high enough to result in negative health effects. According to the National Institute for Occupational Safety and Health (NIOSH) high concentrations of CO_2 can result in health effects such as: headaches, dizziness, restlessness, difficulty breathing, sweating, increased heart rate, increased cardiac output, increased blood pressure, coma, asphyxia, and/or convulsions. It should be noted that current concentrations of CO_2 in the earth's atmosphere are estimated to be approximately 370 ppm, the actual reference

TABLE 2-1: GHGS (3 OF 6)

GHGs	Description	Sources	Health Effects
CO_2 (Continued)	ppm by 2100 as a direct result of anthropogenic sources (12).	ocean water, transfer to soils and ice caps, and chemical weathering of carbonate rocks (13).	exposure level (level at which adverse health effects typically occur) is at exposure levels of 5,000 ppm averaged over 10 hours in a 40-hour workweek and short-term reference exposure levels of 30,000 ppm averaged over a 15-minute period (14).
CH_4	CH_4 is an extremely effective absorber of radiation, although its atmospheric concentration is less than CO_2 and its lifetime in the atmosphere is brief (10-12 years), compared to other GHGs.	CH_4 in the atmosphere is generated by many different sources, such as fossil fuel production, transport and use, from the decay of organic matter in wetlands, and as a byproduct of digestion by ruminant animals such as cows. Determining which specific sources are responsible for variations in annual increases of CH_4 is complex, but scientists estimate that fossil fuel production and use contributes roughly 30% of the total CH_4 emissions. These industrial sources of CH_4 are relatively simple to pinpoint and control using current technology (15).	CH_4 is extremely reactive with oxidizers, halogens, and other halogen-containing compounds. Exposure to elevated levels of CH_4 can cause asphyxiation, loss of consciousness, headache and dizziness, nausea and vomiting, weakness, loss of coordination, and an increased breathing rate.

TABLE 2-1: GHGS (4 OF 6)

GHGs	Description	Sources	Health Effects
N_2O	N_2O, also known as laughing gas, is a colorless GHG. Concentrations of N_2O also began to rise at the beginning of the industrial revolution. In 1998, the global concentration was 314 parts per billion (ppb).	N_2O is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. It is used as an aerosol spray propellant, i.e., in whipped cream bottles. It is also used in potato chip bags to keep chips fresh. It is used in rocket engines and in race cars. N_2O can be transported into the stratosphere, be deposited on the earth's surface, and be converted to other compounds by chemical reaction (16).	N_2O can cause dizziness, euphoria, and sometimes slight hallucinations. In small doses, it is considered harmless. However, in some cases, heavy and extended use can cause Olney's Lesions (brain damage) (16).
Chlorofluorocarbons (CFCs)	CFCs are gases formed synthetically by replacing all hydrogen atoms in CH_4 or ethane (C_2H_6) with chlorine	CFCs have no natural source. They are found in aerosol	In confined indoor locations, working with trichlorotrifluoroethane (CFC-113) or other CFCs is

TABLE 2-1: GHGS (5 OF 6)

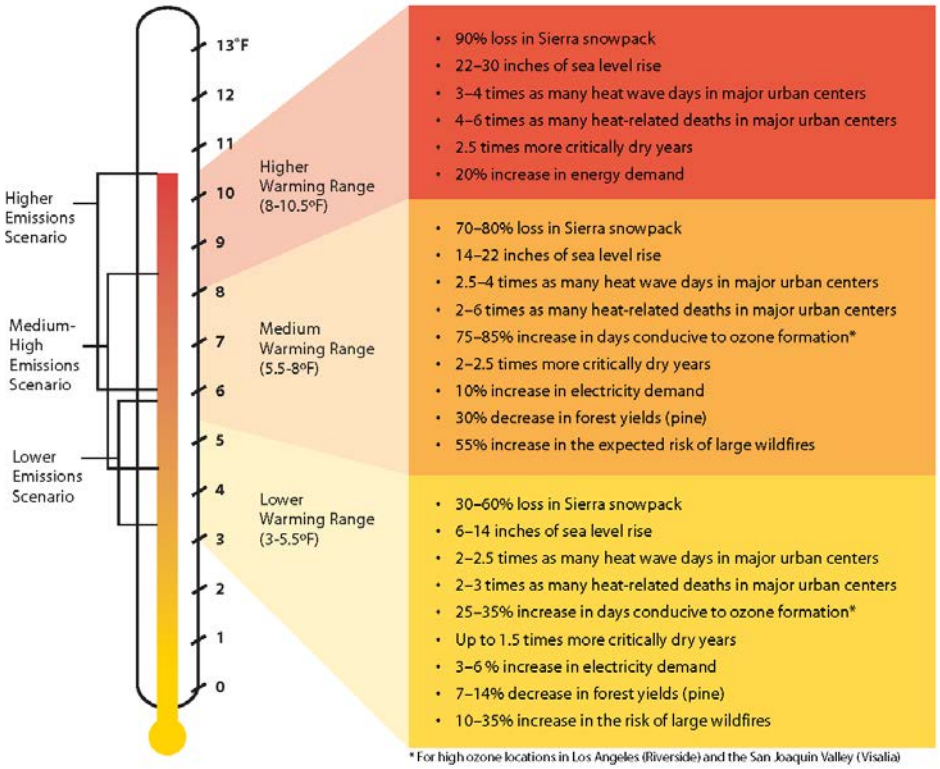
GHGs	Description	Sources	Health Effects
Chlorofluorocarbons (CFCs) (Continued)	and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble and chemically unreactive in the troposphere (the level of air at the earth's surface).	sprays, blowing agents for foams and packing materials, as solvents, and as refrigerants. (17).	thought to result in death by cardiac arrhythmia (heart frequency too high or too low) or asphyxiation.
HFCs	HFCs are synthetic, man-made chemicals that are used as a substitute for CFCs. Out of all the GHGs, they are one of three groups with the highest global warming potential (GWP). The HFCs with the largest measured atmospheric abundances are (in order), Fluoroform (HFC-23), 1,1,1,2-tetrafluoroethane (HFC-134a), and 1,1-difluoroethane (HFC-152a). Prior to 1990, the only significant emissions were of HFC-23. HCF-134a emissions are increasing due to its use as a refrigerant.	HFCs are manmade for applications such as automobile air conditioners and refrigerants.	No health effects are known to result from exposure to HFCs.
PFCs	PFCs have stable molecular structures and do not break down through chemical processes in the lower atmosphere. High-energy ultraviolet rays, which occur about 60 kilometers above earth's surface, are able to destroy the compounds. Because of this, PFCs have exceptionally long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane (CF_4) and hexafluoroethane (C_2F_6). The EPA estimates that concentrations of CF_4 in the	The two main sources of PFCs are primary aluminum production and semiconductor manufacture.	No health effects are known to result from exposure to PFCs.

TABLE 2-1: GHGS (6 OF 6)

GHGs	Description	Sources	Health Effects
PFCs (Continued)	atmosphere are over 70 parts per trillion (ppt).		
SF_6	SF_6 is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It also has the highest GWP of any gas evaluated (23,900) (18). The EPA indicates that concentrations in the 1990s were about 4 ppt.	SF_6 is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.	In high concentrations in confined areas, the gas presents the hazard of suffocation because it displaces the oxygen needed for breathing.
Nitrogen Trifluoride (NF_3)	NF_3 is a colorless gas with a distinctly moldy odor. The World Resources Institute (WRI) indicates that NF_3 has a 100-year GWP of 17,200 (19).	NF_3 is used in industrial processes and is produced in the manufacturing of semiconductors, Liquid Crystal Display (LCD) panels, types of solar panels, and chemical lasers.	Long-term or repeated exposure may affect the liver and kidneys and may cause fluorosis (20).

The potential health effects related directly to the emissions of CO_2, CH_4, and N_2O as they relate to development projects, such as the Project, are still being debated in the scientific community. Their cumulative effects to GCC have the potential to cause adverse effects to human health. Increases in Earth's ambient temperatures would result in more intense heat waves, causing more heat-related deaths. Exhibit 2-A presents the potential impacts of global warming (21).

EXHIBIT 2-A: SUMMARY OF PROJECTED GLOBAL WARMING IMPACT, 2070-2099 (AS COMPARED WITH 1961-1990)



Source: Barbara H. Allen-Diaz. "Climate change affects us all." *University of California, Agriculture and Natural Resources*, 2009.

2.4 GLOBAL WARMING POTENTIAL (GWP)

GHGs have varying GWP values. GWP of a GHG indicates the amount of warming a gas cause over a given period of time and represents the potential of a gas to trap heat in the atmosphere. CO_2 is utilized as the reference gas for GWP, and thus has a GWP of 1. CO_2 equivalent (CO_2e) is a term used for describing the different GHGs in a common unit. CO_2e signifies the amount of CO_2 which would have the equivalent GWP.

The Intergovernmental Panel on Climate Change (IPCC) is the international body for assessing the science related to climate change. IPCC Assessment Reports cover the full scientific, technical and socio-economic assessment of climate change. The atmospheric lifetime and GWP of selected GHGs are summarized at Table 2-2. As shown in the table below, GWP for the 2nd Assessment Report range from 1 for CO_2 to 23,900 for SF_6 and GWP for the 6th Assessment Report range from 1 for CO_2 to 25,200 for SF_6 (22).

TABLE 2-2: GWP AND ATMOSPHERIC LIFETIME OF SELECT GHGS

Gas	Atmospheric Lifetime (years)	GWP (100-year time horizon)	
		2nd Assessment Report	6th Assessment Report
CO_2	Multiple	1	1
CH_4	11.8	21	28
N_2O	109	310	273
HFC-23	228	11,700	14,600
HFC-134a	14	1,300	1,526
HFC-152a	1.6	140	164
SF_6	3,200	23,900	25,200

Source: IPCC Second Assessment Report, 1995 and IPCC Sixth Assessment Report, 2023

2.5 GHG EMISSIONS INVENTORIES

2.5.1 Global

Worldwide anthropogenic GHG emissions are tracked by the IPCC for industrialized nations (referred to as Annex I) and developing nations (referred to as Non-Annex I). Human GHG emissions data for Annex I nations are available through 2021. Based on the latest available data, the sum of these emissions totaled approximately 28,272,940 gigagram (Gg) CO_2e[1] (23) (24) as summarized on Table 2-3.

2.5.2 United States

As noted in Table 2-3, the United States, as a single country, was the number two producer of GHG emissions in 2021.

2.5.3 State of California

California has significantly slowed the rate of growth of GHG emissions due to the implementation of energy efficiency programs as well as adoption of strict emission controls but is still a substantial contributor to the United States (U.S.) emissions inventory total (16). The California Air Resource Board (CARB) compiles GHG inventories for the State of California. Based upon the 2024 GHG inventory data (i.e., the latest year for which data are available) for the 2000-2022 GHG emissions period, California emitted an average 371.1 million metric tons of CO_2e per year ($MMTCO_2e/yr$) or 371,100 Gg CO_2e (5.85% of the total United States GHG emissions) (25). Based on data published by the U.S. Energy Information Administration, California's per capita (9.12 metric tons) GHG emissions are much less than the nationwide per capita (15.8 metric ton) average (26).

[1] The global emissions are the sum of Annex I and non-Annex I countries, without counting Land-Use, Land-Use Change and Forestry (LULUCF). For countries without 2021 data, the United Nations' Framework Convention on Climate Change (UNFCCC) data for the most recent year were used U.N. Framework Convention on Climate Change, "Annex I Parties – GHG total without LULUCF," The most recent GHG emissions for China and India are from 2014 and 2016, respectively.

TABLE 2-3: TOP GHG PRODUCING COUNTRIES AND THE EUROPEAN UNION

Emitting Countries	GHG Emissions (Gg CO_2e)
China	12,300,200
United States	6,340,228
European Union (27-member countries)	3,468,394
India	2,839,425
Russian Federation	2,156,599
Japan	1,168,094
Total	28,272,940

2.6 EFFECTS OF CLIMATE CHANGE IN CALIFORNIA

2.6.1 Public Health

Higher temperatures may increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to ozone formation could increase from 25 to 35% under the lower warming range to 75 to 85% under the medium warming range. In addition, if global background ozone levels increase as predicted in some scenarios, it may become impossible to meet local air quality standards. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter that can travel long distances, depending on wind conditions. Based on *Our Changing Climate Assessing the Risks to California by the California Climate Change Center*, large wildfires could become up to 55% more frequent if GHG emissions are not significantly reduced (27).

In addition, under the higher warming range scenario, there could be up to 100 more days per year with temperatures above 90°F in Los Angeles and 95°F in Sacramento by 2100. This is a significant increase over historical patterns and approximately twice the increase projected if temperatures remain within or below the lower warming range. Rising temperatures could increase the risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat.

2.6.2 Water Resources

A vast network of man-made reservoirs and aqueducts captures and transports water throughout the state from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada snowpack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snowpack, increasing the risk of summer water shortages.

If temperatures continue to increase, more precipitation could fall as rain instead of snow, and the snow that does fall could melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 to 90%. Under the lower warming range scenario, snowpack losses could be only half as large as those possible if temperatures were to rise to the higher warming range. How much snowpack could be lost depends in part on future precipitation patterns, the projections for which remain uncertain. However, even under the wetter climate projections, the loss of snowpack could pose challenges to

water managers and hamper hydropower generation. It could also adversely affect winter tourism. Under the lower warming range, the ski season at lower elevations could be reduced by as much as a month. If temperatures reach the higher warming range and precipitation declines, there might be many years with insufficient snow for skiing and snowboarding.

The State's water supplies are also at risk from rising sea levels. An influx of saltwater could degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta – a major fresh water supply.

2.6.3 Agriculture

Increased temperatures could cause widespread changes to the agriculture industry reducing the quantity and quality of agricultural products statewide. First, California farmers could possibly lose as much as 25% of the water supply needed. Although higher CO_2 levels can stimulate plant production and increase plant water-use efficiency, California's farmers could face greater water demand for crops and a less reliable water supply as temperatures rise. Crop growth and development could change, as could the intensity and frequency of pest and disease outbreaks. Rising temperatures could aggravate ozone pollution, which makes plants more susceptible to disease and pests and interferes with plant growth.

Plant growth tends to be slow at low temperatures, increasing with rising temperatures up to a threshold. However, faster growth can result in less-than-optimal development for many crops, so rising temperatures could worsen the quantity and quality of yield for a number of California's agricultural products. Products likely to be most affected include wine grapes, fruits, and nuts.

In addition, continued GCC could shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants. Range expansion could occur in many species while range contractions may be less likely in rapidly evolving species with significant populations already established. Should range contractions occur, new or different weed species could fill the emerging gaps. Continued GCC could alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates.

2.6.4 Forests and Landscapes

GCC has the potential to intensify the current threat to forests and landscapes by increasing the risk of wildfire and altering the distribution and character of natural vegetation. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55%, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a combination of factors, including precipitation, winds, temperature, and landscape and vegetation conditions, future risks would not be uniform throughout the state. In contrast, wildfires in northern California could increase by up to 90% due to decreased precipitation.

Moreover, continued GCC has the potential to alter natural ecosystems and biological diversity within the state. For example, alpine and subalpine ecosystems could decline by as much as 60 to 80% by the end of the century as a result of increasing temperatures. The productivity of the state's forests has the potential to decrease as a result of GCC.

2.6.5 Rising Sea Levels

Rising sea levels, more intense coastal storms, and warmer water temperatures could increasingly threaten the state's coastal regions. Under the higher warming range scenario, sea level is anticipated to rise 22 to 35 inches by 2100. Elevations of this magnitude would inundate low-lying coastal areas with saltwater, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats. Under the lower warming range scenario, sea level could rise 12-14 inches.

2.7 Regulatory Setting

2.7.1 International

Climate change is a global issue involving GHG emissions from all around the world; therefore, countries such as the ones discussed below have made an effort to reduce GHGs.

IPCC

In 1988, the United Nations (U.N.) and the World Meteorological Organization established the IPCC to assess the scientific, technical, and socioeconomic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts, and options for adaptation and mitigation.

United Nation's Framework Convention on Climate Change (UNFCCC)

On March 21, 1994, the U.S. joined a number of countries around the world in signing the Convention. Under the UNFCCC, governments gather and share information on GHG emissions, national policies, and best practices; launch national strategies for addressing GHG emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of climate change.

International Climate Change Treaties

The Kyoto Protocol is an international agreement linked to the UNFCCC. The major feature of the Kyoto Protocol is that it sets binding targets for 37 industrialized countries and the European community for reducing GHG emissions at an average of 5% against 1990 levels over the five-year period 2008–2012. The Convention (as discussed above) encouraged industrialized countries to stabilize emissions; however, the Protocol commits them to do so. Developed countries have contributed more emissions over the last 150 years; therefore, the Protocol places a heavier burden on developed nations under the principle of "common but differentiated responsibilities."

In 2001, President George W. Bush indicated that he would not submit the treaty to the U.S. Senate for ratification, which effectively ended American involvement in the Kyoto Protocol. In December 2009, international leaders met in Copenhagen to address the future of international climate change commitments post-Kyoto. No binding agreement was reached in Copenhagen; however, the UN Climate Change Committee identified the long-term goal of limiting the maximum global average temperature increase to no more than 2 degrees Celsius (°C) above pre-industrial levels, subject to a review in 2015. The Committee held additional meetings in Durban, South Africa in November 2011; Doha, Qatar in November 2012; and Warsaw, Poland in November 2013. The meetings gradually gained consensus among participants on individual climate change issues.

On September 23, 2014, more than 100 Heads of State and Government and leaders from the private sector and civil society met at the Climate Summit in New York hosted by the U.N. At the Summit, heads of government, business and civil society announced actions in areas that would have the greatest impact on reducing emissions, including climate finance, energy, transport, industry, agriculture, cities, forests, and building resilience.

Parties to the UNFCCC reached a landmark agreement on December 12, 2015, in Paris, charting a fundamentally new course in the two-decade-old global climate effort. Culminating a four-year negotiating round, the new treaty ends the strict differentiation between developed and developing countries that characterized earlier efforts, replacing it with a common framework that commits all countries to put forward their best efforts and to strengthen them in the years ahead. This includes, for the first time, requirements that all parties report regularly on their emissions and implementation efforts and undergo international review.

The agreement and a companion decision by parties were the key outcomes of the conference, known as the 21st session of the UNFCCC Conference of the Parties (COP) 21. Together, the Paris Agreement and the accompanying COP decision:

- Reaffirm the goal of limiting global temperature increase well below 2°C, while urging efforts to limit the increase to 1.5 degrees;
- Establish binding commitments by all parties to make "nationally determined contributions" (NDCs), and to pursue domestic measures aimed at achieving them;
- Commit all countries to report regularly on their emissions and "progress made in implementing and achieving" their NDCs, and to undergo international review;
- Commit all countries to submit new NDCs every five years, with the clear expectation that they would "represent a progression" beyond previous ones;
- Reaffirm the binding obligations of developed countries under the UNFCCC to support the efforts of developing countries, while for the first time encouraging voluntary contributions by developing countries too;
- Extend the current goal of mobilizing $100 billion a year in support by 2020 through 2025, with a new, higher goal to be set for the period after 2025;
- Extend a mechanism to address "loss and damage" resulting from climate change, which explicitly would not "involve or provide a basis for any liability or compensation;"
- Require parties engaging in international emissions trading to avoid "double counting;" and
- Call for a new mechanism, similar to the Clean Development Mechanism under the Kyoto Protocol, enabling emission reductions in one country to be counted toward another country's NDC (C2ES 2015a) (28).

Following President Biden's day one executive order, the United States officially rejoined the landmark Paris Agreement on February 19, 2021, positioning the country to once again be part of the global climate solution. Meanwhile, city, state, business, and civic leaders across the country and around the world have been ramping up efforts to drive the clean energy advances needed to meet the goals of the agreement and put the brakes on dangerous climate change.

In January 2025, President Trump signed Executive Order 14162, officially withdrawing the United States from the Paris Agreement for a second time. Despite the federal withdrawal, California and other subnational entities continue to pursue climate action aligned with international goals.

2.7.2 National

Prior to the last decade, there have been no concrete federal regulations of GHGs or major planning for climate change adaptation. The following are actions regarding the federal government, GHGs, and fuel efficiency.

GHG Endangerment

In *Massachusetts v. Environmental Protection Agency* 549 U.S. 497 (2007), decided on April 2, 2007, the United States Supreme Court (Supreme Court) found that four GHGs, including CO_2, are air pollutants subject to regulation under Section 202(a)(1) of the Clean Air Act (CAA). The Supreme Court held that the EPA Administrator must determine whether emissions of GHGs from new motor vehicles cause or contribute to air pollution, which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. On December 7, 2009, the EPA Administrator signed two distinct findings regarding GHGs under Section 202(a) of the CAA:

- Endangerment Finding: The Administrator finds that the current and projected concentrations of the six key well-mixed GHGs— CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6—in the atmosphere threaten the public health and welfare of current and future generations.
- Cause or Contribute Finding: The Administrator finds that the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution, which threatens public health and welfare.

These findings do not impose requirements on industry or other entities. However, this was a prerequisite for implementing GHG emissions standards for vehicles, as discussed in the section "Clean Vehicles" below. After a lengthy legal challenge, the Supreme Court declined to review an Appeals Court ruling that upheld the EPA Administrator's findings (29).

Clean Vehicles

Congress first passed the Corporate Average Fuel Economy law in 1975 to increase the fuel economy of cars and light duty trucks. The law has become more stringent over time. On May 19, 2009, President Obama put in motion a new national policy to increase fuel economy for all new cars and trucks sold in the U.S. On April 1, 2010, the EPA, and the Department of Transportation's National Highway Traffic Safety Administration (NHTSA) announced a joint final rule establishing a national program that would reduce GHG emissions and improve fuel economy for new cars and trucks sold in the U.S.

The first phase of the national program applies to passenger cars, light-duty trucks, and medium-duty (MD) passenger vehicles, covering model years 2012 through 2016. They require these vehicles to meet an estimated combined average emissions level of 250 grams of CO_2 per mile, equivalent to 35.5 miles per gallon (mpg) if the automobile industry were to meet this CO_2 level solely through fuel economy improvements. Together, these standards would cut CO_2 emissions by an estimated 960 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012–2016). In August 2012, the EPA and the NHTSA issued final rules on a second-phase joint rulemaking establishing national standards for light-duty vehicles for model years 2017 through 2025. The new standards apply to passenger cars, light-duty trucks, and MD passenger vehicles. The final standards are projected to result in an average industry fleetwide level

of 163 grams/mile of CO_2 in model year 2025, which is equivalent to 54.5 mpg if achieved exclusively through fuel economy improvements.

The EPA and the U.S. Department of Transportation issued final rules for the first national standards to reduce GHG emissions and improve fuel efficiency of heavy-duty trucks (HDT) and buses on September 15, 2011, effective November 14, 2011. For combination tractors, the agencies are proposing engine and vehicle standards that begin in the 2014 model year and achieve up to a 20% reduction in CO_2 emissions and fuel consumption by the 2018 model year. For HDT and vans, the agencies are proposing separate gasoline and diesel truck standards, which phase in starting in the 2014 model year and achieve up to a 10% reduction for gasoline vehicles and a 15% reduction for diesel vehicles by the 2018 model year (12 and 17%, respectively if accounting for air conditioning leakage). Lastly, for vocational vehicles, the engine and vehicle standards would achieve up to a 10% reduction in fuel consumption and CO_2 emissions from the 2014 to 2018 model years.

On April 2, 2018, the EPA signed the Mid-term Evaluation Final Determination, which declared that the MY 2022-2025 GHG standards are not appropriate and should be revised (30). This Final Determination serves to initiate a notice to further consider appropriate standards for MY 2022-2025 light-duty vehicles. On August 2, 2018, the NHTSA in conjunction with the EPA, released a notice of proposed rulemaking, the *Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks* (SAFE Vehicles Rule). The SAFE Vehicles Rule was proposed to amend existing Corporate Average Fuel Economy (CAFE) and tailpipe CO_2 standards for passenger cars and light trucks and to establish new standards covering model years 2021 through 2026. As of March 31, 2020, the NHTSA and EPA finalized the SAFE Vehicle Rule which increased stringency of CAFE and CO_2 emissions standards by 1.5% each year through model year 2026 (31). On December 21, 2021, after reviewing all the public comments submitted on NHTSA's April 2021 Notice of Proposed Rulemaking, NHTSA finalizes the CAFE Preemption rulemaking to withdraw its portions of the so-called SAFE I Rule. The final rule concludes that the SAFE I Rule overstepped the agency's legal authority and established overly broad prohibitions that did not account for a variety of important state and local interests. The final rule ensures that the SAFE I Rule will no longer form an improper barrier to states exploring creative solutions to address their local communities' environmental and public health challenges (32).

On March 31, 2022, NHTSA finalized CAFE standards for MY 2024-2026. The standards for passenger cars and light trucks for MYs 2024-2025 were increased at a rate of 8% per year and then increased at a rate of 10% per year for MY 2026 vehicles. NHTSA currently projects that the revised standards would require an industry fleet-wide average of roughly 49 mpg in MY 2026 and would reduce average fuel outlays over the lifetimes of affected vehicles that provide consumers hundreds of dollars in net savings. These standards are directly responsive to the agency's statutory mandate to improve energy conservation and reduce the nation's energy dependence on foreign sources (33).

Mandatory Reporting of GHGs

The Consolidated Appropriations Act of 2008, passed in December 2007, requires the establishment of mandatory GHG reporting requirements. On September 22, 2009, the EPA issued the Final Mandatory Reporting of GHGs Rule, which became effective January 1, 2010. The rule requires reporting of GHG emissions from large sources and suppliers in the U.S. and is intended to collect accurate and timely emissions data to inform future policy decisions. Under the rule, suppliers of fossil fuels or industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000

metric tons per year (MT/yr) or more of GHG emissions are required to submit annual reports to the EPA.

New Source Review

The EPA issued a final rule on May 13, 2010, that establishes thresholds for GHGs that define when permits under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities. This final rule "tailors" the requirements of these CAA permitting programs to limit which facilities would be required to obtain Prevention of Significant Deterioration and Title V permits. In the preamble to the revisions to the Federal Code of Regulations, the EPA states:

> *"This rulemaking is necessary because without it the Prevention of Significant Deterioration and Title V requirements would apply, as of January 2, 2011, at the 100 or 250 tons per year levels provided under the CAA, greatly increasing the number of required permits, imposing undue costs on small sources, overwhelming the resources of permitting authorities, and severely impairing the functioning of the programs. EPA is relieving these resource burdens by phasing in the applicability of these programs to GHG sources, starting with the largest GHG emitters. This rule establishes two initial steps of the phase-in. The rule also commits the agency to take certain actions on future steps addressing smaller sources but excludes certain smaller sources from Prevention of Significant Deterioration and Title V permitting for GHG emissions until at least April 30, 2016."*

The EPA estimates that facilities responsible for nearly 70% of the national GHG emissions from stationary sources would be subject to permitting requirements under this rule. This includes the nation's largest GHG emitters—power plants, refineries, and cement production facilities.

Standards of Performance for GHG Emissions for New Stationary Sources: Electric Utility Generating Units

As required by a settlement agreement, the EPA proposed new performance standards for emissions of CO_2 for new, affected, fossil fuel-fired electric utility generating units on March 27, 2012. New sources greater than 25 megawatts (MW) would be required to meet an output-based standard of 1,000 pounds (lbs) of CO_2 per MW-hour (MWh), based on the performance of widely used natural gas combined cycle technology. On February 9, 2016, the Supreme Court issued a stay of this regulation pending litigation. The Clean Power Plan was later repealed under the Trump administration, and on June 19, 2019, EPA finalized the Affordable Clean Energy (ACE) rule. Under ACE, new state-specific emission guidelines were established that provided existing coal-fired electric utility generating units with achievable standards.

On January 19, 2021, the D.C. Circuit Court of Appeals ruled that the EPA's ACE Rule for GHG emissions from power plants rested on an erroneous interpretation of the CAA that barred EPA from considering measures beyond those that apply at and to an individual source. The court therefore vacated and remanded the ACE Rule and adopted a replacement rule which regulates CO_2 emissions from existing power plants, potentially again considering generation shifting and other measures to more aggressively target power sector emissions.

Cap-and-Trade

Cap-and-trade refers to a policy tool where emissions are limited to a certain amount and can be traded or provides flexibility on how the emitter can comply. Successful examples in the U.S. include the Acid Rain Program and the N_2O Budget Trading Program and Clean Air Interstate Rule in the northeast. There is no federal GHG cap-and-trade program currently; however, some states have joined to create initiatives to provide a mechanism for cap-and-trade.

The Regional GHG Initiative is an effort to reduce GHGs among the states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont. Each state caps CO_2 emissions from power plants, auctions CO_2 emission allowances, and invests the proceeds in strategic energy programs that further reduce emissions, save consumers money, create jobs, and build a clean energy economy. The Initiative began in 2008 and has retained all participating states as of 2020.

The Western Climate Initiative (WCI) partner jurisdictions have developed a comprehensive initiative to reduce regional GHG emissions to 15% below 2005 levels by 2020. The partners were originally California, British Columbia, Manitoba, Ontario, and Quebec. However, Manitoba and Ontario are not currently participating. California linked with Quebec's cap-and-trade system January 1, 2014, and joint offset auctions took place in 2015. While the WCI initially set a goal to reduce regional GHG emissions to 15% below 2005 levels by 2020, the broader WCI framework is no longer active. Participating jurisdictions, such as California and Quebec, continue to monitor their climate goals independently. SB 32 requires that California, a major partner in the WCI, adopt the goal of reducing statewide GHG emissions to 40% below the 1990 level by 2030.

Executive Order 13990

On January 20, 2021, Federal agencies were directed to immediately review and take action to address Federal regulations promulgated and other actions taken during the last 4 years that conflict with national objectives to improve public health and the environment; ensure access to clean air and water; limit exposure to dangerous chemicals and pesticides; hold polluters accountable, including those who disproportionately harm communities of color and low-income communities; reduce GHG emissions; bolster resilience to the impacts of climate change; restore and expand our national treasures and monuments; and prioritize both environmental justice and employment.

On January 20, 2025, President Trump signed Executive Order 14215, which rescinded several previous executive orders related to environmental protection and climate change, including Executive Order 13990. This new order directs federal agencies to review and revise regulations that may impede the development of domestic energy resources, including oil, natural gas, coal, hydropower, biofuels, critical minerals, and nuclear energy. It requires agencies to identify and eliminate regulations that impose undue burdens on energy production and to accelerate permitting processes for energy projects. This new order shifts the focus towards expanding energy production and reducing regulatory constraints in the energy sector.

2.7.3 California

California has a long history of adopting regulations to improve energy efficiency in new and remodeled buildings. These regulations have kept California's energy consumption relatively flat even with rapid population growth.

2.7.3.1 Legislative Actions to Reduce GHGs

The State of California legislature has enacted a series of bills that constitute the most aggressive program to reduce GHGs of any state in the nation. Some legislation, such as the landmark AB 32, was specifically enacted to address GHG emissions. Other legislation, such as Title 24 and Title 20 energy standards, were originally adopted for other purposes such as energy and water conservation but also provided GHG reductions. This section describes the major provisions of the legislation.

AB 1881

The Water Conservation in Landscaping Act of 2006 requires local agencies to adopt the updated DWR model ordinance or equivalent. AB 1881 also requires the CEC to consult with the DWR to adopt, by regulation, performance standards and labeling requirements for landscape irrigation equipment, including irrigation controllers, moisture sensors, emission devices, and valves to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy or water.

SB 1368

California SB 1368 adds Sections 8340 and 8341 to the Public Utilities Code (effective January 1, 2007) with the intent "to prevent long-term investments in power plants with GHG emissions in excess of those produced by a combined-cycle natural gas power plant" with the aim of "reducing emissions of GHGs from the state's electricity consumption, not just the state's electricity production." SB 1368 provides a mechanism for reducing the GHG emissions of electricity providers, both in-state and out-of-state, thereby assisting CARB in meeting its mandate under AB 32, the Global Warming Solutions Act of 2006.

AB 32

The California State Legislature enacted AB 32, which required that GHGs emitted in California be reduced to 1990 levels by the year 2020 (this goal has been met[2]). GHGs, as defined under AB 32, include CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6. Since AB 32 was enacted, a seventh chemical, NF_3, has also been added to the list of GHGs. CARB is the state agency charged with monitoring and regulating sources of GHGs. Pursuant to AB 32, CARB adopted regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 states the following:

> *"Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems."*

[2] Based upon the 2024 GHG inventory data (i.e., the latest year for which data are available) for the 2000-2022 GHG emissions period, California emitted an average 371.1 $MMTCO_2e$) (25). This is less than the 2020 emissions target of 431 $MMTCO_2e$. This is less than the 2020 emissions target of 431 $MMTCO_2e$.

SB 375

On September 30, 2008, SB 375 was signed by Governor Schwarzenegger. According to SB 375, the transportation sector is the largest contributor of GHG emissions, which emits over 40% of the total GHG emissions in California. SB 375 states, "Without improved land use and transportation policy, California would not be able to achieve the goals of AB 32." SB 375 does the following: it (1) requires metropolitan planning organizations (MPOs) to include sustainable community strategies in their regional transportation plans for reducing GHG emissions; (2) aligns planning for transportation and housing; and (3) creates specified incentives for the implementation of the strategies.

SB 375 requires MPOs to prepare a Sustainable Communities Strategy (SCS) within the Regional Transportation Plan (RTP) that guides growth while taking into account the transportation, housing, environmental, and economic needs of the region. SB 375 uses CEQA streamlining as an incentive to encourage residential projects, which help achieve AB 32 goals to reduce GHG emissions. Although SB 375 does not prevent CARB from adopting additional regulations, such actions are not anticipated in the foreseeable future.

Concerning CEQA, SB 375, as codified in Public Resources Code Section 21159.28, states that CEQA findings for certain projects are not required to reference, describe, or discuss (1) growth inducing impacts, or (2) any project-specific or cumulative impacts from cars and light-duty truck trips generated by the project on global warming or the regional transportation network, if the project:

1. Is in an area with an approved sustainable communities strategy or an alternative planning strategy that CARB accepts as achieving the GHG emission reduction targets.
2. Is consistent with that strategy (in designation, density, building intensity, and applicable policies).
3. Incorporates the MMs required by an applicable prior environmental document.

AB 1493 - Pavley Fuel Efficiency Standards

The second phase of the implementation for the Pavley bill was incorporated into Amendments to the Low-Emission Vehicle Program (LEV III) or the Advanced Clean Cars (ACC) program. The ACC program combines the control of smog-causing pollutants and GHG emissions into a single coordinated package of requirements for MY 2017 through 2025. The regulation will reduce GHGs from new cars by 34% from 2016 levels by 2025. The new rules will clean up gasoline and diesel-powered cars, and deliver increasing numbers of zero-emission technologies, such as full battery electric cars, newly emerging plug-in hybrid EV and hydrogen fuel cell cars. The package will also ensure adequate fueling infrastructure is available for the increasing numbers of hydrogen fuel cell vehicles planned for deployment in California. On March 9, EPA reinstated California's authority under the Clean Air Act to implement its own GHG emission standards for cars and light trucks, which other states can also adopt and enforce. With this authority restored, EPA will continue partnering with states to advance the next generation of clean vehicle technologies.

Clean Energy and Pollution Reduction Act of 2015 (SB 350)

In October 2015, the legislature approved, and Governor Jerry Brown signed SB 350, which reaffirms California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the RPS, higher energy efficiency requirements for buildings, initial strategies towards a regional electricity grid, and improved infrastructure for EV charging stations.

Provisions for a 50% reduction in the use of petroleum statewide were removed from the Bill because of opposition and concern that it would prevent the Bill's passage. Specifically, SB 350 requires the following to reduce statewide GHG emissions:

- Increase the amount of electricity procured from renewable energy sources from 33% to 50% by 2030, with interim targets of 40% by 2024, and 45% by 2027.
- Double the energy efficiency in existing buildings by 2030. This target would be achieved through the California Public Utilities Commission (CPUC), the California Energy Commission (CEC), and local publicly owned utilities.
- Reorganize the Independent System Operator (ISO) to develop more regional electrify transmission markets and to improve accessibility in these markets, which would facilitate the growth of renewable energy markets in the western United States.

SB 32

On September 8, 2016, Governor Brown signed SB 32 and its companion bill, AB 197. SB 32 requires the state to reduce statewide GHG emissions to 40% below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15. The new legislation builds upon the AB 32 goal and provides an intermediate goal to achieving S-3-05, which sets a statewide GHG reduction target of 80% below 1990 levels by 2050. AB 197 creates a legislative committee to oversee regulators to ensure that CARB not only responds to the Governor, but also the Legislature (10).

2017 CARB Scoping Plan

In November 2017, CARB released the *Final 2017 Scoping Plan Update* (*2017 Scoping Plan*), which identifies the State's post-2020 reduction strategy. The *2017 Scoping Plan* reflects the 2030 target of a 40% reduction below 1990 levels, set by Executive Order B-30-15 and codified by SB 32. Key programs that the proposed Second Update builds upon include the Cap-and-Trade Regulation, the LCFS, and much cleaner cars, trucks, and freight movement, utilizing cleaner, renewable energy, and strategies to reduce CH_4 emissions from agricultural and other wastes.

The *2017 Scoping Plan* establishes a new emissions limit of 260 $MMTCO_2e$ for the year 2030, which corresponds to a 40% decrease in 1990 levels by 2030 (34).

California's climate strategy would require contributions from all sectors of the economy, including the land base, and would include enhanced focus on zero and near-zero emission (ZE/NZE) vehicle technologies; continued investment in renewables, including solar roofs, wind, and other distributed generation; greater use of low carbon fuels; integrated land conservation and development strategies; coordinated efforts to reduce emissions of short-lived climate pollutants (CH_4, black carbon, and fluorinated gases); and an increased focus on integrated land use planning to support livable, transit-connected communities and conservation of agricultural and other lands. Requirements for direct GHG reductions at refineries would further support air quality co-benefits in neighborhoods, including in disadvantaged communities historically located adjacent to these large stationary sources, as well as efforts with California's local air pollution control and air quality management districts (air districts) to tighten emission limits on a broad spectrum of industrial sources. Major elements of the *2017 Scoping Plan* framework include:

- Implementing and/or increasing the standards of the Mobile Source Strategy, which include increasing zero-emission vehicles (ZEV) buses and trucks.
- LCFS, with an increased stringency (18% by 2030).

- Implementing SB 350, which expands the RPS to 50% RPS and doubles energy efficiency savings by 2030.
- California Sustainable Freight Action Plan, which improves freight system efficiency, utilizes near-zero emissions technology, and deployment of ZEV trucks.
- Implementing the proposed Short-Lived Climate Pollutant Strategy (SLPS), which focuses on reducing CH4 and HCF emissions by 40% and anthropogenic black carbon emissions by 50% by year 2030.
- Continued implementation of SB 375.
- Post-2020 Cap-and-Trade Program that includes declining caps.
- 20% reduction in GHG emissions from refineries by 2030.
- Development of a Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

Note, however, that the *2017 Scoping Plan* acknowledges that:

> *"[a]chieving net zero increases in GHG emissions, resulting in no contribution to GHG impacts, may not be feasible or appropriate for every project, however, and the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA."*

In addition to the statewide strategies listed above, the *2017 Scoping Plan* also identifies local governments as essential partners in achieving the State's long-term GHG reduction goals and identifies local actions to reduce GHG emissions. As part of the recommended actions, CARB recommends that local governments achieve a community-wide goal to achieve emissions of no more than 6 metric tons of CO_2e ($MTCO_2e$) or less per capita by 2030 and 2 $MTCO_2e$ or less per capita by 2050. For CEQA projects, CARB states that lead agencies may develop evidence-based bright-line numeric thresholds—consistent with the *2017 Scoping Plan* and the State's long-term GHG goals—and projects with emissions over that amount may be required to incorporate on-site design features and MMs that avoid or minimize project emissions to the degree feasible; or a performance-based metric using a CAP or other plan to reduce GHG emissions is appropriate.

According to research conducted by the Lawrence Berkeley National Laboratory (LBNL) and supported by CARB, California, under its existing and proposed GHG reduction policies, could achieve the 2030 goals under SB 32. The research utilized a new, validated model known as the California LBNL GHG Analysis of Policies Spreadsheet (CALGAPS), which simulates GHG and criteria pollutant emissions in California from 2010 to 2050 in accordance to existing and future GHG-reducing policies. The CALGAPS model showed that by 2030, emissions could range from 211 to 428 $MTCO_2e$ per year ($MTCO_2e/yr$), indicating that "even if all modeled policies are not implemented, reductions could be sufficient to reduce emissions 40% below the 1990 level [of SB 32]." CALGAPS analyzed emissions through 2050 even though it did not generally account for policies that might be put in place after 2030. Although the research indicated that the emissions would not meet the State's 80% reduction goal by 2050, various combinations of policies could allow California's cumulative emissions to remain very low through 2050 (35) (36).

Cap-and-Trade Program

The *2017 Scoping Plan* identifies a Cap-and-Trade Program as one of the key strategies for California to reduce GHG emissions. According to CARB, a cap-and-trade program would help put California on the path to meet its goal of achieving a 40% reduction in GHG emissions from 1990 levels by 2030. Under cap-and-trade, an overall limit on GHG emissions from capped sectors is established, and facilities subject to the cap would be able to trade permits to emit GHGs within the overall limit.

CARB adopted a California Cap-and-Trade Program pursuant to its authority under AB 32. The Cap-and-Trade Program is designed to reduce GHG emissions from regulated entities by more than 16% between 2013 and 2020, and by an additional 40% by 2030. The statewide cap for GHG emissions from the capped sectors (e.g., electricity generation, petroleum refining, and cement production) commenced in 2013 and would decline over time, achieving GHG emission reductions throughout the program's duration.

Covered entities that emit more than 25,000 $MTCO_2e/yr$ must comply with the Cap-and-Trade Program. Triggering of the 25,000 $MTCO_2e/yr$ "inclusion threshold" is measured against a subset of emissions reported and verified under the California Regulation for the Mandatory Reporting of GHG Emissions (Mandatory Reporting Rule or "MRR").

Under the Cap-and-Trade Program, CARB issues allowances equal to the total amount of allowable emissions over a given compliance period and distributes these to regulated entities. Covered entities are allocated free allowances in whole or part (if eligible), and may buy allowances at auction, purchase allowances from others, or purchase offset credits. Each covered entity with a compliance obligation is required to surrender "compliance instruments" for each $MTCO_2e$ of GHG they emit. There also are requirements to surrender compliance instruments covering 30% of the prior year's compliance obligation by November of each year (37).

The Cap-and-Trade Program provides a firm cap, which provides the highest certainty of achieving the 2030 target. An inherent feature of the Cap-and-Trade program is that it does not guarantee GHG emissions reductions in any discrete location or by any particular source. Rather, GHG emissions reductions are only guaranteed on an accumulative basis. As summarized by CARB in the *First Update to the Climate Change Scoping Plan*:

> *"The Cap-and-Trade Regulation gives companies the flexibility to trade allowances with others or take steps to cost-effectively reduce emissions at their own facilities. Companies that emit more have to turn in more allowances or other compliance instruments. Companies that can cut their GHG emissions have to turn in fewer allowances. But as the cap declines, aggregate emissions must be reduced. In other words, a covered entity theoretically could increase its GHG emissions every year and still comply with the Cap-and-Trade Program if there is a reduction in GHG emissions from other covered entities. Such a focus on aggregate GHG emissions is considered appropriate because climate change is a global phenomenon, and the effects of GHG emissions are considered cumulative."* (38)

The Cap-and-Trade Program covers approximately 80% of California's GHG emissions (34). The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, whether generated in-state or imported. Accordingly, GHG emissions associated with CEQA projects' electricity usage are covered by the Cap-and-Trade Program. The Cap-and-Trade Program

also covers fuel suppliers (natural gas and propane fuel providers and transportation fuel providers) to address emissions from such fuels and from combustion of other fossil fuels not directly covered at large sources in the Program's first compliance period. The Cap-and-Trade Program covers the GHG emissions associated with the combustion of transportation fuels in California, whether refined in-state or imported.

2022 CARB Scoping Plan

On December 15, 2022, CARB adopted the 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan) (39). The 2022 Scoping Plan builds on the 2017 Scoping Plan as well as the requirements set forth by AB 1279, which directs the state to become carbon neutral no later than 2045. To achieve this statutory objective, the 2022 Scoping Plan lays out how California can reduce GHG emissions by 85% below 1990 levels and achieve carbon neutrality by 2045. The Scoping Plan scenario to do this is to "deploy a broad portfolio of existing and emerging fossil fuel alternatives and clean technologies, and align with statutes, Executive Orders, Board direction, and direction from the governor." The 2022 Scoping Plan sets one of the most aggressive approaches to reach carbon neutrality in the world. Unlike the 2017 Scoping Plan, CARB no longer includes a numeric per capita threshold and instead advocates for compliance with a local GHG reduction strategy (CAP) consistent with *CEQA Guidelines* section 15183.5.

The key elements of the 2022 CARB Scoping Plan focus on transportation - the regulations that will impact this sector are adopted and enforced by CARB on vehicle manufacturers and outside the jurisdiction and control of local governments. As stated in the Plan's executive summary:

> *"The major element of this unprecedented transformation is the aggressive reduction of fossil fuels wherever they are currently used in California, building on and accelerating carbon reduction programs that have been in place for a decade and a half. That means rapidly moving to zero-emission transportation; electrifying the cars, buses, trains, and trucks that now constitute California's single largest source of planet-warming pollution."*
>
> *"[A]pproval of this plan catalyzes a number of efforts, including the development of new regulations as well as amendments to strengthen regulations and programs already in place, not just at CARB but across state agencies."*

Under the 2022 Scoping Plan, the State will lead efforts to meet the 2045 carbon neutrality goal through implementation of the following objectives:

- Reimagine roadway projects that increase vehicle miles traveled (VMT) in a way that meets community needs and reduces the need to drive.
- Double local transit capacity and service frequencies by 2030.
- Complete the High-Speed Rail (HSR) System and other elements of the intercity rail network by 2040.
- Expand and complete planned networks of high-quality active transportation infrastructure.
- Increase availability and affordability of bikes, e-bikes, scooters, and other alternatives to light-duty vehicles, prioritizing needs of underserved communities.
- Shift revenue generation for transportation projects away from the gas tax into more durable sources by 2030.

- Authorize and implement roadway pricing strategies and reallocate revenues to equitably improve transit, bicycling, and other sustainable transportation choices.
- Prioritize addressing key transit bottlenecks and other infrastructure investments to improve transit operational efficiency over investments that increase VMT.
- Develop and implement a statewide transportation demand management (TDM) framework with VMT mitigation requirements for large employers and large developments.
- Prevent uncontrolled growth of autonomous vehicle (AV) VMT, particularly zero-passenger miles.
- Channel new mobility services towards pooled use models, transit complementarity, and lower VMT outcomes.
- Establish an integrated statewide system for trip planning, booking, payment, and user accounts that enables efficient and equitable multimodal systems.
- Provide financial support for low-income and disadvantaged Californians' use of transit and new mobility services.
- Expand universal design features for new mobility services.
- Accelerate infill development in existing transportation-efficient places and deploy strategic resources to create more transportation-efficient locations.
- Encourage alignment in land use, housing, transportation, and conservation planning in adopted regional plans (RTP/SCS and RHNA) and local plans (e.g., general plans, zoning, and local transportation plans).
- Accelerate production of affordable housing in forms and locations that reduce VMT and affirmatively further fair housing policy objectives.
- Reduce or eliminate parking requirements (and/or enact parking maximums, as appropriate) and promote redevelopment of excess parking, especially in infill locations.
- Preserve and protect existing affordable housing stock and protect existing residents and businesses from displacement and climate risk.

Included in the 2022 Scoping Plan is a set of Local Actions (Appendix D to the 2022 Scoping Plan) aimed at providing local jurisdictions with tools to reduce GHGs and assist the state in meeting the ambitious targets set forth in the 2022 Scoping Plan. Appendix D to the 2022 Scoping Plan includes a section on evaluating plan-level and project-level alignment with the State's Climate Goals in CEQA GHG analyses. In this section, CARB identifies several recommendations and strategies that should be considered for new development in order to determine consistency with the 2022 Scoping Plan. Notably, this section is focused on Residential and Mixed-Use Projects, in fact CARB states in Appendix D (page 4): "…focuses primarily on climate action plans (CAPs) and local authority over new residential development. It does not address other land use types (e.g., industrial) or air permitting."

Additionally on Page 21 in Appendix D, CARB states: "The recommendations outlined in this section apply only to residential and mixed-use development project types. California currently faces both a housing crisis and a climate crisis, which necessitates prioritizing recommendations for residential projects to address the housing crisis in a manner that simultaneously supports the State's GHG and regional air quality goals. CARB plans to continue to explore new approaches for other land use types in the future." As such, it would be inappropriate to apply the requirements contained in Appendix D of the 2022 Scoping Plan to any land use types other than residential or mixed-use residential development.

2.7.3.2 Executive Orders Related to GHG Emissions

California's Executive Branch has taken several actions to reduce GHGs through the use of Executive Orders. Although not regulatory, they set the tone for the state and guide the actions of state agencies.

Executive Order S-3-05

California Governor Arnold Schwarzenegger announced on June 1, 2005, through Executive Order S-3-05, the following reduction targets for GHG emissions:

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80% below 1990 levels.

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that would stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an executive order, the goals are not legally enforceable for local governments or the private sector.

Executive Order S-01-07 (LCFS)

Governor Schwarzenegger signed Executive Order S-01-07 on January 18, 2007. The order mandates that a statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10% by 2020. CARB adopted the LCFS on April 23, 2009.

After a series of legal changes, in order to address the Court ruling, CARB was required to bring a new LCFS regulation to the Board for consideration in February 2015. The proposed LCFS regulation was required to contain revisions to the 2010 LCFS as well as new provisions designed to foster investments in the production of the low-carbon intensity fuels, offer additional flexibility to regulated parties, update critical technical information, simplify and streamline program operations, and enhance enforcement. On November 16, 2015, the Office of Administrative Law (OAL) approved the Final Rulemaking Package. The new LCFS regulation became effective on January 1, 2016.

In 2018, CARB approved amendments to the regulation, which included strengthening the carbon intensity benchmarks through 2030 in compliance with the SB 32 GHG emissions reduction target for 2030. The amendments included crediting opportunities to promote zero emission vehicle adoption, alternative jet fuel, carbon capture and sequestration, and advanced technologies to achieve deep decarbonization in the transportation sector (40).

Executive Order S-13-08

Executive Order S-13-08 states that "climate change in California during the next century is expected to shift precipitation patterns, accelerate sea level rise and increase temperatures, thereby posing a serious threat to California's economy, to the health and welfare of its population and to its natural resources." Pursuant to the requirements in the Order, the *2009 California Climate Adaptation Strategy* (*CNRA 2009*) was adopted, which is the "…first statewide, multi-sector, region-specific, and information-based climate change adaptation strategy in the United States." Objectives include analyzing risks of climate change in California, identifying, and exploring strategies to adapt to climate change, and specifying a direction for future research.

Executive Order B-30-15

On April 29, 2015, Governor Brown issued an executive order to establish a California GHG reduction target of 40% below 1990 levels by 2030. The Governor's executive order aligned California's GHG reduction targets with those of leading international governments ahead of the U.N. Climate Change Conference in Paris late 2015. The Order sets a new interim statewide GHG emission reduction target to reduce GHG emissions to 40% below 1990 levels by 2030 in order to ensure California meets its target of reducing GHG emissions to 80% below 1990 levels by 2050 and directs CARB to update the *2017 Scoping Plan* to express the 2030 target in terms of $MMTCO_2e$. The Order also requires the state's climate adaptation plan to be updated every three years, and for the State to continue its climate change research program, among other provisions. As with Executive Order S-3-05, this Order is not legally enforceable to local governments and the private sector. Legislation that would update AB 32 to make post 2020 targets and requirements a mandate is in process in the State Legislature.

Executive Order B-55-18 and SB 100

SB 100 and Executive Order B-55-18 were signed by Governor Brown on September 10, 2018. Under the existing RPS, 25% of retail sales of electricity are required to be from renewable sources by December 31, 2016, 33% by December 31, 2020, 40% by December 31, 2024, 45% by December 31, 2027, and 50% by December 31, 2030. SB 100 raises California's RPS requirement to 50% renewable resources target by December 31, 2026, and to achieve a 60% target by December 31, 2030. SB 100 also requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt hours (kWh) of those products sold to their retail end-use customers achieve 44% of retail sales by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030. In addition to targets under AB 32 and SB 32, Executive Order B-55-18 establishes a carbon neutrality goal for the state of California by 2045; and sets a goal to maintain net negative emissions thereafter. The Executive Order directs the California Natural Resources Agency (CNRA), California EPA (CalEPA), the California Department of Food and Agriculture (CDFA), and CARB to include sequestration targets in the Natural and Working Lands Climate Change Implementation Plan consistent with the carbon neutrality goal.

2.7.3.3 California Regulations and Building Codes

California has a long history of adopting regulations to improve energy efficiency in new and remodeled buildings. These regulations have kept California's energy consumption relatively flat even with rapid population growth.

Title 20 CCR Sections 1601 et seq. – Appliance Efficiency Regulations

The Appliance Efficiency Regulations regulate the sale of appliances in California. The Appliance Efficiency Regulations include standards for both federally regulated appliances and non-federally regulated appliances. Twenty-three categories of appliances are included in the scope of these regulations. The standards within these regulations apply to appliances that are sold or offered for sale in California, except those sold wholesale in California for final retail sale outside the state and those designed and sold exclusively for use in recreational vehicles (RV) or other mobile equipment (CEC 2012).

Title 24 Energy Efficiency Standards and California Green Building Standards

California Code of Regulations (CCR) Title 24 Part 6: The California Energy Code was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption.

The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. CCR, Title 24, Part 11: California Green Building Standards Code (CALGreen) is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on August 1, 2009, and is administered by the California Building Standards Commission.

The 2022 California Title 24 Energy Standards became effective on January 1, 2023, with updates for the 2025 standards set to take effect on January 1, 2026. As the Project is expected to be completed in 2030, it will need to comply with the Title 24 Energy Standards in effect at that time, which may include further updates beyond the 2025 version.

CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2025 California Green Building Code Standards that go into effect on January 1, 2026. The Project would be required to comply with the applicable standards in place at the time plan check submittals are made.

CARB Refrigerant Management Program

CARB adopted a regulation in 2009 to reduce refrigerant GHG emissions from stationary sources through refrigerant leak detection and monitoring, leak repair, system retirement and retrofitting, reporting and recordkeeping, and proper refrigerant cylinder use, sale, and disposal. The regulation is set forth in sections 95380 to 95398 of Title 17, CCR. The rules implementing the regulation establish a limit on statewide GHG emissions from stationary facilities with refrigeration systems with more than 50 pounds of a high GWP refrigerant. The refrigerant management program is designed to (1) reduce emissions of high-GWP GHG refrigerants from leaky stationary, non-residential refrigeration equipment; (2) reduce emissions from the installation and servicing of refrigeration and air-conditioning appliances using high-GWP refrigerants; and (3) verify GHG emission reductions.

SB 97 and the CEQA Guidelines Update

Passed in August 2007, SB 97 added Section 21083.05 to the Public Resources Code. The code states "(a) On or before July 1, 2009, the Office of Planning and Research (OPR) shall prepare, develop, and transmit to the Resources Agency guidelines for the mitigation of GHG emissions or the effects of GHG emissions as required by this division, including, but not limited to, effects associated with transportation or energy consumption. (b) On or before January 1, 2010, the Resources Agency shall certify and adopt guidelines prepared and developed by the OPR pursuant to subdivision (a)."

In 2012, Public Resources Code Section 21083.05 was amended to state:

> *"The Office of Planning and Research and the Natural Resources Agency shall periodically update the guidelines for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions as required by this division, including, but not limited to, effects associated with transportation or energy consumption, to incorporate*

new information or criteria established by the State Air Resources Board pursuant to Division 25.5 (commencing with Section 38500) of the Health and Safety Code."

On December 28, 2018, the Natural Resources Agency announced the OAL approved the amendments to the *CEQA Guidelines* for implementing CEQA. The CEQA Amendments provide guidance to public agencies regarding the analysis and mitigation of the effects of GHG emissions in CEQA documents. The CEQA Amendments fit within the existing CEQA framework by amending existing *CEQA Guidelines* to reference climate change.

Section 15064.4 was added to the *CEQA Guidelines* and states that in determining the significance of a project's GHG emissions, the lead agency should focus its analysis on the reasonably foreseeable incremental contribution of the project's emissions to the effects of climate change. A project's incremental contribution may be cumulatively considerable even if it appears relatively insignificant compared to statewide, national, or global emissions. The agency's analysis should consider a timeframe that is appropriate for the project. The agency's analysis also must reasonably reflect evolving scientific knowledge and state regulatory schemes. Additionally, a lead agency may use a model or methodology to estimate GHG emissions resulting from a project. The lead agency has discretion to select the model or methodology it considers most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change. The lead agency must support its selection of a model or methodology with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use (43).

2.7.4 Regional

The Specific Plan site is located within the Salton Sea Air Basin (SSAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD).

SCAQMD

SCAQMD is the agency responsible for air quality planning and regulation in the SSAB. The SCAQMD addresses the impacts to climate change of projects subject to SCAQMD permit as a lead agency if they are the only agency having discretionary approval for the project and acts as a responsible agency when a land use agency must also approve discretionary permits for the project. The SCAQMD acts as an expert commenting agency for impacts to air quality. This expertise carries over to GHG emissions, so the agency helps local land use agencies through the development of models and emission thresholds that can be used to address GHG emissions.

In 2008, SCAQMD formed a Working Group to identify GHG emissions thresholds for land use projects that could be used by local lead agencies in the SSAB. The Working Group developed several different options that are contained in the SCAQMD Draft Guidance Document – Interim CEQA GHG Significance Threshold, which could be applied by lead agencies. The working group has not provided additional guidance since release of the interim guidance in 2008. The SCAQMD Board has not approved the thresholds; however, the Guidance Document provides substantial evidence supporting the approaches to significance of GHG emissions that can be considered by the lead agency in adopting its own threshold. The current interim thresholds consist of the following tiered approach:

- Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.
- Tier 2 consists of determining whether the project is consistent with a GHG reduction plan. If a project is consistent with a qualifying local GHG reduction plan, it does not have significant GHG emissions.
- Tier 3 consists of screening values, which the lead agency can choose, but must be consistent with all projects within its jurisdiction. A project's construction emissions are averaged over 30 years and are added to the project's operational emissions. If a project's emissions are below one of the following screening thresholds, then the project is less than significant:
  - Residential and commercial land use: 3,000 $MTCO_2e/yr$
  - Industrial land use: 10,000 $MTCO_2e/yr$
  - Based on land use type: residential: 3,500 $MTCO_2e/yr$; commercial: 1,400 $MTCO_2e/yr$; or mixed use: 3,000 $MTCO_2e/yr$
- Tier 4 has the following options:
  - Option 1: Reduce Business-as-Usual (BAU) emissions by a certain percentage; this percentage is currently undefined.
  - Option 2: Early implementation of applicable AB 32 Scoping Plan measures
  - Option 3: 2020 target for service populations (SP), which includes residents and employees: 4.8 $MTCO_2e$ per SP per year for projects and 6.6 $MTCO_2e$ per SP per year for plans;
  - Option 3, 2035 target: 3.0 $MTCO_2e$ per SP per year for projects and 4.1 $MTCO_2e$ per SP per year for plans
- Tier 5 involves mitigation offsets to achieve target significance threshold.

The SCAQMD's interim thresholds used the Executive Order S-3-05-year 2050 goal as the basis for the Tier 3 screening level. Achieving the Executive Order's objective would contribute to worldwide efforts to cap CO_2 concentrations at 450 ppm, thus stabilizing global climate.

SCAQMD only has authority over GHG emissions from development projects that include air quality permits. If the Project requires a stationary permit, it would be subject to the applicable SCAQMD regulations.

SCAQMD Regulation XXVII, adopted in 2009 includes the following rules:

- Rule 2700 defines terms and post global warming potentials.
- Rule 2701, SoCal Climate Solutions Exchange, establishes a voluntary program to encourage, quantify, and certify voluntary, high quality certified GHG emission reductions in the SCAQMD.
- Rule 2702, GHG Reduction Program created a program to produce GHG emission reductions within the SCAQMD. The SCAQMD would fund projects through contracts in response to requests for proposals or purchase reductions from other parties.

2.7.5 Local

City of Coachella Climate Action Plan

The City of Coachella's Climate Action Plan (CAP) quantifies emissions associated with buildout of the City's General Plan and outlines strategies to reduce GHG emissions through energy efficiency, expanding public transit and active transportation, increased recycling, and water conservation. By implementing energy efficiency programs in residential and commercial buildings, encouraging

renewable energy sources like solar, and setting long-term sustainability goals, the plan aims to mitigate climate change impacts. It also emphasizes community engagement and collaboration with local organizations to foster a culture of energy conservation. Ultimately, the plan directly contributes to reducing GHG emissions, improving air quality, and promoting a healthier, more sustainable environment for residents.

3 PROJECT GHG IMPACT

3.1 INTRODUCTION

The Project has been evaluated to determine if it will result in a significant GHG impact. The significance of these potential impacts is described in the following sections.

3.2 STANDARDS OF SIGNIFICANCE

The criteria used to determine the significance of potential Project-related GHG impacts are taken from the Initial Study Checklist in Appendix G of the State *CEQA Guidelines* (14 California Code of Regulations §§15000, et seq.). Based on these thresholds, a project would result in a significant impact related to GHG if it would (45):

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?

The evaluation of an impact under CEQA requires measuring data from a project against both existing conditions and a "threshold of significance." For establishing significance thresholds, the Office of Planning and Research's amendments to the CEQA Guidelines Section 15064.7(c) state *"[w]hen adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence."*

CEQA Guidelines Section 15064.4(a) further states, *". . . A lead agency shall have discretion to determine, in the context of a particular project, whether to: (1) Quantify greenhouse gas emissions resulting from a project . . .; and/or (2) Rely on a qualitative analysis or performance-based standards."* The lead agency has the discretion to select the model or methodology it considers most appropriate, pursuant to *CEQA Guidelines* Section 15064.4(c).

CEQA Guidelines Section 15064.4 provides that a lead agency should consider the following factors, among others, in assessing the significance of impacts from greenhouse gas emissions:

- Consideration #1: The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.
- Consideration #2: Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- Consideration #3: The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. In determining the significance of impacts, the lead agency may consider a project's consistency with the State's long-term climate goals or strategies, provided that substantial evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is not cumulatively considerable.

3.2.1 Thresholds of Significance

The SCAQMD defines the SP as the total residents and employees associated with a Project. The origin of the SP is based on CARB's *2008 Scoping Plan*. The *2008 Scoping Plan* identified that based on the GHG emissions inventories for the state, the people of California generate approximately 14 tons of GHG emissions per capita and would need to reduce annual emissions to approximately 10 tons per capita in order to meet the GHG reduction target of AB 32. Because people who live in California generally work in California, the SP metric did not include employees. As CEQA significance thresholds were being determined by air districts, the air districts considered applying this efficiency metric to their air district boundaries. Consistent with methodology provided by the Regional Targets Advisory Committee (RTAC) as part of the SB 375 target setting discussions, the definition of SP was amended to include employees in addition to residents. This is because the transportation sector is the primary source of project-related GHG emissions; and unlike the state as a whole, people who work in one county/air district may not live in the same county/air district boundary. Also, people who live in a county/air district boundary would also have other trip ends such as school, parks, and retail uses. As such, the air district/county boundary as a whole did not take into account other users within the site.

Relevant to the proposed Project, the SCAQMD Tier 4 Option 3 is to utilize an efficiency target. The SCAQMD has proposed targets for project-level and plan-level analysis. At the September 2010 working group meeting the SCAQMD recommended a project-level efficiency target of 4.8 $MTCO_2e$/SP as a target[3].

The calculations behind this option are based on the same inventory calculated by CARB. The 4.8 MT/SP target is based on the same statewide 2020 GHG inventory in the CARB *Scoping Plan*, i.e., 295,530,000 $MTCO_2e$/yr. To derive the project level SP of 4.8 metric ton, SCAQMD took the 2020 statewide GHG reduction target for land use only (295,530,000 $MTCO_2e$/yr) and divided it by the total 2020 statewide population plus the total statewide employment for land use only (44,135,923 + 17,064,489) (i.e., (295,530,000 $MTCO_2e$/yr)/(44,135,923 + 17,064,489) = 4.8 $MTCO_2e$/yr). Thus, SCAQMD's threshold is another metric for assessing compliance with AB 32, just based on using numbers attributable to certain sectors and trying to break down the analysis to a finer grain based on a per person methodology associated with land use-related sectors.

This approach is a widely accepted screening threshold used by numerous cities in the basin and is based on the SCAQMD staff's proposed GHG screening threshold for stationary source emissions for non-industrial projects, as described in the SCAQMD's *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans*. The SCAQMD's *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans* identifies a screening threshold to determine whether additional analysis is required (48). As noted by the SCAQMD:

> *"…the…screening level for stationary sources is based on an emission capture rate of 90 percent for all new or modified projects…the policy objective of [SCAQMD's] recommended interim GHG significance threshold proposal is to achieve an emission capture rate of 90 percent of all new or modified stationary source projects. A GHG*

[3] It should be noted that SCAQMD identifies a plan-level threshold of 6.6 MTCO2e per SP. As a conservative measure, the Project utilizes the 4.8 MTCO2e per SP as the basis of establishing long-term thresholds for buildout conditions.

significance threshold based on a 90 percent emission capture rate may be more appropriate to address the long-term adverse impacts associated with global climate change because most projects will be required to implement GHG reduction measures. Further, a 90 percent emission capture rate sets the emission threshold low enough to capture a substantial fraction of future stationary source projects that will be constructed to accommodate future statewide population and economic growth, while setting the emission threshold high enough to exclude small projects that will in aggregate contribute a relatively small fraction of the cumulative statewide GHG emissions. This assertion is based on the fact that [SCAQMD] staff estimates that these GHG emissions would account for slightly less than one percent of future 2050 statewide GHG emissions target (85 [MMTCO2e/yr]). In addition, these small projects may be subject to future applicable GHG control regulations that would further reduce their overall future contribution to the statewide GHG inventory. Finally, these small sources are already subject to [Best Available Control Technology] (BACT) for criteria pollutants and are more likely to be single-permit facilities, so they are more likely to have few opportunities readily available to reduce GHG emissions from other parts of their facility." (43)

Although the SCAQMD's draft significance criteria have not been adopted, the City has determined that the SCAQMD's project-level efficiency threshold methodology can be used to set an appropriate significance criterion by which to determine whether the project emits a significant amount of GHG. To determine a project-level GHG efficiency threshold for the Project's Opening Year of 2030, a linear interpolation was used between the known targets of 2020 and 2045.

The 2022 Scoping Plan establishes a goal of reducing statewide GHG emissions by 85% below 1990 levels by 2045. Applying this 85% reduction to the previously established 2020 threshold of 4.8 $MTCO_2e/SP$, the resulting efficiency target for 2045 is 0.72 $MTCO_2e/yr$. A linear interpolation was applied between the established targets for 2020 and 2045 to calculate a project-level GHG efficiency threshold for the project's Opening Year of 2030, yielding a threshold of 3.17 $MTCO_2e/SP$.

3.3 Models Employed To Greenhouse Gases

3.3.1 California Emissions Estimator Model (CalEEMod)

The California Air Pollution Control Officers Association (CAPCOA) in conjunction with other California air districts, including SCAQMD, released CalEEMod 2022 in May 2022. CalEEMod periodically releases updates, as such the latest version available at the time of this report has been utilized in this analysis. The purpose of this model is to calculate construction-source and operational-source criteria pollutants and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures (48). Accordingly, the latest version of CalEEMod has been used for this Project to determine GHG emissions. Output from the model runs for construction and operational activity for the proposed Project is provided in Appendix 3.1. CalEEMod includes GHG emissions from the following source categories: construction, area, energy, mobile, waste, water, and refrigerants sources.

3.4 LIFE-CYCLE ANALYSIS NOT REQUIRED

A full life-cycle analysis (LCA) for construction and operational activity is not included in this analysis due to the lack of consensus guidance on LCA methodology at this time (45). Life-cycle analysis (i.e., assessing economy-wide GHG emissions from the processes in manufacturing and transporting all raw materials used in the Project development, infrastructure, and on-going operations) depends on emission factors or econometric factors that are not well established for all processes. At this time, an LCA would be extremely speculative and thus has not been prepared.

Additionally, the SCAQMD recommends analyzing direct and indirect project GHG emissions generated within California and not life-cycle emissions because the life-cycle effects from a project could occur outside of California, might not be very well understood, or documented, and would be challenging to mitigate (46). Additionally, the science to calculate life cycle emissions is not yet established or well defined; therefore, the SCAQMD has not recommended, and is not requiring, life-cycle emissions analysis.

3.5 CONSTRUCTION EMISSIONS

Construction activities associated with the construction of new cemetery uses in the southern portion of the Specific Plan site would generate CO_2 and CH_4 emissions. The *COVA Air Quality Impact Analysis* (AQIA) report contains detailed information regarding construction activities of the proposed cemetery uses (47). As discussed in the AQIA, construction-related emissions are expected from the following activities.

- Demolition
- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating

3.5.1 Construction Duration

For purposes of analysis, construction will begin August 2026 and would last through December 2030. The construction schedule utilized in the analysis, shown in Table 4-3, represents a "conservative" analysis scenario should construction occur any time after the respective dates since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent.[4] The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per the *CEQA Guidelines* (48).

[4] As shown in the CalEEMod User's Guide Version 2022, Appendix G "Table G-11. Statewide Average Annual Offroad Equipment Emission Factors" as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirements.

TABLE 3-1: CONSTRUCTION DURATION

Construction Activity	Start Date	End Date	Days
Demolition	08/03/2026	11/13/2026	75
Site Preparation	11/14/2026	01/15/2027	45
Grading	01/16/2027	06/25/2027	115
Building Construction	06/26/2027	12/06/2030	900
Paving	07/06/2030	12/06/2030	110
Architectural Coating	3/19/2029	12/06/2030	450

3.5.2 Construction Equipment

Consistent with industry standards and typical construction practices, each piece of equipment listed in Table 3-2 is assumed to operate up to a total of eight (8) hours per day, or more than two-thirds of the period during which construction activities are allowed pursuant to the City code.

TABLE 3-2: CONSTRUCTION EQUIPMENT ASSUMPTIONS

Construction Activity	Equipment	Quantity	Hours
Demolition	Concrete/Industrial Saws	1	8
	Excavators	4	8
	Rubber Tired Dozers	3	8
Site Preparation	Rubber Tired Dozers	4	8
	Crawler Tractors	5	8
Grading	Excavators	3	8
	Graders	1	8
	Rubber Tired Dozers	1	8
	Scrapers	3	8
	Crawler Tractors	3	8
Building Construction	Cranes	2	8
	Forklifts	5	8
	Generator Sets	2	8
	Tractors/Loaders/Backhoes	5	8
	Welders	2	8
Paving	Pavers	2	8
	Paving Equipment	2	8
	Rollers	2	8
Architectural Coating	Air Compressors	1	8

3.4.5 Construction Emissions Summary

For construction phase Project emissions, GHGs are quantified and amortized over the life of the Project. To amortize the emissions over the life of the Project, the SCAQMD recommends calculating the total GHG emissions for the construction activities, dividing it by a 30-year Project life then

adding that number to the annual operational phase GHG emissions (53). As such, construction emissions were amortized over a 30-year period and added to the annual operational phase GHG emissions. The amortized construction emissions are presented in Table 3-3.

TABLE 3-3: AMORTIZED ANNUAL CONSTRUCTION EMISSIONS

Year	CO_2	CH_4	N_2O	R	Total CO_2E
2026	306.00	0.01	< 0.005	0.03	308.00
2027	1,266.00	0.04	0.04	0.59	1,279.00
2028	1,376.00	0.03	0.06	0.96	1,396.00
2029	1,457.00	0.03	0.06	0.97	1,477.00
2030	1,450.00	0.03	0.06	0.84	1,469.00
Total	5,855.00	0.14	0.22	3.39	5,929.00
Amortized	195.17	4.67E-03	0.01	0.11	197.63

3.6 OPERATIONAL EMISSIONS

Operational activities associated with the Project would result in emissions of CO_2, CH_4, N_2O, and Refrigerant emissions from the following primary sources:

- Mobile Source Emissions;
- Area Source Emissions;
- Energy Source Emissions;
- Water Supply, Treatment, and Distribution;
- Solid Waste; and
- Refrigeration.

3.6.1 Mobile Source Emissions

The Project related operational GHG emissions derive primarily from vehicle trips generated by the Project, including employee and attendee trips associated with the proposed use. Trip characteristics available from the *COVA Traffic Impact Analysis* were utilized in this analysis (50).

3.6.2 Area Source Emissions

Landscape Maintenance Equipment

Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shedders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the Project. It should be noted that on October 9, 2021, Governor Gavin Newsom signed AB 1346. The bill aims to ban the sale of new gasoline-powered equipment under 25 gross horsepower (known as small off-road engines [SOREs]) by January 1, 2024, which is now in effect. However, for purposes of analysis, the emissions associated with landscape maintenance equipment were calculated based on assumptions provided in CalEEMod. These emissions are conservative and overstated, as they do not incorporate the emissions reductions that would be realized from implementation of AB 1346.

3.6.3 Energy Source Emissions

Combustion Emissions Associated with Electricity and Natural Gas

GHGs are emitted from buildings as a result of activities for which electricity and natural gas are typically used as energy sources. Combustion of any type of fuel emits CO_2 and other GHGs directly into the atmosphere; these emissions are considered direct emissions associated with a building. GHGs are also emitted during the generation of electricity from fossil fuels; these emissions are considered to be indirect emissions. Natural gas and electricity usage associated with the Project were calculated by CalEEMod using default parameters.

3.6.4 Water Supply, Treatment, and Distribution

Indirect GHG emissions result from the production of electricity used to convey, treat, and distribute water and wastewater. The amount of electricity required to convey, treat, and distribute water depends on the volume of water as well as the sources of the water. Unless otherwise noted, CalEEMod default parameters were used.

3.6.5 Solid Waste

The proposed land uses would result in the generation and disposal of solid waste. A percentage of this waste would be diverted from landfills by a variety of means, such as reducing the amount of waste generated, recycling, and/or composting. The remainder of the waste not diverted would be disposed of at a landfill. GHG emissions from landfills are associated with the anaerobic breakdown of material. GHG emissions associated with the disposal of solid waste associated with the proposed Project were calculated by CalEEMod using default parameters.

3.6.6 Refrigerants

Air conditioning (A/C) and refrigeration equipment associated with the buildings are anticipated to generate GHG emissions. CalEEMod automatically generates a default A/C and refrigeration equipment inventory for each project land use subtype based on industry data from the USEPA (2016b). CalEEMod quantifies refrigerant emissions from leaks during regular operation and routine servicing over the equipment lifetime and then derives average annual emissions from the lifetime estimate. Note that CalEEMod does not quantify emissions from the disposal of refrigeration and A/C equipment at the end of its lifetime. Per 17 CCR 95371, new facilities with refrigeration equipment containing more than 50 pounds of refrigerant are prohibited from utilizing refrigerants with a GWP of 150 or greater as of January 1, 2022. Additionally, beginning January 1, 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater. GHG emissions associated with refrigerants were calculated by CalEEMod using default parameters.

3.7 Service Population

Residential/Employees

According to the population generation of the VMT analysis, buildout of the Project has the potential to generate a future population of approximately 2,380 people, including approximately 330 employees for commercial uses and 2,050 residents for residential uses (53).

TABLE 3-4: SERVICE POPULATION

Visitor Type	Amount
Residents/Visitors	2,050
Employees	330
Total Service Population	2,380

3.8 GHG EMISSIONS SUMMARY

Impacts Without Mitigation

The estimated Project-related GHG emissions are summarized in Table 3-5. Detailed operation model outputs for the Project are presented in Appendix 3.1. As shown in Table 3-5, construction and operation of the Project would generate approximately 3.27 $MTCO_2e$/SP. As shown on Table 3-5, the Project would exceed the applicable threshold and therefore has the potential to result in a significant impact.

TABLE 3-5: PROJECT GHG EMISSIONS – IMPACTS WITHOUT MITIGATION

Source	Emissions (MT/yr)				
	CO_2	CH_4	N_2O	R	Total CO_2E
Annual construction emissions amortized over 30 years	195.17	4.67E-03	0.01	0.11	197.63
Mobile	3,522.00	0.09	0.08	3.08	3,550.00
Area	21.80	< 0.005	< 0.005	0.00	22.00
Energy	2,112.00	0.26	0.03	0.00	2,126.00
Water	157.00	5.43	0.13	0.00	332.00
Waste	445.00	44.50	0.00	0.00	1,557.00
Refrigeration	0.00	0.00	0.00	2.19	2.19
Total CO_2E (All Sources)	7,786.82				
Service Population	2,380				
Total CO_2E per SP	3.27				
Screening Threshold (CO_2E)	3.17				
Threshold Exceeded?	YES				

GHG Mitigation Measures

The following measures (MM GHG-1 through MM GHG-5) are designed to reduce Project operational-source GHG emissions. These measures are quantifiable, and the associated emission reductions have been calculated and presented in this report.

MM GHG-1

All residential buildings (single-family homes and condos/townhomes) will be fully electrified, eliminating the use of natural gas.

MM GHG-2

On-site photovoltaic (PV) systems will provide 50% of electricity for single-family homes, condos/townhomes, movie theaters, and restaurants.

MM GHG-3

Water fixtures in residential and commercial buildings will be low-flow, with a 30% reduction in water use for toilets, showerheads, and faucets in residential buildings.

MM GHG-4

Landscaping will use low-water plants and efficient irrigation techniques, such as drip irrigation, to reduce water consumption.

MM GHG-5

The Project will implement a program that results in a 20% reduction in waste generation through enhanced recycling, composting, and waste minimization practices.

Impacts With Mitigation

The estimated operational-source emissions summarized on Table 3-6 represent the Project's GHG emissions after implementation of MMs GHG-1 through MM GHG-5. The proposed MMs would reduce GHG emissions by improving energy and water efficiency and integrating solar power. Efficient appliances, WaterSense fixtures, and drought-tolerant landscaping lower electricity and water use, reducing indirect emissions. Installing solar panels offsets a portion of the facility's electricity needs with renewable energy. Together, these measures reduce emissions from building operations and energy use. Detailed operation model outputs for the Project are presented in Appendix 3.1. As shown in Table 3-6, after mitigation, construction and operation of the Project would generate approximately 2.81 $MTCO_2e$/SP, which would not exceed the applicable threshold.

TABLE 3-6: PROJECT GHG EMISSIONS – IMPACTS WITH MITIGATION

Source	Emissions (MT/yr)				
	CO_2	CH_4	N_2O	R	Total CO_2E
Annual construction emissions amortized over 30 years	195.17	4.67E-03	0.01	0.11	197.63
Mobile	3,522.00	0.09	0.08	3.08	3,550.00
Area	21.80	0.00	0.00	0.00	22.00
Energy	1,370.00	0.16	0.01	0.00	1,378.00
Water	134.00	4.83	0.12	0.00	290.00
Waste	356.00	35.60	0.00	0.00	1,246.00
Refrigeration	0.00	0.00	0.00	2.19	2.19
Total CO_2E (All Sources)	6,685.82				
Service Population	2,380				
Total CO_2E per SP	2.81				
Screening Threshold (CO_2E)	3.17				
Threshold Exceeded?	NO				

3.9 GHG EMISSIONS FINDINGS AND RECOMMENDATIONS

3.9.1 GHG Impact 1

Potential to generate direct or indirect GHG emissions that would result in a significant impact on the environment.

The Project, after implementation of the applicable mitigation measures, would result in 2.81 $MTCO_2e$/SP per year in 2030 as summarized in Table 3-6 and would not exceed the SCAQMD screening threshold of 3.17 $MTCO_2e$/SP per year. Thus, Project-related emissions would result in a less than significant impact with respect to GHG emissions and no new impacts are expected.

The Project would not have the potential to generate direct or indirect GHG emissions that would result in a significant impact on the environment.

3.9.2 GHG Impact 2

Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?

As previously stated, pursuant to 15604.4 of the *CEQA Guidelines*, a lead agency may rely on qualitative analysis or performance-based standards to determine the significance of impacts from GHG emissions (52). As such, the Project's consistency with the 2022 Scoping Plan, is discussed below. It should be noted that the Project's consistency with the 2022 Scoping Plan also satisfies consistency with AB 32 since the 2022 Scoping Plan is based on the overall targets established by AB 32 and SB 32. Consistency with the 2008 and 2017 Scoping Plan is not necessary since both of these plans have been superseded by the 2022 Scoping Plan. For reasons outlined herein, the proposed Project would result in a less than significant impact with respect to GHG emissions for GHG Impact #1 and GHG Impact #2.

City of Coachella CAP

The CAP recommends GHG emissions targets that are consistent with the reduction targets of the State of California and presents a number of strategies that will make it possible for the City of Coachella to meet the recommended targets. As part of the CAP development the City of Coachella developed a development review checklist. Compliance with the CAP will be determined based on the responses provided. For a project to be determined as complying with the CAP and eligible for streamlining, the project must comply with all applicable development standards presented in the Checklist. A "No" response to an applicable Project Design Feature will require a project be adjusted to comply or the project will have to demonstrate compliance with the CAP via an alternative path, as discussed in the CAP Implementation Chapter. The Project's consistency with the CAP is detailed in Table 3-5.

TABLE 3-7: CONSISTENCY WITH THE CITY OF COACHELLA CAP DEVELOPMENT REVIEW CHECKLIST

Project Design Feature and Intent	Development Standard/Guideline	Determination of Consistency and Explanation
For All New Development		
Recycling. Ensure recyclables can be separated for collection.	For non-residential and multifamily residential buildings, provide dedicated on-site storage areas for recyclable solid waste.	Consistent. The Project will provide designated recycling and trash bins per SB 939 recycling requirements.
Density. Apply the density envisioned by the General Plan.	Demonstrate the project complies with the General Plan Designations and development intensity envisioned by the General Plan and the applicable Subarea descriptions.	The Project site is designated "Regional Retail District" in the General Plan and the proposed Project land uses are allowed under that designation.
Subarea Character. Meet the vision and intent of the applicable General Plan Subarea.	Demonstrate the project complies with the policy direction set forth in the applicable Subarea description and reasonably meets the intent of the Subarea vision.	The Project site is located within the Regional Retail District which provides opportunities for a wide range of shopping and entertainment in a variety of urban and suburban formats. These include regional shopping centers, mixed destination centers or similar uses. The uses allowed in this designation will cater to regional clientele and provide a unique amenity to all residents of the Coachella Valley and an important revenue source for the City. The primary purpose of the District is to provide for commercial opportunities, with residential uses supporting the retail environment.
Urban Forest. Protect the City's healthy trees and plant new ones	Unless the Zoning Code, General Plan, Complete Streets Manual or	Consistent. The landscape plan for the Project has been developed in

to provide shade, increase carbon sequestration and purify the air.	other City standard requires more stringent performance, plant shade trees at the equivalent of one tree per 50 feet along all street frontages, open space frontages, and public walkways.	accordance with City Guidelines, which mandate the planting of one tree every 50 feet along street frontages, open space areas, and public walkways.
Urban Form. Apply the urban form and character envisioned by the General Plan.	Demonstrate the project complies with the urban form guidelines described in the applicable General Plan designations.	Consistent. The Project aligns with the urban form guidelines for the District designation, which were carefully reviewed to ensure compliance.
Construction Emissions. Reduce GHG emissions associated with construction activities.	Prepare a Construction Emissions Reduction plan that demonstrates the utilization of current best practices in construction operations that will realize a 10 percent reduction in GHG emissions. Best practices might include: • Alternative fuels for construction equipment; • Use of electric or hybrid electric construction equipment; • Further limiting construction equipment idling beyond regulatory requirements; and • Transportation demand management strategies for construction workers.	Consistent. Project Design Features 1 and 2 have been provided that requires the Project Applicant to install signage that would limit construction equipment idling beyond regulatory requirements and use electric or hybrid electric construction equipment.
Recycled Content Building Materials. Encourage use of recycled materials in new construction.	Demonstrate that at least 15 percent of a project's construction materials, preferably as a percentage of value of construction materials, be comprised of recycled content.	Consistent. The Project will source construction materials locally, in line with state requirements that mandate the use of recycled materials by suppliers. As a result, utilizing these locally sourced materials ensures compliance with the development standard.
Recycled CD&D Waste. Increase the rate of recycle construction waste.	Demonstrate that at least 75 percent of construction waste by weight will be recycled. Demonstrate at least 5 percent of a project's materials, by value, are salvaged, refurbished, or reused materials.	Consistent. The future tenants of the Project will be obligated to work with a City-approved waste hauling service, which must comply with Municipal Code Section 8.44.210 implementing AB 341. This legislation mandates that 75% of construction waste be diverted from landfills. Additionally, various state regulations, including AB 2953 and CALGreen Building Standards, will

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Construction Equipment Idling Restrictions. The idling of heavy construction equipment for more than 5 minutes shall be prohibited. Signage shall be posted throughout the construction site informing construction personnel of the idling time limit. Idling time limits shall be noted in construction specifications. Subject to all other idling restrictions, heavy construction equipment shall not be left in the "on position" for more than 10 hours per day.

PDF 2

Provision of Electrical Infrastructure for Construction and Use of Electric Construction Equipment. After the grading phase of Project construction, the Project Applicant or successor in interest shall provide temporary electrical hook ups to the power grid, rather than diesel-fueled generators, for contractors' electric construction tools, such as saws, drills, and compressors. The use of diesel-fueled generators for on-site construction activities shall be prohibited unless electrical infrastructure is not yet available on the Project site. Diesel-fueled generators may be used for off-site construction work. All off-road equipment with a power rating below 19 kilowatts (e.g., plate compactors, pressure washers) used during Project construction must be electric powered. The Project Applicant or successor in interest shall include these requirements in applicable bid documents, purchase orders, and contracts with successful contractors.

		ensure that at least 5% of the Project's materials are reused.
Energy Efficiency. Design or retrofit buildings to exceed Title 24 energy efficiency standards by 15 percent.	For projects constructed prior to 2020, exceed Title 24 energy efficiency standards by 15 percent. For projects constructed between 2020 and 2035, exceed Title 24 by 25 percent.	Consistent. The Project will exceed Title 24 by 25%.
Passive Solar Design. Design new buildings to incorporate passive energy efficiency strategies.	Design new buildings to incorporate energy efficient building and site design strategies for the desert environment that include appropriate solar orientation, thermal mass, use of natural daylight and ventilation, and shading. Projects shall demonstrate a 10 percent reduction in energy use through passive solar design strategies.	Consistent. The Project was designed to incorporate passive solar design strategies that provide more than a 10% reduction in energy use.
Solar Orientation. Design all residences to maximize energy efficiency and minimize solar heat gain.	Design new neighborhood streets and lot layouts so at least 80 percent of new homes are oriented with the primary building axis within 20 degrees of an east-west orientation.	Consistent. The Project has been designed to include new neighborhood streets and lot configurations ensuring that at least 80% of new homes are oriented with their primary building axis within 20 degrees of east-west alignment.
Green Design. Design affordable housing developments to prioritize green building features that reduce monthly utility costs, enhance occupant health and lower the overall cost of housing.	For affordable housing projects, demonstrate the inclusion of green building features that reduce monthly utility costs, enhance occupant health and lower the overall cost of housing, such as highly energy-efficient appliances, nontoxic materials, and features such as green roofs and solar panels.	Not applicable. The Project does not include any affordable homes.
Shaded Public Spaces. Improve shading in public spaces such as bus stops, sidewalks and public parks and plazas through the use of trees, shelters, awnings, gazebos, fabric shading and other creative cooling strategies.	Through the use of trees, shelters, awnings, gazebos, fabric shading and other creative cooling strategies, shade at least 50 percent of all public spaces within five years of project operation.	Consistent. All public spaces in the Project will have shading from either trees or shade structures that shade at least 50 percent of the area.
Electric Vehicles. Support Electric Vehicle and Neighborhood Electric Vehicle use by developing appropriate infrastructure.	Demonstrate that the project contains measures that support the CVAG Electric Vehicle Plan, if applicable.	Consistent. The Project is required to be designed to meet the 2022 or latter Title 24 standards, that currently require the installation of electric vehicle charging stations in nonresidential developments, the Project will

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		include X parking spaces for electric vehicles, of which X parking spaces will have charging stations.
Energy Efficient Street Lighting. Install the latest energy-efficient technologies for street and parking lot.	Reduce electricity demand from outdoor lighting by 40 percent.	Consistent. The Project is required to be designed to meet the 2022 or latter Title 24 standards, that currently require the use of energy-efficient LED lighting for streets and parking lots.
Adequate Pedestrian Facilities. Provide wide sidewalks along all roadways.	Provide sidewalks on both sides of the street for those frontages controlled by the project proponent. Widths may vary as specified by the General Plan designations.	Consistent. The site plan shows that there will be sidewalks throughout the Project.
Bicycle Facilities. Fully developed bicycle network.	Provide bicycle facilities along all new roadways.	Not applicable. The Project does not propose any new roadways.
Bicycle Parking. Provide sufficient bicycle parking in all new public and private development.	Provide 1 space for every 2 residential dwelling units. Provide 1 space per 10,000 square feet of new non-residential, and provide 1 space per 5,000 square feet of retail square feet but not fewer than 4 spaces per building. For non-residential development, provide at least one on-site shower with changing facility for any development with 100 or more new workers and at least one additional on-site shower with changing facility for every 150 new workers thereafter. Provide visitor bicycle parking in a highly visible and easily accessible locations.	Consistent. The Project is required to be designed to meet the 2022 or latter Title 24 standards that currently require more short term and long-term bicycle parking for nonresidential uses than what is defined in this development standard.
Bus Shelters. Protect bus riders waiting for buses.	Provide bus shelters in new development if a stop is determined necessary by SunLine.	Not applicable. The nearest SunLine stop is the Cesar Chavez at Avenue 52 stop, approximately 1 mile away. As such, the Project would not need to provide a new bus shelter.
Complete Streets. Create complete streets, considering the needs of pedestrians, bicyclists, motorists and public transit users of all ages and abilities.	Unless the Zoning Code or Complete Streets Manual specifies different standards, new streets shall be designed and constructed as follows:	Consistent. The Project will install crosswalks at the internal intersections, sidewalks throughout, plant trees, and provide on-street parking and design the private roads for low speeds.

Commented [AB3]: Please provide the amount of parking spaces and charging stations that will be provided.

Commented [AB4]: Can you please confirm whether there will be bicycle parking?

	• Crosswalks at every intersection. • Sidewalk amenities like benches, trash receptacles, drinking fountains, and/or public are for every 50 feet of sidewalk frontage in mixed use, commercial, and multifamily residential areas. • Frequent on-street parking (available along at least 70 percent of streets). • Sidewalks along 100 percent of street length (both sides of the street). • Street trees placed between the roadway and sidewalks. • Low design speeds for most streets (20 mph for residential, 25 mph for non-residential). • Driveway crossings along no more than 10 percent of sidewalk length.	
Low-water streetscape landscaping. Use of sustainable landscape and streetscape elements along roadways.	Use water efficient plant materials for at least 50 percent of the landscaping and install outdoor water fixtures that achieve a 50 percent reduction in irrigation water use for roadway landscaping elements.	Consistent. The landscape plan has been designed per the City Landscape design standards that meet Executive Order B 29-15 that require that landscape plans are designed to reduce irrigation water use by more than 50%.
Pedestrian Connectivity. Provide pedestrian connections to the external pedestrian network.	Provide pedestrian and bicycle connections to the community surrounding the project every 800 feet along the project perimeter	Consistent. The onsite sidewalk system will connect to the existing sidewalk system Avenue 52, Van Buren Street, and Calhoun Street.
Traffic Calming. Apply traffic calming techniques to residential streets to limit cut through traffic and speeding on roadway streets.	New streets shall include appropriate traffic calming techniques to neighborhood streets to limit cut-through traffic and speeding on roadway streets.	Consistent. The Project site will include appropriate traffic calming techniques that would limit cut-through traffic and speeding on roadway streets.
Parkland. Provide parkland and greenspaces.	Provide at least 5 acres of parkland per 1,000 residents.	Consistent. The Project will provide X acres of parkland space, offering a vibrant and accessible area for recreation, relaxation, and community gatherings.
Solar Access. Prohibit new development and renovations	Prohibit new development and renovations that impair adjacent buildings' solar access, unless it	Consistent. The Project development would not impair adjacent buildings' solar access.

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that impair adjacent buildings' solar access.	can be demonstrated that the shading benefits substantially offset the impacts of solar energy generation potential and comply with California Public Resources Code, Sections 25980 through 25986.	
Solar Energy. Design new construction to incorporate solar photovoltaics	Incorporate solar PV into all new construction. Residential: For single family homes built prior to 2020, provide 10 percent of the projected electricity demand via onsite solar photovoltaics. For single family homes built between 2020 and 2035, provide 25 percent of the projected electricity demand via onsite solar photovoltaics. Non-residential and multi-family residential: For non-residential and multi-family residential buildings built prior to 2020, provide 20 percent of the project electricity demand via onsite solar photovoltaics. For non-residential and multi-family residential buildings built between 2020 and 2035, provide 50 percent of the project electricity demand via onsite solar photovoltaics.	Consistent. The Project, through implementation of MM GHG-2, will provide on-site PV systems that will generate 50% of electricity for single-family homes, condos/townhomes, movie theaters, and restaurants. With implementation of MM GHG-2, the project will be consistent with this Development Standard.
Low-Impact Development Strategies. Use low-impact development strategies to minimize urban run-off, increase site infiltration, manage stormwater and recharge groundwater supplies.	Require all new development greater than 5,000 square feet of new construction to utilize low-impact design strategies to manage stormwater on-site. Where impervious cover exceeds 50 percent, a 25 percent decrease in the volume of stormwater must be obtained.	Consistent. The stormwater plan for the Project has utilized low-impact design strategies to reduce stormwater by more than a 25% decrease.
Parking. Utilize parking to balance transportation options.	Only the minimum parking requirements required by the Zoning Code should be provided. If providing more than the minimum parking required under the Zoning Code, additional spaces should be dedicated for priority parking spaces for carpooling, for spaces dedicated to car-sharing, or for spaces for electric vehicles. If new development is within ½ mile of a transit stop and requires off-street parking, unbundle	Consistent. The Project has been designed to meet the 2022 Title 24 standards that require that at least 8% of the parking spaces to be designated for carpools/vanpools and a minimum of 6 percent of the parking spaces shall have electric vehicle charging stations.

	parking from the rental or for-sale cost.	
Transportation Demand Management. Reduce automobile trip generation related to employment.	For non-residential projects with 20 or more employees, provide at least one of these programs: • Pre-tax election program to allow employees to exclude wages for commuting costs for transit or vanpools; • An employer supplied transit pass; • Employer provided transit; or • Other, similar demand management programs.	Consistent. Project Design Feature 3 has been provided that requires the project applicant to require that any business that operates within the proposed project that has 20 or more employees to implement at least one of the listed programs. With implementation of Project Design Feature 3, the project will be consistent with this Development Standard.
Urban Heat Island. Incorporate heat island reduction strategies in new developments.	Use 50 percent high-albedo surface materials for the site's hardscape or, within five years of project operation, shade at least 50 percent of the site's hardscape or use a combination of high-albedo surface materials and shades trees for at least 50 percent of the site's hardscape within five years of project operation. For non-residential and multifamily residential surface parking, plant shade trees at a minimum ratio of one tree per 4 spaces or demonstrate that 50 percent of the parking area will be shaded within five years of operation	Consistent. The Project will be designed with cool roofs and cool pavement as well as provide shade trees, which will reduce the Project's heat island effect.
Grey water. Promote grey water use to reduce potable water consumption.	Incorporate grey water systems into new construction.	Consistent. The Project has been designed to meet the City's greywater standards that include installation of piping that can be hooked up to a grey water system, when it becomes available in the vicinity of the project site.
Recycled water. Use recycled water for all agricultural, irrigation and industrial uses in order to reserve the City's highest quality potable water for drinking.	Install "purple pipe" water systems to utilize recycled water for non-potable uses such as irrigation and industrial uses.	Consistent. The Landscape Plan shows that the irrigation system will be designed with "purple pipe" that can be hooked up to a recycled water system when it becomes available in the vicinity of the Project site.
Reduce landscaping water consumption. Reduce landscaping water consumption	For buildings constructed prior to 2020, use water efficient plant	Consistent. The Landscape Plan has been designed to meet the requirements of Municipal Code

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The Project Applicant shall require any business that operates on the project site (including both construction and operations of the proposed project) and has 20 or more full-time employees onsite shall implement at least one of the following programs:

- Pre-tax election program to allow employees to exclude wages for commuting costs for transit or vanpools;
- An employer supplied transit pass;
- Employer provided transit; or
- Other, similar demand management programs

through plant selection and irrigation technology.	materials for the landscaping and install outdoor water fixtures and demonstrate an overall reduction in irrigation water use of 25 percent. For buildings constructed between 2020 and 2035, use water efficient plant materials for the landscaping and install outdoor water fixtures that achieve an overall reduction in irrigation water use of 42 percent.	Section 8.44.220 that implements Executive Order B-29-15 that requires the use of drought tolerant plants, restricts the planting of turf at nonresidential projects and requires installation of water efficient irrigation systems that will reduce irrigation water usage by more than 42%.
Water Conservation. Design new buildings to use less water.	For buildings constructed prior to 2020, demonstrate that new buildings will exceed the state's Green Building Code standard for water conservation by an additional 10 percent. For buildings constructed between 2020 and 2035, demonstrate that new buildings will exceed the state's Green Building Code standard for water conservation by an additional 15 percent.	Consistent. The 2022 CALGreen Code requires all plumbing fixture in new buildings to be water efficient that will reduce indoor water consumption by more than 15%.
New Development with a General Plan District Designation		
Adequate Pedestrian Facilities. Provide wide sidewalks along all roadways.	Provide sidewalks on both sides of the street for those frontages controlled by the project proponent. Widths may vary as specified by the General Plan designations, the Zoning Code, or the Complete Streets Manual.	Consistent. The site plan shows that a sidewalks will be constructed on Avenue 52, Van Buren Street, and Calhoun Street that is controlled by the Project proponent.
Shaded Sidewalks. Provide shade over the length of sidewalks on streets within the project	Provide at least 50 percent shading of project sidewalks within five years of project operation. Palm trees shall not be considered towards meeting this standard.	Consistent. The Landscape Plan has been designed to place enough trees adjacent to sidewalks in order to provide shading of project sidewalks within 5 years of Project operation
Shaded Streets. Plant street trees.	Provide at least 60 percent shading of project streets, at intervals no more than 40 feet, within five years of project operation. Palm trees shall not be considered towards meeting this standard.	Consistent. The Landscape Plan has been designed to place trees adjacent to the Project streets at intervals no more than 40 feet.
Streets for all users. Design streets to equally accommodate pedestrians and vehicles.	Demonstrate the project complies with the street design direct set forth by the General Plan for the applicable General Plan designations.	Consistent. The Project streets have been designed to accommodate both pedestrians and vehicles.
Pedestrian Connectivity. Provide connections between projects.	Provide pedestrian connections to the community surrounding the	Consistent. The site plan shows that pedestrian connections will

	project every 800 feet along the project perimeter in the Suburban Retail District. If possible, strive to provide pedestrian connections every 400 feet along the project perimeter. External connections from the Industrial District should occur every 1,000 feet and 1,320 feet for Resort District.	be provided along Avenue 52, Van Buren Street, and Calhoun Street.
Walkable Blocks. Design streets with well connected walkable blocks.	Design blocks as follows: • Suburban Retail District and Regional Retail District: maximum of 1,000 by 1,000, subdivided into smaller blocks with dimensions of 400 to 500 feet. The maximum block perimeter should be 3,200 feet for Suburban Retail and 4,000 for Regional Retail. • Industrial District: provide blocks that are 1,200 by 1,200 feet, subdivided into smaller blocks with dimensions of 400 to 600 feet. • Resort District: Not defined.	Consistent. The site plan shows that the Project site is segmented into 400 foot or smaller blocks with a maximum block perimeter of 4,000 feet.
Building Orientation. Locate the main entrance to the building within the front façade, accessed directly from the street, and designed to welcome visitors.	Design buildings as follows: • Public-facing building entries (onto any public space except a parking lot) on 90 percent of building frontage. • Minimal distance between the sidewalk and most buildings, with mixed use and nonresidential buildings particularly close to the sidewalk. • Frequent building entries (at least every 75 feet). • Unshuttered windows along the sidewalk for nonresidential buildings. • No blank walls more than 50 feet along sidewalks.	Consistent. The site plan shows that the buildings have been designed to have public spaces in front of the buildings with minimal distance between the sidewalks and buildings, frequent building entries, and unshuttered windows facing the sidewalks.

Vehicle Access. Accommodate vehicle access to parking lots via common drives and by alley. Locate parking lots internally to blocks.	Locate parking lots behind buildings, and allow driveway crossings along no more than 10 percent of sidewalk length.	Consistent. The site plan shows that where feasible, the parking lots were placed behind the buildings.

2022 Scoping Plan Consistency

The Project would not impede the State's progress towards carbon neutrality by 2045 under the 2022 Scoping Plan. The Project would be required to comply with applicable current and future regulatory requirements promulgated through the 2022 Scoping Plan. Some of the current transportation sector policies the Project will comply with (through vehicle manufacturer compliance) include: Advanced Clean Cars II, Advanced Clean Trucks, Advanced Clean Fleets, Zero Emission Forklifts, Off-Road Zero-Emission Targeted Manufacturer Rule, Clean Off-Road Fleet Recognition Program, Amendments to the In-use Off-Road Diesel-Fueled Fleets Regulation, carbon pricing through the Cap-and-Trade Program, and the Low Carbon Fuel Standard. As such, the Project would be consistent with the 2022 Scoping Plan.

Based on the preceding, the potential for the Project to conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs is considered less-than-significant.

4 REFERENCES

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5 CERTIFICATION

The contents of this GHG study report represent an accurate depiction of the GHG impacts associated with the proposed COVA Project. The information contained in this GHG report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at hqureshi@urbanxroads.com.

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Master of Science in Environmental Studies
California State University, Fullerton • May, 2010
Bachelor of Arts in Environmental Analysis and Design
University of California, Irvine • June, 2006

Professional Affiliations

AEP – Association of Environmental Professionals
AWMA – Air and Waste Management Association
ASTM – American Society for Testing and Materials

Professional Certifications

Planned Communities and Urban Infill – Urban Land Institute • June, 2011
Indoor Air Quality and Industrial Hygiene – EMSL Analytical • April, 2008
Principles of Ambient Air Monitoring – CARB • August, 2007
AB2588 Regulatory Standards – Trinity Consultants • November, 2006
Air Dispersion Modeling – Lakes Environmental • June, 2006

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APPENDIX 3.1:

CALEEMOD EMISSIONS MODEL OUTPUTS

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```
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 13.0.0
** Lakes Environmental Software Inc.
** Date: 7/18/2025
** File: C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 Const
co.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02
   MODELOPT DFAULT CONC
   AVERTIME 1 8
   URBANOPT 2492442 Riverside_County
   POLLUTID CO
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "16552-02 Const co.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     573500.180  3725886.220      -15.810
   LOCATION VOL2         VOLUME     573500.381  3725789.820      -16.120
   LOCATION VOL3         VOLUME     573597.602  3725886.190      -16.050
   LOCATION VOL4         VOLUME     573597.803  3725789.790      -16.360
   LOCATION VOL5         VOLUME     573694.930  3725886.254      -16.110
   LOCATION VOL6         VOLUME     573695.131  3725789.853      -16.280
   LOCATION VOL7         VOLUME     573792.553  3725789.824      -16.410
   LOCATION VOL8         VOLUME     573792.352  3725886.224      -16.330
   LOCATION VOL9         VOLUME     573890.171  3725886.254      -15.450
   LOCATION VOL10        VOLUME     573890.372  3725789.853      -15.750
   LOCATION VOL11        VOLUME     573987.794  3725789.824      -15.210
   LOCATION VOL12        VOLUME     573987.593  3725886.224      -15.520
   LOCATION VOL13        VOLUME     574085.292  3725886.133      -15.630
   LOCATION VOL14        VOLUME     574085.493  3725789.733      -15.890
   LOCATION VOL15        VOLUME     574182.915  3725789.703      -16.000
   LOCATION VOL16        VOLUME     574182.714  3725886.103      -15.750
   LOCATION VOL17        VOLUME     573695.175  3725695.674      -16.510
   LOCATION VOL18        VOLUME     573695.376  3725599.274      -16.700
   LOCATION VOL19        VOLUME     573792.799  3725599.244      -16.820
   LOCATION VOL20        VOLUME     573792.597  3725695.644      -16.620
   LOCATION VOL21        VOLUME     573890.309  3725695.354      -16.590
   LOCATION VOL22        VOLUME     573890.510  3725598.954      -16.930
   LOCATION VOL23        VOLUME     573987.932  3725598.925      -17.030
   LOCATION VOL24        VOLUME     573987.731  3725695.325      -16.730
   LOCATION VOL25        VOLUME     574085.442  3725695.035      -16.760
   LOCATION VOL26        VOLUME     574085.643  3725598.635      -17.100
   LOCATION VOL27        VOLUME     574183.066  3725598.605      -17.220
   LOCATION VOL28        VOLUME     574182.864  3725695.005      -16.880
   LOCATION VOL29        VOLUME     573895.419  3725502.137      -17.650
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   LOCATION VOL30        VOLUME     573895.620  3725405.737      -18.290
   LOCATION VOL31        VOLUME     573993.042  3725405.707      -18.630
   LOCATION VOL32        VOLUME     573992.841  3725502.107      -17.860
   LOCATION VOL33        VOLUME     574085.442  3725503.095      -17.950
   LOCATION VOL34        VOLUME     574085.643  3725406.695      -18.800
   LOCATION VOL35        VOLUME     574183.066  3725406.665      -18.970
   LOCATION VOL36        VOLUME     574182.864  3725503.066      -18.220
** Source Parameters **
   SRCPARAM VOL1         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL2         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL3         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL4         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL5         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL6         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL7         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL8         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL9         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL10        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL11        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL12        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL13        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL14        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL15        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL16        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL17        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL18        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL19        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL20        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL21        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL22        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL23        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL24        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL25        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL26        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL27        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL28        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL29        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL30        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL31        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL32        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL33        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL34        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL35        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL36        0.0177278428     5.000    22.640     1.400
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
```

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   EMISFACT VOL2         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL6         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

```
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL11        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL12        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
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   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL24        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL28        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

```
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

```
** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
****************************************
```

```
**
**
RE STARTING
   INCLUDED "16552-02 Const co.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE ..\KTRM_V11_trimmed.sfc
   PROFFILE ..\KTRM_V11_trimmed.PFL
   SURFDATA 3104 2017
   UAIRDATA 3190 2017
   PROFBASE -36.04 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
   RECTABLE 8 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "16552-02 Const co.AD\01H1GALL.PLT" 31
   PLOTFILE 8 ALL 1ST "16552-02 Const co.AD\08H1GALL.PLT" 32
   SUMMFILE "16552-02 Const co.sum"
OU FINISHED
**
**************************************
** Project Parameters
**************************************
** PROJCTN  CoordinateSystemUTM
** DESCPTN  UTM: Universal Transverse Mercator
** DATUM    North American Datum 1983
** DTMRGN   CONUS
** UNITS    m
** ZONE     11
** ZONEINX  0
**

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**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 13.0.0
** Lakes Environmental Software Inc.
** Date: 7/18/2025
** File: C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 Const
co.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02
   MODELOPT DFAULT CONC
   AVERTIME 1 8
   URBANOPT 2492442 Riverside_County
   POLLUTID CO
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "16552-02 Const co.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     573500.180  3725886.220      -15.810
   LOCATION VOL2         VOLUME     573500.381  3725789.820      -16.120
   LOCATION VOL3         VOLUME     573597.602  3725886.190      -16.050
   LOCATION VOL4         VOLUME     573597.803  3725789.790      -16.360
   LOCATION VOL5         VOLUME     573694.930  3725886.254      -16.110
   LOCATION VOL6         VOLUME     573695.131  3725789.853      -16.280
   LOCATION VOL7         VOLUME     573792.553  3725789.824      -16.410
   LOCATION VOL8         VOLUME     573792.352  3725886.224      -16.330
   LOCATION VOL9         VOLUME     573890.171  3725886.254      -15.450
   LOCATION VOL10        VOLUME     573890.372  3725789.853      -15.750
   LOCATION VOL11        VOLUME     573987.794  3725789.824      -15.210
   LOCATION VOL12        VOLUME     573987.593  3725886.224      -15.520
   LOCATION VOL13        VOLUME     574085.292  3725886.133      -15.630
   LOCATION VOL14        VOLUME     574085.493  3725789.733      -15.890
   LOCATION VOL15        VOLUME     574182.915  3725789.703      -16.000
   LOCATION VOL16        VOLUME     574182.714  3725886.103      -15.750
   LOCATION VOL17        VOLUME     573695.175  3725695.674      -16.510
   LOCATION VOL18        VOLUME     573695.376  3725599.274      -16.700
   LOCATION VOL19        VOLUME     573792.799  3725599.244      -16.820
   LOCATION VOL20        VOLUME     573792.597  3725695.644      -16.620
   LOCATION VOL21        VOLUME     573890.309  3725695.354      -16.590
   LOCATION VOL22        VOLUME     573890.510  3725598.954      -16.930
   LOCATION VOL23        VOLUME     573987.932  3725598.925      -17.030
   LOCATION VOL24        VOLUME     573987.731  3725695.325      -16.730
   LOCATION VOL25        VOLUME     574085.442  3725695.035      -16.760
   LOCATION VOL26        VOLUME     574085.643  3725598.635      -17.100
   LOCATION VOL27        VOLUME     574183.066  3725598.605      -17.220
   LOCATION VOL28        VOLUME     574182.864  3725695.005      -16.880
   LOCATION VOL29        VOLUME     573895.419  3725502.137      -17.650
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   LOCATION VOL30        VOLUME     573895.620  3725405.737      -18.290
   LOCATION VOL31        VOLUME     573993.042  3725405.707      -18.630
   LOCATION VOL32        VOLUME     573992.841  3725502.107      -17.860
   LOCATION VOL33        VOLUME     574085.442  3725503.095      -17.950
   LOCATION VOL34        VOLUME     574085.643  3725406.695      -18.800
   LOCATION VOL35        VOLUME     574183.066  3725406.665      -18.970
   LOCATION VOL36        VOLUME     574182.864  3725503.066      -18.220
** Source Parameters **
   SRCPARAM VOL1         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL2         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL3         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL4         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL5         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL6         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL7         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL8         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL9         0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL10        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL11        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL12        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL13        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL14        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL15        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL16        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL17        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL18        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL19        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL20        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL21        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL22        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL23        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL24        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL25        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL26        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL27        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL28        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL29        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL30        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL31        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL32        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL33        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL34        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL35        0.0177278428     5.000    22.640     1.400
   SRCPARAM VOL36        0.0177278428     5.000    22.640     1.400
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL2         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL6         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL11        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL12        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
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   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL24        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL28        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
****************************************
```

```
**
**
RE STARTING
   INCLUDED "16552-02 Const co.rou"
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
ME STARTING
   SURFFILE ..\KTRM_V11_trimmed.sfc
   PROFFILE ..\KTRM_V11_trimmed.PFL
   SURFDATA 3104 2017
   UAIRDATA 3190 2017
   PROFBASE -36.04 METERS
ME FINISHED
**
****************************************
** AERMOD Output Pathway
****************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
   RECTABLE 8 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "16552-02 Const co.AD\01H1GALL.PLT" 31
   PLOTFILE 8 ALL 1ST "16552-02 Const co.AD\08H1GALL.PLT" 32
   SUMMFILE "16552-02 Const co.sum"
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            3 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W340     676       PRBASE: Possible Error in PROFBASE Input:  Value is < 0
 PROFBASE
 ME W186     677       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold
 used           0.50
 ME W187     677       MEOPEN: ADJ_U* Option for Stable Low Winds used in
 AERMET

 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************

FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                   ***
 11:19:19

```

```
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                          ***     MODEL SETUP OPTIONS SUMMARY        ***
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - -

** Model Options Selected:
     * Model Uses Regulatory DEFAULT Options
     * Model Is Setup For Calculation of Average CONCentration Values.
     * NO GAS DEPOSITION Data Provided.
     * NO PARTICLE DEPOSITION Data Provided.
     * Model Uses NO DRY DEPLETION. DDPLETE  =  F
     * Model Uses NO WET DEPLETION. WETDPLT  =  F
     * Stack-tip Downwash.
     * Model Accounts for ELEVated Terrain Effects.
     * Use Calms Processing Routine.
     * Use Missing Data Processing Routine.
     * No Exponential Decay.
     * Model Uses URBAN Dispersion Algorithm for the SBL for    36 Source(s),
       for Total of    1 Urban Area(s):
  Urban Population =   2492442.0 ;  Urban Roughness Length =  1.000 m
     * Urban Roughness Length of 1.0 Meter Used.
     * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
     * CCVR_Sub - Meteorological data includes CCVR substitutions
     * TEMP_Sub - Meteorological data includes TEMP substitutions
     * Model Accepts FLAGPOLE Receptor . Heights.
     * The User Specified a Pollutant Type of: CO

**Model Calculates  2 Short Term Average(s) of:   1-HR   8-HR

**This Run Includes:     36 Source(s);       1 Source Group(s); and      22 Receptor(s)

               with:      0 POINT(s), including
                          0 POINTCAP(s) and      0 POINTHOR(s)
                and:     36 VOLUME source(s)
                and:      0 AREA type source(s)
                and:      0 LINE source(s)
                and:      0 RLINE/RLINEXT source(s)
                and:      0 OPENPIT source(s)
                and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                and:      0 SWPOINT source(s)


**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date:  22112

**Output Options Selected:
         Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
         Keyword)
         Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
         Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                m for Missing Hours
                                                                b for Both Calm and
                                                                Missing Hours

**Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =   -36.04 ;  Decay Coef.
=    0.000     ;  Rot. Angle =     0.0
                  Emission Units = GRAMS/SEC                                ;  Emission
                  Rate Unit Factor =   0.10000E+07
                  Output Units   = MICROGRAMS/M**3

**Approximate Storage Requirements of Model =      3.5 MB of RAM.
```

**Input Runstream File:
aermod.inp

**Output Print File:
aermod.out

**Detailed Error/Message File: 16552-02 Const co.err
**File for Summary of Results: 16552-02 Const co.sum
FF *** AERMOD - VERSION 24142 *** *** C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 *** 07/18/25
*** AERMET - VERSION 22112 ***
*** ***
11:19:19

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER INIT. PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	AIRCRAFT ELEV. (METERS)	BASE HEIGHT (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	SZ SOURCE SCALAR VARY BY
VOL1	0	0.17728E-01	573500.2	3725886.2	-15.8	5.00	22.64	1.40	YES HRDOW NO
VOL2	0	0.17728E-01	573500.4	3725789.8	-16.1	5.00	22.64	1.40	YES HRDOW NO
VOL3	0	0.17728E-01	573597.6	3725886.2	-16.1	5.00	22.64	1.40	YES HRDOW NO
VOL4	0	0.17728E-01	573597.8	3725789.8	-16.4	5.00	22.64	1.40	YES HRDOW NO
VOL5	0	0.17728E-01	573694.9	3725886.3	-16.1	5.00	22.64	1.40	YES HRDOW NO
VOL6	0	0.17728E-01	573695.1	3725789.9	-16.3	5.00	22.64	1.40	YES HRDOW NO
VOL7	0	0.17728E-01	573792.6	3725789.8	-16.4	5.00	22.64	1.40	YES HRDOW NO
VOL8	0	0.17728E-01	573792.4	3725886.2	-16.3	5.00	22.64	1.40	YES HRDOW NO
VOL9	0	0.17728E-01	573890.2	3725886.3	-15.5	5.00	22.64	1.40	YES HRDOW NO
VOL10	0	0.17728E-01	573890.4	3725789.9	-15.8	5.00	22.64	1.40	YES HRDOW NO
VOL11	0	0.17728E-01	573987.8	3725789.8	-15.2	5.00	22.64	1.40	YES HRDOW NO
VOL12	0	0.17728E-01	573987.6	3725886.2	-15.5	5.00	22.64	1.40	YES HRDOW NO
VOL13	0	0.17728E-01	574085.3	3725886.1	-15.6	5.00	22.64	1.40	YES HRDOW NO
VOL14	0	0.17728E-01	574085.5	3725789.7	-15.9	5.00	22.64	1.40	YES HRDOW NO
VOL15	0	0.17728E-01	574182.9	3725789.7	-16.0	5.00	22.64	1.40	YES HRDOW NO
VOL16	0	0.17728E-01	574182.7	3725886.1	-15.8	5.00	22.64	1.40	YES HRDOW NO
VOL17	0	0.17728E-01	573695.2	3725695.7	-16.5	5.00	22.64		

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      1.40     YES   HRDOW            NO
816   VOL18            0   0.17728E-01  573695.4 3725599.3   -16.7     5.00    22.64
      1.40     YES   HRDOW            NO
817   VOL19            0   0.17728E-01  573792.8 3725599.2   -16.8     5.00    22.64
      1.40     YES   HRDOW            NO
818   VOL20            0   0.17728E-01  573792.6 3725695.6   -16.6     5.00    22.64
      1.40     YES   HRDOW            NO
819   VOL21            0   0.17728E-01  573890.3 3725695.4   -16.6     5.00    22.64
      1.40     YES   HRDOW            NO
820   VOL22            0   0.17728E-01  573890.5 3725599.0   -16.9     5.00    22.64
      1.40     YES   HRDOW            NO
821   VOL23            0   0.17728E-01  573987.9 3725598.9   -17.0     5.00    22.64
      1.40     YES   HRDOW            NO
822   VOL24            0   0.17728E-01  573987.7 3725695.3   -16.7     5.00    22.64
      1.40     YES   HRDOW            NO
823   VOL25            0   0.17728E-01  574085.4 3725695.0   -16.8     5.00    22.64
      1.40     YES   HRDOW            NO
824   VOL26            0   0.17728E-01  574085.6 3725598.6   -17.1     5.00    22.64
      1.40     YES   HRDOW            NO
825   VOL27            0   0.17728E-01  574183.1 3725598.6   -17.2     5.00    22.64
      1.40     YES   HRDOW            NO
826   VOL28            0   0.17728E-01  574182.9 3725695.0   -16.9     5.00    22.64
      1.40     YES   HRDOW            NO
827   VOL29            0   0.17728E-01  573895.4 3725502.1   -17.7     5.00    22.64
      1.40     YES   HRDOW            NO
828   VOL30            0   0.17728E-01  573895.6 3725405.7   -18.3     5.00    22.64
      1.40     YES   HRDOW            NO
829   VOL31            0   0.17728E-01  573993.0 3725405.7   -18.6     5.00    22.64
      1.40     YES   HRDOW            NO
830   VOL32            0   0.17728E-01  573992.8 3725502.1   -17.9     5.00    22.64
      1.40     YES   HRDOW            NO
831   VOL33            0   0.17728E-01  574085.4 3725503.1   -17.9     5.00    22.64
      1.40     YES   HRDOW            NO
832   VOL34            0   0.17728E-01  574085.6 3725406.7   -18.8     5.00    22.64
      1.40     YES   HRDOW            NO
833   VOL35            0   0.17728E-01  574183.1 3725406.7   -19.0     5.00    22.64
      1.40     YES   HRDOW            NO
834   VOL36            0   0.17728E-01  574182.9 3725503.1   -18.2     5.00    22.64
      1.40     YES   HRDOW            NO
835   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***       07/18/25
836    *** AERMET - VERSION  22112 ***
       ***                                                                ***
       11:19:19
837
                                  PAGE   3
838    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
839
840
841                                          *** SOURCE IDs DEFINING SOURCE GROUPS ***
842
843    SRCGROUP ID                                          SOURCE IDs
844    -----------                                          ----------
845
846
847     ALL         VOL1         , VOL2         , VOL3         , VOL4         , VOL5         ,
       VOL6         , VOL7         , VOL8         ,
848
849                 VOL9         , VOL10        , VOL11        , VOL12        , VOL13        ,
                    VOL14        , VOL15        , VOL16        ,
850
851                 VOL17        , VOL18        , VOL19        , VOL20        , VOL21        ,
                    VOL22        , VOL23        , VOL24        ,
852
853                 VOL25        , VOL26        , VOL27        , VOL28        , VOL29        ,
                    VOL30        , VOL31        , VOL32        ,
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854
855              VOL33       , VOL34       , VOL35       , VOL36       ,
856  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
     Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
857   *** AERMET - VERSION  22112 ***
      ***                                                              ***
      11:19:19
858
                                PAGE   4
859   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
860
861
862                                        *** SOURCE IDs DEFINED AS URBAN SOURCES ***
863
864    URBAN ID   URBAN POP                                    SOURCE IDs
865    --------   ---------                                    ----------
866
867
868                2492442.   VOL1        , VOL2        , VOL3        , VOL4        ,
                   VOL5        , VOL6        , VOL7        ,
869   VOL8        ,
870
871              VOL9        , VOL10       , VOL11       , VOL12       , VOL13       ,
                 VOL14       , VOL15       , VOL16       ,
872
873              VOL17       , VOL18       , VOL19       , VOL20       , VOL21       ,
                 VOL22       , VOL23       , VOL24       ,
874
875              VOL25       , VOL26       , VOL27       , VOL28       , VOL29       ,
                 VOL30       , VOL31       , VOL32       ,
876
877              VOL33       , VOL34       , VOL35       , VOL36       ,
878  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
     Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
879   *** AERMET - VERSION  22112 ***
      ***                                                              ***
      11:19:19
880
                                PAGE   5
881   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
882
883                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
884
885   SOURCE ID = VOL1          ; SOURCE TYPE = VOLUME   :
886    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
887   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
888                                                 DAY OF WEEK = WEEKDAY
889      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
890      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
891     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
892                                                 DAY OF WEEK = SATURDAY
893      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
894      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
895     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
896                                                 DAY OF WEEK = SUNDAY
897      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
         .0000E+00    7  .0000E+00    8  .0000E+00
```

```
898       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
899       17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
          .0000E+00   23  .0000E+00   24  .0000E+00
900   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
901    *** AERMET - VERSION  22112 ***
       ***                                                                ***
       11:19:19
902
                                  PAGE   6
903    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
904
905                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
906
907    SOURCE ID = VOL2         ; SOURCE TYPE = VOLUME   :
908     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
909    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
910                                              DAY OF WEEK = WEEKDAY
911       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
912       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
913       17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
914                                              DAY OF WEEK = SATURDAY
915       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
916       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
917       17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
918                                              DAY OF WEEK = SUNDAY
919       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
920       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
921       17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
922   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
923    *** AERMET - VERSION  22112 ***
       ***                                                                ***
       11:19:19
924
                                  PAGE   7
925    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
926
927                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
928
929    SOURCE ID = VOL3         ; SOURCE TYPE = VOLUME   :
930     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
931    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
932                                              DAY OF WEEK = WEEKDAY
933       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
934       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
935       17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
          .0000E+00   23  .0000E+00   24  .0000E+00
```

```
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:19:19

                            PAGE   8
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL4         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:19:19

                            PAGE   9
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL5         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
```

```
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - -
```

```
     11:19:19
1012
                                PAGE  11
1013  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1014
1015                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1016
1017  SOURCE ID = VOL7         ; SOURCE TYPE = VOLUME   :
1018   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1019  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1020                                                DAY OF WEEK = WEEKDAY
1021     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
1022     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
1023    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1024                                                DAY OF WEEK = SATURDAY
1025     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1026     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1027    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1028                                                DAY OF WEEK = SUNDAY
1029     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1030     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1031    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1032  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1033   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       11:19:19
1034
                                PAGE  12
1035  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1036
1037                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1038
1039  SOURCE ID = VOL8         ; SOURCE TYPE = VOLUME   :
1040   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1041  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1042                                                DAY OF WEEK = WEEKDAY
1043     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
1044     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
1045    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1046                                                DAY OF WEEK = SATURDAY
1047     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1048     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1049    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1050                                                DAY OF WEEK = SUNDAY
```

```
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:19:19

                              PAGE  13
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL9         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
     .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:19:19

                              PAGE  14
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL10        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
     .1000E+01   15  .0000E+00   16  .0000E+00
```

```
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:19:19

                             PAGE  15
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL11        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .1000E+01    8  .1000E+01
       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
       .1000E+01   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:19:19

                             PAGE  16
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *
```

```
 SOURCE ID = VOL12        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
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                            PAGE  17
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL13        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
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1165    *** AERMET - VERSION  22112 ***
        ***                                                                    ***
        11:19:19
1166
                                    PAGE  18
1167    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1168
1169                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1170
1171    SOURCE ID = VOL14        ; SOURCE TYPE = VOLUME   :
1172     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1173    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - - - -
1174                                                  DAY OF WEEK = WEEKDAY
1175       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1176       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1177      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1178                                                  DAY OF WEEK = SATURDAY
1179       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1180       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1181      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1182                                                  DAY OF WEEK = SUNDAY
1183       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1184       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1185      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1186    FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
        Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1187     *** AERMET - VERSION  22112 ***
         ***                                                                   ***
         11:19:19
1188
                                    PAGE  19
1189    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1190
1191                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1192
1193     SOURCE ID = VOL15        ; SOURCE TYPE = VOLUME   :
1194      HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
          SCALAR   HOUR   SCALAR   HOUR   SCALAR
1195    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - - - -
1196                                                  DAY OF WEEK = WEEKDAY
1197       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1198       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1199      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1200                                                  DAY OF WEEK = SATURDAY
1201       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1202       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1203      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
```

```
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
      .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
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                            PAGE  20
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL16        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .1000E+01    8  .1000E+01
       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
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                            PAGE  21
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL17        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
      .0000E+00    7  .1000E+01    8  .1000E+01
```

```
 9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
 .1000E+01   15  .0000E+00   16  .0000E+00
17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
 .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
 1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
 .0000E+00    7  .0000E+00    8  .0000E+00
 9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
 .0000E+00   15  .0000E+00   16  .0000E+00
17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
 .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
 1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
 .0000E+00    7  .0000E+00    8  .0000E+00
 9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
 .0000E+00   15  .0000E+00   16  .0000E+00
17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
 .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:19:19

                            PAGE  22
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL18        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
 1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
 .0000E+00    7  .1000E+01    8  .1000E+01
 9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
 .1000E+01   15  .0000E+00   16  .0000E+00
17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
 .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
 1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
 .0000E+00    7  .0000E+00    8  .0000E+00
 9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
 .0000E+00   15  .0000E+00   16  .0000E+00
17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
 .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
 1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
 .0000E+00    7  .0000E+00    8  .0000E+00
 9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
 .0000E+00   15  .0000E+00   16  .0000E+00
17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
 .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:19:19

                            PAGE  23
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
```

```
                    WEEK (HRDOW) *
1280
1281   SOURCE ID = VOL19        ; SOURCE TYPE = VOLUME   :
1282    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
        SCALAR   HOUR   SCALAR   HOUR   SCALAR
1283   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1284                                              DAY OF WEEK = WEEKDAY
1285      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1286      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
1287     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1288                                              DAY OF WEEK = SATURDAY
1289      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1290      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1291     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1292                                              DAY OF WEEK = SUNDAY
1293      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1294      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1295     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1296   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
       Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1297    *** AERMET - VERSION  22112 ***
        ***                                                                    ***
        11:19:19
1298
                                  PAGE  24
1299   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1300
1301                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1302
1303   SOURCE ID = VOL20        ; SOURCE TYPE = VOLUME   :
1304    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
        SCALAR   HOUR   SCALAR   HOUR   SCALAR
1305   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1306                                              DAY OF WEEK = WEEKDAY
1307      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1308      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
1309     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1310                                              DAY OF WEEK = SATURDAY
1311      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1312      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1313     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1314                                              DAY OF WEEK = SUNDAY
1315      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1316      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1317     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
          .0000E+00   23  .0000E+00   24  .0000E+00
```

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1318  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1319   *** AERMET - VERSION  22112 ***
       ***                                                                ***
       11:19:19
1320
                                  PAGE  25
1321   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1322
1323                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1324
1325   SOURCE ID = VOL21        ; SOURCE TYPE = VOLUME   :
1326    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1327   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1328                                              DAY OF WEEK = WEEKDAY
1329      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1330      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
1331     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1332                                              DAY OF WEEK = SATURDAY
1333      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1334      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1335     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1336                                              DAY OF WEEK = SUNDAY
1337      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1338      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1339     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1340  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1341   *** AERMET - VERSION  22112 ***
       ***                                                                ***
       11:19:19
1342
                                  PAGE  26
1343   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1344
1345                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1346
1347   SOURCE ID = VOL22        ; SOURCE TYPE = VOLUME   :
1348    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1349   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1350                                              DAY OF WEEK = WEEKDAY
1351      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1352      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
1353     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1354                                              DAY OF WEEK = SATURDAY
1355      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1356      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
```

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 .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:19:19

                            PAGE  27
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL23        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
  .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:19:19

                            PAGE  28
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL24        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
```

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1395      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1396      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
1397     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1398                                              DAY OF WEEK = SATURDAY
1399      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1400      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1401     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1402                                              DAY OF WEEK = SUNDAY
1403      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1404      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1405     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1406 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
     Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1407  *** AERMET - VERSION  22112 ***
      ***                                                                    ***
      11:19:19
1408
                                PAGE  29
1409  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1410
1411                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1412
1413  SOURCE ID = VOL25        ; SOURCE TYPE = VOLUME   :
1414   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
      SCALAR   HOUR   SCALAR   HOUR   SCALAR
1415  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1416                                              DAY OF WEEK = WEEKDAY
1417      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1418      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
1419     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1420                                              DAY OF WEEK = SATURDAY
1421      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1422      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1423     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1424                                              DAY OF WEEK = SUNDAY
1425      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1426      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1427     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1428 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
     Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1429  *** AERMET - VERSION  22112 ***
      ***                                                                    ***
      11:19:19
1430
                                PAGE  30
1431  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
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1432
1433                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1434
1435    SOURCE ID = VOL26        ; SOURCE TYPE = VOLUME   :
1436     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1437    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1438                                                DAY OF WEEK = WEEKDAY
1439       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1440       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1441      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1442                                                DAY OF WEEK = SATURDAY
1443       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1444       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1445      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1446                                                DAY OF WEEK = SUNDAY
1447       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1448       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1449      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1450    FE *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
        Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1451     *** AERMET - VERSION  22112 ***
         ***                                                                    ***
         11:19:19
1452
                                    PAGE  31
1453    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1454
1455                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1456
1457    SOURCE ID = VOL27        ; SOURCE TYPE = VOLUME   :
1458     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1459    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1460                                                DAY OF WEEK = WEEKDAY
1461       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1462       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1463      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1464                                                DAY OF WEEK = SATURDAY
1465       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1466       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1467      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1468                                                DAY OF WEEK = SUNDAY
1469       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1470       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
           .0000E+00   15  .0000E+00   16  .0000E+00
```

```
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                ***
 11:19:19

                              PAGE  32
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL28        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                ***
 11:19:19

                              PAGE  33
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL29        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
```

```
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:19:19

                             PAGE  34
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL30        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:19:19

                             PAGE  35
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL31        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
```

```
- - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:19:19

                            PAGE  36
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL32        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:19:19
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                                PAGE  37
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                  WEEK (HRDOW) *

SOURCE ID = VOL33        ; SOURCE TYPE = VOLUME   :
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:19:19

                                PAGE  38
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                  WEEK (HRDOW) *

SOURCE ID = VOL34        ; SOURCE TYPE = VOLUME   :
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
   .0000E+00    7  .0000E+00    8  .0000E+00
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1624       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1625      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
           .0000E+00   23  .0000E+00   24  .0000E+00
1626  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1627   *** AERMET - VERSION  22112 ***
       ***                                                                ***
       11:19:19
1628
                                  PAGE  39
1629   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1630
1631                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1632
1633   SOURCE ID = VOL35        ; SOURCE TYPE = VOLUME   :
1634    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1635   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1636                                                DAY OF WEEK = WEEKDAY
1637       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1638       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1639      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1640                                                DAY OF WEEK = SATURDAY
1641       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1642       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1643      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1644                                                DAY OF WEEK = SUNDAY
1645       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1646       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1647      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1648  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1649   *** AERMET - VERSION  22112 ***
       ***                                                                ***
       11:19:19
1650
                                  PAGE  40
1651   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1652
1653                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1654
1655   SOURCE ID = VOL36        ; SOURCE TYPE = VOLUME   :
1656    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1657   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1658                                                DAY OF WEEK = WEEKDAY
1659       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1660       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1661      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
           .0000E+00   23  .0000E+00   24  .0000E+00
```

Item 2.

```
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:19:19

                            PAGE  41
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                        *** DISCRETE CARTESIAN RECEPTORS ***
                                      (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                   (METERS)

     ( 574106.6, 3725973.2,     -15.2,    2651.3,       2.0);         ( 574279.0,
     3725910.5,     -15.9,    2651.3,       2.0);
     ( 574204.4, 3725350.5,     -19.1,    2651.3,       2.0);         ( 573655.6,
     3725533.6,     -16.7,    2651.3,       2.0);
     ( 573199.4, 3725824.6,     -14.8,    2651.3,       2.0);         ( 573815.9,
     3726049.2,     -13.7,    2651.3,       2.0);
     ( 574057.4, 3725989.2,     -14.7,    2651.3,       2.0);         ( 574023.1,
     3725980.7,     -14.6,    2651.3,       2.0);
     ( 574346.5, 3725650.9,     -17.5,    2651.3,       2.0);         ( 574313.0,
     3725545.0,     -17.4,    2651.3,       2.0);
     ( 574206.8, 3725308.8,     -19.7,    2651.3,       2.0);         ( 574038.4,
     3725331.2,     -18.7,    2651.3,       2.0);
     ( 574209.1, 3725258.2,     -19.7,    2651.3,       2.0);         ( 573785.2,
     3725289.0,     -17.4,    2651.3,       2.0);
     ( 573482.6, 3725346.8,     -16.6,    2651.3,       2.0);         ( 573666.9,
     3725489.5,     -17.0,    2651.3,       2.0);
     ( 573580.6, 3725595.5,     -16.2,    2651.3,       2.0);         ( 573477.6,
     3725543.7,     -16.2,    2651.3,       2.0);
     ( 573474.2, 3725503.2,     -16.5,    2651.3,       2.0);         ( 573229.4,
     3725847.4,     -14.7,    2651.3,       2.0);
     ( 573040.9, 3725971.2,     -13.5,    2651.3,       2.0);         ( 573120.2,
     3725973.9,     -13.8,    2651.3,       2.0);
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:19:19

                            PAGE  42
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                        *** METEOROLOGICAL DAYS SELECTED FOR
                                        PROCESSING ***
                                                   (1=YES; 0=NO)

           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
           1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1
           1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
```

```
1700              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                  1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1701              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1
                  1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1702              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                  1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1703              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                  1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1704              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                  1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1705              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1706
1707                  NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT
                      IS INCLUDED IN THE DATA FILE.
1708
1709
1710
1711                                  *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED
                                      CATEGORIES ***
1712                                                  (METERS/SEC)
1713
1714                                                 1.54,   3.09,   5.14,   8.23,  10.80,
1715  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1716   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       11:19:19
1717
                                    PAGE  43
1718   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1719
1720                                  *** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA
                                      ***
1721
1722       Surface file:
           ..\KTRM_V11_trimmed.sfc
           Met Version:  22112
1723       Profile file:
           ..\KTRM_V11_trimmed.PFL
1724       Surface format:
           FREE

1725       Profile format:
           FREE

1726       Surface station no.:     3104                 Upper air station no.:     3190
1727                       Name: UNKNOWN                                  Name:
                           UNKNOWN
1728                       Year:   2017                                   Year:   2017
1729
1730    First 24 hours of scalar data
1731    YR MO DY JDY HR     H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALBEDO
        REF WS   WD     HT  REF TA     HT
1732  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - -
1733    17 01 01   1 01  -21.0  0.211 -9.000 -9.000 -999.  233.     49.1  0.06   2.53   1.00
        2.86  321.   10.1  284.8    2.0
1734    17 01 01   1 02  -48.7  0.490 -9.000 -9.000 -999.  824.    264.4  0.14   2.53   1.00
        5.36  358.   10.1  285.3    2.0
1735    17 01 01   1 03  -39.8  0.400 -9.000 -9.000 -999.  613.    175.9  0.06   2.53   1.00
        5.36  294.   10.1  284.8    2.0
1736    17 01 01   1 04  -47.4  0.477 -9.000 -9.000 -999.  790.    250.2  0.14   2.53   1.00
        5.22  335.   10.1  284.8    2.0
1737    17 01 01   1 05  -55.1  0.554 -9.000 -9.000 -999.  987.    337.1  0.06   2.53   1.00
        7.20  327.   10.1  284.2    2.0
1738    17 01 01   1 06  -30.8  0.309 -9.000 -9.000 -999.  472.    104.8  0.14   2.53   1
```

```
      3.44  335.   10.1  283.8    2.0
1739  17 01 01   1 07  -15.6  0.170 -9.000 -9.000 -999.  191.     31.7  0.06   2.53
      2.33  329.   10.1  283.8    2.0
1740  17 01 01   1 08   -7.2  0.185 -9.000 -9.000 -999.  191.     79.0  0.06   2.53   0.50
      2.47  326.   10.1  285.3    2.0
1741  17 01 01   1 09   46.3  0.265  0.707  0.005  276.  326.    -36.1  0.06   2.53   0.31
      3.00  303.   10.1  285.9    2.0
1742  17 01 01   1 10  113.8  0.336  1.418  0.005  907.  468.    -30.2  0.06   2.53   0.24
      3.76  300.   10.1  288.1    2.0
1743  17 01 01   1 11  159.2  0.526  1.708  0.005 1133.  915.    -82.7  0.06   2.53   0.22
      6.27  311.   10.1  289.2    2.0
1744  17 01 01   1 12  179.8  0.454  1.860  0.005 1296.  739.    -47.0  0.06   2.53   0.21
      5.24  315.   10.1  289.8    2.0
1745  17 01 01   1 13  175.0  0.302  1.886  0.005 1387.  416.    -14.2  0.06   2.53   0.21
      3.20  297.   10.1  290.3    2.0
1746  17 01 01   1 14  145.9  0.251  1.851  0.005 1573.  302.     -9.7  0.06   2.53   0.23
      2.50  322.   10.1  292.0    2.0
1747  17 01 01   1 15   91.5  0.235  1.599  0.005 1617.  273.    -12.8  0.06   2.53   0.26
      2.42  316.   10.1  291.4    2.0
1748  17 01 01   1 16   18.8  0.259  0.950  0.005 1643.  316.    -83.0  0.14   2.53   0.36
      2.57  338.   10.1  291.4    2.0
1749  17 01 01   1 17  -41.4  0.440 -9.000 -9.000 -999.  701.    213.3  0.14   2.53   0.66
      4.83  344.   10.1  288.8    2.0
1750  17 01 01   1 18  -40.2  0.408 -9.000 -9.000 -999.  626.    182.7  0.14   2.53   1.00
      4.49  356.   10.1  287.5    2.0
1751  17 01 01   1 19  -33.3  0.337 -9.000 -9.000 -999.  473.    124.8  0.14   2.53   1.00
      3.74  352.   10.1  287.0    2.0
1752  17 01 01   1 20  -19.3  0.194 -9.000 -9.000 -999.  219.     41.4  0.06   2.53   1.00
      2.64  326.   10.1  285.3    2.0
1753  17 01 01   1 21  -29.0  0.291 -9.000 -9.000 -999.  377.     93.2  0.14   2.53   1.00
      3.25  336.   10.1  285.3    2.0
1754  17 01 01   1 22  -11.2  0.142 -9.000 -9.000 -999.  145.     23.3  0.06   2.53   1.00
      2.01  272.   10.1  283.8    2.0
1755  17 01 01   1 23  -25.8  0.259 -9.000 -9.000 -999.  316.     73.6  0.06   2.53   1.00
      3.47  301.   10.1  285.9    2.0
1756  17 01 01   1 24  -13.9  0.162 -9.000 -9.000 -999.  161.     29.0  0.09   2.53   1.00
      2.05  250.   10.1  283.1    2.0
1757
1758
1759   First hour of profile data
1760   YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
1761   17 01 01 01   10.1 1  321.    2.86   284.9   99.0  -99.00  -99.00
1762
1763   F indicates top of profile (=1) or below (=0)
1764 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
     Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***       07/18/25
1765   *** AERMET - VERSION  22112 ***
       ***                                                              ***
       11:19:19
1766
                                  PAGE  44
1767   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1768
1769                              *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION   VALUES
                                  FOR SOURCE GROUP:  ALL      ***
1770                                  INCLUDING SOURCE(S):     VOL1        , VOL2        ,
                                      VOL3        , VOL4        , VOL5        ,
1771                  VOL6        , VOL7        , VOL8        , VOL9        , VOL10       ,
                      VOL11       , VOL12       , VOL13       ,
1772                  VOL14       , VOL15       , VOL16       , VOL17       , VOL18       ,
                      VOL19       , VOL20       , VOL21       ,
1773                  VOL22       , VOL23       , VOL24       , VOL25       , VOL26       ,
                      VOL27       , VOL28       ,  . . .      ,
1774
1775                                        *** DISCRETE CARTESIAN RECEPTOR POINT
1776
```

```
                                    ** CONC OF CO       IN
                                    MICROGRAMS/M**3

     X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
     Y-COORD (M)        CONC     (YYMMDDHH)
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - -
       574106.64   3725973.24       18.78731  (17011107)               574278.99
       3725910.47       17.73112  (21011407)
       574204.36   3725350.47       28.29159  (19011407)               573655.61
       3725533.56       19.08660  (18020107)
       573199.43   3725824.57        8.86063  (17012308)               573815.91
       3726049.22       14.24122  (18022207)
       574057.43   3725989.22       18.08834  (21012507)               574023.10
       3725980.72       18.83159  (21012507)
       574346.45   3725650.86       19.48433  (21020107)               574312.95
       3725545.02       21.36397  (19012807)
       574206.77   3725308.84       22.37394  (19011407)               574038.43
       3725331.17       24.62753  (18010307)
       574209.11   3725258.17       18.53320  (18010307)               573785.25
       3725289.00       10.50195  (21020407)
       573482.56   3725346.84        8.25413  (22020307)               573666.90
       3725489.52       14.83961  (21012208)
       573580.56   3725595.53       18.54312  (18020107)               573477.56
       3725543.69       12.75618  (18020107)
       573474.22   3725503.19       11.91953  (22020307)               573229.37
       3725847.44        9.13853  (21122808)
       573040.93   3725971.18        7.24435  (17101907)               573120.15
       3725973.92        7.17318  (17101907)
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***       07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                            ***
 11:19:19

                            PAGE  45
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                            *** THE   1ST HIGHEST  8-HR AVERAGE CONCENTRATION   VALUES
                            FOR SOURCE GROUP:  ALL      ***
                                INCLUDING SOURCE(S):     VOL1        , VOL2        ,
                                VOL3        , VOL4        , VOL5        ,
               VOL6        , VOL7        , VOL8        , VOL9        , VOL10       ,
               VOL11       , VOL12       , VOL13       ,
               VOL14       , VOL15       , VOL16       , VOL17       , VOL18       ,
               VOL19       , VOL20       , VOL21       ,
               VOL22       , VOL23       , VOL24       , VOL25       , VOL26       ,
               VOL27       , VOL28       ,  . . .      ,

                                  *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                    ** CONC OF CO       IN
                                    MICROGRAMS/M**3                          **

     X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
     Y-COORD (M)        CONC     (YYMMDDHH)
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - -
       574106.64   3725973.24       5.16848c (21012208)               574278.99
       3725910.47       4.47270c (21012208)
       574204.36   3725350.47       8.56813  (17011316)               573655.61
       3725533.56       4.81963c (21012208)
       573199.43   3725824.57       1.75152  (21122808)               573815.91
       3726049.22       3.24833c (21012208)
       574057.43   3725989.22       4.74617c (21012208)               574023.10
       3725980.72       5.14300c (21012208)
```

```
574346.45   3725650.86        4.16504  (22120508)                574312.95
3725545.02        4.83607  (22120508)
574206.77   3725308.84        5.62904m (22122108)                574038.4
3725331.17        6.52760m (22122108)
574209.11   3725258.17        4.61599m (22122108)                573785.25
3725289.00        2.64395c (21012208)
573482.56   3725346.84        1.54869c (21012208)                573666.90
3725489.52        3.91923c (21012208)
573580.56   3725595.53        4.02212c (21012208)                573477.56
3725543.69        2.35208  (17010608)
573474.22   3725503.19        2.11077c (21012208)                573229.37
3725847.44        1.84603  (21122808)
573040.93   3725971.18        1.38293  (21120908)                573120.15
3725973.92        1.65170  (21120908)
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                ***
 11:19:19

                              PAGE  46
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                          *** THE SUMMARY OF HIGHEST  1-HR RESULTS
                                          ***


                                   ** CONC OF CO       IN
                                   MICROGRAMS/M**3                          **


                                                  DATE

                                                    NETWORK
GROUP ID                           AVERAGE CONC     (YYMMDDHH)             RECEPTOR  (XR,
YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS      28.29159  ON 19011407: AT (  574204.36,
3725350.47,   -19.13,  2651.27,    2.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                ***
 11:19:19

                              PAGE  47
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                          *** THE SUMMARY OF HIGHEST  8-HR RESULTS
                                          ***


                                   ** CONC OF CO       IN
                                   MICROGRAMS/M**3                          **


                                                  DATE
```

```
                                                                NETWORK
GROUP ID                          AVERAGE CONC     (YYMMDDHH)             RECEPTOR (X, Y,
YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS       8.56813  ON 17011316: AT (  574204.36,
3725350.47,   -19.13,  2651.27,    2.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:19:19

                             PAGE  48
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of          251 Warning Message(s)
 A Total of         1671 Informational Message(s)

 A Total of        43800 Hours Were Processed

 A Total of          763 Calm Hours Identified

 A Total of          908 Missing Hours Identified (  2.07 Percent)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W340     676       PRBASE: Possible Error in PROFBASE Input:  Value is < 0
 PROFBASE
 ME W186     677       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold
 used           0.50
 ME W187     677       MEOPEN: ADJ_U* Option for Stable Low Winds used in
 AERMET
 CN W733      56         AVER: 8-hr avg, < 6 hours of data, calms policy used.
 2017010308
 CN W733     232         AVER: 8-hr avg, < 6 hours of data, calms policy used.
 2017011016
 CN W733    1168         AVER: 8-hr avg, < 6 hours of data, calms policy used.
 2017021816
 CN W733    1960         AVER: 8-hr avg, < 6 hours of data, calms policy used.
 2017032316
 CN W733    1984         AVER: 8-hr avg, < 6 hours of data, calms policy used.
 2017032416
 CN W733    2000         AVER: 8-hr avg, < 6 hours of data, calms policy used.
 2017032508
 CN W733    2032         AVER: 8-hr avg, < 6 hours of data, calms policy used.
 2017032616
 CN W733    2184         AVER: 8-hr avg, < 6 hours of data, calms policy used.
 2017040124
 CN W733    3832         AVER: 8-hr avg, < 6 hours of data, calms policy used.
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      2017060916
1899  CN W733    5128        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017080216
1900  CN W733    5568        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017082024
1901  CN W733    5632        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017082316
1902  CN W733    6040        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017090916
1903  CN W733    6048        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017090924
1904  CN W733    6136        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017091316
1905  CN W733    6304        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017092016
1906  CN W733    6496        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017092816
1907  CN W733    6784        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017101016
1908  CN W733    6904        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017101516
1909  CN W733    6960        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017101724
1910  CN W733    6968        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017101808
1911  CN W733    8728        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017123016
1912  CN W733    8736        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2017123024
1913  CN W733    9096        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018011424
1914  CN W733    9480        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018013024
1915  CN W733    9704        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018020908
1916  CN W733    9784        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018021216
1917  CN W733    9824        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018021408
1918  CN W733    9904        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018021716
1919  CN W733    9992        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018022108
1920  CN W733   10040        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018022308
1921  CN W733   10072        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018022416
1922  CN W733   10096        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018022516
1923  CN W733   10200        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018030124
1924  CN W733   10232        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018030308
1925  CN W733   10328        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018030708
1926  CN W733   10352        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018030808
1927  CN W733   10360        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018030816
1928  CN W733   10368        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018030824
1929  CN W733   10448        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018031208
1930  CN W733   10456        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2018031216
1931  CN W733   10624        AVER: 8-hr avg, < 6 hours of data, calms policy used.
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2018031916
1932 CN W733 12392 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2018060108
1933 CN W733 12400 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2018060116
1934 CN W733 14488 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2018082716
1935 CN W733 15888 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2018102424
1936 CN W733 15896 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2018102508
1937 CN W733 16392 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2018111424
1938 CN W733 16696 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2018112716
1939 CN W733 16704 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2018112724
1940 CN W733 16712 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2018112808
1941 CN W733 16720 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2018112816
1942 CN W733 18544 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019021216
1943 CN W733 18904 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019022716
1944 CN W733 18952 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019030116
1945 CN W733 19048 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019030516
1946 CN W733 19056 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019030524
1947 CN W733 19136 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019030908
1948 CN W733 19168 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019031016
1949 CN W733 19192 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019031116
1950 CN W733 19208 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019031208
1951 CN W733 19216 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019031216
1952 CN W733 19336 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019031716
1953 CN W733 19376 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019031908
1954 CN W733 19408 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019032016
1955 CN W733 19424 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019032108
1956 CN W733 19432 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019032116
1957 CN W733 19456 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019032216
1958 CN W733 19480 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019032316
1959 CN W733 19504 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019032416
1960 CN W733 19512 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019032424
1961 CN W733 19528 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019032516
1962 CN W733 19552 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019032616
1963 CN W733 19560 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2019032624
1964 CN W733 19568 AVER: 8-hr avg, < 6 hours of data, calms policy used.

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      2019032708
1965  CN W733   19576        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019032716
1966  CN W733   19648        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019033016
1967  CN W733   19656        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019033024
1968  CN W733   20000        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019041408
1969  CN W733   20080        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019041716
1970  CN W733   20096        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019041808
1971  CN W733   20104        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019041816
1972  CN W733   20320        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019042716
1973  CN W733   20344        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019042816
1974  CN W733   20416        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019050116
1975  CN W733   20560        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019050716
1976  CN W733   20704        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019051316
1977  CN W733   20712        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019051324
1978  CN W733   20784        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019051624
1979  CN W733   20840        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019051908
1980  CN W733   20848        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019051916
1981  CN W733   20856        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019051924
1982  CN W733   20936        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019052308
1983  CN W733   21232        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019060416
1984  CN W733   21256        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019060516
1985  CN W733   21296        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019060708
1986  CN W733   21328        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019060816
1987  CN W733   21360        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019060924
1988  CN W733   21584        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019061908
1989  CN W733   21592        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019061916
1990  CN W733   21704        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019062408
1991  CN W733   21712        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019062416
1992  CN W733   21752        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019062608
1993  CN W733   21880        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019070116
1994  CN W733   21904        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019070216
1995  CN W733   21976        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019070516
1996  CN W733   22016        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019070708
1997  CN W733   22064        AVER: 8-hr avg, < 6 hours of data, calms policy used.
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      2019070908
1998  CN W733   22072        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019070916
1999  CN W733   22120        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019071116
2000  CN W733   22184        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019071408
2001  CN W733   22192        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019071416
2002  CN W733   22840        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019081016
2003  CN W733   23192        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019082508
2004  CN W733   23392        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019090216
2005  CN W733   23416        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019090316
2006  CN W733   23488        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019090616
2007  CN W733   23536        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019090816
2008  CN W733   23560        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019090916
2009  CN W733   23672        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019091408
2010  CN W733   23696        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019091508
2011  CN W733   23752        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019091716
2012  CN W733   23896        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019092316
2013  CN W733   23992        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019092716
2014  CN W733   24016        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019092816
2015  CN W733   24040        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019092916
2016  CN W733   24200        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019100608
2017  CN W733   24208        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019100616
2018  CN W733   24216        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019100624
2019  CN W733   24248        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019100808
2020  CN W733   24280        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019100916
2021  CN W733   24400        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019101416
2022  CN W733   24448        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019101616
2023  CN W733   24568        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019102116
2024  CN W733   24808        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019103116
2025  CN W733   25576        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019120216
2026  CN W733   26280        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2019123124
2027  MX W450   26281      CHKDAT: Record Out of Sequence in Meteorological File at:
      21010101
2028  MX W450   26281      CHKDAT: Record Out of Sequence in Meteorological File at:    1
      year gap
2029  CN W733   26488        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021010916
2030  CN W733   26512        AVER: 8-hr avg, < 6 hours of data, calms policy used.
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      2021011016
2031  CN W733   26536        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021011116
2032  CN W733   26560        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021011216
2033  CN W733   26776        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021012116
2034  CN W733   26792        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021012208
2035  CN W733   26824        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021012316
2036  CN W733   26848        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021012416
2037  CN W733   26872        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021012516
2038  CN W733   26992        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021013016
2039  CN W733   27000        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021013024
2040  CN W733   27016        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021013116
2041  CN W733   27024        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021013124
2042  CN W733   27176        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021020708
2043  CN W733   28024        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021031416
2044  CN W733   28216        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021032216
2045  CN W733   28408        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021033016
2046  CN W733   28504        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021040316
2047  CN W733   28576        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021040616
2048  CN W733   28624        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021040816
2049  CN W733   28664        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021041008
2050  CN W733   28672        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021041016
2051  CN W733   28712        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021041208
2052  CN W733   28960        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021042216
2053  CN W733   28984        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021042316
2054  CN W733   29008        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021042416
2055  CN W733   29960        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021060308
2056  CN W733   29968        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021060316
2057  CN W733   30056        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021060708
2058  CN W733   30064        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021060716
2059  CN W733   30400        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021062116
2060  CN W733   30496        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021062516
2061  CN W733   30568        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021062816
2062  CN W733   30752        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021070608
2063  CN W733   30760        AVER: 8-hr avg, < 6 hours of data, calms policy used.
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      2021070616
2064  CN W733   30792        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021070724
2065  CN W733   30800        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021070808
2066  CN W733   30808        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021070816
2067  CN W733   31496        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021080608
2068  CN W733   31504        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021080616
2069  CN W733   31544        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021080808
2070  CN W733   31552        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021080816
2071  CN W733   31624        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021081116
2072  CN W733   31648        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021081216
2073  CN W733   31728        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021081524
2074  CN W733   32128        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021090116
2075  CN W733   32992        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021100716
2076  CN W733   33016        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021100816
2077  CN W733   33040        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021100916
2078  CN W733   34544        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021121108
2079  CN W733   34568        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021121208
2080  CN W733   34584        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021121224
2081  CN W733   34592        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021121308
2082  CN W733   34664        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2021121608
2083  CN W733   35104        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022010316
2084  CN W733   35800        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022020116
2085  CN W733   36328        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022022316
2086  CN W733   36648        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022030824
2087  CN W733   37192        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022033116
2088  CN W733   37264        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022040316
2089  CN W733   37792        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022042516
2090  CN W733   37960        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022050216
2091  CN W733   38248        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022051416
2092  CN W733   38512        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022052516
2093  CN W733   38960        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022061308
2094  CN W733   38968        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022061316
2095  CN W733   38992        AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022061416
2096  CN W733   39272        AVER: 8-hr avg, < 6 hours of data, calms policy used.
```

2022062608
2097 CN W733 40384 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022081116
2098 CN W733 40928 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022090308
2099 CN W733 40960 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022090416
2100 CN W733 41080 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022090916
2101 CN W733 41088 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022090924
2102 CN W733 41096 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022091008
2103 CN W733 41104 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022091016
2104 CN W733 41112 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022091024
2105 CN W733 41120 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022091108
2106 CN W733 41152 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022091216
2107 CN W733 41224 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022091516
2108 CN W733 41392 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022092216
2109 CN W733 41400 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022092224
2110 CN W733 41408 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022092308
2111 CN W733 41544 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022092824
2112 CN W733 41552 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022092908
2113 CN W733 42616 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022111216
2114 CN W733 42632 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022111308
2115 CN W733 42640 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022111316
2116 CN W733 42664 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022111416
2117 CN W733 42688 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022111516
2118 CN W733 42736 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022111716
2119 CN W733 42808 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022112016
2120 CN W733 42880 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022112316
2121 CN W733 42888 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022112324
2122 CN W733 42896 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022112408
2123 CN W733 42968 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022112708
2124 CN W733 43104 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022120224
2125 CN W733 43120 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022120316
2126 CN W733 43216 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022120716
2127 CN W733 43256 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022120908
2128 CN W733 43264 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2022120916
2129 CN W733 43272 AVER: 8-hr avg, < 6 hours of data, calms policy used.

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      2022120924
2130  CN W733   43280         AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022121008
2131  CN W733   43288         AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022121016
2132  CN W733   43448         AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022121708
2133  CN W733   43512         AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022121924
2134  CN W733   43520         AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022122008
2135  CN W733   43704         AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022122724
2136  CN W733   43728         AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022122824
2137  CN W733   43736         AVER: 8-hr avg, < 6 hours of data, calms policy used.
      2022122908
2138
2139     ************************************
2140     *** AERMOD Finishes Successfully ***
2141     ************************************
2142
2143
```

```
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 13.0.0
** Lakes Environmental Software Inc.
** Date: 7/17/2025
** File: C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const NOx\16552-02 Const
NOx.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02
   MODELOPT DFAULT CONC
   AVERTIME 1
   URBANOPT 2492442 Riverside_County
   POLLUTID NOX
   RUNORNOT RUN
   ERRORFIL "16552-02 Const NOx.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     573500.180  3725886.220      -15.810
   LOCATION VOL2         VOLUME     573500.381  3725789.820      -16.120
   LOCATION VOL3         VOLUME     573597.602  3725886.190      -16.050
   LOCATION VOL4         VOLUME     573597.803  3725789.790      -16.360
   LOCATION VOL5         VOLUME     573694.930  3725886.254      -16.110
   LOCATION VOL6         VOLUME     573695.131  3725789.853      -16.280
   LOCATION VOL7         VOLUME     573792.553  3725789.824      -16.410
   LOCATION VOL8         VOLUME     573792.352  3725886.224      -16.330
   LOCATION VOL9         VOLUME     573890.171  3725886.254      -15.450
   LOCATION VOL10        VOLUME     573890.372  3725789.853      -15.750
   LOCATION VOL11        VOLUME     573987.794  3725789.824      -15.210
   LOCATION VOL12        VOLUME     573987.593  3725886.224      -15.520
   LOCATION VOL13        VOLUME     574085.292  3725886.133      -15.630
   LOCATION VOL14        VOLUME     574085.493  3725789.733      -15.890
   LOCATION VOL15        VOLUME     574182.915  3725789.703      -16.000
   LOCATION VOL16        VOLUME     574182.714  3725886.103      -15.750
   LOCATION VOL17        VOLUME     573695.175  3725695.674      -16.510
   LOCATION VOL18        VOLUME     573695.376  3725599.274      -16.700
   LOCATION VOL19        VOLUME     573792.799  3725599.244      -16.820
   LOCATION VOL20        VOLUME     573792.597  3725695.644      -16.620
   LOCATION VOL21        VOLUME     573890.309  3725695.354      -16.590
   LOCATION VOL22        VOLUME     573890.510  3725598.954      -16.930
   LOCATION VOL23        VOLUME     573987.932  3725598.925      -17.030
   LOCATION VOL24        VOLUME     573987.731  3725695.325      -16.730
   LOCATION VOL25        VOLUME     574085.442  3725695.035      -16.760
   LOCATION VOL26        VOLUME     574085.643  3725598.635      -17.100
   LOCATION VOL27        VOLUME     574183.066  3725598.605      -17.220
   LOCATION VOL28        VOLUME     574182.864  3725695.005      -16.880
   LOCATION VOL29        VOLUME     573895.419  3725502.137      -17.650
   LOCATION VOL30        VOLUME     573895.620  3725405.737      -18.290
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   LOCATION VOL31        VOLUME     573993.042  3725405.707      -18.630
   LOCATION VOL32        VOLUME     573992.841  3725502.107      -17.860
   LOCATION VOL33        VOLUME     574085.442  3725503.095      -17.950
   LOCATION VOL34        VOLUME     574085.643  3725406.695      -18.800
   LOCATION VOL35        VOLUME     574183.066  3725406.665      -18.970
   LOCATION VOL36        VOLUME     574182.864  3725503.066      -18.220
** Source Parameters **
   SRCPARAM VOL1         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL2         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL3         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL4         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL5         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL6         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL7         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL8         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL9         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL10        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL11        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL12        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL13        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL14        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL15        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL16        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL17        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL18        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL19        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL20        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL21        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL22        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL23        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL24        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL25        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL26        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL27        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL28        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL29        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL30        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL31        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL32        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL33        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL34        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL35        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL36        0.0198417491     5.000    22.640     1.400
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL2         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL6         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

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** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
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   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL11        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL12        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL24        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL28        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
```

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   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
```

```
**
RE STARTING
   INCLUDED "16552-02 Const NOx.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE ..\KTRM_V11_trimmed.sfc
   PROFFILE ..\KTRM_V11_trimmed.PFL
   SURFDATA 3104 2017
   UAIRDATA 3190 2017
   PROFBASE -36.04 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "16552-02 CONST NOX.AD\01H1GALL.PLT" 31
   SUMMFILE "16552-02 Const NOx.sum"
OU FINISHED
**
**************************************
** Project Parameters
**************************************
** PROJCTN  CoordinateSystemUTM
** DESCPTN  UTM: Universal Transverse Mercator
** DATUM    North American Datum 1983
** DTMRGN   CONUS
** UNITS    m
** ZONE     11
** ZONEINX  0
**

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**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 13.0.0
** Lakes Environmental Software Inc.
** Date: 7/17/2025
** File: C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const NOx\16552-02 Const
NOx.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02
   MODELOPT DFAULT CONC
   AVERTIME 1
   URBANOPT 2492442 Riverside_County
   POLLUTID NOX
   RUNORNOT RUN
   ERRORFIL "16552-02 Const NOx.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     573500.180  3725886.220      -15.810
   LOCATION VOL2         VOLUME     573500.381  3725789.820      -16.120
   LOCATION VOL3         VOLUME     573597.602  3725886.190      -16.050
   LOCATION VOL4         VOLUME     573597.803  3725789.790      -16.360
   LOCATION VOL5         VOLUME     573694.930  3725886.254      -16.110
   LOCATION VOL6         VOLUME     573695.131  3725789.853      -16.280
   LOCATION VOL7         VOLUME     573792.553  3725789.824      -16.410
   LOCATION VOL8         VOLUME     573792.352  3725886.224      -16.330
   LOCATION VOL9         VOLUME     573890.171  3725886.254      -15.450
   LOCATION VOL10        VOLUME     573890.372  3725789.853      -15.750
   LOCATION VOL11        VOLUME     573987.794  3725789.824      -15.210
   LOCATION VOL12        VOLUME     573987.593  3725886.224      -15.520
   LOCATION VOL13        VOLUME     574085.292  3725886.133      -15.630
   LOCATION VOL14        VOLUME     574085.493  3725789.733      -15.890
   LOCATION VOL15        VOLUME     574182.915  3725789.703      -16.000
   LOCATION VOL16        VOLUME     574182.714  3725886.103      -15.750
   LOCATION VOL17        VOLUME     573695.175  3725695.674      -16.510
   LOCATION VOL18        VOLUME     573695.376  3725599.274      -16.700
   LOCATION VOL19        VOLUME     573792.799  3725599.244      -16.820
   LOCATION VOL20        VOLUME     573792.597  3725695.644      -16.620
   LOCATION VOL21        VOLUME     573890.309  3725695.354      -16.590
   LOCATION VOL22        VOLUME     573890.510  3725598.954      -16.930
   LOCATION VOL23        VOLUME     573987.932  3725598.925      -17.030
   LOCATION VOL24        VOLUME     573987.731  3725695.325      -16.730
   LOCATION VOL25        VOLUME     574085.442  3725695.035      -16.760
   LOCATION VOL26        VOLUME     574085.643  3725598.635      -17.100
   LOCATION VOL27        VOLUME     574183.066  3725598.605      -17.220
   LOCATION VOL28        VOLUME     574182.864  3725695.005      -16.880
   LOCATION VOL29        VOLUME     573895.419  3725502.137      -17.650
   LOCATION VOL30        VOLUME     573895.620  3725405.737      -18.290
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   LOCATION VOL31        VOLUME     573993.042  3725405.707      -18.630
   LOCATION VOL32        VOLUME     573992.841  3725502.107      -17.860
   LOCATION VOL33        VOLUME     574085.442  3725503.095      -17.950
   LOCATION VOL34        VOLUME     574085.643  3725406.695      -18.800
   LOCATION VOL35        VOLUME     574183.066  3725406.665      -18.970
   LOCATION VOL36        VOLUME     574182.864  3725503.066      -18.220
** Source Parameters **
   SRCPARAM VOL1         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL2         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL3         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL4         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL5         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL6         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL7         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL8         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL9         0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL10        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL11        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL12        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL13        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL14        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL15        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL16        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL17        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL18        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL19        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL20        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL21        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL22        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL23        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL24        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL25        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL26        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL27        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL28        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL29        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL30        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL31        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL32        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL33        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL34        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL35        0.0198417491     5.000    22.640     1.400
   SRCPARAM VOL36        0.0198417491     5.000    22.640     1.400
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL2         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL6         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
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   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL11        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL12        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL24        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL28        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

```
** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
```

```
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
```

```
**
RE STARTING
   INCLUDED "16552-02 Const NOx.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE ..\KTRM_V11_trimmed.sfc
   PROFFILE ..\KTRM_V11_trimmed.PFL
   SURFDATA 3104 2017
   UAIRDATA 3190 2017
   PROFBASE -36.04 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "16552-02 CONST NOX.AD\01H1GALL.PLT" 31
   SUMMFILE "16552-02 Const NOx.sum"
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            3 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
              ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W340     675       PRBASE: Possible Error in PROFBASE Input:  Value is < 0
 PROFBASE
 ME W186     676       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold
 used           0.50
 ME W187     676       MEOPEN: ADJ_U* Option for Stable Low Winds used in
 AERMET

 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************

FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:03:55

                              PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
```

```
                                        ***     MODEL SETUP OPTIONS SUMMARY       ***
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - -

** Model Options Selected:
     * Model Uses Regulatory DEFAULT Options
     * Model Is Setup For Calculation of Average CONCentration Values.
     * NO GAS DEPOSITION Data Provided.
     * NO PARTICLE DEPOSITION Data Provided.
     * Model Uses NO DRY DEPLETION. DDPLETE  =  F
     * Model Uses NO WET DEPLETION. WETDPLT  =  F
     * Stack-tip Downwash.
     * Model Accounts for ELEVated Terrain Effects.
     * Use Calms Processing Routine.
     * Use Missing Data Processing Routine.
     * No Exponential Decay.
     * Model Uses URBAN Dispersion Algorithm for the SBL for    36 Source(s),
       for Total of    1 Urban Area(s):
  Urban Population =   2492442.0 ;  Urban Roughness Length =  1.000 m
     * Urban Roughness Length of 1.0 Meter Used.
     * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
     * CCVR_Sub - Meteorological data includes CCVR substitutions
     * TEMP_Sub - Meteorological data includes TEMP substitutions
     * Model Assumes No FLAGPOLE Receptor Heights.
     * The User Specified a Pollutant Type of: NOX

**Model Calculates  1 Short Term Average(s) of:   1-HR

**This Run Includes:     36 Source(s);       1 Source Group(s); and      22 Receptor(s)

               with:      0 POINT(s), including
                          0 POINTCAP(s) and      0 POINTHOR(s)
                and:     36 VOLUME source(s)
                and:      0 AREA type source(s)
                and:      0 LINE source(s)
                and:      0 RLINE/RLINEXT source(s)
                and:      0 OPENPIT source(s)
                and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                and:      0 SWPOINT source(s)


**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date:  22112

**Output Options Selected:
         Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
         Keyword)
         Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
         Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                m for Missing Hours
                                                                b for Both Calm and
                                                                Missing Hours

**Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =   -36.04 ;  Decay Coef.
=    0.000     ;  Rot. Angle =     0.0
                  Emission Units = GRAMS/SEC                                ;  Emission
                  Rate Unit Factor =   0.10000E+07
                  Output Units   = MICROGRAMS/M**3

**Approximate Storage Requirements of Model =      3.5 MB of RAM.

**Input Runstream File:
aermod.inp
```

779 **Output Print File:
aermod.out

780

781 **Detailed Error/Message File: 16552-02 Const
NOx.err
782 **File for Summary of Results: 16552-02 Const
NOx.sum
783 FF *** AERMOD - VERSION 24142 *** *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 *** 07/17/25
784 *** AERMET - VERSION 22112 ***
*** ***
11:03:55

785

786 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

787

788

789 *** VOLUME SOURCE DATA ***

790

791 NUMBER EMISSION RATE BASE RELEASE INIT.
INIT. URBAN EMISSION RATE AIRCRAFT
792 SOURCE PART. (GRAMS/SEC) X Y ELEV. HEIGHT SY
SZ SOURCE SCALAR VARY
793 ID CATS. (METERS) (METERS) (METERS) (METERS) (METERS)
(METERS) BY
794 - - -

```
814   VOL19            0   0.19842E-01  573792.8 3725599.2   -16.8     5.00    22.64
      1.40     YES   HRDOW            NO
815   VOL20            0   0.19842E-01  573792.6 3725695.6   -16.6     5.00    22.64
      1.40     YES   HRDOW            NO
816   VOL21            0   0.19842E-01  573890.3 3725695.4   -16.6     5.00    22.64
      1.40     YES   HRDOW            NO
817   VOL22            0   0.19842E-01  573890.5 3725599.0   -16.9     5.00    22.64
      1.40     YES   HRDOW            NO
818   VOL23            0   0.19842E-01  573987.9 3725598.9   -17.0     5.00    22.64
      1.40     YES   HRDOW            NO
819   VOL24            0   0.19842E-01  573987.7 3725695.3   -16.7     5.00    22.64
      1.40     YES   HRDOW            NO
820   VOL25            0   0.19842E-01  574085.4 3725695.0   -16.8     5.00    22.64
      1.40     YES   HRDOW            NO
821   VOL26            0   0.19842E-01  574085.6 3725598.6   -17.1     5.00    22.64
      1.40     YES   HRDOW            NO
822   VOL27            0   0.19842E-01  574183.1 3725598.6   -17.2     5.00    22.64
      1.40     YES   HRDOW            NO
823   VOL28            0   0.19842E-01  574182.9 3725695.0   -16.9     5.00    22.64
      1.40     YES   HRDOW            NO
824   VOL29            0   0.19842E-01  573895.4 3725502.1   -17.7     5.00    22.64
      1.40     YES   HRDOW            NO
825   VOL30            0   0.19842E-01  573895.6 3725405.7   -18.3     5.00    22.64
      1.40     YES   HRDOW            NO
826   VOL31            0   0.19842E-01  573993.0 3725405.7   -18.6     5.00    22.64
      1.40     YES   HRDOW            NO
827   VOL32            0   0.19842E-01  573992.8 3725502.1   -17.9     5.00    22.64
      1.40     YES   HRDOW            NO
828   VOL33            0   0.19842E-01  574085.4 3725503.1   -17.9     5.00    22.64
      1.40     YES   HRDOW            NO
829   VOL34            0   0.19842E-01  574085.6 3725406.7   -18.8     5.00    22.64
      1.40     YES   HRDOW            NO
830   VOL35            0   0.19842E-01  574183.1 3725406.7   -19.0     5.00    22.64
      1.40     YES   HRDOW            NO
831   VOL36            0   0.19842E-01  574182.9 3725503.1   -18.2     5.00    22.64
      1.40     YES   HRDOW            NO
832   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
833    *** AERMET - VERSION  22112 ***
       ***                                                                ***
       11:03:55
834
                                  PAGE   3
835    *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
836
837
838                                          *** SOURCE IDs DEFINING SOURCE GROUPS ***
839
840    SRCGROUP ID                                          SOURCE IDs
841    -----------                                          ----------
842
843
844     ALL        VOL1        , VOL2        , VOL3        , VOL4        , VOL5        ,
       VOL6        , VOL7        , VOL8        ,
845
846                VOL9        , VOL10       , VOL11       , VOL12       , VOL13       ,
                   VOL14       , VOL15       , VOL16       ,
847
848                VOL17       , VOL18       , VOL19       , VOL20       , VOL21       ,
                   VOL22       , VOL23       , VOL24       ,
849
850                VOL25       , VOL26       , VOL27       , VOL28       , VOL29       ,
                   VOL30       , VOL31       , VOL32       ,
851
852                VOL33       , VOL34       , VOL35       , VOL36       ,
853   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
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     Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
854   *** AERMET - VERSION  22112 ***
      ***                                                              ***
      11:03:55
855
                                PAGE   4
856   *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
857
858
859                                        *** SOURCE IDs DEFINED AS URBAN SOURCES ***
860
861    URBAN ID   URBAN POP                                    SOURCE IDs
862    --------   ---------                                    ----------
863
864
865                2492442.   VOL1        , VOL2        , VOL3        , VOL4        ,
                   VOL5        , VOL6        , VOL7        ,
866   VOL8        ,
867
868               VOL9        , VOL10       , VOL11       , VOL12       , VOL13       ,
                  VOL14       , VOL15       , VOL16       ,
869
870               VOL17       , VOL18       , VOL19       , VOL20       , VOL21       ,
                  VOL22       , VOL23       , VOL24       ,
871
872               VOL25       , VOL26       , VOL27       , VOL28       , VOL29       ,
                  VOL30       , VOL31       , VOL32       ,
873
874               VOL33       , VOL34       , VOL35       , VOL36       ,
875   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
     Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
876   *** AERMET - VERSION  22112 ***
      ***                                                              ***
      11:03:55
877
                                PAGE   5
878   *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
879
880                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                       WEEK (HRDOW) *
881
882   SOURCE ID = VOL1         ; SOURCE TYPE = VOLUME   :
883    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
884   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
885                                                DAY OF WEEK = WEEKDAY
886      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
887      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
888     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
889                                                DAY OF WEEK = SATURDAY
890      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
891      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
892     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
893                                                DAY OF WEEK = SUNDAY
894      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
895      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
896     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
```

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   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                ***
 11:03:55

                              PAGE   6
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL2         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                ***
 11:03:55

                              PAGE   7
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL3         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
    .0000E+00    7  .0000E+00    8  .0000E+00
```

```
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:03:55

                             PAGE   8
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL4         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:03:55

                             PAGE   9
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL5         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - -
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                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:03:55

                            PAGE  10
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL6         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:03:55

                            PAGE  11
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*** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                  WEEK (HRDOW) *

SOURCE ID = VOL7         ; SOURCE TYPE = VOLUME   :
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:03:55

                            PAGE  12
*** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                  WEEK (HRDOW) *

SOURCE ID = VOL8         ; SOURCE TYPE = VOLUME   :
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
```

```
      .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:03:55

                              PAGE  13
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL9         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:03:55

                              PAGE  14
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL10        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
```

```
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:03:55

                              PAGE  15
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL11        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
     .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL12        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
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- - - -
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                                PAGE  18
*** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                  WEEK (HRDOW) *

SOURCE ID = VOL14        ; SOURCE TYPE = VOLUME   :
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***       07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
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*** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                  WEEK (HRDOW) *

SOURCE ID = VOL15        ; SOURCE TYPE = VOLUME   :
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
```

```
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:03:55

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL16        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:03:55

                              PAGE  21
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL17        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
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```
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
      .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:03:55

                             PAGE  22
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL18        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .1000E+01    8  .1000E+01
       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:03:55

                             PAGE  23
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL19        ; SOURCE TYPE = VOLUME   :
```

```
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
  .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
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 11:03:55

                            PAGE  24
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL20        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
  .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
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      ***                                                                    ***
      11:03:55
1317
                                  PAGE  25
1318  *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
1319
1320                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1321
1322  SOURCE ID = VOL21        ; SOURCE TYPE = VOLUME   :
1323   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1324  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1325                                                  DAY OF WEEK = WEEKDAY
1326     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
1327     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
1328    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1329                                                  DAY OF WEEK = SATURDAY
1330     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1331     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1332    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1333                                                  DAY OF WEEK = SUNDAY
1334     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1335     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1336    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1337  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
1338   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       11:03:55
1339
                                  PAGE  26
1340  *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
1341
1342                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1343
1344   SOURCE ID = VOL22        ; SOURCE TYPE = VOLUME   :
1345    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
        SCALAR   HOUR   SCALAR   HOUR   SCALAR
1346  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1347                                                  DAY OF WEEK = WEEKDAY
1348     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
1349     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
1350    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1351                                                  DAY OF WEEK = SATURDAY
1352     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1353     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1354    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
        .0000E+00   23  .0000E+00   24  .0000E+00
```

```
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
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                              PAGE  27
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL23        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:03:55

                              PAGE  28
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL24        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
```

```
      .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
      .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:03:55

                            PAGE  29
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL25        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:03:55

                            PAGE  30
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
                   WEEK (HRDOW) *
```

```
 SOURCE ID = VOL26        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:03:55

                            PAGE  31
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL27        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
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* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL28 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL29 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00

```
1508      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1509                                          DAY OF WEEK = SUNDAY
1510       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1511       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1512      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1513  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
1514   *** AERMET - VERSION  22112 ***
       ***                                                                  ***
       11:03:55
1515
                                  PAGE  34
1516   *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
1517
1518                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1519
1520   SOURCE ID = VOL30        ; SOURCE TYPE = VOLUME   :
1521    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1522   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1523                                          DAY OF WEEK = WEEKDAY
1524       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1525       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
1526      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1527                                          DAY OF WEEK = SATURDAY
1528       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1529       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1530      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1531                                          DAY OF WEEK = SUNDAY
1532       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1533       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1534      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1535  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
1536   *** AERMET - VERSION  22112 ***
       ***                                                                  ***
       11:03:55
1537
                                  PAGE  35
1538   *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
1539
1540                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1541
1542   SOURCE ID = VOL31        ; SOURCE TYPE = VOLUME   :
1543    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1544   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1545                                          DAY OF WEEK = WEEKDAY
1546       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
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      .0000E+00    7  .1000E+01    8  .1000E+01
1547   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
       .1000E+01   15  .0000E+00   16  .0000E+00
1548  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
1549                                          DAY OF WEEK = SATURDAY
1550   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
1551   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
1552  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
1553                                          DAY OF WEEK = SUNDAY
1554   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
1555   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
1556  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
1557 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
     Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
1558  *** AERMET - VERSION  22112 ***
      ***                                                                  ***
      11:03:55
1559
                                PAGE  36
1560  *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
1561
1562                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1563
1564  SOURCE ID = VOL32        ; SOURCE TYPE = VOLUME   :
1565   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
      SCALAR   HOUR   SCALAR   HOUR   SCALAR
1566  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1567                                          DAY OF WEEK = WEEKDAY
1568    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .1000E+01    8  .1000E+01
1569    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
       .1000E+01   15  .0000E+00   16  .0000E+00
1570   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
1571                                          DAY OF WEEK = SATURDAY
1572   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
1573   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
1574  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
1575                                          DAY OF WEEK = SUNDAY
1576   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
1577   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
1578  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
1579 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
     Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
1580  *** AERMET - VERSION  22112 ***
      ***                                                                  ***
      11:03:55
1581
                                PAGE  37
1582  *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
1583
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```
                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                    WEEK (HRDOW) *

 SOURCE ID = VOL33        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 11:03:55

                              PAGE  38
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                    WEEK (HRDOW) *

 SOURCE ID = VOL34        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
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   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                ***
 11:03:55

                              PAGE  39
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL35        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                ***
 11:03:55

                              PAGE  40
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL36        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
    .0000E+00    7  .0000E+00    8  .0000E+00
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1661       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1662      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
           .0000E+00   23  .0000E+00   24  .0000E+00
1663                                          DAY OF WEEK = SUNDAY
1664       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1665       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1666      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1667   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
       Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
1668    *** AERMET - VERSION  22112 ***
        ***                                                                  ***
        11:03:55
1669
                                  PAGE  41
1670    *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
1671
1672                                            *** DISCRETE CARTESIAN RECEPTORS ***
1673                                          (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
1674                                                      (METERS)
1675
1676       ( 574106.6, 3725973.2,     -15.2,    2651.3,       0.0);         ( 574279.0,
           3725910.5,     -15.9,    2651.3,       0.0);
1677       ( 574204.4, 3725350.5,     -19.1,    2651.3,       0.0);         ( 573655.6,
           3725533.6,     -16.7,    2651.3,       0.0);
1678       ( 573199.4, 3725824.6,     -14.8,    2651.3,       0.0);         ( 573815.9,
           3726049.2,     -13.7,    2651.3,       0.0);
1679       ( 574057.4, 3725989.2,     -14.7,    2651.3,       0.0);         ( 574023.1,
           3725980.7,     -14.6,    2651.3,       0.0);
1680       ( 574346.5, 3725650.9,     -17.5,    2651.3,       0.0);         ( 574313.0,
           3725545.0,     -17.4,    2651.3,       0.0);
1681       ( 574206.8, 3725308.8,     -19.7,    2651.3,       0.0);         ( 574038.4,
           3725331.2,     -18.7,    2651.3,       0.0);
1682       ( 574209.1, 3725258.2,     -19.7,    2651.3,       0.0);         ( 573785.2,
           3725289.0,     -17.4,    2651.3,       0.0);
1683       ( 573482.6, 3725346.8,     -16.6,    2651.3,       0.0);         ( 573666.9,
           3725489.5,     -17.0,    2651.3,       0.0);
1684       ( 573580.6, 3725595.5,     -16.2,    2651.3,       0.0);         ( 573477.6,
           3725543.7,     -16.2,    2651.3,       0.0);
1685       ( 573474.2, 3725503.2,     -16.5,    2651.3,       0.0);         ( 573229.4,
           3725847.4,     -14.7,    2651.3,       0.0);
1686       ( 573040.9, 3725971.2,     -13.5,    2651.3,       0.0);         ( 573120.2,
           3725973.9,     -13.8,    2651.3,       0.0);
1687   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
       Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
1688    *** AERMET - VERSION  22112 ***
        ***                                                                  ***
        11:03:55
1689
                                  PAGE  42
1690    *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
1691
1692                                              *** METEOROLOGICAL DAYS SELECTED FOR
                                                  PROCESSING ***
1693                                                          (1=YES; 0=NO)
1694
1695              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                  1 1 1 1 1   1 1 1 1 1 1 1 1 1 1 1
1696              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                  1 1 1 1 1   1 1 1 1 1 1 1 1 1 1 1
1697              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                  1 1 1 1 1   1 1 1 1 1 1 1 1 1 1 1
1698              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1
```

```
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1699            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1700            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1701            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1702            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1703
1704                NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT
                    IS INCLUDED IN THE DATA FILE.
1705
1706
1707
1708                                    *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED
                                        CATEGORIES ***
1709                                                    (METERS/SEC)
1710
1711                                                1.54,   3.09,   5.14,   8.23,  10.80,
1712    FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
        Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
1713     *** AERMET - VERSION  22112 ***
         ***                                                                    ***
         11:03:55
1714
                                    PAGE  43
1715     *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
1716
1717                                    *** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA
                                        ***
1718
1719       Surface file:
           ..\KTRM_V11_trimmed.sfc
           Met Version:  22112
1720       Profile file:
           ..\KTRM_V11_trimmed.PFL
1721       Surface format:
           FREE

1722       Profile format:
           FREE

1723       Surface station no.:     3104                  Upper air station no.:     3190
1724                       Name: UNKNOWN                                  Name:
                           UNKNOWN
1725                       Year:   2017                                   Year:   2017
1726
1727     First 24 hours of scalar data
1728     YR MO DY JDY HR     H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALBEDO
         REF WS   WD     HT  REF TA     HT
1729    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - -
1730     17 01 01   1 01  -21.0  0.211 -9.000 -9.000 -999.  233.     49.1  0.06   2.53   1.00
         2.86  321.   10.1  284.8    2.0
1731     17 01 01   1 02  -48.7  0.490 -9.000 -9.000 -999.  824.    264.4  0.14   2.53   1.00
         5.36  358.   10.1  285.3    2.0
1732     17 01 01   1 03  -39.8  0.400 -9.000 -9.000 -999.  613.    175.9  0.06   2.53   1.00
         5.36  294.   10.1  284.8    2.0
1733     17 01 01   1 04  -47.4  0.477 -9.000 -9.000 -999.  790.    250.2  0.14   2.53   1.00
         5.22  335.   10.1  284.8    2.0
1734     17 01 01   1 05  -55.1  0.554 -9.000 -9.000 -999.  987.    337.1  0.06   2.53   1.00
         7.20  327.   10.1  284.2    2.0
1735     17 01 01   1 06  -30.8  0.309 -9.000 -9.000 -999.  472.    104.8  0.14   2.53   1.00
         3.44  335.   10.1  283.8    2.0
1736     17 01 01   1 07  -15.6  0.170 -9.000 -9.000 -999.  191.     31.7  0.06   2.53   1
         2.33  329.   10.1  283.8    2.0
```

```
17 01 01   1 08   -7.2  0.185 -9.000 -9.000 -999.  191.     79.0  0.06   2.53   0.50
2.47  326.   10.1  285.3    2.0
17 01 01   1 09   46.3  0.265  0.707  0.005  276.  326.    -36.1  0.06   2.53
3.00  303.   10.1  285.9    2.0
17 01 01   1 10  113.8  0.336  1.418  0.005  907.  468.    -30.2  0.06   2.53   0.24
3.76  300.   10.1  288.1    2.0
17 01 01   1 11  159.2  0.526  1.708  0.005 1133.  915.    -82.7  0.06   2.53   0.22
6.27  311.   10.1  289.2    2.0
17 01 01   1 12  179.8  0.454  1.860  0.005 1296.  739.    -47.0  0.06   2.53   0.21
5.24  315.   10.1  289.8    2.0
17 01 01   1 13  175.0  0.302  1.886  0.005 1387.  416.    -14.2  0.06   2.53   0.21
3.20  297.   10.1  290.3    2.0
17 01 01   1 14  145.9  0.251  1.851  0.005 1573.  302.     -9.7  0.06   2.53   0.23
2.50  322.   10.1  292.0    2.0
17 01 01   1 15   91.5  0.235  1.599  0.005 1617.  273.    -12.8  0.06   2.53   0.26
2.42  316.   10.1  291.4    2.0
17 01 01   1 16   18.8  0.259  0.950  0.005 1643.  316.    -83.0  0.14   2.53   0.36
2.57  338.   10.1  291.4    2.0
17 01 01   1 17  -41.4  0.440 -9.000 -9.000 -999.  701.    213.3  0.14   2.53   0.66
4.83  344.   10.1  288.8    2.0
17 01 01   1 18  -40.2  0.408 -9.000 -9.000 -999.  626.    182.7  0.14   2.53   1.00
4.49  356.   10.1  287.5    2.0
17 01 01   1 19  -33.3  0.337 -9.000 -9.000 -999.  473.    124.8  0.14   2.53   1.00
3.74  352.   10.1  287.0    2.0
17 01 01   1 20  -19.3  0.194 -9.000 -9.000 -999.  219.     41.4  0.06   2.53   1.00
2.64  326.   10.1  285.3    2.0
17 01 01   1 21  -29.0  0.291 -9.000 -9.000 -999.  377.     93.2  0.14   2.53   1.00
3.25  336.   10.1  285.3    2.0
17 01 01   1 22  -11.2  0.142 -9.000 -9.000 -999.  145.     23.3  0.06   2.53   1.00
2.01  272.   10.1  283.8    2.0
17 01 01   1 23  -25.8  0.259 -9.000 -9.000 -999.  316.     73.6  0.06   2.53   1.00
3.47  301.   10.1  285.9    2.0
17 01 01   1 24  -13.9  0.162 -9.000 -9.000 -999.  161.     29.0  0.09   2.53   1.00
2.05  250.   10.1  283.1    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 17 01 01 01   10.1 1  321.    2.86   284.9   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***       07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                ***
 11:03:55


                            PAGE  44
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                            *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION   VALUES
                            FOR SOURCE GROUP:  ALL      ***
                                INCLUDING SOURCE(S):     VOL1        , VOL2        ,
                                VOL3        , VOL4        , VOL5        ,
                VOL6        , VOL7        , VOL8        , VOL9        , VOL10       ,
                VOL11       , VOL12       , VOL13       ,
                VOL14       , VOL15       , VOL16       , VOL17       , VOL18       ,
                VOL19       , VOL20       , VOL21       ,
                VOL22       , VOL23       , VOL24       , VOL25       , VOL26       ,
                VOL27       , VOL28       ,  . . .      ,

                                        *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                     ** CONC OF NOX      IN
                                     MICROGRAMS/M**3                          *
```

```
      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
      Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - - -
       574106.64   3725973.24       20.70119  (17011107)               574278.99
       3725910.47       19.97032  (21011407)
       574204.36   3725350.47       31.58154  (19011407)               573655.61
       3725533.56       21.50832  (18020107)
       573199.43   3725824.57       10.02977  (17012308)               573815.91
       3726049.22       14.08038  (21012208)
       574057.43   3725989.22       19.10538  (21012507)               574023.10
       3725980.72       20.65501  (21012208)
       574346.45   3725650.86       21.73411  (21020107)               574312.95
       3725545.02       23.97684  (19012807)
       574206.77   3725308.84       24.76695  (19011407)               574038.43
       3725331.17       27.57043  (18010307)
       574209.11   3725258.17       20.56718  (18010307)               573785.25
       3725289.00       11.78940  (21020407)
       573482.56   3725346.84        9.25841  (22020307)               573666.90
       3725489.52       16.61871  (21012208)
       573580.56   3725595.53       20.88878  (18020107)               573477.56
       3725543.69       14.31826  (18020107)
       573474.22   3725503.19       13.37444  (22020307)               573229.37
       3725847.44       10.33249  (21122808)
       573040.93   3725971.18        6.19585  (17101907)               573120.15
       3725973.92        7.05413  (21121408)
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:03:55

                            PAGE  45
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                          *** THE SUMMARY OF HIGHEST  1-HR RESULTS
                                          ***


                               ** CONC OF NOX      IN
                               MICROGRAMS/M**3                        **


                                                  DATE

                                                   NETWORK
GROUP ID                          AVERAGE CONC     (YYMMDDHH)             RECEPTOR  (XR,
YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS      31.58154  ON 19011407: AT (  574204.36,
3725350.47,   -19.13,  2651.27,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/17/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 11:03:55

                            PAGE  46
```

```
*** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

*** Message Summary : AERMOD Model Execution ***

 --------- Summary of Total Messages --------

A Total of            0 Fatal Error Message(s)
A Total of            5 Warning Message(s)
A Total of         1671 Informational Message(s)

A Total of        43800 Hours Were Processed

A Total of          763 Calm Hours Identified

A Total of          908 Missing Hours Identified (  2.07 Percent)


   ******** FATAL ERROR MESSAGES ********
              ***  NONE  ***


   ********   WARNING MESSAGES   ********
ME W340     675       PRBASE: Possible Error in PROFBASE Input:  Value is < 0
PROFBASE
ME W186     676       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold
used           0.50
ME W187     676       MEOPEN: ADJ_U* Option for Stable Low Winds used in
AERMET
MX W450   26281       CHKDAT: Record Out of Sequence in Meteorological File at:
21010101
MX W450   26281       CHKDAT: Record Out of Sequence in Meteorological File at:    1
year gap

   ***********************************
   *** AERMOD Finishes Successfully ***
   ***********************************
```

```
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 13.0.0
** Lakes Environmental Software Inc.
** Date: 11/4/2025
** File: C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const PM25\16552-02 Const
PM25.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02
   MODELOPT DFAULT CONC
   AVERTIME 24
   URBANOPT 2492442 Riverside_County
   POLLUTID PM_2.5
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "16552-02 Const PM25.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     573500.180  3725886.220      -15.810
   LOCATION VOL2         VOLUME     573500.381  3725789.820      -16.120
   LOCATION VOL3         VOLUME     573597.602  3725886.190      -16.050
   LOCATION VOL4         VOLUME     573597.803  3725789.790      -16.360
   LOCATION VOL5         VOLUME     573694.930  3725886.254      -16.110
   LOCATION VOL6         VOLUME     573695.131  3725789.853      -16.280
   LOCATION VOL7         VOLUME     573792.553  3725789.824      -16.410
   LOCATION VOL8         VOLUME     573792.352  3725886.224      -16.330
   LOCATION VOL9         VOLUME     573890.171  3725886.254      -15.450
   LOCATION VOL10        VOLUME     573890.372  3725789.853      -15.750
   LOCATION VOL11        VOLUME     573987.794  3725789.824      -15.210
   LOCATION VOL12        VOLUME     573987.593  3725886.224      -15.520
   LOCATION VOL13        VOLUME     574085.292  3725886.133      -15.630
   LOCATION VOL14        VOLUME     574085.493  3725789.733      -15.890
   LOCATION VOL15        VOLUME     574182.915  3725789.703      -16.000
   LOCATION VOL16        VOLUME     574182.714  3725886.103      -15.750
   LOCATION VOL17        VOLUME     573695.175  3725695.674      -16.510
   LOCATION VOL18        VOLUME     573695.376  3725599.274      -16.700
   LOCATION VOL19        VOLUME     573792.799  3725599.244      -16.820
   LOCATION VOL20        VOLUME     573792.597  3725695.644      -16.620
   LOCATION VOL21        VOLUME     573890.309  3725695.354      -16.590
   LOCATION VOL22        VOLUME     573890.510  3725598.954      -16.930
   LOCATION VOL23        VOLUME     573987.932  3725598.925      -17.030
   LOCATION VOL24        VOLUME     573987.731  3725695.325      -16.730
   LOCATION VOL25        VOLUME     574085.442  3725695.035      -16.760
   LOCATION VOL26        VOLUME     574085.643  3725598.635      -17.100
   LOCATION VOL27        VOLUME     574183.066  3725598.605      -17.220
   LOCATION VOL28        VOLUME     574182.864  3725695.005      -16.880
   LOCATION VOL29        VOLUME     573895.419  3725502.137      -17.650
```

```
   LOCATION VOL30        VOLUME     573895.620  3725405.737      -18.290
   LOCATION VOL31        VOLUME     573993.042  3725405.707      -18.630
   LOCATION VOL32        VOLUME     573992.841  3725502.107      -17.860
   LOCATION VOL33        VOLUME     574085.442  3725503.095      -17.950
   LOCATION VOL34        VOLUME     574085.643  3725406.695      -18.800
   LOCATION VOL35        VOLUME     574183.066  3725406.665      -18.970
   LOCATION VOL36        VOLUME     574182.864  3725503.066      -18.220
   LOCATION PAREA1       AREAPOLY   573452.368  3725934.831      -15.220
** Source Parameters **
   SRCPARAM VOL1         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL2         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL3         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL4         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL5         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL6         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL7         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL8         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL9         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL10        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL11        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL12        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL13        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL14        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL15        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL16        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL17        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL18        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL19        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL20        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL21        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL22        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL23        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL24        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL25        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL26        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL27        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL28        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL29        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL30        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL31        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL32        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL33        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL34        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL35        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL36        0.0009250105     5.000    22.640     1.400
   SRCPARAM PAREA1       1.6792E-07     0.000         8     1.000
   AREAVERT PAREA1       573452.368 3725934.831 574231.065 3725933.083
   AREAVERT PAREA1       574231.939 3725360.640 573845.649 3725358.018
   AREAVERT PAREA1       573845.649 3725549.415 573646.387 3725552.911
   AREAVERT PAREA1       573645.513 3725741.686 573451.494 3725741.686
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL2         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL6         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL11        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL12        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
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   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL24        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL28        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED "16552-02 Const PM25.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE ..\KTRM_V11_trimmed.sfc
   PROFFILE ..\KTRM_V11_trimmed.PFL
   SURFDATA 3104 2017
   UAIRDATA 3190 2017
   PROFBASE -36.04 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 24 ALL 1ST "16552-02 CONST PM25.AD\24H1GALL.PLT" 31
   SUMMFILE "16552-02 Const PM25.sum"
OU FINISHED
**
**************************************
** Project Parameters
**************************************
** PROJCTN  CoordinateSystemUTM
** DESCPTN  UTM: Universal Transverse Mercator
** DATUM    North American Datum 1983
** DTMRGN   CONUS
** UNITS    m
** ZONE     11
** ZONEINX  0
**
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**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 13.0.0
** Lakes Environmental Software Inc.
** Date: 11/4/2025
** File: C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const PM25\16552-02 Const PM25.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02
   MODELOPT DFAULT CONC
   AVERTIME 24
   URBANOPT 2492442 Riverside_County
   POLLUTID PM_2.5
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "16552-02 Const PM25.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     573500.180  3725886.220      -15.810
   LOCATION VOL2         VOLUME     573500.381  3725789.820      -16.120
   LOCATION VOL3         VOLUME     573597.602  3725886.190      -16.050
   LOCATION VOL4         VOLUME     573597.803  3725789.790      -16.360
   LOCATION VOL5         VOLUME     573694.930  3725886.254      -16.110
   LOCATION VOL6         VOLUME     573695.131  3725789.853      -16.280
   LOCATION VOL7         VOLUME     573792.553  3725789.824      -16.410
   LOCATION VOL8         VOLUME     573792.352  3725886.224      -16.330
   LOCATION VOL9         VOLUME     573890.171  3725886.254      -15.450
   LOCATION VOL10        VOLUME     573890.372  3725789.853      -15.750
   LOCATION VOL11        VOLUME     573987.794  3725789.824      -15.210
   LOCATION VOL12        VOLUME     573987.593  3725886.224      -15.520
   LOCATION VOL13        VOLUME     574085.292  3725886.133      -15.630
   LOCATION VOL14        VOLUME     574085.493  3725789.733      -15.890
   LOCATION VOL15        VOLUME     574182.915  3725789.703      -16.000
   LOCATION VOL16        VOLUME     574182.714  3725886.103      -15.750
   LOCATION VOL17        VOLUME     573695.175  3725695.674      -16.510
   LOCATION VOL18        VOLUME     573695.376  3725599.274      -16.700
   LOCATION VOL19        VOLUME     573792.799  3725599.244      -16.820
   LOCATION VOL20        VOLUME     573792.597  3725695.644      -16.620
   LOCATION VOL21        VOLUME     573890.309  3725695.354      -16.590
   LOCATION VOL22        VOLUME     573890.510  3725598.954      -16.930
   LOCATION VOL23        VOLUME     573987.932  3725598.925      -17.030
   LOCATION VOL24        VOLUME     573987.731  3725695.325      -16.730
   LOCATION VOL25        VOLUME     574085.442  3725695.035      -16.760
   LOCATION VOL26        VOLUME     574085.643  3725598.635      -17.100
   LOCATION VOL27        VOLUME     574183.066  3725598.605      -17.220
   LOCATION VOL28        VOLUME     574182.864  3725695.005      -16.880
   LOCATION VOL29        VOLUME     573895.419  3725502.137      -17.650
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   LOCATION VOL30        VOLUME     573895.620  3725405.737      -18.290
   LOCATION VOL31        VOLUME     573993.042  3725405.707      -18.630
   LOCATION VOL32        VOLUME     573992.841  3725502.107      -17.860
   LOCATION VOL33        VOLUME     574085.442  3725503.095      -17.950
   LOCATION VOL34        VOLUME     574085.643  3725406.695      -18.800
   LOCATION VOL35        VOLUME     574183.066  3725406.665      -18.970
   LOCATION VOL36        VOLUME     574182.864  3725503.066      -18.220
   LOCATION PAREA1       AREAPOLY   573452.368  3725934.831      -15.220
** Source Parameters **
   SRCPARAM VOL1         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL2         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL3         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL4         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL5         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL6         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL7         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL8         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL9         0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL10        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL11        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL12        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL13        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL14        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL15        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL16        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL17        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL18        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL19        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL20        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL21        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL22        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL23        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL24        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL25        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL26        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL27        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL28        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL29        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL30        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL31        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL32        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL33        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL34        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL35        0.0009250105     5.000    22.640     1.400
   SRCPARAM VOL36        0.0009250105     5.000    22.640     1.400
   SRCPARAM PAREA1       1.6792E-07     0.000         8     1.000
   AREAVERT PAREA1       573452.368 3725934.831 574231.065 3725933.083
   AREAVERT PAREA1       574231.939 3725360.640 573845.649 3725358.018
   AREAVERT PAREA1       573845.649 3725549.415 573646.387 3725552.911
   AREAVERT PAREA1       573645.513 3725741.686 573451.494 3725741.686
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL2         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL6         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL11        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL12        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
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   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL24        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL28        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED "16552-02 Const PM25.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE ..\KTRM_V11_trimmed.sfc
   PROFFILE ..\KTRM_V11_trimmed.PFL
   SURFDATA 3104 2017
   UAIRDATA 3190 2017
   PROFBASE -36.04 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 24 ALL 1ST "16552-02 CONST PM25.AD\24H1GALL.PLT" 31
   SUMMFILE "16552-02 Const PM25.sum"
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            3 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***

```

```
   ********   WARNING MESSAGES   ********
 ME W340     697       PRBASE: Possible Error in PROFBASE Input:  Value is < 0
 PROFBASE
 ME W186     698       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold
 used           0.50
 ME W187     698       MEOPEN: ADJ_U* Option for Stable Low Winds used in
 AERMET

 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************

FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 17:01:41

                            PAGE   1
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                        ***     MODEL SETUP OPTIONS SUMMARY       ***
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - -

** Model Options Selected:
     * Model Uses Regulatory DEFAULT Options
     * Model Is Setup For Calculation of Average CONCentration Values.
     * NO GAS DEPOSITION Data Provided.
     * NO PARTICLE DEPOSITION Data Provided.
     * Model Uses NO DRY DEPLETION. DDPLETE  =  F
     * Model Uses NO WET DEPLETION. WETDPLT  =  F
     * Stack-tip Downwash.
     * Model Accounts for ELEVated Terrain Effects.
     * Use Calms Processing Routine.
     * Use Missing Data Processing Routine.
     * No Exponential Decay.
     * Model Uses URBAN Dispersion Algorithm for the SBL for    37 Source(s),
       for Total of    1 Urban Area(s):
  Urban Population =   2492442.0 ;  Urban Roughness Length =  1.000 m
     * Urban Roughness Length of 1.0 Meter Used.
     * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
     * CCVR_Sub - Meteorological data includes CCVR substitutions
     * TEMP_Sub - Meteorological data includes TEMP substitutions
     * Model Accepts FLAGPOLE Receptor . Heights.
     * The User Specified a Pollutant Type of: PM_2.5

**Model Calculates  1 Short Term Average(s) of:  24-HR

**This Run Includes:     37 Source(s);       1 Source Group(s); and      22 Receptor(s)

               with:      0 POINT(s), including
                          0 POINTCAP(s) and      0 POINTHOR(s)
                and:     36 VOLUME source(s)
                and:      1 AREA type source(s)
                and:      0 LINE source(s)
                and:      0 RLINE/RLINEXT source(s)
                and:      0 OPENPIT source(s)
                and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                and:      0 SWPOINT source(s)


**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date:  22112
```

**Output Options Selected:
Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours
m for Missing Hours
b for Both Calm and Missing Hours

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = -36.04 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0
Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 3.6 MB of RAM.

**Input Runstream File:
aermod.inp

**Output Print File:
aermod.out

**Detailed Error/Message File: 16552-02 Const PM25.err
**File for Summary of Results: 16552-02 Const PM25.sum
FF *** AERMOD - VERSION 24142 *** *** C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 *** 11/04/25
*** AERMET - VERSION 22112 ***
*** ***
17:01:41

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER EMISSION RATE INIT. PART. CATS.	EMISSION RATE (GRAMS/SEC)	URBAN SOURCE	SCALAR VARY BY	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	SZ (METERS)
VOL1	0	0.92501E-03	YES	HRDOW	-15.8	5.00	22.64	1.40
VOL2	0	0.92501E-03	YES	HRDOW	-16.1	5.00	22.64	1.40
VOL3	0	0.92501E-03	YES	HRDOW	-16.1	5.00	22.64	1.40
VOL4	0	0.92501E-03	YES	HRDOW	-16.4	5.00	22.64	1.40
VOL5	0	0.92501E-03	YES	HRDOW	-16.1	5.00	22.64	1.40
VOL6	0	0.92501E-03	YES	HRDOW	-16.3	5.00	22.64	1.40
VOL7	0	0.92501E-03	YES	HRDOW	-16.4	5.00	22.64	1.40

SOURCE ID	AIRCRAFT X (METERS)	Y (METERS)
VOL1	573500.2	3725886.2
VOL2	573500.4	3725789.8
VOL3	573597.6	3725886.2
VOL4	573597.8	3725789.8
VOL5	573694.9	3725886.3
VOL6	573695.1	3725789.9
VOL7	573792.6	3725789.8

```
825   VOL8            0   0.92501E-03  573792.4 3725886.2   -16.3     5.00    22.64
      1.40     YES   HRDOW            NO
826   VOL9            0   0.92501E-03  573890.2 3725886.3   -15.5     5.00    22.64
      1.40     YES   HRDOW            NO
827   VOL10           0   0.92501E-03  573890.4 3725789.9   -15.8     5.00    22.64
      1.40     YES   HRDOW            NO
828   VOL11           0   0.92501E-03  573987.8 3725789.8   -15.2     5.00    22.64
      1.40     YES   HRDOW            NO
829   VOL12           0   0.92501E-03  573987.6 3725886.2   -15.5     5.00    22.64
      1.40     YES   HRDOW            NO
830   VOL13           0   0.92501E-03  574085.3 3725886.1   -15.6     5.00    22.64
      1.40     YES   HRDOW            NO
831   VOL14           0   0.92501E-03  574085.5 3725789.7   -15.9     5.00    22.64
      1.40     YES   HRDOW            NO
832   VOL15           0   0.92501E-03  574182.9 3725789.7   -16.0     5.00    22.64
      1.40     YES   HRDOW            NO
833   VOL16           0   0.92501E-03  574182.7 3725886.1   -15.8     5.00    22.64
      1.40     YES   HRDOW            NO
834   VOL17           0   0.92501E-03  573695.2 3725695.7   -16.5     5.00    22.64
      1.40     YES   HRDOW            NO
835   VOL18           0   0.92501E-03  573695.4 3725599.3   -16.7     5.00    22.64
      1.40     YES   HRDOW            NO
836   VOL19           0   0.92501E-03  573792.8 3725599.2   -16.8     5.00    22.64
      1.40     YES   HRDOW            NO
837   VOL20           0   0.92501E-03  573792.6 3725695.6   -16.6     5.00    22.64
      1.40     YES   HRDOW            NO
838   VOL21           0   0.92501E-03  573890.3 3725695.4   -16.6     5.00    22.64
      1.40     YES   HRDOW            NO
839   VOL22           0   0.92501E-03  573890.5 3725599.0   -16.9     5.00    22.64
      1.40     YES   HRDOW            NO
840   VOL23           0   0.92501E-03  573987.9 3725598.9   -17.0     5.00    22.64
      1.40     YES   HRDOW            NO
841   VOL24           0   0.92501E-03  573987.7 3725695.3   -16.7     5.00    22.64
      1.40     YES   HRDOW            NO
842   VOL25           0   0.92501E-03  574085.4 3725695.0   -16.8     5.00    22.64
      1.40     YES   HRDOW            NO
843   VOL26           0   0.92501E-03  574085.6 3725598.6   -17.1     5.00    22.64
      1.40     YES   HRDOW            NO
844   VOL27           0   0.92501E-03  574183.1 3725598.6   -17.2     5.00    22.64
      1.40     YES   HRDOW            NO
845   VOL28           0   0.92501E-03  574182.9 3725695.0   -16.9     5.00    22.64
      1.40     YES   HRDOW            NO
846   VOL29           0   0.92501E-03  573895.4 3725502.1   -17.7     5.00    22.64
      1.40     YES   HRDOW            NO
847   VOL30           0   0.92501E-03  573895.6 3725405.7   -18.3     5.00    22.64
      1.40     YES   HRDOW            NO
848   VOL31           0   0.92501E-03  573993.0 3725405.7   -18.6     5.00    22.64
      1.40     YES   HRDOW            NO
849   VOL32           0   0.92501E-03  573992.8 3725502.1   -17.9     5.00    22.64
      1.40     YES   HRDOW            NO
850   VOL33           0   0.92501E-03  574085.4 3725503.1   -17.9     5.00    22.64
      1.40     YES   HRDOW            NO
851   VOL34           0   0.92501E-03  574085.6 3725406.7   -18.8     5.00    22.64
      1.40     YES   HRDOW            NO
852   VOL35           0   0.92501E-03  574183.1 3725406.7   -19.0     5.00    22.64
      1.40     YES   HRDOW            NO
853   VOL36           0   0.92501E-03  574182.9 3725503.1   -18.2     5.00    22.64
      1.40     YES   HRDOW            NO
854   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***       11/04/25
855    *** AERMET - VERSION  22112 ***
       ***                                                          ***
       17:01:41
856
                                  PAGE   3
857    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
```

```
                                                     *** AREAPOLY SOURCE DATA ***

              NUMBER EMISSION RATE   LOCATION OF AREA  BASE     RELEASE  NUMBER
              INIT.   URBAN  EMISSION RATE    AIRCRAFT
   SOURCE       PART.  (GRAMS/SEC       X        Y      ELEV.    HEIGHT  OF VERTS.
   SZ     SOURCE  SCALAR VARY
     ID         CATS.   /METER**2)   (METERS) (METERS) (METERS) (METERS)
     (METERS)              BY
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - -

 PAREA1           0   0.16792E-06  573452.4 3725934.8   -15.2     0.00       8
 1.00     YES   HRDOW            NO
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 17:01:41

                             PAGE   4
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                       *** SOURCE IDs DEFINING SOURCE GROUPS ***

 SRCGROUP ID                                          SOURCE IDs
 -----------                                          ----------


  ALL        VOL1        , VOL2        , VOL3        , VOL4        , VOL5        ,
  VOL6        , VOL7        , VOL8        ,

             VOL9        , VOL10       , VOL11       , VOL12       , VOL13       ,
             VOL14       , VOL15       , VOL16       ,

             VOL17       , VOL18       , VOL19       , VOL20       , VOL21       ,
             VOL22       , VOL23       , VOL24       ,

             VOL25       , VOL26       , VOL27       , VOL28       , VOL29       ,
             VOL30       , VOL31       , VOL32       ,

             VOL33       , VOL34       , VOL35       , VOL36       , PAREA1      ,
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
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                             PAGE   5
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                       *** SOURCE IDs DEFINED AS URBAN SOURCES ***

  URBAN ID   URBAN POP                                 SOURCE IDs
  --------   ---------                                 ----------


              2492442.   VOL1        , VOL2        , VOL3        , VOL4        ,
              VOL5        , VOL6        , VOL7        ,
 VOL8        ,

             VOL9        , VOL10       , VOL11       , VOL12       , VOL13       ,
             VOL14       , VOL15       , VOL16       ,
```

```
905
906              VOL17       , VOL18       , VOL19       , VOL20       , VOL21
                 VOL22       , VOL23       , VOL24       ,
907
908              VOL25       , VOL26       , VOL27       , VOL28       , VOL29       ,
                 VOL30       , VOL31       , VOL32       ,
909
910              VOL33       , VOL34       , VOL35       , VOL36       , PAREA1      ,
911  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
     Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
912   *** AERMET - VERSION  22112 ***
      ***                                                                    ***
      17:01:41
913
                                PAGE   6
914   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
915
916                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                      WEEK (HRDOW) *
917
918   SOURCE ID = VOL1         ; SOURCE TYPE = VOLUME   :
919    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
920   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
921                                              DAY OF WEEK = WEEKDAY
922      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
923      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
924     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
925                                              DAY OF WEEK = SATURDAY
926      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
927      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
928     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
929                                              DAY OF WEEK = SUNDAY
930      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
931      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
932     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
933  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
     Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
934   *** AERMET - VERSION  22112 ***
      ***                                                                    ***
      17:01:41
935
                                PAGE   7
936   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
937
938                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                      WEEK (HRDOW) *
939
940   SOURCE ID = VOL2         ; SOURCE TYPE = VOLUME   :
941    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
942   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
943                                              DAY OF WEEK = WEEKDAY
944      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
         .0000E+00    7  .1000E+01    8  .1000E+01
```

```
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
     .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 17:01:41

                             PAGE   8
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL3         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
     .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 17:01:41

                             PAGE   9
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
```

```
                    WEEK (HRDOW) *
983
984   SOURCE ID = VOL4         ; SOURCE TYPE = VOLUME   :
985    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
986   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
987                                              DAY OF WEEK = WEEKDAY
988      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
989      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
990     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
991                                              DAY OF WEEK = SATURDAY
992      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
993      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
994     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
995                                              DAY OF WEEK = SUNDAY
996      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
997      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
998     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
999   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
1000   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       17:01:41
1001
                                  PAGE  10
1002   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1003
1004                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
1005
1006   SOURCE ID = VOL5         ; SOURCE TYPE = VOLUME   :
1007    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1008  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1009                                             DAY OF WEEK = WEEKDAY
1010     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
1011     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
1012    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1013                                             DAY OF WEEK = SATURDAY
1014     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1015     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1016    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1017                                             DAY OF WEEK = SUNDAY
1018     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1019     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1020    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
        .0000E+00   23  .0000E+00   24  .0000E+00
```

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1021  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***       11/04/25
1022   *** AERMET - VERSION  22112 ***
       ***                                                              ***
       17:01:41
1023
                                  PAGE  11
1024   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1025
1026                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
1027
1028   SOURCE ID = VOL6         ; SOURCE TYPE = VOLUME   :
1029    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1030   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1031                                              DAY OF WEEK = WEEKDAY
1032      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1033      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
1034     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1035                                              DAY OF WEEK = SATURDAY
1036      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1037      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1038     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1039                                              DAY OF WEEK = SUNDAY
1040      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1041      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1042     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1043  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***       11/04/25
1044   *** AERMET - VERSION  22112 ***
       ***                                                              ***
       17:01:41
1045
                                  PAGE  12
1046   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1047
1048                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
1049
1050   SOURCE ID = VOL7         ; SOURCE TYPE = VOLUME   :
1051    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1052   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1053                                              DAY OF WEEK = WEEKDAY
1054      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1055      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
1056     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1057                                              DAY OF WEEK = SATURDAY
1058      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1059      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
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 .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 17:01:41

                            PAGE  13
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL8         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
  .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 17:01:41

                            PAGE  14
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL9         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
```

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1098       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1099       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1100      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1101                                              DAY OF WEEK = SATURDAY
1102       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1103       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1104      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1105                                              DAY OF WEEK = SUNDAY
1106       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1107       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1108      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1109  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
1110   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       17:01:41
1111
                                  PAGE  15
1112   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1113
1114                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
1115
1116   SOURCE ID = VOL10        ; SOURCE TYPE = VOLUME   :
1117    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1118   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - - - - - -
1119                                              DAY OF WEEK = WEEKDAY
1120       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1121       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1122      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1123                                              DAY OF WEEK = SATURDAY
1124       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1125       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1126      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1127                                              DAY OF WEEK = SUNDAY
1128       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1129       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1130      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1131  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
1132   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       17:01:41
1133
                                  PAGE  16
1134   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
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1135
1136                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1137
1138    SOURCE ID = VOL11        ; SOURCE TYPE = VOLUME   :
1139     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1140    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1141                                                DAY OF WEEK = WEEKDAY
1142       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1143       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1144      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1145                                                DAY OF WEEK = SATURDAY
1146       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1147       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1148      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1149                                                DAY OF WEEK = SUNDAY
1150       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1151       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1152      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1153    FE *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
        Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
1154     *** AERMET - VERSION  22112 ***
         ***                                                                    ***
         17:01:41
1155
                                  PAGE  17
1156    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1157
1158                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1159
1160    SOURCE ID = VOL12        ; SOURCE TYPE = VOLUME   :
1161     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1162    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1163                                                DAY OF WEEK = WEEKDAY
1164       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1165       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1166      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1167                                                DAY OF WEEK = SATURDAY
1168       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1169       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1170      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1171                                                DAY OF WEEK = SUNDAY
1172       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1173       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
           .0000E+00   15  .0000E+00   16  .0000E+00
```

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   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                ***
 17:01:41

                              PAGE  18
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL13        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -

                                          DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00

                                          DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00

                                          DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                ***
 17:01:41

                              PAGE  19
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL14        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -

                                          DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00

                                          DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
```

```
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 17:01:41

                             PAGE  20
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL15        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
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                             PAGE  21
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL16        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
```

```
- - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 17:01:41

                            PAGE  22
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL17        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 17:01:41
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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

Item 2.

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL18 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

FF *** AERMOD - VERSION 24142 *** *** C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 *** 11/04/25

*** AERMET - VERSION 22112 ***

*** ***

17:01:41

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL19 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00

9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

FF *** AERMOD - VERSION 24142 *** *** C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 *** 11/04/25
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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL20 ; SOURCE TYPE = VOLUME :

HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR

DAY OF WEEK = WEEKDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .1000E+01 8 .1000E+01
9 .1000E+01 10 .1000E+01 11 .1000E+01 12 .1000E+01 13 .1000E+01 14 .1000E+01 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SATURDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SUNDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

FF *** AERMOD - VERSION 24142 *** *** C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 *** 11/04/25
*** AERMET - VERSION 22112 *** *** 17:01:41

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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL21 ; SOURCE TYPE = VOLUME :

HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR

DAY OF WEEK = WEEKDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .1000E+01 8 .1000E+01
9 .1000E+01 10 .1000E+01 11 .1000E+01 12 .1000E+01 13 .1000E+01 14 .1000E+01 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

```
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 17:01:41

                            PAGE  27
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL22        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL23        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
```

```
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - -
```

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      17:01:41
1441
                                  PAGE  30
1442  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1443
1444                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1445
1446  SOURCE ID = VOL25        ; SOURCE TYPE = VOLUME   :
1447   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1448  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1449                                                DAY OF WEEK = WEEKDAY
1450     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
1451     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
1452    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1453                                                DAY OF WEEK = SATURDAY
1454     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1455     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1456    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1457                                                DAY OF WEEK = SUNDAY
1458     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1459     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1460    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1461  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
1462   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       17:01:41
1463
                                  PAGE  31
1464  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1465
1466                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1467
1468  SOURCE ID = VOL26        ; SOURCE TYPE = VOLUME   :
1469   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1470  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1471                                                DAY OF WEEK = WEEKDAY
1472     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
1473     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
1474    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1475                                                DAY OF WEEK = SATURDAY
1476     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1477     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1478    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1479                                                DAY OF WEEK = SUNDAY
```

```
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
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                              PAGE  32
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL27        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
     .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
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                              PAGE  33
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL28        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
     .1000E+01   15  .0000E+00   16  .0000E+00
```

```
 17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
 .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
  1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
 .0000E+00    7  .0000E+00    8  .0000E+00
  9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
 .0000E+00   15  .0000E+00   16  .0000E+00
 17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
 .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
  1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
 .0000E+00    7  .0000E+00    8  .0000E+00
  9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
 .0000E+00   15  .0000E+00   16  .0000E+00
 17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
 .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
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                            PAGE  34
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL29        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
  1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
 .0000E+00    7  .1000E+01    8  .1000E+01
  9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
 .1000E+01   15  .0000E+00   16  .0000E+00
 17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
 .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
  1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
 .0000E+00    7  .0000E+00    8  .0000E+00
  9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
 .0000E+00   15  .0000E+00   16  .0000E+00
 17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
 .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
  1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
 .0000E+00    7  .0000E+00    8  .0000E+00
  9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
 .0000E+00   15  .0000E+00   16  .0000E+00
 17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
 .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
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                            PAGE  35
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *
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```
 SOURCE ID = VOL30        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 17:01:41

                            PAGE  36
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                  WEEK (HRDOW) *

 SOURCE ID = VOL31        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
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1594    *** AERMET - VERSION  22112 ***
        ***                                                                    ***
        17:01:41
1595
                                    PAGE  37
1596    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1597
1598                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1599
1600    SOURCE ID = VOL32        ; SOURCE TYPE = VOLUME   :
1601     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1602    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - - - -
1603                                                DAY OF WEEK = WEEKDAY
1604       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1605       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1606      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1607                                                DAY OF WEEK = SATURDAY
1608       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1609       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1610      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1611                                                DAY OF WEEK = SUNDAY
1612       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1613       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1614      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1615    FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
        Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
1616     *** AERMET - VERSION  22112 ***
         ***                                                                   ***
         17:01:41
1617
                                    PAGE  38
1618    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1619
1620                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1621
1622     SOURCE ID = VOL33        ; SOURCE TYPE = VOLUME   :
1623     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1624    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - - - -
1625                                                DAY OF WEEK = WEEKDAY
1626       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1627       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1628      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1629                                                DAY OF WEEK = SATURDAY
1630       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1631       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1632      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
```

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      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
      .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 17:01:41

                            PAGE  39
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL34        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -

                                              DAY OF WEEK = WEEKDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .1000E+01    8  .1000E+01
       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 17:01:41

                            PAGE  40
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL35        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -

                                              DAY OF WEEK = WEEKDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
      .0000E+00    7  .1000E+01    8  .1000E+01
```

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      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
     .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 17:01:41

                            PAGE  41
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL36        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
     .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 17:01:41

                            PAGE  42
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
```

```
                    WEEK (HRDOW) *
1709
1710   SOURCE ID = PAREA1       ; SOURCE TYPE = AREAPOLY :
1711    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1712   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - -
1713                                                DAY OF WEEK = WEEKDAY
1714      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1715      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
1716     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1717                                                DAY OF WEEK = SATURDAY
1718      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1719      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1720     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1721                                                DAY OF WEEK = SUNDAY
1722      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1723      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1724     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1725   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
       Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
1726    *** AERMET - VERSION  22112 ***
        ***                                                                    ***
        17:01:41
1727
                                  PAGE  43
1728    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1729
1730                                          *** DISCRETE CARTESIAN RECEPTORS ***
1731                                        (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
1732                                                    (METERS)
1733
1734        ( 574106.6, 3725973.2,     -15.2,    2651.3,       2.0);         ( 574279.0,
          3725910.5,     -15.9,    2651.3,       2.0);
1735        ( 574204.4, 3725350.5,     -19.1,    2651.3,       2.0);         ( 573655.6,
          3725533.6,     -16.7,    2651.3,       2.0);
1736        ( 573199.4, 3725824.6,     -14.8,    2651.3,       2.0);         ( 573815.9,
          3726049.2,     -13.7,    2651.3,       2.0);
1737        ( 574057.4, 3725989.2,     -14.7,    2651.3,       2.0);         ( 574023.1,
          3725980.7,     -14.6,    2651.3,       2.0);
1738        ( 574346.5, 3725650.9,     -17.5,    2651.3,       2.0);         ( 574313.0,
          3725545.0,     -17.4,    2651.3,       2.0);
1739        ( 574206.8, 3725308.8,     -19.7,    2651.3,       2.0);         ( 574038.4,
          3725331.2,     -18.7,    2651.3,       2.0);
1740        ( 574209.1, 3725258.2,     -19.7,    2651.3,       2.0);         ( 573785.2,
          3725289.0,     -17.4,    2651.3,       2.0);
1741        ( 573482.6, 3725346.8,     -16.6,    2651.3,       2.0);         ( 573666.9,
          3725489.5,     -17.0,    2651.3,       2.0);
1742        ( 573580.6, 3725595.5,     -16.2,    2651.3,       2.0);         ( 573477.6,
          3725543.7,     -16.2,    2651.3,       2.0);
1743        ( 573474.2, 3725503.2,     -16.5,    2651.3,       2.0);         ( 573229.4,
          3725847.4,     -14.7,    2651.3,       2.0);
1744        ( 573040.9, 3725971.2,     -13.5,    2651.3,       2.0);         ( 573120.2,
          3725973.9,     -13.8,    2651.3,       2.0);
1745   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
       Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
1746    *** AERMET - VERSION  22112 ***
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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
(1=YES; 0=NO)

1 1 1

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      REF WS   WD     HT  REF TA     HT
1787  - - -
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*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION ***
FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): VOL1 , VOL2 ,
VOL3 , VOL4 , VOL5 ,
VOL6 , VOL7 , VOL8 , VOL9 , VOL10 ,
VOL11 , VOL12 , VOL13 ,
VOL14 , VOL15 , VOL16 , VOL17 , VOL18 ,
VOL19 , VOL20 , VOL21 ,
VOL22 , VOL23 , VOL24 , VOL25 , VOL26 ,
VOL27 , VOL28 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_2.5 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
574106.64	3725973.24	0.54980	(19011724)	574278.99	3725910.47	0.40412	(19011724)
574204.36	3725350.47	0.99001c	(22122824)	573655.61	3725533.56	0.47706	(18122024)
573199.43	3725824.57	0.21111	(21122824)	573815.91	3726049.22	0.46398	(18011924)
574057.43	3725989.22	0.51145	(18011924)	574023.10	3725980.72	0.58547	(18011924)
574346.45	3725650.86	0.35963	(21123024)	574312.95	3725545.02	0.49025	(21123024)
574206.77	3725308.84	0.64145c	(22122824)	574038.43	3725331.17	0.76524	(18120624)
574209.11	3725258.17	0.48885c	(22122824)	573785.25	3725289.00	0.25374	(18122024)
573482.56	3725346.84	0.15016	(17010624)	573666.90	3725489.52	0.34603	(18122024)
573580.56	3725595.53	0.36177	(17010624)	573477.56	3725543.69	0.22673	(17010624)
573474.22	3725503.19	0.20434	(17010624)	573229.37	3725847.44	0.23057	(21122824)
573040.93	3725971.18	0.14591	(21122824)	573120.15	3725973.92	0.15038	(21122824)

*** THE SUMMARY OF HIGHEST 24-HR RESULTS ***

** CONC OF PM_2.5 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID

```
- - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS       0.99001c ON 22122824: AT (  574204.36,
3725350.47,   -19.13,  2651.27,    2.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        11/04/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 17:01:41

                            PAGE  48
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of           77 Warning Message(s)
 A Total of         1671 Informational Message(s)

 A Total of        43800 Hours Were Processed

 A Total of          763 Calm Hours Identified

 A Total of          908 Missing Hours Identified (  2.07 Percent)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W340     697       PRBASE: Possible Error in PROFBASE Input:  Value is < 0
 PROFBASE
 ME W186     698       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold
 used           0.50
 ME W187     698       MEOPEN: ADJ_U* Option for Stable Low Winds used in
 AERMET
 CN W732    1176         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2017021824
 CN W732    5136         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2017080224
 CN W732    6048         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2017090924
 CN W732    6792         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2017101024
 CN W732   10368         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2018030824
 CN W732   10464         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2018031224
 CN W732   10632         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2018031924
 CN W732   12408         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2018060124
 CN W732   16704         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2018112724
 CN W732   16728         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2018112824
 CN W732   18552         AVER: 24-hr avg, < 18 hours of data, calms policy used.
```

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      2019021224
1907  CN W732   19056         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019030524
1908  CN W732   19152         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019030924
1909  CN W732   19224         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019031224
1910  CN W732   19344         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019031724
1911  CN W732   19464         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019032224
1912  CN W732   19512         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019032424
1913  CN W732   19536         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019032524
1914  CN W732   19560         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019032624
1915  CN W732   19584         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019032724
1916  CN W732   19656         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019033024
1917  CN W732   20016         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019041424
1918  CN W732   20112         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019041824
1919  CN W732   20712         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019051324
1920  CN W732   20856         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019051924
1921  CN W732   22080         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019070924
1922  CN W732   22200         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019071424
1923  CN W732   22848         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019081024
1924  CN W732   23400         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019090224
1925  CN W732   24216         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019100624
1926  CN W732   24408         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019101424
1927  CN W732   24576         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019102124
1928  MX W450   26281       CHKDAT: Record Out of Sequence in Meteorological File at:
      21010101
1929  MX W450   26281       CHKDAT: Record Out of Sequence in Meteorological File at:    1
      year gap
1930  CN W732   26496         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021010924
1931  CN W732   26520         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021011024
1932  CN W732   26544         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021011124
1933  CN W732   26568         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021011224
1934  CN W732   26832         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021012324
1935  CN W732   26856         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021012424
1936  CN W732   26880         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021012524
1937  CN W732   27000         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021013024
1938  CN W732   27024         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021013124
1939  CN W732   27192         AVER: 24-hr avg, < 18 hours of data, calms policy used.
```

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      2021020724
1940  CN W732   28032         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021031424
1941  CN W732   28416         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021033024
1942  CN W732   28512         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021040324
1943  CN W732   28680         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021041024
1944  CN W732   29976         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021060324
1945  CN W732   30072         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021060724
1946  CN W732   30408         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021062124
1947  CN W732   30768         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021070624
1948  CN W732   30816         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021070824
1949  CN W732   31512         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021080624
1950  CN W732   31560         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021080824
1951  CN W732   32136         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021090124
1952  CN W732   33024         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021100824
1953  CN W732   33048         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021100924
1954  CN W732   34584         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021121224
1955  CN W732   38256         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022051424
1956  CN W732   38976         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022061324
1957  CN W732   40392         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022081124
1958  CN W732   41088         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022090924
1959  CN W732   41112         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022091024
1960  CN W732   41160         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022091224
1961  CN W732   41400         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022092224
1962  CN W732   42624         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022111224
1963  CN W732   42648         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022111324
1964  CN W732   42672         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022111424
1965  CN W732   42696         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022111524
1966  CN W732   42888         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022112324
1967  CN W732   43128         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022120324
1968  CN W732   43272         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022120924
1969  CN W732   43296         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022121024
1970
1971     ***********************************
1972     *** AERMOD Finishes Successfully ***
1973     ***********************************
1974
```

```
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 13.0.0
** Lakes Environmental Software Inc.
** Date: 7/18/2025
** File: C:\Users\Alyssa Barnett\Desktop\HRA\16552\16652-02 Const PM10\16652-02 Const PM10.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02
   MODELOPT DFAULT CONC
   AVERTIME 24
   URBANOPT 2492442 Riverside_County
   POLLUTID PM_10
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "16652-02 Const PM10.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     573500.180  3725886.220      -15.810
   LOCATION VOL2         VOLUME     573500.381  3725789.820      -16.120
   LOCATION VOL3         VOLUME     573597.602  3725886.190      -16.050
   LOCATION VOL4         VOLUME     573597.803  3725789.790      -16.360
   LOCATION VOL5         VOLUME     573694.930  3725886.254      -16.110
   LOCATION VOL6         VOLUME     573695.131  3725789.853      -16.280
   LOCATION VOL7         VOLUME     573792.553  3725789.824      -16.410
   LOCATION VOL8         VOLUME     573792.352  3725886.224      -16.330
   LOCATION VOL9         VOLUME     573890.171  3725886.254      -15.450
   LOCATION VOL10        VOLUME     573890.372  3725789.853      -15.750
   LOCATION VOL11        VOLUME     573987.794  3725789.824      -15.210
   LOCATION VOL12        VOLUME     573987.593  3725886.224      -15.520
   LOCATION VOL13        VOLUME     574085.292  3725886.133      -15.630
   LOCATION VOL14        VOLUME     574085.493  3725789.733      -15.890
   LOCATION VOL15        VOLUME     574182.915  3725789.703      -16.000
   LOCATION VOL16        VOLUME     574182.714  3725886.103      -15.750
   LOCATION VOL17        VOLUME     573695.175  3725695.674      -16.510
   LOCATION VOL18        VOLUME     573695.376  3725599.274      -16.700
   LOCATION VOL19        VOLUME     573792.799  3725599.244      -16.820
   LOCATION VOL20        VOLUME     573792.597  3725695.644      -16.620
   LOCATION VOL21        VOLUME     573890.309  3725695.354      -16.590
   LOCATION VOL22        VOLUME     573890.510  3725598.954      -16.930
   LOCATION VOL23        VOLUME     573987.932  3725598.925      -17.030
   LOCATION VOL24        VOLUME     573987.731  3725695.325      -16.730
   LOCATION VOL25        VOLUME     574085.442  3725695.035      -16.760
   LOCATION VOL26        VOLUME     574085.643  3725598.635      -17.100
   LOCATION VOL27        VOLUME     574183.066  3725598.605      -17.220
   LOCATION VOL28        VOLUME     574182.864  3725695.005      -16.880
   LOCATION VOL29        VOLUME     573895.419  3725502.137      -17.650
```

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   LOCATION VOL30        VOLUME     573895.620  3725405.737      -18.290
   LOCATION VOL31        VOLUME     573993.042  3725405.707      -18.630
   LOCATION VOL32        VOLUME     573992.841  3725502.107      -17.860
   LOCATION VOL33        VOLUME     574085.442  3725503.095      -17.950
   LOCATION VOL34        VOLUME     574085.643  3725406.695      -18.800
   LOCATION VOL35        VOLUME     574183.066  3725406.665      -18.970
   LOCATION VOL36        VOLUME     574182.864  3725503.066      -18.220
   LOCATION PAREA1       AREAPOLY   573452.368  3725934.831      -15.220
** Source Parameters **
   SRCPARAM VOL1         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL2         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL3         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL4         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL5         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL6         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL7         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL8         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL9         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL10        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL11        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL12        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL13        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL14        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL15        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL16        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL17        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL18        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL19        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL20        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL21        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL22        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL23        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL24        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL25        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL26        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL27        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL28        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL29        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL30        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL31        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL32        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL33        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL34        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL35        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL36        0.0010054462     5.000    22.640     1.400
   SRCPARAM PAREA1       3.5229E-07     0.000         8     1.000
   AREAVERT PAREA1       573452.368 3725934.831 574231.065 3725933.083
   AREAVERT PAREA1       574231.939 3725360.640 573845.649 3725358.018
   AREAVERT PAREA1       573845.649 3725549.415 573646.387 3725552.911
   AREAVERT PAREA1       573645.513 3725741.686 573451.494 3725741.686
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

```
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL2         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL6         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL11        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL12        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
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   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL24        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
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528      EMISFACT VOL28        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
529      EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
530   ** Saturday:
531      EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
532      EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
533      EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
534      EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
535   ** Sunday:
536      EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
537      EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
538      EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
539      EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
540   ** WeekDays:
541      EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
542      EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
543      EMISFACT VOL29        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
544      EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
545   ** Saturday:
546      EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
547      EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
548      EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
549      EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
550   ** Sunday:
551      EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
552      EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
553      EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
554      EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
555   ** WeekDays:
556      EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
557      EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
558      EMISFACT VOL30        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
559      EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
560   ** Saturday:
561      EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
562      EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
563      EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
564      EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
565   ** Sunday:
566      EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
567      EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
568      EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
569      EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
570   ** WeekDays:
571      EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
572      EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
573      EMISFACT VOL31        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
574      EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
575   ** Saturday:
576      EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
577      EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
578      EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
579      EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
580   ** Sunday:
581      EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
582      EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
583      EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
584      EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
585   ** WeekDays:
586      EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
587      EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
588      EMISFACT VOL32        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
589      EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
590   ** Saturday:
591      EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
592      EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
593      EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

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   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

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** WeekDays:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED "16652-02 Const PM10.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE ..\KTRM_V11_trimmed.sfc
   PROFFILE ..\KTRM_V11_trimmed.PFL
   SURFDATA 3104 2017
   UAIRDATA 3190 2017
   PROFBASE -36.04 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 24 ALL 1ST "16652-02 CONST PM10.AD\24H1GALL.PLT" 31
   SUMMFILE "16652-02 Const PM10.sum"
OU FINISHED
**
**************************************
** Project Parameters
**************************************
** PROJCTN  CoordinateSystemUTM
** DESCPTN  UTM: Universal Transverse Mercator
** DATUM    North American Datum 1983
** DTMRGN   CONUS
** UNITS    m
** ZONE     11
** ZONEINX  0
**
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**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 13.0.0
** Lakes Environmental Software Inc.
** Date: 7/18/2025
** File: C:\Users\Alyssa Barnett\Desktop\HRA\16552\16652-02 Const PM10\16652-02 Const PM10.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02
   MODELOPT DFAULT CONC
   AVERTIME 24
   URBANOPT 2492442 Riverside_County
   POLLUTID PM_10
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "16652-02 Const PM10.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     573500.180  3725886.220      -15.810
   LOCATION VOL2         VOLUME     573500.381  3725789.820      -16.120
   LOCATION VOL3         VOLUME     573597.602  3725886.190      -16.050
   LOCATION VOL4         VOLUME     573597.803  3725789.790      -16.360
   LOCATION VOL5         VOLUME     573694.930  3725886.254      -16.110
   LOCATION VOL6         VOLUME     573695.131  3725789.853      -16.280
   LOCATION VOL7         VOLUME     573792.553  3725789.824      -16.410
   LOCATION VOL8         VOLUME     573792.352  3725886.224      -16.330
   LOCATION VOL9         VOLUME     573890.171  3725886.254      -15.450
   LOCATION VOL10        VOLUME     573890.372  3725789.853      -15.750
   LOCATION VOL11        VOLUME     573987.794  3725789.824      -15.210
   LOCATION VOL12        VOLUME     573987.593  3725886.224      -15.520
   LOCATION VOL13        VOLUME     574085.292  3725886.133      -15.630
   LOCATION VOL14        VOLUME     574085.493  3725789.733      -15.890
   LOCATION VOL15        VOLUME     574182.915  3725789.703      -16.000
   LOCATION VOL16        VOLUME     574182.714  3725886.103      -15.750
   LOCATION VOL17        VOLUME     573695.175  3725695.674      -16.510
   LOCATION VOL18        VOLUME     573695.376  3725599.274      -16.700
   LOCATION VOL19        VOLUME     573792.799  3725599.244      -16.820
   LOCATION VOL20        VOLUME     573792.597  3725695.644      -16.620
   LOCATION VOL21        VOLUME     573890.309  3725695.354      -16.590
   LOCATION VOL22        VOLUME     573890.510  3725598.954      -16.930
   LOCATION VOL23        VOLUME     573987.932  3725598.925      -17.030
   LOCATION VOL24        VOLUME     573987.731  3725695.325      -16.730
   LOCATION VOL25        VOLUME     574085.442  3725695.035      -16.760
   LOCATION VOL26        VOLUME     574085.643  3725598.635      -17.100
   LOCATION VOL27        VOLUME     574183.066  3725598.605      -17.220
   LOCATION VOL28        VOLUME     574182.864  3725695.005      -16.880
   LOCATION VOL29        VOLUME     573895.419  3725502.137      -17.650
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   LOCATION VOL30        VOLUME     573895.620  3725405.737      -18.290
   LOCATION VOL31        VOLUME     573993.042  3725405.707      -18.630
   LOCATION VOL32        VOLUME     573992.841  3725502.107      -17.860
   LOCATION VOL33        VOLUME     574085.442  3725503.095      -17.950
   LOCATION VOL34        VOLUME     574085.643  3725406.695      -18.800
   LOCATION VOL35        VOLUME     574183.066  3725406.665      -18.970
   LOCATION VOL36        VOLUME     574182.864  3725503.066      -18.220
   LOCATION PAREA1       AREAPOLY   573452.368  3725934.831      -15.220
** Source Parameters **
   SRCPARAM VOL1         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL2         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL3         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL4         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL5         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL6         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL7         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL8         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL9         0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL10        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL11        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL12        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL13        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL14        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL15        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL16        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL17        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL18        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL19        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL20        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL21        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL22        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL23        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL24        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL25        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL26        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL27        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL28        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL29        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL30        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL31        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL32        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL33        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL34        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL35        0.0010054462     5.000    22.640     1.400
   SRCPARAM VOL36        0.0010054462     5.000    22.640     1.400
   SRCPARAM PAREA1       3.5229E-07     0.000         8     1.000
   AREAVERT PAREA1       573452.368 3725934.831 574231.065 3725933.083
   AREAVERT PAREA1       574231.939 3725360.640 573845.649 3725358.018
   AREAVERT PAREA1       573845.649 3725549.415 573646.387 3725552.911
   AREAVERT PAREA1       573645.513 3725741.686 573451.494 3725741.686
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL2         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL6         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL11        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL12        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
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   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL24        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL28        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED "16652-02 Const PM10.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE ..\KTRM_V11_trimmed.sfc
   PROFFILE ..\KTRM_V11_trimmed.PFL
   SURFDATA 3104 2017
   UAIRDATA 3190 2017
   PROFBASE -36.04 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 24 ALL 1ST "16652-02 CONST PM10.AD\24H1GALL.PLT" 31
   SUMMFILE "16652-02 Const PM10.sum"
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            3 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***

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726
727       ********   WARNING MESSAGES   ********
728     ME W340     697       PRBASE: Possible Error in PROFBASE Input:  Value is < 0
        PROFBASE
729     ME W186     698       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold
        used           0.50
730     ME W187     698       MEOPEN: ADJ_U* Option for Stable Low Winds used in
        AERMET
731
732     **********************************
733     *** SETUP Finishes Successfully ***
734     **********************************
735
736     FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
        Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
737     *** AERMET - VERSION  22112 ***
        ***                                                                  ***
        14:26:55
738
                                  PAGE   1
739     *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
740
741                                              ***     MODEL SETUP OPTIONS SUMMARY       ***
742     - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - -
743
744     ** Model Options Selected:
745          * Model Uses Regulatory DEFAULT Options
746          * Model Is Setup For Calculation of Average CONCentration Values.
747          * NO GAS DEPOSITION Data Provided.
748          * NO PARTICLE DEPOSITION Data Provided.
749          * Model Uses NO DRY DEPLETION. DDPLETE  =  F
750          * Model Uses NO WET DEPLETION. WETDPLT  =  F
751          * Stack-tip Downwash.
752          * Model Accounts for ELEVated Terrain Effects.
753          * Use Calms Processing Routine.
754          * Use Missing Data Processing Routine.
755          * No Exponential Decay.
756          * Model Uses URBAN Dispersion Algorithm for the SBL for    37 Source(s),
757            for Total of    1 Urban Area(s):
758       Urban Population =   2492442.0 ;  Urban Roughness Length =  1.000 m
759          * Urban Roughness Length of 1.0 Meter Used.
760          * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
761          * CCVR_Sub - Meteorological data includes CCVR substitutions
762          * TEMP_Sub - Meteorological data includes TEMP substitutions
763          * Model Accepts FLAGPOLE Receptor . Heights.
764          * The User Specified a Pollutant Type of: PM_10
765
766     **Model Calculates  1 Short Term Average(s) of:  24-HR
767
768     **This Run Includes:     37 Source(s);       1 Source Group(s); and      22 Receptor(s)
769
770                    with:      0 POINT(s), including
771                               0 POINTCAP(s) and      0 POINTHOR(s)
772                     and:     36 VOLUME source(s)
773                     and:      1 AREA type source(s)
774                     and:      0 LINE source(s)
775                     and:      0 RLINE/RLINEXT source(s)
776                     and:      0 OPENPIT source(s)
777                     and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
778                     and:      0 SWPOINT source(s)
779
780
781     **Model Set To Continue RUNning After the Setup Testing.
782
783     **The AERMET Input Meteorological Data Version Date:  22112
```

**Output Options Selected:
Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours
m for Missing Hours
b for Both Calm and Missing Hours

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = -36.04 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0
Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 3.6 MB of RAM.

**Input Runstream File:
aermod.inp

**Output Print File:
aermod.out

**Detailed Error/Message File: 16652-02 Const PM10.err
**File for Summary of Results: 16652-02 Const PM10.sum
FF *** AERMOD - VERSION 24142 *** *** C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 *** 07/18/25
*** AERMET - VERSION 22112 ***
*** ***
14:26:55

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER EMISSION RATE INIT. PART. CATS.	URBAN SOURCE	EMISSION RATE (GRAMS/SEC) SCALAR VARY BY	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	AIRCRAFT WAKE
VOL1	0		0.10054E-02	573500.2	3725886.2	-15.8	5.00	22.64	
1.40	YES	HRDOW	NO						
VOL2	0		0.10054E-02	573500.4	3725789.8	-16.1	5.00	22.64	
1.40	YES	HRDOW	NO						
VOL3	0		0.10054E-02	573597.6	3725886.2	-16.1	5.00	22.64	
1.40	YES	HRDOW	NO						
VOL4	0		0.10054E-02	573597.8	3725789.8	-16.4	5.00	22.64	
1.40	YES	HRDOW	NO						
VOL5	0		0.10054E-02	573694.9	3725886.3	-16.1	5.00	22.64	
1.40	YES	HRDOW	NO						
VOL6	0		0.10054E-02	573695.1	3725789.9	-16.3	5.00	22.64	
1.40	YES	HRDOW	NO						
VOL7	0		0.10054E-02	573792.6	3725789.8	-16.4	5.00	22.64	
1.40	YES	HRDOW	NO						

```
825   VOL8            0   0.10054E-02  573792.4 3725886.2   -16.3     5.00    22.64
      1.40     YES   HRDOW            NO
826   VOL9            0   0.10054E-02  573890.2 3725886.3   -15.5     5.00    22.64
      1.40     YES   HRDOW            NO
827   VOL10           0   0.10054E-02  573890.4 3725789.9   -15.8     5.00    22.64
      1.40     YES   HRDOW            NO
828   VOL11           0   0.10054E-02  573987.8 3725789.8   -15.2     5.00    22.64
      1.40     YES   HRDOW            NO
829   VOL12           0   0.10054E-02  573987.6 3725886.2   -15.5     5.00    22.64
      1.40     YES   HRDOW            NO
830   VOL13           0   0.10054E-02  574085.3 3725886.1   -15.6     5.00    22.64
      1.40     YES   HRDOW            NO
831   VOL14           0   0.10054E-02  574085.5 3725789.7   -15.9     5.00    22.64
      1.40     YES   HRDOW            NO
832   VOL15           0   0.10054E-02  574182.9 3725789.7   -16.0     5.00    22.64
      1.40     YES   HRDOW            NO
833   VOL16           0   0.10054E-02  574182.7 3725886.1   -15.8     5.00    22.64
      1.40     YES   HRDOW            NO
834   VOL17           0   0.10054E-02  573695.2 3725695.7   -16.5     5.00    22.64
      1.40     YES   HRDOW            NO
835   VOL18           0   0.10054E-02  573695.4 3725599.3   -16.7     5.00    22.64
      1.40     YES   HRDOW            NO
836   VOL19           0   0.10054E-02  573792.8 3725599.2   -16.8     5.00    22.64
      1.40     YES   HRDOW            NO
837   VOL20           0   0.10054E-02  573792.6 3725695.6   -16.6     5.00    22.64
      1.40     YES   HRDOW            NO
838   VOL21           0   0.10054E-02  573890.3 3725695.4   -16.6     5.00    22.64
      1.40     YES   HRDOW            NO
839   VOL22           0   0.10054E-02  573890.5 3725599.0   -16.9     5.00    22.64
      1.40     YES   HRDOW            NO
840   VOL23           0   0.10054E-02  573987.9 3725598.9   -17.0     5.00    22.64
      1.40     YES   HRDOW            NO
841   VOL24           0   0.10054E-02  573987.7 3725695.3   -16.7     5.00    22.64
      1.40     YES   HRDOW            NO
842   VOL25           0   0.10054E-02  574085.4 3725695.0   -16.8     5.00    22.64
      1.40     YES   HRDOW            NO
843   VOL26           0   0.10054E-02  574085.6 3725598.6   -17.1     5.00    22.64
      1.40     YES   HRDOW            NO
844   VOL27           0   0.10054E-02  574183.1 3725598.6   -17.2     5.00    22.64
      1.40     YES   HRDOW            NO
845   VOL28           0   0.10054E-02  574182.9 3725695.0   -16.9     5.00    22.64
      1.40     YES   HRDOW            NO
846   VOL29           0   0.10054E-02  573895.4 3725502.1   -17.7     5.00    22.64
      1.40     YES   HRDOW            NO
847   VOL30           0   0.10054E-02  573895.6 3725405.7   -18.3     5.00    22.64
      1.40     YES   HRDOW            NO
848   VOL31           0   0.10054E-02  573993.0 3725405.7   -18.6     5.00    22.64
      1.40     YES   HRDOW            NO
849   VOL32           0   0.10054E-02  573992.8 3725502.1   -17.9     5.00    22.64
      1.40     YES   HRDOW            NO
850   VOL33           0   0.10054E-02  574085.4 3725503.1   -17.9     5.00    22.64
      1.40     YES   HRDOW            NO
851   VOL34           0   0.10054E-02  574085.6 3725406.7   -18.8     5.00    22.64
      1.40     YES   HRDOW            NO
852   VOL35           0   0.10054E-02  574183.1 3725406.7   -19.0     5.00    22.64
      1.40     YES   HRDOW            NO
853   VOL36           0   0.10054E-02  574182.9 3725503.1   -18.2     5.00    22.64
      1.40     YES   HRDOW            NO
854   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***       07/18/25
855    *** AERMET - VERSION  22112 ***
       ***                                                          ***
       14:26:55
856
                                  PAGE   3
                                                                                1735
857    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
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                                                     *** AREAPOLY SOURCE DATA ***

              NUMBER EMISSION RATE   LOCATION OF AREA  BASE     RELEASE  NUMBER
              INIT.   URBAN  EMISSION RATE    AIRCRAFT
   SOURCE       PART.  (GRAMS/SEC       X        Y      ELEV.    HEIGHT  OF VERTS.
   SZ     SOURCE  SCALAR VARY
     ID         CATS.   /METER**2)   (METERS) (METERS) (METERS) (METERS)
     (METERS)              BY
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - -

 PAREA1           0   0.35229E-06  573452.4 3725934.8   -15.2     0.00       8
 1.00     YES   HRDOW            NO
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 14:26:55

                            PAGE   4
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                       *** SOURCE IDs DEFINING SOURCE GROUPS ***

 SRCGROUP ID                                          SOURCE IDs
 -----------                                          ----------


  ALL        VOL1        , VOL2        , VOL3        , VOL4        , VOL5        ,
  VOL6        , VOL7        , VOL8        ,

             VOL9        , VOL10       , VOL11       , VOL12       , VOL13       ,
             VOL14       , VOL15       , VOL16       ,

             VOL17       , VOL18       , VOL19       , VOL20       , VOL21       ,
             VOL22       , VOL23       , VOL24       ,

             VOL25       , VOL26       , VOL27       , VOL28       , VOL29       ,
             VOL30       , VOL31       , VOL32       ,

             VOL33       , VOL34       , VOL35       , VOL36       , PAREA1      ,
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 14:26:55

                            PAGE   5
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                       *** SOURCE IDs DEFINED AS URBAN SOURCES ***

  URBAN ID   URBAN POP                                 SOURCE IDs
  --------   ---------                                 ----------


              2492442.   VOL1        , VOL2        , VOL3        , VOL4        ,
              VOL5        , VOL6        , VOL7        ,
 VOL8        ,

             VOL9        , VOL10       , VOL11       , VOL12       , VOL13       ,
             VOL14       , VOL15       , VOL16       ,
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905
906              VOL17       , VOL18       , VOL19       , VOL20       , VOL21
                 VOL22       , VOL23       , VOL24       ,
907
908              VOL25       , VOL26       , VOL27       , VOL28       , VOL29       ,
                 VOL30       , VOL31       , VOL32       ,
909
910              VOL33       , VOL34       , VOL35       , VOL36       , PAREA1      ,
911  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
     Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
912   *** AERMET - VERSION  22112 ***
      ***                                                                    ***
      14:26:55
913
                                PAGE   6
914   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
915
916                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
917
918   SOURCE ID = VOL1         ; SOURCE TYPE = VOLUME   :
919    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
920   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
921                                                 DAY OF WEEK = WEEKDAY
922      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
923      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
924     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
925                                                 DAY OF WEEK = SATURDAY
926      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
927      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
928     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
929                                                 DAY OF WEEK = SUNDAY
930      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
931      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
932     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
933  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
     Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
934   *** AERMET - VERSION  22112 ***
      ***                                                                    ***
      14:26:55
935
                                PAGE   7
936   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
937
938                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
939
940   SOURCE ID = VOL2         ; SOURCE TYPE = VOLUME   :
941    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
942   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
943                                                 DAY OF WEEK = WEEKDAY
944      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
         .0000E+00    7  .1000E+01    8  .1000E+01
```

945 9 .1000E+01 10 .1000E+01 11 .1000E+01 12 .1000E+01 13 .1000E+01 14 .1000E+01 15 .0000E+00 16 .0000E+00
946 17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
947 DAY OF WEEK = SATURDAY
948 1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
949 9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
950 17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
951 DAY OF WEEK = SUNDAY
952 1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
953 9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
954 17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
955 FF *** AERMOD - VERSION 24142 *** *** C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 *** 07/18/25
956 *** AERMET - VERSION 22112 *** *** ***
14:26:55
957
PAGE 8
958 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*
959
960 * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *
961
962 SOURCE ID = VOL3 ; SOURCE TYPE = VOLUME :
963 HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR
964 - - -

```
                    WEEK (HRDOW) *
983
984   SOURCE ID = VOL4         ; SOURCE TYPE = VOLUME   :
985    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
986   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
987                                              DAY OF WEEK = WEEKDAY
988      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
989      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
990     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
991                                              DAY OF WEEK = SATURDAY
992      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
993      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
994     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
995                                              DAY OF WEEK = SUNDAY
996      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
997      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
998     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
999   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1000   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       14:26:55
1001
                                  PAGE  10
1002   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1003
1004                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
1005
1006   SOURCE ID = VOL5         ; SOURCE TYPE = VOLUME   :
1007    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1008  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1009                                             DAY OF WEEK = WEEKDAY
1010     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
1011     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
1012    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1013                                             DAY OF WEEK = SATURDAY
1014     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1015     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1016    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1017                                             DAY OF WEEK = SUNDAY
1018     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1019     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1020    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
        .0000E+00   23  .0000E+00   24  .0000E+00
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1021  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1022   *** AERMET - VERSION  22112 ***
       ***                                                                ***
       14:26:55
1023
                                  PAGE  11
1024   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1025
1026                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
1027
1028   SOURCE ID = VOL6         ; SOURCE TYPE = VOLUME   :
1029    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1030   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1031                                                DAY OF WEEK = WEEKDAY
1032      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1033      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
1034     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1035                                                DAY OF WEEK = SATURDAY
1036      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1037      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1038     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1039                                                DAY OF WEEK = SUNDAY
1040      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1041      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1042     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1043  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1044   *** AERMET - VERSION  22112 ***
       ***                                                                ***
       14:26:55
1045
                                  PAGE  12
1046   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1047
1048                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
1049
1050   SOURCE ID = VOL7         ; SOURCE TYPE = VOLUME   :
1051    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1052   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1053                                                DAY OF WEEK = WEEKDAY
1054      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1055      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
1056     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
         .0000E+00   23  .0000E+00   24  .0000E+00
1057                                                DAY OF WEEK = SATURDAY
1058      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1059      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
```

```
 .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 14:26:55

                            PAGE  13
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL8         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
  .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 14:26:55

                            PAGE  14
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL9         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
```

```
1098       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1099       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1100      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1101                                              DAY OF WEEK = SATURDAY
1102       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1103       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1104      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1105                                              DAY OF WEEK = SUNDAY
1106       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1107       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1108      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1109 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
     Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1110  *** AERMET - VERSION  22112 ***
      ***                                                                    ***
      14:26:55
1111
                                PAGE  15
1112  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1113
1114                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1115
1116  SOURCE ID = VOL10        ; SOURCE TYPE = VOLUME   :
1117   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
      SCALAR   HOUR   SCALAR   HOUR   SCALAR
1118  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1119                                              DAY OF WEEK = WEEKDAY
1120       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1121       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1122      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1123                                              DAY OF WEEK = SATURDAY
1124       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1125       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1126      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1127                                              DAY OF WEEK = SUNDAY
1128       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1129       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1130      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1131 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
     Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1132  *** AERMET - VERSION  22112 ***
      ***                                                                    ***
      14:26:55
1133
                                PAGE  16
1134  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
```

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1135
1136                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1137
1138    SOURCE ID = VOL11        ; SOURCE TYPE = VOLUME   :
1139     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1140    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1141                                                DAY OF WEEK = WEEKDAY
1142       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1143       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1144      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1145                                                DAY OF WEEK = SATURDAY
1146       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1147       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1148      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1149                                                DAY OF WEEK = SUNDAY
1150       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1151       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1152      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1153    FE *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
        Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1154     *** AERMET - VERSION  22112 ***
         ***                                                                    ***
         14:26:55
1155
                                  PAGE  17
1156    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1157
1158                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1159
1160    SOURCE ID = VOL12        ; SOURCE TYPE = VOLUME   :
1161     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1162    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1163                                                DAY OF WEEK = WEEKDAY
1164       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1165       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1166      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1167                                                DAY OF WEEK = SATURDAY
1168       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1169       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1170      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1171                                                DAY OF WEEK = SUNDAY
1172       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1173       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
           .0000E+00   15  .0000E+00   16  .0000E+00
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1174      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1175    FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
        Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1176     *** AERMET - VERSION  22112 ***
         ***                                                                ***
         14:26:55
1177
                                    PAGE  18
1178     *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1179
1180                       * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                           WEEK (HRDOW) *
1181
1182     SOURCE ID = VOL13        ; SOURCE TYPE = VOLUME   :
1183      HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
          SCALAR   HOUR   SCALAR   HOUR   SCALAR
1184    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1185                                                DAY OF WEEK = WEEKDAY
1186        1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1187        9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
1188      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1189                                                DAY OF WEEK = SATURDAY
1190        1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1191        9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1192      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1193                                                DAY OF WEEK = SUNDAY
1194        1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1195        9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1196      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1197    FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
        Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1198     *** AERMET - VERSION  22112 ***
         ***                                                                ***
         14:26:55
1199
                                    PAGE  19
1200     *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1201
1202                       * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                           WEEK (HRDOW) *
1203
1204     SOURCE ID = VOL14        ; SOURCE TYPE = VOLUME   :
1205      HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
          SCALAR   HOUR   SCALAR   HOUR   SCALAR
1206    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1207                                                DAY OF WEEK = WEEKDAY
1208        1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .1000E+01    8  .1000E+01
1209        9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .0000E+00   16  .0000E+00
1210      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1211                                                DAY OF WEEK = SATURDAY
1212        1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
```

```
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 14:26:55

                             PAGE  20
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL15        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 14:26:55

                             PAGE  21
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL16        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
```

```
- - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 14:26:55

                            PAGE  22
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL17        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 14:26:55
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                                PAGE  23
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                  WEEK (HRDOW) *

SOURCE ID = VOL18        ; SOURCE TYPE = VOLUME   :
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
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                                PAGE  24
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                  WEEK (HRDOW) *

SOURCE ID = VOL19        ; SOURCE TYPE = VOLUME   :
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
   .0000E+00    7  .0000E+00    8  .0000E+00
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      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
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                              PAGE  25
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL20        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
     .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
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                              PAGE  26
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL21        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
     .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
     .0000E+00   23  .0000E+00   24  .0000E+00
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                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
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                            PAGE  27
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL22        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .1000E+01    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
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                            PAGE  28
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL23        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
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 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - -
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      14:26:55
1441
                                  PAGE  30
1442  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1443
1444                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1445
1446  SOURCE ID = VOL25        ; SOURCE TYPE = VOLUME   :
1447   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1448  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1449                                                DAY OF WEEK = WEEKDAY
1450     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
1451     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
1452    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1453                                                DAY OF WEEK = SATURDAY
1454     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1455     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1456    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1457                                                DAY OF WEEK = SUNDAY
1458     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1459     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1460    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1461  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1462   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       14:26:55
1463
                                  PAGE  31
1464  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1465
1466                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1467
1468  SOURCE ID = VOL26        ; SOURCE TYPE = VOLUME   :
1469   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1470  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1471                                                DAY OF WEEK = WEEKDAY
1472     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .1000E+01    8  .1000E+01
1473     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
         .1000E+01   15  .0000E+00   16  .0000E+00
1474    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1475                                                DAY OF WEEK = SATURDAY
1476     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
         .0000E+00    7  .0000E+00    8  .0000E+00
1477     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
         .0000E+00   15  .0000E+00   16  .0000E+00
1478    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
1479                                                DAY OF WEEK = SUNDAY
```

```
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 14:26:55

                              PAGE  32
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL27        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
     .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
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                              PAGE  33
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL28        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
     .1000E+01   15  .0000E+00   16  .0000E+00
```

```
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
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                              PAGE  34
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL29        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .1000E+01    8  .1000E+01
       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
       .1000E+01   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 14:26:55

                              PAGE  35
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *
```

```
 SOURCE ID = VOL30        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
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                            PAGE  36
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL31        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
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1594    *** AERMET - VERSION  22112 ***
        ***                                                                    ***
        14:26:55
1595
                                    PAGE  37
1596    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1597
1598                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1599
1600    SOURCE ID = VOL32        ; SOURCE TYPE = VOLUME   :
1601     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1602    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - - - -
1603                                                  DAY OF WEEK = WEEKDAY
1604       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1605       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1606      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1607                                                  DAY OF WEEK = SATURDAY
1608       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1609       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1610      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1611                                                  DAY OF WEEK = SUNDAY
1612       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1613       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1614      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1615    FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
        Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1616     *** AERMET - VERSION  22112 ***
         ***                                                                   ***
         14:26:55
1617
                                    PAGE  38
1618    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1619
1620                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1621
1622     SOURCE ID = VOL33        ; SOURCE TYPE = VOLUME   :
1623     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1624    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - - - -
1625                                                  DAY OF WEEK = WEEKDAY
1626       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .1000E+01    8  .1000E+01
1627       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .0000E+00   16  .0000E+00
1628      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1629                                                  DAY OF WEEK = SATURDAY
1630       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1631       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1632      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
```

```
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
      .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 14:26:55

                            PAGE  39
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL34        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .1000E+01    8  .1000E+01
       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                  ***
 14:26:55

                            PAGE  40
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL35        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
      .0000E+00    7  .1000E+01    8  .1000E+01
```

```
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
     .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 14:26:55

                              PAGE  41
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL36        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .1000E+01    8  .1000E+01
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
     .1000E+01   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 14:26:55

                              PAGE  42
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
```

```
                    WEEK (HRDOW) *
 SOURCE ID = PAREA1       ; SOURCE TYPE = AREAPOLY :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .1000E+01    8  .1000E+01
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 14:26:55

                            PAGE  43
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                      *** DISCRETE CARTESIAN RECEPTORS ***
                                    (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                (METERS)

     ( 574106.6, 3725973.2,     -15.2,    2651.3,       2.0);         ( 574279.0,
     3725910.5,     -15.9,    2651.3,       2.0);
     ( 574204.4, 3725350.5,     -19.1,    2651.3,       2.0);         ( 573655.6,
     3725533.6,     -16.7,    2651.3,       2.0);
     ( 573199.4, 3725824.6,     -14.8,    2651.3,       2.0);         ( 573815.9,
     3726049.2,     -13.7,    2651.3,       2.0);
     ( 574057.4, 3725989.2,     -14.7,    2651.3,       2.0);         ( 574023.1,
     3725980.7,     -14.6,    2651.3,       2.0);
     ( 574346.5, 3725650.9,     -17.5,    2651.3,       2.0);         ( 574313.0,
     3725545.0,     -17.4,    2651.3,       2.0);
     ( 574206.8, 3725308.8,     -19.7,    2651.3,       2.0);         ( 574038.4,
     3725331.2,     -18.7,    2651.3,       2.0);
     ( 574209.1, 3725258.2,     -19.7,    2651.3,       2.0);         ( 573785.2,
     3725289.0,     -17.4,    2651.3,       2.0);
     ( 573482.6, 3725346.8,     -16.6,    2651.3,       2.0);         ( 573666.9,
     3725489.5,     -17.0,    2651.3,       2.0);
     ( 573580.6, 3725595.5,     -16.2,    2651.3,       2.0);         ( 573477.6,
     3725543.7,     -16.2,    2651.3,       2.0);
     ( 573474.2, 3725503.2,     -16.5,    2651.3,       2.0);         ( 573229.4,
     3725847.4,     -14.7,    2651.3,       2.0);
     ( 573040.9, 3725971.2,     -13.5,    2651.3,       2.0);         ( 573120.2,
     3725973.9,     -13.8,    2651.3,       2.0);
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
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      ***                                                                    ***
      14:26:55
1747
                                  PAGE  44
1748  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1749
1750                                          *** METEOROLOGICAL DAYS SELECTED FOR
                                              PROCESSING ***
1751                                                          (1=YES; 0=NO)
1752
1753            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1754            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1755            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1756            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1757            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1758            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1759            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1760            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1761
1762              NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT
                  IS INCLUDED IN THE DATA FILE.
1763
1764
1765
1766                              *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED
                                  CATEGORIES ***
1767                                                  (METERS/SEC)
1768
1769                                                1.54,   3.09,   5.14,   8.23,  10.80,
1770  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
      Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
1771   *** AERMET - VERSION  22112 ***
       ***                                                                   ***
       14:26:55
1772
                                  PAGE  45
1773  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1774
1775                                    *** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA
                                        ***
1776
1777        Surface file:
            ..\KTRM_V11_trimmed.sfc
            Met Version:  22112
1778        Profile file:
            ..\KTRM_V11_trimmed.PFL
1779        Surface format:
            FREE

1780        Profile format:
            FREE

1781        Surface station no.:     3104                  Upper air station no.:     3190
1782                       Name: UNKNOWN                                 Name:
                           UNKNOWN
1783                       Year:   2017                                  Year:   2017
1784
1785  First 24 hours of scalar data
1786  YR MO DY JDY HR     H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALB
```

```
 REF WS   WD     HT  REF TA     HT
- - - -
```

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION ***
FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): VOL1 , VOL2 , VOL3 , VOL4 , VOL5 , VOL6 , VOL7 , VOL8 , VOL9 , VOL10 , VOL11 , VOL12 , VOL13 , VOL14 , VOL15 , VOL16 , VOL17 , VOL18 , VOL19 , VOL20 , VOL21 , VOL22 , VOL23 , VOL24 , VOL25 , VOL26 , VOL27 , VOL28 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
574106.64	3725973.24	1.04421	(19011724)	574278.99	3725910.47	0.77186	(19011724)
574204.36	3725350.47	1.80880c	(22122824)	573655.61	3725533.56	0.91255	(18122024)
573199.43	3725824.57	0.41050	(21122824)	573815.91	3726049.22	0.87930	(18011924)
574057.43	3725989.22	0.94511	(18011924)	574023.10	3725980.72	1.08957	(18011924)
574346.45	3725650.86	0.68155	(21123024)	574312.95	3725545.02	0.93207	(21123024)
574206.77	3725308.84	1.16527c	(22122824)	574038.43	3725331.17	1.41756	(18120624)
574209.11	3725258.17	0.90068	(21122124)	573785.25	3725289.00	0.48673	(18122024)
573482.56	3725346.84	0.28420	(17010624)	573666.90	3725489.52	0.65740	(18122024)
573580.56	3725595.53	0.66871	(17010624)	573477.56	3725543.69	0.42251	(17010624)
573474.22	3725503.19	0.38173	(17010624)	573229.37	3725847.44	0.44942	(21122824)
573040.93	3725971.18	0.28364	(21122824)	573120.15	3725973.92	0.29361	(21122824)

FF *** AERMOD - VERSION 24142 *** *** C:\Users\Alyssa Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 *** 07/18/25
*** AERMET - VERSION 22112 *** *** ***
14:26:55

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** THE SUMMARY OF HIGHEST 24-HR RESULTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	NETWORK RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	GRID-ID

```
- - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS       1.80880c ON 22122824: AT (  574204.36,
3725350.47,   -19.13,  2651.27,    2.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Alyssa
Barnett\Desktop\HRA\16552\16552-02 Const co\16552-02 ***        07/18/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 14:26:55

                              PAGE  48
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of           77 Warning Message(s)
 A Total of         1671 Informational Message(s)

 A Total of        43800 Hours Were Processed

 A Total of          763 Calm Hours Identified

 A Total of          908 Missing Hours Identified (  2.07 Percent)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W340     697       PRBASE: Possible Error in PROFBASE Input:  Value is < 0
 PROFBASE
 ME W186     698       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold
 used           0.50
 ME W187     698       MEOPEN: ADJ_U* Option for Stable Low Winds used in
 AERMET
 CN W732    1176         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2017021824
 CN W732    5136         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2017080224
 CN W732    6048         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2017090924
 CN W732    6792         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2017101024
 CN W732   10368         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2018030824
 CN W732   10464         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2018031224
 CN W732   10632         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2018031924
 CN W732   12408         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2018060124
 CN W732   16704         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2018112724
 CN W732   16728         AVER: 24-hr avg, < 18 hours of data, calms policy used.
 2018112824
 CN W732   18552         AVER: 24-hr avg, < 18 hours of data, calms policy used.
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      2019021224
1907  CN W732   19056         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019030524
1908  CN W732   19152         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019030924
1909  CN W732   19224         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019031224
1910  CN W732   19344         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019031724
1911  CN W732   19464         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019032224
1912  CN W732   19512         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019032424
1913  CN W732   19536         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019032524
1914  CN W732   19560         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019032624
1915  CN W732   19584         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019032724
1916  CN W732   19656         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019033024
1917  CN W732   20016         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019041424
1918  CN W732   20112         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019041824
1919  CN W732   20712         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019051324
1920  CN W732   20856         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019051924
1921  CN W732   22080         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019070924
1922  CN W732   22200         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019071424
1923  CN W732   22848         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019081024
1924  CN W732   23400         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019090224
1925  CN W732   24216         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019100624
1926  CN W732   24408         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019101424
1927  CN W732   24576         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2019102124
1928  MX W450   26281       CHKDAT: Record Out of Sequence in Meteorological File at:
      21010101
1929  MX W450   26281       CHKDAT: Record Out of Sequence in Meteorological File at:    1
      year gap
1930  CN W732   26496         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021010924
1931  CN W732   26520         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021011024
1932  CN W732   26544         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021011124
1933  CN W732   26568         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021011224
1934  CN W732   26832         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021012324
1935  CN W732   26856         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021012424
1936  CN W732   26880         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021012524
1937  CN W732   27000         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021013024
1938  CN W732   27024         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021013124
1939  CN W732   27192         AVER: 24-hr avg, < 18 hours of data, calms policy used.
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      2021020724
1940  CN W732   28032         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021031424
1941  CN W732   28416         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021033024
1942  CN W732   28512         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021040324
1943  CN W732   28680         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021041024
1944  CN W732   29976         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021060324
1945  CN W732   30072         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021060724
1946  CN W732   30408         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021062124
1947  CN W732   30768         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021070624
1948  CN W732   30816         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021070824
1949  CN W732   31512         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021080624
1950  CN W732   31560         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021080824
1951  CN W732   32136         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021090124
1952  CN W732   33024         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021100824
1953  CN W732   33048         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021100924
1954  CN W732   34584         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2021121224
1955  CN W732   38256         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022051424
1956  CN W732   38976         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022061324
1957  CN W732   40392         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022081124
1958  CN W732   41088         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022090924
1959  CN W732   41112         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022091024
1960  CN W732   41160         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022091224
1961  CN W732   41400         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022092224
1962  CN W732   42624         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022111224
1963  CN W732   42648         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022111324
1964  CN W732   42672         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022111424
1965  CN W732   42696         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022111524
1966  CN W732   42888         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022112324
1967  CN W732   43128         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022120324
1968  CN W732   43272         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022120924
1969  CN W732   43296         AVER: 24-hr avg, < 18 hours of data, calms policy used.
      2022121024
1970
1971     ***********************************
1972     *** AERMOD Finishes Successfully ***
1973     ***********************************
1974
```

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COVA Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	COVA
Construction Start Date	8/3/2026
Operational Year	2030
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	7.60
Location	33.668924537913895, -116.20280185678254
County	Riverside-Salton Sea
City	Coachella
Air District	South Coast AQMD
Air Basin	Salton Sea
TAZ	5662
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.30

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Single Family Housing	165	Dwelling Unit	53.6	321,750	1,932,621	—	533	—

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Condo/Townhouse	244	Dwelling Unit	15.3	258,640	0.00	—	788	—
Movie Theater (No Matinee)	278	1000sqft	6.38	277,804	0.00	—	—	Beach Club
Quality Restaurant	22.0	1000sqft	0.50	21,977	0.00	—	—	—
User Defined Recreational	8.93	User Defined Unit	0.20	0.00	0.00	—	—	—
Parking Lot	696	Space	6.26	0.00	0.00	—	—	—
Recreational Swimming Pool	536	1000sqft	12.3	0.00	0.00	—	—	—
Other Asphalt Surfaces	1.00	1000sqft	0.02	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Energy	E-10-B	Establish Onsite Renewable Energy Systems: Solar Power
Water	W-4	Require Low-Flow Water Fixtures
Water	W-5	Design Water-Efficient Landscapes
Waste	S-1/S-2	Implement Waste Reduction Plan

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	19.5	18.8	37.2	67.4	0.09	1.66	6.49	7.28	1.53	1.55	2.66	—	14,630	14,630	0.38	0.54	20.7	14,819

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Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	19.3	18.5	45.6	54.3	0.09	2.30	7.83	10.1	2.12	3.66	5.77	—	13,742	13,742	0.38	0.54	0.54	13,914
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	12.5	12.1	21.4	35.1	0.05	0.85	4.33	4.76	0.78	1.03	1.72	—	8,800	8,800	0.23	0.37	5.83	8,921
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.28	2.20	3.90	6.41	0.01	0.15	0.79	0.87	0.14	0.19	0.31	—	1,457	1,457	0.04	0.06	0.97	1,477

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	4.04	3.40	30.2	29.0	0.05	1.24	0.39	1.63	1.14	0.09	1.23	—	5,518	5,518	0.22	0.09	1.63	5,552
2027	5.22	4.39	37.2	55.9	0.09	1.66	5.35	6.06	1.53	1.28	2.66	—	12,209	12,209	0.38	0.51	20.7	12,388
2028	4.13	3.54	21.3	53.9	0.06	0.64	5.35	5.99	0.59	1.28	1.87	—	12,059	12,059	0.27	0.51	18.8	12,235
2029	18.7	18.2	21.7	58.5	0.07	0.60	6.30	6.90	0.56	1.50	2.06	—	13,079	13,079	0.29	0.53	19.4	13,262
2030	19.5	18.8	27.4	67.4	0.08	0.79	6.49	7.28	0.73	1.55	2.28	—	14,630	14,630	0.34	0.54	17.9	14,819
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	6.07	5.11	45.6	41.7	0.07	2.30	7.83	10.1	2.12	3.66	5.77	—	7,662	7,662	0.30	0.09	0.04	7,696
2027	5.79	4.86	43.2	43.0	0.09	2.11	7.83	9.95	1.95	3.66	5.60	—	11,448	11,448	0.38	0.51	0.54	11,607
2028	3.73	3.29	21.7	41.7	0.07	0.64	5.35	5.99	0.59	1.28	1.87	—	11,314	11,314	0.29	0.51	0.49	11,473
2029	18.4	17.8	22.0	45.1	0.07	0.60	6.30	6.90	0.56	1.50	2.06	—	12,203	12,203	0.30	0.53	0.50	12,368
2030	19.3	18.5	27.7	54.3	0.08	0.79	6.49	7.28	0.73	1.55	2.28	—	13,742	13,742	0.36	0.54	0.47	4

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Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.40	1.18	10.5	9.79	0.02	0.47	0.82	1.29	0.43	0.36	0.79	—	1,850	1,850	0.07	0.03	0.20	1,860
2027	3.33	2.82	21.4	31.0	0.05	0.85	3.31	4.16	0.78	0.94	1.72	—	7,645	7,645	0.23	0.23	3.59	7,723
2028	2.72	2.40	15.4	32.8	0.05	0.46	3.81	4.27	0.42	0.91	1.33	—	8,314	8,314	0.20	0.36	5.81	8,433
2029	11.0	10.7	15.4	34.5	0.05	0.43	4.33	4.76	0.40	1.03	1.43	—	8,800	8,800	0.20	0.37	5.83	8,921
2030	12.5	12.1	16.1	35.1	0.05	0.45	4.23	4.67	0.41	1.01	1.42	—	8,759	8,759	0.21	0.36	5.07	8,875
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.26	0.21	1.91	1.79	< 0.005	0.09	0.15	0.23	0.08	0.07	0.15	—	306	306	0.01	< 0.005	0.03	308
2027	0.61	0.51	3.90	5.65	0.01	0.15	0.60	0.76	0.14	0.17	0.31	—	1,266	1,266	0.04	0.04	0.59	1,279
2028	0.50	0.44	2.80	5.98	0.01	0.08	0.70	0.78	0.08	0.17	0.24	—	1,376	1,376	0.03	0.06	0.96	1,396
2029	2.01	1.95	2.80	6.30	0.01	0.08	0.79	0.87	0.07	0.19	0.26	—	1,457	1,457	0.03	0.06	0.97	1,477
2030	2.28	2.20	2.93	6.41	0.01	0.08	0.77	0.85	0.08	0.18	0.26	—	1,450	1,450	0.03	0.06	0.84	1,469

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	4.04	3.40	30.2	29.0	0.05	1.24	0.39	1.63	1.14	0.09	1.23	—	5,518	5,518	0.22	0.09	1.63	5,552
2027	5.22	4.39	37.2	55.9	0.09	1.66	5.35	6.06	1.53	1.28	2.66	—	12,209	12,209	0.38	0.51	20.7	12,388
2028	4.13	3.54	21.3	53.9	0.06	0.64	5.35	5.99	0.59	1.28	1.87	—	12,059	12,059	0.27	0.51	18.8	12,235
2029	18.7	18.2	21.7	58.5	0.07	0.60	6.30	6.90	0.56	1.50	2.06	—	13,079	13,079	0.29	0.53	19.4	13,262
2030	19.5	18.8	27.4	67.4	0.08	0.79	6.49	7.28	0.73	1.55	2.28	—	14,630	14,630	0.34	0.54	17.9	14,819
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	6.07	5.11	45.6	41.7	0.07	2.30	7.83	10.1	2.12	3.66	5.77	—	7,662	7,662	0.30	0.09	0.04	7,696
2027	5.79	4.86	43.2	43.0	0.09	2.11	7.83	9.95	1.95	3.66	5.60	—	11,448	11,448	0.38	0.51	0.54	1776

2028	3.73	3.29	21.7	41.7	0.07	0.64	5.35	5.99	0.59	1.28	1.87	—	11,314	11,314	0.29	0.51	0.49	11,473
2029	18.4	17.8	22.0	45.1	0.07	0.60	6.30	6.90	0.56	1.50	2.06	—	12,203	12,203	0.30	0.53	0.50	12,368
2030	19.3	18.5	27.7	54.3	0.08	0.79	6.49	7.28	0.73	1.55	2.28	—	13,742	13,742	0.36	0.54	0.47	13,914
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.40	1.18	10.5	9.79	0.02	0.47	0.82	1.29	0.43	0.36	0.79	—	1,850	1,850	0.07	0.03	0.20	1,860
2027	3.33	2.82	21.4	31.0	0.05	0.85	3.31	4.16	0.78	0.94	1.72	—	7,645	7,645	0.23	0.23	3.59	7,723
2028	2.72	2.40	15.4	32.8	0.05	0.46	3.81	4.27	0.42	0.91	1.33	—	8,314	8,314	0.20	0.36	5.81	8,433
2029	11.0	10.7	15.4	34.5	0.05	0.43	4.33	4.76	0.40	1.03	1.43	—	8,800	8,800	0.20	0.37	5.83	8,921
2030	12.5	12.1	16.1	35.1	0.05	0.45	4.23	4.67	0.41	1.01	1.42	—	8,759	8,759	0.21	0.36	5.07	8,875
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.26	0.21	1.91	1.79	< 0.005	0.09	0.15	0.23	0.08	0.07	0.15	—	306	306	0.01	< 0.005	0.03	308
2027	0.61	0.51	3.90	5.65	0.01	0.15	0.60	0.76	0.14	0.17	0.31	—	1,266	1,266	0.04	0.04	0.59	1,279
2028	0.50	0.44	2.80	5.98	0.01	0.08	0.70	0.78	0.08	0.17	0.24	—	1,376	1,376	0.03	0.06	0.96	1,396
2029	2.01	1.95	2.80	6.30	0.01	0.08	0.79	0.87	0.07	0.19	0.26	—	1,457	1,457	0.03	0.06	0.97	1,477
2030	2.28	2.20	2.93	6.41	0.01	0.08	0.77	0.85	0.08	0.18	0.26	—	1,450	1,450	0.03	0.06	0.84	1,469

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	32.4	31.4	7.38	138	0.25	0.34	23.1	23.4	0.32	5.82	6.15	3,008	37,837	40,845	304	1.41	56.3	48,916
Mit.	32.4	31.4	7.38	138	0.25	0.34	23.1	23.4	0.32	5.82	6.15	2,435	33,254	35,689	246	1.25	56.3	42,263
% Reduced	—	—	—	—	—	—	—	—	—	—	—	19%	12%	13%	19%	11%	—	14%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	27.0	26.3	7.49	65.8	0.22	0.30	23.1	23.4	0.30	5.82	6.12	3,008	34,468	37,476	304	1.44	14.3	45,515
Mit.	27.0	26.3	7.49	65.8	0.22	0.30	23.1	23.4	0.30	5.82	6.12	2,435	29,885	32,320	246	1.28	14.3	38,861
% Reduced	—	—	—	—	—	—	—	—	—	—	—	19%	13%	14%	19%	11%	—	15%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	29.5	28.6	7.37	95.3	0.23	0.32	23.0	23.3	0.31	5.80	6.11	3,008	34,791	37,799	304	1.40	31.8	45,841
Mit.	29.5	28.6	7.37	95.3	0.23	0.32	23.0	23.3	0.31	5.80	6.11	2,435	30,208	32,643	246	1.24	31.8	39,187
% Reduced	—	—	—	—	—	—	—	—	—	—	—	19%	13%	14%	19%	11%	—	15%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.38	5.21	1.34	17.4	0.04	0.06	4.20	4.25	0.06	1.06	1.11	498	5,760	6,258	50.3	0.23	5.27	7,589
Mit.	5.38	5.21	1.34	17.4	0.04	0.06	4.20	4.25	0.06	1.06	1.11	403	5,001	5,404	40.7	0.21	5.27	6,488
% Reduced	—	—	—	—	—	—	—	—	—	—	—	19%	13%	14%	19%	11%	—	15%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.03	6.42	4.00	99.3	0.23	0.07	23.1	23.2	0.07	5.82	5.89	—	23,244	23,244	0.54	0.45	43.1	23,435
Area	25.1	24.8	0.33	36.3	< 0.005	0.03	—	0.03	0.03	—	0.03	0.00	1,208	1,208	0.15	0.02	—	1,217
Energy	0.34	0.17	3.05	2.56	0.02	0.23	—	0.23	0.23	—	0.23	—	12,756	12,756	1.54	0.15	—	12,840
Water	—	—	—	—	—	—	—	—	—	—	—	319	629	948	32.8	0.79	—	2,004
Waste	—	—	—	—	—	—	—	—	—	—	—	2,689	0.00	2,689	269	0.00	—	9,407
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.2	13.2
Total	32.4	31.4	7.38	138	0.25	0.34	23.1	23.4	0.32	5.82	6.15	3,008	37,837	40,845	304	1.41	56.3	1778

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.06	5.47	4.44	63.3	0.20	0.07	23.1	23.2	0.07	5.82	5.89	—	19,991	19,991	0.56	0.48	1.12	20,150
Area	20.6	20.6	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	1,092	1,092	0.15	0.02	—	1,101
Energy	0.34	0.17	3.05	2.56	0.02	0.23	—	0.23	0.23	—	0.23	—	12,756	12,756	1.54	0.15	—	12,840
Water	—	—	—	—	—	—	—	—	—	—	—	319	629	948	32.8	0.79	—	2,004
Waste	—	—	—	—	—	—	—	—	—	—	—	2,689	0.00	2,689	269	0.00	—	9,407
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.2	13.2
Total	27.0	26.3	7.49	65.8	0.22	0.30	23.1	23.4	0.30	5.82	6.12	3,008	34,468	37,476	304	1.44	14.3	45,515
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.30	5.71	4.15	74.8	0.21	0.07	23.0	23.1	0.07	5.80	5.86	—	21,275	21,275	0.54	0.46	18.6	21,444
Area	22.8	22.7	0.16	17.9	< 0.005	0.02	—	0.02	0.01	—	0.01	0.00	132	132	0.01	< 0.005	—	133
Energy	0.34	0.17	3.05	2.56	0.02	0.23	—	0.23	0.23	—	0.23	—	12,756	12,756	1.54	0.15	—	12,840
Water	—	—	—	—	—	—	—	—	—	—	—	319	629	948	32.8	0.79	—	2,004
Waste	—	—	—	—	—	—	—	—	—	—	—	2,689	0.00	2,689	269	0.00	—	9,407
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.2	13.2
Total	29.5	28.6	7.37	95.3	0.23	0.32	23.0	23.3	0.31	5.80	6.11	3,008	34,791	37,799	304	1.40	31.8	45,841
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.15	1.04	0.76	13.7	0.04	0.01	4.20	4.21	0.01	1.06	1.07	—	3,522	3,522	0.09	0.08	3.08	3,550
Area	4.17	4.14	0.03	3.27	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	21.8	21.8	< 0.005	< 0.005	—	22.0
Energy	0.06	0.03	0.56	0.47	< 0.005	0.04	—	0.04	0.04	—	0.04	—	2,112	2,112	0.26	0.03	—	2,126
Water	—	—	—	—	—	—	—	—	—	—	—	52.8	104	157	5.43	0.13	—	332
Waste	—	—	—	—	—	—	—	—	—	—	—	445	0.00	445	44.5	0.00	—	1,557
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.19	2.19
Total	5.38	5.21	1.34	17.4	0.04	0.06	4.20	4.25	0.06	1.06	1.11	498	5,760	6,258	50.3	0.23	5.27	7,589

2.6. Operations Emissions by Sector, Mitigated

1779

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.03	6.42	4.00	99.3	0.23	0.07	23.1	23.2	0.07	5.82	5.89	—	23,244	23,244	0.54	0.45	43.1	23,435
Area	25.1	24.8	0.33	36.3	< 0.005	0.03	—	0.03	0.03	—	0.03	0.00	1,208	1,208	0.15	0.02	—	1,217
Energy	0.34	0.17	3.05	2.56	0.02	0.23	—	0.23	0.23	—	0.23	—	8,274	8,274	0.94	0.08	—	8,322
Water	—	—	—	—	—	—	—	—	—	—	—	284	527	811	29.2	0.70	—	1,750
Waste	—	—	—	—	—	—	—	—	—	—	—	2,151	0.00	2,151	215	0.00	—	7,526
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.2	13.2
Total	32.4	31.4	7.38	138	0.25	0.34	23.1	23.4	0.32	5.82	6.15	2,435	33,254	35,689	246	1.25	56.3	42,263
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.06	5.47	4.44	63.3	0.20	0.07	23.1	23.2	0.07	5.82	5.89	—	19,991	19,991	0.56	0.48	1.12	20,150
Area	20.6	20.6	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	1,092	1,092	0.15	0.02	—	1,101
Energy	0.34	0.17	3.05	2.56	0.02	0.23	—	0.23	0.23	—	0.23	—	8,274	8,274	0.94	0.08	—	8,322
Water	—	—	—	—	—	—	—	—	—	—	—	284	527	811	29.2	0.70	—	1,750
Waste	—	—	—	—	—	—	—	—	—	—	—	2,151	0.00	2,151	215	0.00	—	7,526
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.2	13.2
Total	27.0	26.3	7.49	65.8	0.22	0.30	23.1	23.4	0.30	5.82	6.12	2,435	29,885	32,320	246	1.28	14.3	38,861
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.30	5.71	4.15	74.8	0.21	0.07	23.0	23.1	0.07	5.80	5.86	—	21,275	21,275	0.54	0.46	18.6	21,444
Area	22.8	22.7	0.16	17.9	< 0.005	0.02	—	0.02	0.01	—	0.01	0.00	132	132	0.01	< 0.005	—	133
Energy	0.34	0.17	3.05	2.56	0.02	0.23	—	0.23	0.23	—	0.23	—	8,274	8,274	0.94	0.08	—	8,322
Water	—	—	—	—	—	—	—	—	—	—	—	284	527	811	29.2	0.70	—	1,750
Waste	—	—	—	—	—	—	—	—	—	—	—	2,151	0.00	2,151	215	0.00	—	7,526
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.2	1780

Total	29.5	28.6	7.37	95.3	0.23	0.32	23.0	23.3	0.31	5.80	6.11	2,435	30,208	32,643	246	1.24	31.8	39,187
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.15	1.04	0.76	13.7	0.04	0.01	4.20	4.21	0.01	1.06	1.07	—	3,522	3,522	0.09	0.08	3.08	3,550
Area	4.17	4.14	0.03	3.27	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	21.8	21.8	< 0.005	< 0.005	—	22.0
Energy	0.06	0.03	0.56	0.47	< 0.005	0.04	—	0.04	0.04	—	0.04	—	1,370	1,370	0.16	0.01	—	1,378
Water	—	—	—	—	—	—	—	—	—	—	—	47.0	87.3	134	4.83	0.12	—	290
Waste	—	—	—	—	—	—	—	—	—	—	—	356	0.00	356	35.6	0.00	—	1,246
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.19	2.19
Total	5.38	5.21	1.34	17.4	0.04	0.06	4.20	4.25	0.06	1.06	1.11	403	5,001	5,404	40.7	0.21	5.27	6,488

3. Construction Emissions Details

3.1. Demolition (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.92	3.30	29.8	27.1	0.05	1.23	—	1.23	1.14	—	1.14	—	4,947	4,947	0.20	0.04	—	4,964
Demolition	—	—	—	—	—	—	0.05	0.05	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	3.92	3.30	29.8	27.1	0.05	1.23	—	1.23	1.14	—	1.14	—	4,947	4,947	0.20	0.04	—	4,964
Demolition	—	—	—	—	—	—	0.05	0.05	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81	0.68	6.13	5.56	0.01	0.25	—	0.25	0.23	—	0.23	—	1,017	1,017	0.04	0.01	—	1,020
Demolition	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.12	1.02	< 0.005	0.05	—	0.05	0.04	—	0.04	—	168	168	0.01	< 0.005	—	169
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.10	1.77	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	291	291	0.01	0.01	0.93	295
Vendor	0.01	0.01	0.22	0.10	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	217	217	< 0.005	0.03	0.57	227
Hauling	< 0.005	< 0.005	0.07	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	63.1	63.1	< 0.005	0.01	0.13	66.2

Item 2.

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.10	1.00	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	248	248	< 0.005	0.01	0.02	251
Vendor	0.01	0.01	0.24	0.10	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	218	218	< 0.005	0.03	0.01	227
Hauling	< 0.005	< 0.005	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	63.2	63.2	< 0.005	0.01	< 0.005	66.1
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.26	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	54.4	54.4	< 0.005	< 0.005	0.08	55.0
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	44.7	44.7	< 0.005	0.01	0.05	46.6
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.0	13.0	< 0.005	< 0.005	0.01	13.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.00	9.00	< 0.005	< 0.005	0.01	9.11
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.40	7.40	< 0.005	< 0.005	0.01	7.71
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.15	2.15	< 0.005	< 0.005	< 0.005	2.25

3.2. Demolition (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.92	3.30	29.8	27.1	0.05	1.23	—	1.23	1.14	—	1.14	—	4,947	4,947	0.20	0.04	—	4,964
Demolition	—	—	—	—	—	—	0.05	0.05	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

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Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.92	3.30	29.8	27.1	0.05	1.23	—	1.23	1.14	—	1.14	—	4,947	4,947	0.20	0.04	—	4,964
Demolition	—	—	—	—	—	—	0.05	0.05	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81	0.68	6.13	5.56	0.01	0.25	—	0.25	0.23	—	0.23	—	1,017	1,017	0.04	0.01	—	1,020
Demolition	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.12	1.02	< 0.005	0.05	—	0.05	0.04	—	0.04	—	168	168	0.01	< 0.005	—	169
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.10	1.77	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	291	291	0.01	0.01	0.93	295
Vendor	0.01	0.01	0.22	0.10	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	217	217	< 0.005	0.03	0.57	1784

Hauling	< 0.005	< 0.005	0.07	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	63.1	63.1	< 0.005	0.01	0.13	66.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.10	1.00	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	248	248	< 0.005	0.01	0.02	251
Vendor	0.01	0.01	0.24	0.10	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	218	218	< 0.005	0.03	0.01	227
Hauling	< 0.005	< 0.005	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	63.2	63.2	< 0.005	0.01	< 0.005	66.1
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.26	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	54.4	54.4	< 0.005	< 0.005	0.08	55.0
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	44.7	44.7	< 0.005	0.01	0.05	46.6
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.0	13.0	< 0.005	< 0.005	0.01	13.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.00	9.00	< 0.005	< 0.005	0.01	9.11
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.40	7.40	< 0.005	< 0.005	0.01	7.71
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.15	2.15	< 0.005	< 0.005	< 0.005	2.25

3.3. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.97	5.02	45.4	40.5	0.07	2.30	—	2.30	2.11	—	2.11	—	7,259	7,259	0.29	0.06	—	7,284

Dust From Material Movement	—	—	—	—	—	—	7.50	7.50	—	3.58	3.58	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.47	4.26	3.81	0.01	0.22	—	0.22	0.20	—	0.20	—	682	682	0.03	0.01	—	684
Dust From Material Movement	—	—	—	—	—	—	0.70	0.70	—	0.34	0.34	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.09	0.78	0.69	< 0.005	0.04	—	0.04	0.04	—	0.04	—	113	113	< 0.005	< 0.005	—	113
Dust From Material Movement	—	—	—	—	—	—	0.13	0.13	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	0.12	1.13	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	278	278	< 0.005	0.01	0.03	1786

Vendor	0.01	< 0.005	0.14	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	124	124	< 0.005	0.02	0.01	130
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	28.0	28.0	< 0.005	< 0.005	0.04	28.3
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.7	11.7	< 0.005	< 0.005	0.01	12.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.63	4.63	< 0.005	< 0.005	0.01	4.69
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.93	1.93	< 0.005	< 0.005	< 0.005	2.02
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Site Preparation (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.97	5.02	45.4	40.5	0.07	2.30	—	2.30	2.11	—	2.11	—	7,259	7,259	0.29	0.06	—	7,284
Dust From Material Movement	—	—	—	—	—	—	7.50	7.50	—	3.58	3.58	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

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Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.47	4.26	3.81	0.01	0.22	—	0.22	0.20	—	0.20	—	682	682	0.03	0.01	—	684
Dust From Material Movement	—	—	—	—	—	—	0.70	0.70	—	0.34	0.34	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.09	0.78	0.69	< 0.005	0.04	—	0.04	0.04	—	0.04	—	113	113	< 0.005	< 0.005	—	113
Dust From Material Movement	—	—	—	—	—	—	0.13	0.13	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	0.12	1.13	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	278	278	< 0.005	0.01	0.03	282
Vendor	0.01	< 0.005	0.14	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	124	124	< 0.005	0.02	0.01	130
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	28.0	28.0	< 0.005	< 0.005	0.04	1788

Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.7	11.7	< 0.005	< 0.005	0.01	12.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.63	4.63	< 0.005	< 0.005	0.01	4.69
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.93	1.93	< 0.005	< 0.005	< 0.005	2.02
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Site Preparation (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.69	4.78	42.9	39.7	0.07	2.11	—	2.11	1.94	—	1.94	—	7,261	7,261	0.29	0.06	—	7,286
Dust From Material Movement	—	—	—	—	—	—	7.50	7.50	—	3.58	3.58	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.26	1.16	< 0.005	0.06	—	0.06	0.06	—	0.06	—	213	213	0.01	< 0.005	—	214

Dust From Material Movement	—	—	—	—	—	—	0.22	0.22	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.23	0.21	< 0.005	0.01	—	0.01	0.01	—	0.01	—	35.3	35.3	< 0.005	< 0.005	—	35.4
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.11	1.05	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	273	273	< 0.005	0.01	0.02	276
Vendor	0.01	< 0.005	0.13	0.05	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	122	122	< 0.005	0.02	0.01	126
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.57	8.57	< 0.005	< 0.005	0.01	8.67
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.57	3.57	< 0.005	< 0.005	< 0.005	3.71
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.42	1.42	< 0.005	< 0.005	< 0.005	1.79

Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.59	0.59	< 0.005	< 0.005	< 0.005	0.61
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Site Preparation (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.69	4.78	42.9	39.7	0.07	2.11	—	2.11	1.94	—	1.94	—	7,261	7,261	0.29	0.06	—	7,286
Dust From Material Movement	—	—	—	—	—	—	7.50	7.50	—	3.58	3.58	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.26	1.16	< 0.005	0.06	—	0.06	0.06	—	0.06	—	213	213	0.01	< 0.005	—	214
Dust From Material Movement	—	—	—	—	—	—	0.22	0.22	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.23	0.21	< 0.005	0.01	—	0.01	0.01	—	0.01	—	35.3	35.3	< 0.005	< 0.005	—	35.4
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.11	1.05	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	273	273	< 0.005	0.01	0.02	276
Vendor	0.01	< 0.005	0.13	0.05	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	122	122	< 0.005	0.02	0.01	126
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.57	8.57	< 0.005	< 0.005	0.01	8.67
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.57	3.57	< 0.005	< 0.005	< 0.005	3.71
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.42	1.42	< 0.005	< 0.005	< 0.005	1.44
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.59	0.59	< 0.005	< 0.005	< 0.005	0.61
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Grading (2027) - Unmitigated

1792

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.07	4.26	36.7	37.2	0.08	1.66	—	1.66	1.52	—	1.52	—	9,100	9,100	0.37	0.07	—	9,131
Dust From Material Movement	—	—	—	—	—	—	3.08	3.08	—	1.02	1.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.07	4.26	36.7	37.2	0.08	1.66	—	1.66	1.52	—	1.52	—	9,100	9,100	0.37	0.07	—	9,131
Dust From Material Movement	—	—	—	—	—	—	3.08	3.08	—	1.02	1.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.60	1.34	11.6	11.7	0.03	0.52	—	0.52	0.48	—	0.48	—	2,867	2,867	0.12	0.02	—	2,877

Dust From Material Movement	—	—	—	—	—	—	0.97	0.97	—	0.32	0.32	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.29	0.25	2.11	2.14	< 0.005	0.10	—	0.10	0.09	—	0.09	—	475	475	0.02	< 0.005	—	476
Dust From Material Movement	—	—	—	—	—	—	0.18	0.18	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.12	2.27	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	392	392	< 0.005	0.01	1.15	397
Vendor	0.02	0.01	0.31	0.13	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	304	304	< 0.005	0.04	0.75	317
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.13	1.29	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	334	334	< 0.005	0.01	0.03	338
Vendor	0.01	0.01	0.33	0.14	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	304	304	< 0.005	0.04	0.02	316
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.51	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	112	112	< 0.005	< 0.005	0.16	114
Vendor	< 0.005	< 0.005	0.10	0.04	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	95.8	95.8	< 0.005	0.01	0.10	1794

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.6	18.6	< 0.005	< 0.005	0.03	18.8
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	15.9	15.9	< 0.005	< 0.005	0.02	16.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Grading (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.07	4.26	36.7	37.2	0.08	1.66	—	1.66	1.52	—	1.52	—	9,100	9,100	0.37	0.07	—	9,131
Dust From Material Movement	—	—	—	—	—	—	3.08	3.08	—	1.02	1.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.07	4.26	36.7	37.2	0.08	1.66	—	1.66	1.52	—	1.52	—	9,100	9,100	0.37	0.07	—	9,131
Dust From Material Movement	—	—	—	—	—	—	3.08	3.08	—	1.02	1.02	—	—	—	—	—	—	—

1795

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.60	1.34	11.6	11.7	0.03	0.52	—	0.52	0.48	—	0.48	—	2,867	2,867	0.12	0.02	—	2,877
Dust From Material Movement	—	—	—	—	—	—	0.97	0.97	—	0.32	0.32	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.29	0.25	2.11	2.14	< 0.005	0.10	—	0.10	0.09	—	0.09	—	475	475	0.02	< 0.005	—	476
Dust From Material Movement	—	—	—	—	—	—	0.18	0.18	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.12	2.27	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	392	392	< 0.005	0.01	1.15	397
Vendor	0.02	0.01	0.31	0.13	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	304	304	< 0.005	0.04	0.75	317
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.13	1.29	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	334	334	< 0.005	0.01	0.03	1796

Vendor	0.01	0.01	0.33	0.14	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	304	304	< 0.005	0.04	0.02	316
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.51	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	112	112	< 0.005	< 0.005	0.16	114
Vendor	< 0.005	< 0.005	0.10	0.04	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	95.8	95.8	< 0.005	0.01	0.10	99.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.6	18.6	< 0.005	< 0.005	0.03	18.8
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	15.9	15.9	< 0.005	< 0.005	0.02	16.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.46	2.06	18.7	25.1	0.05	0.67	—	0.67	0.62	—	0.62	—	4,817	4,817	0.20	0.04	—	4,833
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.46	2.06	18.7	25.1	0.05	0.67	—	0.67	0.62	—	0.62	—	4,817	4,817	0.20	0.04	—	4,833

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	6.93	9.29	0.02	0.25	—	0.25	0.23	—	0.23	—	1,781	1,781	0.07	0.01	—	1,788
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.26	1.70	< 0.005	0.05	—	0.05	0.04	—	0.04	—	295	295	0.01	< 0.005	—	296
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.72	1.55	1.56	29.8	0.00	0.00	4.72	4.72	0.00	1.11	1.11	—	5,144	5,144	0.06	0.17	15.2	5,211
Vendor	0.12	0.09	2.26	0.99	0.02	0.03	0.63	0.67	0.03	0.17	0.21	—	2,248	2,248	0.03	0.30	5.57	2,343
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.47	1.29	1.71	16.9	0.00	0.00	4.72	4.72	0.00	1.11	1.11	—	4,381	4,381	0.06	0.17	0.39	4,434
Vendor	0.11	0.08	2.42	1.01	0.02	0.03	0.63	0.67	0.03	0.17	0.21	—	2,250	2,250	0.03	0.30	0.14	2,340
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.50	0.57	7.82	0.00	0.00	1.74	1.74	0.00	0.41	0.41	—	1,732	1,732	0.02	0.06	2.42	1,753
Vendor	0.04	0.03	0.87	0.36	0.01	0.01	0.23	0.25	0.01	0.06	0.08	—	832	832	0.01	0.11	0.89	1798

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.10	1.43	0.00	0.00	0.32	0.32	0.00	0.07	0.07	—	287	287	< 0.005	0.01	0.40	290
Vendor	0.01	0.01	0.16	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	138	138	< 0.005	0.02	0.15	143
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.46	2.06	18.7	25.1	0.05	0.67	—	0.67	0.62	—	0.62	—	4,817	4,817	0.20	0.04	—	4,833
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.46	2.06	18.7	25.1	0.05	0.67	—	0.67	0.62	—	0.62	—	4,817	4,817	0.20	0.04	—	4,833
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	6.93	9.29	0.02	0.25	—	0.25	0.23	—	0.23	—	1,781	1,781	0.07	0.01	—	1,788

1799

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.26	1.70	< 0.005	0.05	—	0.05	0.04	—	0.04	—	295	295	0.01	< 0.005	—	296
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.72	1.55	1.56	29.8	0.00	0.00	4.72	4.72	0.00	1.11	1.11	—	5,144	5,144	0.06	0.17	15.2	5,211
Vendor	0.12	0.09	2.26	0.99	0.02	0.03	0.63	0.67	0.03	0.17	0.21	—	2,248	2,248	0.03	0.30	5.57	2,343
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.47	1.29	1.71	16.9	0.00	0.00	4.72	4.72	0.00	1.11	1.11	—	4,381	4,381	0.06	0.17	0.39	4,434
Vendor	0.11	0.08	2.42	1.01	0.02	0.03	0.63	0.67	0.03	0.17	0.21	—	2,250	2,250	0.03	0.30	0.14	2,340
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.50	0.57	7.82	0.00	0.00	1.74	1.74	0.00	0.41	0.41	—	1,732	1,732	0.02	0.06	2.42	1,753
Vendor	0.04	0.03	0.87	0.36	0.01	0.01	0.23	0.25	0.01	0.06	0.08	—	832	832	0.01	0.11	0.89	866
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.10	1.43	0.00	0.00	0.32	0.32	0.00	0.07	0.07	—	287	287	< 0.005	0.01	0.40	290
Vendor	0.01	0.01	0.16	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	138	138	< 0.005	0.02	0.15	143
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.37	1.98	17.8	25.1	0.05	0.60	—	0.60	0.55	—	0.55	—	4,818	4,818	0.20	0.04	—	4,834
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.37	1.98	17.8	25.1	0.05	0.60	—	0.60	0.55	—	0.55	—	4,818	4,818	0.20	0.04	—	4,834
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.70	1.42	12.7	18.0	0.03	0.43	—	0.43	0.40	—	0.40	—	3,451	3,451	0.14	0.03	—	3,462
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.31	0.26	2.32	3.28	0.01	0.08	—	0.08	0.07	—	0.07	—	571	571	0.02	< 0.005	—	573

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.66	1.49	1.40	27.8	0.00	0.00	4.72	4.72	0.00	1.11	1.11	—	5,047	5,047	0.05	0.17	13.6	5,112
Vendor	0.10	0.07	2.16	0.93	0.02	0.03	0.63	0.67	0.03	0.17	0.21	—	2,194	2,194	0.03	0.30	5.14	2,289
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.27	1.24	1.56	15.7	0.00	0.00	4.72	4.72	0.00	1.11	1.11	—	4,300	4,300	0.06	0.17	0.35	4,353
Vendor	0.09	0.06	2.33	0.97	0.02	0.03	0.63	0.67	0.03	0.17	0.21	—	2,197	2,197	0.03	0.30	0.13	2,286
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.95	0.93	1.00	14.1	0.00	0.00	3.36	3.36	0.00	0.79	0.79	—	3,291	3,291	0.04	0.12	4.22	3,332
Vendor	0.07	0.05	1.62	0.68	0.01	0.02	0.45	0.48	0.02	0.12	0.15	—	1,572	1,572	0.02	0.21	1.59	1,638
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.17	0.18	2.57	0.00	0.00	0.61	0.61	0.00	0.14	0.14	—	545	545	0.01	0.02	0.70	552
Vendor	0.01	0.01	0.30	0.12	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	260	260	< 0.005	0.04	0.26	271
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

1802

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.37	1.98	17.8	25.1	0.05	0.60	—	0.60	0.55	—	0.55	—	4,818	4,818	0.20	0.04	—	4,834
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.37	1.98	17.8	25.1	0.05	0.60	—	0.60	0.55	—	0.55	—	4,818	4,818	0.20	0.04	—	4,834
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.70	1.42	12.7	18.0	0.03	0.43	—	0.43	0.40	—	0.40	—	3,451	3,451	0.14	0.03	—	3,462
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.31	0.26	2.32	3.28	0.01	0.08	—	0.08	0.07	—	0.07	—	571	571	0.02	< 0.005	—	573
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	1.66	1.49	1.40	27.8	0.00	0.00	4.72	4.72	0.00	1.11	1.11	—	5,047	5,047	0.05	0.17	13.6	5,112
Vendor	0.10	0.07	2.16	0.93	0.02	0.03	0.63	0.67	0.03	0.17	0.21	—	2,194	2,194	0.03	0.30	5.14	2,289
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.27	1.24	1.56	15.7	0.00	0.00	4.72	4.72	0.00	1.11	1.11	—	4,300	4,300	0.06	0.17	0.35	4,353
Vendor	0.09	0.06	2.33	0.97	0.02	0.03	0.63	0.67	0.03	0.17	0.21	—	2,197	2,197	0.03	0.30	0.13	2,286
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.95	0.93	1.00	14.1	0.00	0.00	3.36	3.36	0.00	0.79	0.79	—	3,291	3,291	0.04	0.12	4.22	3,332
Vendor	0.07	0.05	1.62	0.68	0.01	0.02	0.45	0.48	0.02	0.12	0.15	—	1,572	1,572	0.02	0.21	1.59	1,638
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.17	0.18	2.57	0.00	0.00	0.61	0.61	0.00	0.14	0.14	—	545	545	0.01	0.02	0.70	552
Vendor	0.01	0.01	0.30	0.12	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	260	260	< 0.005	0.04	0.26	271
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Building Construction (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.31	1.93	17.1	25.0	0.05	0.55	—	0.55	0.51	—	0.51	—	4,816	4,816	0.20	0.04	—	4,833

1804

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.31	1.93	17.1	25.0	0.05	0.55	—	0.55	0.51	—	0.51	—	4,816	4,816	0.20	0.04	—	4,833
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.65	1.38	12.2	17.9	0.03	0.40	—	0.40	0.36	—	0.36	—	3,440	3,440	0.14	0.03	—	3,452
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.25	2.22	3.26	0.01	0.07	—	0.07	0.07	—	0.07	—	570	570	0.02	< 0.005	—	572
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.42	1.41	1.25	25.9	0.00	0.00	4.72	4.72	0.00	1.11	1.11	—	4,956	4,956	0.05	0.17	12.2	5,020
Vendor	0.10	0.07	2.09	0.89	0.02	0.03	0.63	0.67	0.03	0.17	0.21	—	2,137	2,137	0.03	0.28	4.74	2,226
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	1.21	1.03	1.39	14.7	0.00	0.00	4.72	4.72	0.00	1.11	1.11	—	4,224	4,224	0.06	0.17	0.32	4,277
Vendor	0.09	0.06	2.24	0.93	0.02	0.03	0.63	0.67	0.03	0.17	0.21	—	2,140	2,140	0.03	0.28	0.12	2,224
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.91	0.89	0.88	13.1	0.00	0.00	3.35	3.35	0.00	0.79	0.79	—	3,223	3,223	0.03	0.12	3.77	3,264
Vendor	0.07	0.05	1.55	0.65	0.01	0.02	0.45	0.47	0.02	0.12	0.15	—	1,527	1,527	0.02	0.20	1.46	1,589
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.16	0.16	2.39	0.00	0.00	0.61	0.61	0.00	0.14	0.14	—	534	534	0.01	0.02	0.62	540
Vendor	0.01	0.01	0.28	0.12	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	253	253	< 0.005	0.03	0.24	263
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Building Construction (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.31	1.93	17.1	25.0	0.05	0.55	—	0.55	0.51	—	0.51	—	4,816	4,816	0.20	0.04	—	4,833
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	2.31	1.93	17.1	25.0	0.05	0.55	—	0.55	0.51	—	0.51	—	4,816	4,816	0.20	0.04	—	4,833
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.65	1.38	12.2	17.9	0.03	0.40	—	0.40	0.36	—	0.36	—	3,440	3,440	0.14	0.03	—	3,452
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.25	2.22	3.26	0.01	0.07	—	0.07	0.07	—	0.07	—	570	570	0.02	< 0.005	—	572
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.42	1.41	1.25	25.9	0.00	0.00	4.72	4.72	0.00	1.11	1.11	—	4,956	4,956	0.05	0.17	12.2	5,020
Vendor	0.10	0.07	2.09	0.89	0.02	0.03	0.63	0.67	0.03	0.17	0.21	—	2,137	2,137	0.03	0.28	4.74	2,226
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.21	1.03	1.39	14.7	0.00	0.00	4.72	4.72	0.00	1.11	1.11	—	4,224	4,224	0.06	0.17	0.32	4,277
Vendor	0.09	0.06	2.24	0.93	0.02	0.03	0.63	0.67	0.03	0.17	0.21	—	2,140	2,140	0.03	0.28	0.12	2,224
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

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Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.91	0.89	0.88	13.1	0.00	0.00	3.35	3.35	0.00	0.79	0.79	—	3,223	3,223	0.03	0.12	3.77	3,264
Vendor	0.07	0.05	1.55	0.65	0.01	0.02	0.45	0.47	0.02	0.12	0.15	—	1,527	1,527	0.02	0.20	1.46	1,589
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.16	0.16	2.39	0.00	0.00	0.61	0.61	0.00	0.14	0.14	—	534	534	0.01	0.02	0.62	540
Vendor	0.01	0.01	0.28	0.12	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	253	253	< 0.005	0.03	0.24	263
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Building Construction (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.25	1.88	16.7	25.0	0.05	0.52	—	0.52	0.48	—	0.48	—	4,816	4,816	0.20	0.04	—	4,833
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.25	1.88	16.7	25.0	0.05	0.52	—	0.52	0.48	—	0.48	—	4,816	4,816	0.20	0.04	—	4,833
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.50	1.25	11.1	16.6	0.03	0.35	—	0.35	0.32	—	0.32	—	3,205	3,205	0.13	0.03	—	3,216
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.23	2.02	3.04	0.01	0.06	—	0.06	0.06	—	0.06	—	531	531	0.02	< 0.005	—	532
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.35	1.19	1.09	24.3	0.00	0.00	4.72	4.72	0.00	1.11	1.11	—	4,871	4,871	0.04	0.17	10.9	4,934
Vendor	0.10	0.07	2.01	0.87	0.02	0.03	0.63	0.67	0.03	0.17	0.21	—	2,077	2,077	0.03	0.28	4.33	2,165
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.17	1.00	1.24	13.7	0.00	0.00	4.72	4.72	0.00	1.11	1.11	—	4,154	4,154	0.06	0.17	0.28	4,207
Vendor	0.09	0.06	2.16	0.89	0.02	0.03	0.63	0.67	0.03	0.17	0.21	—	2,079	2,079	0.03	0.28	0.11	2,163
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.80	0.69	0.81	11.4	0.00	0.00	3.12	3.12	0.00	0.73	0.73	—	2,952	2,952	0.03	0.11	3.14	2,990
Vendor	0.06	0.04	1.40	0.58	0.01	0.02	0.42	0.44	0.02	0.12	0.14	—	1,383	1,383	0.02	0.19	1.24	1,440
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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Worker	0.15	0.13	0.15	2.08	0.00	0.00	0.57	0.57	0.00	0.13	0.13	—	489	489	0.01	0.02	0.52	495
Vendor	0.01	0.01	0.25	0.11	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	229	229	< 0.005	0.03	0.21	238
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Building Construction (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.25	1.88	16.7	25.0	0.05	0.52	—	0.52	0.48	—	0.48	—	4,816	4,816	0.20	0.04	—	4,833
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.25	1.88	16.7	25.0	0.05	0.52	—	0.52	0.48	—	0.48	—	4,816	4,816	0.20	0.04	—	4,833
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.50	1.25	11.1	16.6	0.03	0.35	—	0.35	0.32	—	0.32	—	3,205	3,205	0.13	0.03	—	3,216
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.23	2.02	3.04	0.01	0.06	—	0.06	0.06	—	0.06	—	531	531	0.02	< 0.005	—	532
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.35	1.19	1.09	24.3	0.00	0.00	4.72	4.72	0.00	1.11	1.11	—	4,871	4,871	0.04	0.17	10.9	4,934
Vendor	0.10	0.07	2.01	0.87	0.02	0.03	0.63	0.67	0.03	0.17	0.21	—	2,077	2,077	0.03	0.28	4.33	2,165
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.17	1.00	1.24	13.7	0.00	0.00	4.72	4.72	0.00	1.11	1.11	—	4,154	4,154	0.06	0.17	0.28	4,207
Vendor	0.09	0.06	2.16	0.89	0.02	0.03	0.63	0.67	0.03	0.17	0.21	—	2,079	2,079	0.03	0.28	0.11	2,163
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.80	0.69	0.81	11.4	0.00	0.00	3.12	3.12	0.00	0.73	0.73	—	2,952	2,952	0.03	0.11	3.14	2,990
Vendor	0.06	0.04	1.40	0.58	0.01	0.02	0.42	0.44	0.02	0.12	0.14	—	1,383	1,383	0.02	0.19	1.24	1,440
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.13	0.15	2.08	0.00	0.00	0.57	0.57	0.00	0.13	0.13	—	489	489	0.01	0.02	0.52	495
Vendor	0.01	0.01	0.25	0.11	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	229	229	< 0.005	0.03	0.21	238
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Paving (2030) - Unmitigated

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Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	0.64	6.28	9.90	0.01	0.22	—	0.22	0.20	—	0.20	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.15	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	0.64	6.28	9.90	0.01	0.22	—	0.22	0.20	—	0.20	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.15	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.19	1.89	2.98	< 0.005	0.07	—	0.07	0.06	—	0.06	—	455	455	0.02	< 0.005	—	457
Paving	0.05	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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Off-Road Equipment	0.04	0.04	0.35	0.54	< 0.005	0.01	—	0.01	0.01	—	0.01	—	75.4	75.4	< 0.005	< 0.005	—	75.6
Paving	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	1.01	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	202	202	< 0.005	0.01	0.45	205
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.05	0.57	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	173	173	< 0.005	0.01	0.01	175
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.02	0.21	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	55.6	55.6	< 0.005	< 0.005	0.06	56.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.20	9.20	< 0.005	< 0.005	0.01	9.32
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.18. Paving (2030) - Mitigated

1813

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	0.64	6.28	9.90	0.01	0.22	—	0.22	0.20	—	0.20	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.15	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	0.64	6.28	9.90	0.01	0.22	—	0.22	0.20	—	0.20	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.15	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.19	1.89	2.98	< 0.005	0.07	—	0.07	0.06	—	0.06	—	455	455	0.02	< 0.005	—	457
Paving	0.05	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

1814

Off-Road Equipment	0.04	0.04	0.35	0.54	< 0.005	0.01	—	0.01	0.01	—	0.01	—	75.4	75.4	< 0.005	< 0.005	—	75.6
Paving	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	1.01	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	202	202	< 0.005	0.01	0.45	205
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.05	0.57	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	173	173	< 0.005	0.01	0.01	175
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.02	0.21	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	55.6	55.6	< 0.005	< 0.005	0.06	56.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.20	9.20	< 0.005	< 0.005	0.01	9.32
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Architectural Coating (2029) - Unmitigated

1815

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.06	1.48	< 0.005	0.02	—	0.02	0.02	—	0.02	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	14.4	14.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.06	1.48	< 0.005	0.02	—	0.02	0.02	—	0.02	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	14.4	14.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	0.60	0.84	< 0.005	0.01	—	0.01	0.01	—	0.01	—	100	100	< 0.005	< 0.005	—	101

Architectural Coating	8.13	8.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.11	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.6	16.6	< 0.005	< 0.005	—	16.7
Architectural Coatings	1.48	1.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.28	0.25	5.18	0.00	0.00	0.94	0.94	0.00	0.22	0.22	—	991	991	0.01	0.03	2.45	1,004
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.21	0.28	2.95	0.00	0.00	0.94	0.94	0.00	0.22	0.22	—	845	845	0.01	0.03	0.06	855
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.14	0.14	2.07	0.00	0.00	0.53	0.53	0.00	0.12	0.12	—	509	509	0.01	0.02	0.60	515
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	1817

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.38	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	84.2	84.2	< 0.005	< 0.005	0.10	85.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. Architectural Coating (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.06	1.48	< 0.005	0.02	—	0.02	0.02	—	0.02	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	14.4	14.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.06	1.48	< 0.005	0.02	—	0.02	0.02	—	0.02	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	14.4	14.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	1818

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	0.60	0.84	< 0.005	0.01	—	0.01	0.01	—	0.01	—	100	100	< 0.005	< 0.005	—	101
Architectural Coatings	8.13	8.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.11	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.6	16.6	< 0.005	< 0.005	—	16.7
Architectural Coatings	1.48	1.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.28	0.25	5.18	0.00	0.00	0.94	0.94	0.00	0.22	0.22	—	991	991	0.01	0.03	2.45	1,004
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.21	0.28	2.95	0.00	0.00	0.94	0.94	0.00	0.22	0.22	—	845	845	0.01	0.03	0.06	855
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	1819

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.14	0.14	2.07	0.00	0.00	0.53	0.53	0.00	0.12	0.12	—	509	509	0.01	0.02	0.60	515
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.38	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	84.2	84.2	< 0.005	< 0.005	0.10	85.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Architectural Coating (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.05	1.48	< 0.005	0.01	—	0.01	0.01	—	0.01	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	14.4	14.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.16	0.13	1.05	1.48	< 0.005	0.01	—	0.01	0.01	—	0.01	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	14.4	14.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.70	0.98	< 0.005	0.01	—	0.01	0.01	—	0.01	—	118	118	< 0.005	< 0.005	—	119
Architectural Coatings	9.59	9.59	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.13	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	19.6	19.6	< 0.005	< 0.005	—	19.7
Architectural Coatings	1.75	1.75	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27	0.24	0.22	4.86	0.00	0.00	0.94	0.94	0.00	0.22	0.22	—	974	974	0.01	0.03	2.19	1821

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.23	0.20	0.25	2.74	0.00	0.00	0.94	0.94	0.00	0.22	0.22	—	831	831	0.01	0.03	0.06	841
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.14	0.16	2.28	0.00	0.00	0.62	0.62	0.00	0.15	0.15	—	590	590	0.01	0.02	0.63	598
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.42	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	97.8	97.8	< 0.005	< 0.005	0.10	99.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.22. Architectural Coating (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.05	1.48	< 0.005	0.01	—	0.01	0.01	—	0.01	—	178	178	0.01	< 0.005	—	179

Architectural Coatings	14.4	14.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.05	1.48	< 0.005	0.01	—	0.01	0.01	—	0.01	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	14.4	14.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.70	0.98	< 0.005	0.01	—	0.01	0.01	—	0.01	—	118	118	< 0.005	< 0.005	—	119
Architectural Coatings	9.59	9.59	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.13	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	19.6	19.6	< 0.005	< 0.005	—	19.7

Architectural Coating	1.75	1.75	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27	0.24	0.22	4.86	0.00	0.00	0.94	0.94	0.00	0.22	0.22	—	974	974	0.01	0.03	2.19	987
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.23	0.20	0.25	2.74	0.00	0.00	0.94	0.94	0.00	0.22	0.22	—	831	831	0.01	0.03	0.06	841
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.14	0.16	2.28	0.00	0.00	0.62	0.62	0.00	0.15	0.15	—	590	590	0.01	0.02	0.63	598
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.42	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	97.8	97.8	< 0.005	< 0.005	0.10	99.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

1824

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.1.2. Mitigated

Mobile source emissions results are presented in Sections 2.5. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	1,043	1,043	0.14	0.02	—	1,052
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	1,209	1,209	0.16	0.02	—	1,219
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	—	5,699	5,699	0.76	0.09	—	5,745
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	1,003	1,003	0.13	0.02	—	1,011
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	161	161	0.02	< 0.005	—	163

1825

Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	9,116	9,116	1.22	0.15	—	9,191
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	1,043	1,043	0.14	0.02	—	1,052
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	1,209	1,209	0.16	0.02	—	1,219
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	—	5,699	5,699	0.76	0.09	—	5,745
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	1,003	1,003	0.13	0.02	—	1,011
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	161	161	0.02	< 0.005	—	163
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	9,116	9,116	1.22	0.15	—	1826

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	173	173	0.02	< 0.005	—	174
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	200	200	0.03	< 0.005	—	202
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	—	944	944	0.13	0.02	—	951
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	166	166	0.02	< 0.005	—	167
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	26.7	26.7	< 0.005	< 0.005	—	26.9
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,509	1,509	0.20	0.02	—	1,522

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

1827

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	519	519	0.07	0.01	—	523
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	603	603	0.08	0.01	—	608
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	—	2,849	2,849	0.38	0.05	—	2,873
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	502	502	0.07	0.01	—	506
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	161	161	0.02	< 0.005	—	163
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,635	4,635	0.62	0.08	—	4,672
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	519	519	0.07	0.01	—	523
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	603	603	0.08	0.01	—	608

Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	—	2,849	2,849	0.38	0.05	—	2,873
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	502	502	0.07	0.01	—	506
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	161	161	0.02	< 0.005	—	163
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,635	4,635	0.62	0.08	—	4,672
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	85.9	85.9	0.01	< 0.005	—	86.6
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	99.9	99.9	0.01	< 0.005	—	101
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	—	472	472	0.06	0.01	—	476
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	83.0	83.0	0.01	< 0.005	—	83.7
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	26.7	26.7	< 0.005	< 0.005	—	26.9
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	767	767	0.10	0.01	—	774

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Movie Theater (No Matinee)	0.27	0.13	2.42	2.04	0.01	0.18	—	0.18	0.18	—	0.18	—	2,892	2,892	0.26	0.01	—	2,900
Quality Restaurant	0.07	0.03	0.63	0.53	< 0.005	0.05	—	0.05	0.05	—	0.05	—	747	747	0.07	< 0.005	—	749
User Defined Recreational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Recreati Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.34	0.17	3.05	2.56	0.02	0.23	—	0.23	0.23	—	0.23	—	3,640	3,640	0.32	0.01	—	3,650
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Movie Theater (No Matinee)	0.27	0.13	2.42	2.04	0.01	0.18	—	0.18	0.18	—	0.18	—	2,892	2,892	0.26	0.01	—	2,900
Quality Restaurant	0.07	0.03	0.63	0.53	< 0.005	0.05	—	0.05	0.05	—	0.05	—	747	747	0.07	< 0.005	—	749
User Defined Recreational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.34	0.17	3.05	2.56	0.02	0.23	—	0.23	0.23	—	0.23	—	3,640	3,640	0.32	0.01	—	3,650
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1831

Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Movie Theater (No Matinee)	0.05	0.02	0.44	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	479	479	0.04	< 0.005	—	480
Quality Restaurant	0.01	0.01	0.11	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	124	124	0.01	< 0.005	—	124
User Defined Recreational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.06	0.03	0.56	0.47	< 0.005	0.04	—	0.04	0.04	—	0.04	—	603	603	0.05	< 0.005	—	604

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Movie Theater (No Matinee)	0.27	0.13	2.42	2.04	0.01	0.18	—	0.18	0.18	—	0.18	—	2,892	2,892	0.26	0.01	—	2,900
Quality Restaurant	0.07	0.03	0.63	0.53	< 0.005	0.05	—	0.05	0.05	—	0.05	—	747	747	0.07	< 0.005	—	749
User Defined Recreational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.34	0.17	3.05	2.56	0.02	0.23	—	0.23	0.23	—	0.23	—	3,640	3,640	0.32	0.01	—	3,650
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Movie Theater (No Matinee)	0.27	0.13	2.42	2.04	0.01	0.18	—	0.18	0.18	—	0.18	—	2,892	2,892	0.26	0.01	—	2,900
Quality Restaurant	0.07	0.03	0.63	0.53	< 0.005	0.05	—	0.05	0.05	—	0.05	—	747	747	0.07	< 0.005	—	749
User Defined Recreational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.34	0.17	3.05	2.56	0.02	0.23	—	0.23	0.23	—	0.23	—	3,640	3,640	0.32	0.01	—	3,650
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Movie Theater (No Matinee)	0.05	0.02	0.44	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	479	479	0.04	< 0.005	—	480
Quality Restaurant	0.01	0.01	0.11	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	124	124	0.01	< 0.005	—	124
User Defined Recreational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.06	0.03	0.56	0.47	< 0.005	0.04	—	0.04	0.04	—	0.04	—	603	603	0.05	< 0.005	—	604

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	1,092	1,092	0.15	0.02	—	1,101
Consumer Products	18.9	18.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.78	1.78	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	4.44	4.15	0.33	36.3	< 0.005	0.03	—	0.03	0.03	—	0.03	—	116	116	< 0.005	< 0.005	—	116
Total	25.1	24.8	0.33	36.3	< 0.005	0.03	—	0.03	0.03	—	0.03	0.00	1,208	1,208	0.15	0.02	—	1,217

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	1,092	1,092	0.15	0.02	—	1,101
Consumer Products	18.9	18.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.78	1.78	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	20.6	20.6	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	1,092	1,092	0.15	0.02	—	1,101
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	12.4	12.4	< 0.005	< 0.005	—	12.5
Consumer Products	3.44	3.44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.32	0.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.40	0.37	0.03	3.27	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.44	9.44	< 0.005	< 0.005	—	9.48
Total	4.17	4.14	0.03	3.27	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	21.8	21.8	< 0.005	< 0.005	—	22.0

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	1,092	1,092	0.15	0.02	—	1,101
Consumer Products	18.9	18.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.78	1.78	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	4.44	4.15	0.33	36.3	< 0.005	0.03	—	0.03	0.03	—	0.03	—	116	116	< 0.005	< 0.005	—	116
Total	25.1	24.8	0.33	36.3	< 0.005	0.03	—	0.03	0.03	—	0.03	0.00	1,208	1,208	0.15	0.02	—	1,217
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	1,092	1,092	0.15	0.02	—	1,101
Consumer Products	18.9	18.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.78	1.78	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	20.6	20.6	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	1,092	1,092	0.15	0.02	—	1,101
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	12.4	12.4	< 0.005	< 0.005	—	12.5
Consumer Products	3.44	3.44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.32	0.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landsca Equipment	0.40	0.37	0.03	3.27	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.44	9.44	< 0.005	< 0.005	—	9.48
Total	4.17	4.14	0.03	3.27	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	21.8	21.8	< 0.005	< 0.005	—	22.0

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	12.9	118	131	1.33	0.03	—	174
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	19.0	31.8	50.8	1.95	0.05	—	114
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	214	357	571	22.0	0.53	—	1,277
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	12.8	21.3	34.1	1.31	0.03	—	76.4
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	60.7	101	162	6.24	0.15	—	363

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Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	319	629	948	32.8	0.79	—	2,004
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	12.9	118	131	1.33	0.03	—	174
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	19.0	31.8	50.8	1.95	0.05	—	114
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	214	357	571	22.0	0.53	—	1,277
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	12.8	21.3	34.1	1.31	0.03	—	76.4
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	60.7	101	162	6.24	0.15	—	363
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	319	629	948	32.8	0.79	—	2,004
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	2.13	19.5	21.6	0.22	0.01	—	28.8

Condo/T	—	—	—	—	—	—	—	—	—	—	—	3.15	5.26	8.41	0.32	0.01	—	18.8
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	35.4	59.1	94.5	3.64	0.09	—	211
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	2.12	3.53	5.65	0.22	0.01	—	12.6
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	10.1	16.8	26.8	1.03	0.02	—	60.0
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	52.8	104	157	5.43	0.13	—	332

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	9.62	69.1	78.7	1.00	0.02	—	111
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	14.2	23.8	38.0	1.46	0.04	—	85.0

Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	193	322	515	19.8	0.48	—	1,153
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	11.6	19.4	31.0	1.19	0.03	—	69.2
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	55.5	92.6	148	5.70	0.14	—	331
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	284	527	811	29.2	0.70	—	1,750
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	9.62	69.1	78.7	1.00	0.02	—	111
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	14.2	23.8	38.0	1.46	0.04	—	85.0
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	193	322	515	19.8	0.48	—	1,153
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	11.6	19.4	31.0	1.19	0.03	—	69.2
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	55.5	92.6	148	5.70	0.14	—	331
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	284	527	811	29.2	0.70	—	1,750
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	1.59	11.4	13.0	0.16	< 0.005	—	18.4
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	2.36	3.93	6.29	0.24	0.01	—	14.1
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	32.0	53.4	85.3	3.28	0.08	—	191
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	1.92	3.21	5.12	0.20	< 0.005	—	11.5
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	9.18	15.3	24.5	0.94	0.02	—	54.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

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Total	—	—	—	—	—	—	—	—	—	—	—	47.0	87.3	134	4.83	0.12	—	290

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	81.4	0.00	81.4	8.14	0.00	—	285
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	97.2	0.00	97.2	9.72	0.00	—	340
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	853	0.00	853	85.3	0.00	—	2,986
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	10.8	0.00	10.8	1.08	0.00	—	37.8
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	1,646	0.00	1,646	165	0.00	—	5,759
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	2,689	0.00	2,689	269	0.00	—	9,407
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	81.4	0.00	81.4	8.14	0.00	—	285
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	97.2	0.00	97.2	9.72	0.00	—	340
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	853	0.00	853	85.3	0.00	—	2,986
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	10.8	0.00	10.8	1.08	0.00	—	37.8
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	1,646	0.00	1,646	165	0.00	—	5,759
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2,689	0.00	2,689	269	0.00	—	9,407
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	13.5	0.00	13.5	1.35	0.00	—	47.2
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	16.1	0.00	16.1	1.61	0.00	—	56.3

Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	141	0.00	141	14.1	0.00	—	494
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	1.79	0.00	1.79	0.18	0.00	—	6.26
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	273	0.00	273	27.2	0.00	—	953
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	445	0.00	445	44.5	0.00	—	1,557

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	65.1	0.00	65.1	6.51	0.00	—	228
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	77.8	0.00	77.8	7.77	0.00	—	272

Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	683	0.00	683	68.2	0.00	—	2,389
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	8.65	0.00	8.65	0.86	0.00	—	30.3
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	1,317	0.00	1,317	132	0.00	—	4,607
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2,151	0.00	2,151	215	0.00	—	7,526
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	65.1	0.00	65.1	6.51	0.00	—	228
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	77.8	0.00	77.8	7.77	0.00	—	272
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	683	0.00	683	68.2	0.00	—	2,389
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	8.65	0.00	8.65	0.86	0.00	—	30.3
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

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Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	1,317	0.00	1,317	132	0.00	—	4,607
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2,151	0.00	2,151	215	0.00	—	7,526
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	10.8	0.00	10.8	1.08	0.00	—	37.7
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	12.9	0.00	12.9	1.29	0.00	—	45.1
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	113	0.00	113	11.3	0.00	—	395
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	1.43	0.00	1.43	0.14	0.00	—	5.01
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	218	0.00	218	21.8	0.00	—	763
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

1847

Total	—	—	—	—	—	—	—	—	—	—	—	356	0.00	356	35.6	0.00	—	1,246

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.34	0.34
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.3	12.3
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.2	13.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.34	0.34

Condo/T	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.3	12.3
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.2	13.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.04	2.04
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.19	2.19

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

1849

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.34	0.34
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.3	12.3
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.2	13.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.34	0.34
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.3	1850

Recreati Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.2	13.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.04	2.04
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.19	2.19

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1851

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

1852

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

1856

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Item 2.

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	8/3/2026	11/13/2026	5.00	75.0	—
Site Preparation	Site Preparation	11/14/2026	1/15/2027	5.00	45.0	—
Grading	Grading	1/16/2027	6/25/2027	5.00	115	—
Building Construction	Building Construction	6/26/2027	12/6/2030	5.00	900	—
Paving	Paving	7/6/2030	12/6/2030	5.00	110	—
Architectural Coating	Architectural Coating	3/19/2029	12/6/2030	5.00	450	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	4.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Rubber Tired Dozers	Diesel	Average	4.00	8.00	367	0.40
Site Preparation	Crawler Tractors	Diesel	Average	5.00	8.00	87.0	0.43

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Grading	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	3.00	8.00	423	0.48
Grading	Crawler Tractors	Diesel	Average	3.00	8.00	87.0	0.43
Building Construction	Cranes	Diesel	Average	2.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	5.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	2.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	5.00	8.00	84.0	0.37
Building Construction	Welders	Diesel	Average	2.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	4.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Rubber Tired Dozers	Diesel	Average	4.00	8.00	367	0.40
Site Preparation	Crawler Tractors	Diesel	Average	5.00	8.00	87.0	0.43
Grading	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	3.00	8.00	423	0.48
Grading	Crawler Tractors	Diesel	Average	3.00	8.00	87.0	0.43

1860

Building Construction	Cranes	Diesel	Average	2.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	5.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	2.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	5.00	8.00	84.0	0.37
Building Construction	Welders	Diesel	Average	2.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	20.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	7.00	10.2	HHDT,MHDT
Demolition	Hauling	0.95	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	22.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	4.00	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	27.5	18.5	LDA,LDT1,LDT2
Grading	Vendor	10.0	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT

Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	361	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	74.0	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	72.2	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	20.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	7.00	10.2	HHDT,MHDT
Demolition	Hauling	0.95	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	22.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	4.00	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT

1862

Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	27.5	18.5	LDA,LDT1,LDT2
Grading	Vendor	10.0	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	361	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	74.0	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	72.2	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

1863

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	1,175,290	391,763	449,672	149,891	16,432

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	6,143	—
Site Preparation	—	—	203	0.00	—
Grading	—	—	633	0.00	—
Paving	0.00	0.00	0.00	0.00	8.11

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Single Family Housing	1.82	0%
Condo/Townhouse	—	0%
Movie Theater (No Matinee)	0.00	0%
Quality Restaurant	0.00	0%
User Defined Recreational	0.00	0%
Parking Lot	6.26	100%
Recreational Swimming Pool	0.00	0%

1864

Other Asphalt Surfaces	0.02	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	457	0.03	< 0.005
2027	0.00	457	0.03	< 0.005
2028	0.00	457	0.03	< 0.005
2029	0.00	457	0.03	< 0.005
2030	0.00	457	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	1,887	1,887	1,887	688,755	33,272	33,272	33,272	12,144,280

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	1,887	1,887	1,887	688,755	33,272	33,272	33,272	12,144,280

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Single Family Housing	—

1865

Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	165
No Fireplaces	0
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0
Condo/Townhouse	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	244
No Fireplaces	0
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Single Family Housing	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	165
No Fireplaces	0

1866

Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0
Condo/Townhouse	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	244
No Fireplaces	0
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
1175289.75	391,763	449,672	149,891	16,432

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value

1867

Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	1,545,056	247	0.0330	0.0040	0.00
Condo/Townhouse	1,790,418	247	0.0330	0.0040	0.00
Movie Theater (No Matinee)	8,438,137	247	0.0330	0.0040	9,024,353
Quality Restaurant	1,485,248	247	0.0330	0.0040	2,332,120
User Defined Recreational	0.00	247	0.0330	0.0040	0.00
Parking Lot	239,025	247	0.0330	0.0040	0.00
Recreational Swimming Pool	0.00	247	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	247	0.0330	0.0040	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	768,447	247	0.0330	0.0040	0.00
Condo/Townhouse	893,101	247	0.0330	0.0040	0.00
Movie Theater (No Matinee)	4,219,069	247	0.0330	0.0040	9,024,353
Quality Restaurant	742,624	247	0.0330	0.0040	2,332,120
User Defined Recreational	0.00	247	0.0330	0.0040	0.00
Parking Lot	239,025	247	0.0330	0.0040	0.00
Recreational Swimming Pool	0.00	247	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	247	0.0330	0.0040	0.00

1868

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	6,711,173	44,326,113
Condo/Townhouse	9,924,401	0.00
Movie Theater (No Matinee)	111,566,492	0.00
Quality Restaurant	6,670,760	0.00
User Defined Recreational	0.00	0.00
Parking Lot	0.00	0.00
Recreational Swimming Pool	31,688,246	0.00
Other Asphalt Surfaces	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	5,021,971	24,396,890
Condo/Townhouse	7,426,429	0.00
Movie Theater (No Matinee)	100,744,543	0.00
Quality Restaurant	6,050,380	0.00
User Defined Recreational	0.00	0.00
Parking Lot	0.00	0.00
Recreational Swimming Pool	28,950,382	0.00
Other Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	151	—
Condo/Townhouse	180	—
Movie Theater (No Matinee)	1,583	—
Quality Restaurant	20.1	—
User Defined Recreational	0.00	—
Parking Lot	0.00	—
Recreational Swimming Pool	3,054	—
Other Asphalt Surfaces	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	121	—
Condo/Townhouse	144	—
Movie Theater (No Matinee)	1,267	—
Quality Restaurant	16.0	—
User Defined Recreational	0.00	—
Parking Lot	0.00	—
Recreational Swimming Pool	2,443	—
Other Asphalt Surfaces	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	User Defined	750	< 0.005	2.50	2.50	10.0

1870

Single Family Housing	Household refrigerators and/or freezers	User Defined	150	0.12	0.60	0.00	1.00
Condo/Townhouse	Average room A/C & Other residential A/C and heat pumps	User Defined	750	< 0.005	2.50	2.50	10.0
Condo/Townhouse	Household refrigerators and/or freezers	User Defined	150	0.12	0.60	0.00	1.00
Movie Theater (No Matinee)	Other commercial A/C and heat pumps	User Defined	750	< 0.005	4.00	4.00	18.0
Movie Theater (No Matinee)	Stand-alone retail refrigerators and freezers	User Defined	150	0.04	1.00	0.00	1.00
Movie Theater (No Matinee)	Walk-in refrigerators and freezers	User Defined	150	< 0.005	7.50	7.50	20.0
Quality Restaurant	Household refrigerators and/or freezers	User Defined	150	0.00	0.60	0.00	1.00
Quality Restaurant	Other commercial A/C and heat pumps	User Defined	750	1.80	4.00	4.00	18.0
Quality Restaurant	Walk-in refrigerators and freezers	User Defined	150	< 0.005	7.50	7.50	20.0
Recreational Swimming Pool	Other commercial A/C and heat pumps	User Defined	750	< 0.005	4.00	4.00	18.0
Recreational Swimming Pool	Stand-alone retail refrigerators and freezers	User Defined	150	0.04	1.00	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	User Defined	750	< 0.005	2.50	2.50	10.0

1871

Single Family Housing	Household refrigerators and/or freezers	User Defined	150	0.12	0.60	0.00	1.00
Condo/Townhouse	Average room A/C & Other residential A/C and heat pumps	User Defined	750	< 0.005	2.50	2.50	10.0
Condo/Townhouse	Household refrigerators and/or freezers	User Defined	150	0.12	0.60	0.00	1.00
Movie Theater (No Matinee)	Other commercial A/C and heat pumps	User Defined	750	< 0.005	4.00	4.00	18.0
Movie Theater (No Matinee)	Stand-alone retail refrigerators and freezers	User Defined	150	0.04	1.00	0.00	1.00
Movie Theater (No Matinee)	Walk-in refrigerators and freezers	User Defined	150	< 0.005	7.50	7.50	20.0
Quality Restaurant	Household refrigerators and/or freezers	User Defined	150	0.00	0.60	0.00	1.00
Quality Restaurant	Other commercial A/C and heat pumps	User Defined	750	1.80	4.00	4.00	18.0
Quality Restaurant	Walk-in refrigerators and freezers	User Defined	150	< 0.005	7.50	7.50	20.0
Recreational Swimming Pool	Other commercial A/C and heat pumps	User Defined	750	< 0.005	4.00	4.00	18.0
Recreational Swimming Pool	Stand-alone retail refrigerators and freezers	User Defined	150	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

1872

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	23.5	annual days of extreme heat
Extreme Precipitation	0.05	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.14	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A

1875

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	91.1
AQ-PM	8.11
AQ-DPM	43.5
Drinking Water	72.0
Lead Risk Housing	4.10
Pesticides	72.9
Toxic Releases	2.83
Traffic	9.28
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	0.00
Haz Waste Facilities/Generators	35.6
Impaired Water Bodies	0.00
Solid Waste	0.00

1876

Sensitive Population	—
Asthma	26.8
Cardio-vascular	32.6
Low Birth Weights	4.36
Socioeconomic Factor Indicators	—
Education	30.4
Housing	42.8
Linguistic	86.9
Poverty	40.8
Unemployment	64.5

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	52.34184525
Employed	12.04927499
Median HI	41.75542153
Education	—
Bachelor's or higher	59.05299628
High school enrollment	100
Preschool enrollment	1.873476197
Transportation	—
Auto Access	43.30809701
Active commuting	33.32477865
Social	—
2-parent households	17.11792634
Voting	54.07416913

1877

Neighborhood	—
Alcohol availability	91.45386886
Park access	2.194276915
Retail density	9.790837931
Supermarket access	15.98870781
Tree canopy	8.661619402
Housing	—
Homeownership	66.77787758
Housing habitability	81.5603747
Low-inc homeowner severe housing cost burden	21.18567946
Low-inc renter severe housing cost burden	92.91672013
Uncrowded housing	70.98678301
Health Outcomes	—
Insured adults	50.93032208
Arthritis	1.8
Asthma ER Admissions	72.2
High Blood Pressure	3.3
Cancer (excluding skin)	2.7
Asthma	55.1
Coronary Heart Disease	2.7
Chronic Obstructive Pulmonary Disease	14.4
Diagnosed Diabetes	19.9
Life Expectancy at Birth	80.0
Cognitively Disabled	85.7
Physically Disabled	10.0
Heart Attack ER Admissions	73.8
Mental Health Not Good	68.6
Chronic Kidney Disease	5.2

1878

Obesity	37.0
Pedestrian Injuries	19.6
Physical Health Not Good	38.5
Stroke	13.0
Health Risk Behaviors	—
Binge Drinking	87.0
Current Smoker	74.7
No Leisure Time for Physical Activity	49.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	90.2
Elderly	5.0
English Speaking	66.0
Foreign-born	19.1
Outdoor Workers	12.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	84.6
Traffic Density	11.0
Traffic Access	23.0
Other Indices	—
Hardship	50.2
Other Decision Support	—
2016 Voting	78.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	21.0

1879

Healthy Places Index Score for Project Location (b)	31.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Total area is 81.14 acres
Construction: Construction Phases	Construction schedule based on a 2030 opening year
Construction: Off-Road Equipment	Crawler Tractors used in lieu of Tractors/Loaders/Backhoes
Construction: Trips and VMT	Vendor trips adjusted based on CalEEMod defaults for Building Construction and number of days during Demolition, Site Preparation, Grading, and Building Construction
Construction: Architectural Coatings	Rule 1113
Operations: Vehicle Data	Trip characteristics based on information provided in the Traffic analysis
Operations: Hearths	Rule 445
Operations: Refrigerants	As of 1 January 2022, new commercial refrigeration equipment may not use refrigerants with a GWP of 150 or greater. Further, R-404A (the CalEEMod default) is unacceptable for new supermarket and cold storage systems as of 1 January 2019 and 2023, respectively. Beginning 1 January 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater.
Operations: Fleet Mix	Adjusted Fleet Mix

1880

Operations: Energy Use	No natural gas for residential

RESULTS OF PHASE I
ENVIRONMENTAL SITE ASSESSMENT
MIXED-USE DEVELOPMENT
APNS 780-040-001, 003 &
780-060-001 & 002
COACHELLA, CALIFORNIA

-Prepared By-

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June 3, 2024

Project No. 544-24159
24-05-260

Relevant Living
6417 Selma Avenue, 2nd Floor
Los Angeles, California

Subject: Phase I Environmental Site Assessment
Proposed Mixed-Use Development
APN's 780-040-001, 003, 780-060-001 & 002
SWC 52nd Avenue & Van Buren Street
Coachella, California

In accordance with your request, Sladden Engineering has completed this Phase I Environmental Site Assessment of the subject property identified by the County of Riverside as APNs 780-040-001, 003, 780-060-001 & 002 located on southwest corner of 52nd Avenue and Van Buren Street in the City of Coachella California (Figure 1 & Figure 2).

This report was prepared to stand as a whole and no part should be excerpted or used in exclusion of any other part. The activities conducted have been in accordance with our proposal dated November 7, 2023. This report completes our Phase I scope of services as outlined in our agreement. We appreciate this opportunity to be of service. If you have any questions regarding this report or the information contained herein, please contact the undersigned at your convenience.

We declare that, to the best of our professional knowledge and belief, we meet the definition of environmental professional as defined in §312.10 of 40 CFR 312 and we have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Respectfully Submitted,
Sladden Engineering

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Phase I/jm

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RESULTS OF PHASE I
ENVIRONMENTAL SITE ASSESSMENT
MIXED-USE DEVELOPMENT
APN'S 780-040-001, 003, 780-060-001 &
780-060-002
SWC 52ND AVENUE & VAN BUREN STREET
COACHELLA, CALIFORNIA

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Figure 1 Site Location Map
Figure 2 Site Photograph

Appendix A Photographs of Property

Appendix B Environmental Database Report

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Appendix D Phase I Environmental Site Assessment Questionnaire

1.0 INTRODUCTION

This Phase I *environmental site assessment* has been conducted at the request of Mrs. Isabel Ronda with Relevant Living.

1.1 Purpose

This report presents the findings of the Phase I Environmental Site Assessment (ESA) conducted for the property identified by the County of Riverside as APNs 780-040-001, 003, 780-060-001 & 002 located on southwest corner of 52nd Avenue and Van Buren Street in the City of Coachella California. The approximate location of the site is indicated on the Site Location Map, Figure 1 and Site Photograph Figure 2.

The intent of this investigation was to evaluate areas of potential environmental concern that may be present as a result of past hazardous materials use, handling or storage on or near the properties with respect to the range of contaminants within the scope of Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and *petroleum products* for a parcel of *commercial real estate*. This ESA is also intended to permit the *user* to satisfy one of the requirements to qualify for the *landowner liability protection* (LLP) that is, the practice that constitutes "all appropriate inquiry" (AAI) defined at 40 Code of Federal Regulations Part 312.

1.2 Detailed Scope-of-Services

The scope of Phase I ESA work performed herein conforms with American Society for Testing and Materials (ASTM) Standard E1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* and has consisted of a records review, site reconnaissance, interviews, and the preparation of this report. An evaluation of *business environmental risks* and testing of building materials, air, or groundwater is beyond the scope of this report. For reference, the italicized terms presented herein are consistent with those defined in ASTM Standard E1527-13, Section 3, Terminology.

Included in this report are a Site Location Map (Figure 1) and Site Photograph (Figure 2). Photographs of the property (Appendix A) document the general site features and conditions as observed during site visit on May 23, 2024. For regulatory and agency database information, Environmental Data Resources, Inc. (EDR) was retained. A copy of their report is attached as Appendix B. Relevant and readily available historical records are provided in Appendix C as reference.

There are no *Special Contractual Conditions* between *user* and *environmental professional* for this assessment.

1.3 Significant Assumptions

This environmental assessment and report meet the December 30, 2013, ASTM Standard E1527-13. As specified under this standard, certain responsibilities lie with the *user* of the assessment. The *user* is generally the purchaser, owner, lender, property manager, or potential tenant. Under the ASTM standard, it is the responsibility of the *user* to engage a title company or title professional to undertake a review of *Environmental Liens or Activity and Use Limitations (AULs)* with regard to the property and provide this information to the *environmental professional* preparing the assessment. Additionally, the *user* must make the professional aware of any specialized knowledge or experience that is material to *Recognized Environmental Conditions* in connection with the property. Where and when provided, information provided in this regard is presented in the records review section of this report.

"*Recognized Environmental Conditions*" are defined by ASTM as follows: "The presence or likely presence of any Hazardous Substances or Petroleum Products on a Property under conditions that indicate an existing release, a past release, or a material threat of a release of any Hazardous Substances or Petroleum Products into structures on the Property or into the ground, groundwater, or surface water of the Property. The term includes Hazardous Substances or Petroleum Products even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies."

Indoor air quality is specifically listed as a non-scope consideration under Section 13.1.5.7 of ASTM Standard E1527-13. However, *Environmental Professionals* cannot eliminate vapor migration screening from the ASTM Standard E1527-13 Phase I ESA scope of work as this would result in the Phase I ESA being non-AAI compliant. ASTM has released ASTM Standard E2600-10 *Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions*. The Guidance is directed at identifying the likelihood for migrating vapors to encroach onto a target property creating a Vapor Encroachment Condition (VEC). The potential findings of the ASTM Standard E2600-10 screening are the following:

1) A VEC exists or is likely to exist; or,

2) A VEC can be ruled out because it does not exist or is not likely to exist.

ASTM Standard E2600-10 is a two-Tier process. Tier 1 focuses on known or suspected contaminated properties identified during the Phase I ESA within an Area of Concern (AOC) about the target property. For volatile and semi-volatile organic compounds (VOCs and SVOCs), such as dry-cleaning chemicals and industrial solvents, the AOC is defined as 1/3 mile. For petroleum hydrocarbon chemicals such as gasoline the AOC is defined as 1/10 mile. The AOC can be shortened in the down- and cross-gradient directions if the groundwater flow direction is known.

Tier 2 focuses on contaminant plumes from contaminated properties identified within the AOC and their proximity (critical distance) to the target property. The critical distance is 100 feet for VOCs and 30 feet for petroleum hydrocarbons.

2.0 SITE DESCRIPTION

A description and general property information is summarized in this section.

2.1 Location and Legal Description

Latitude (North)	33.668402 - 33° 40′ 6.25″
Longitude (West)	116.202506 - 116° 12′ 9.02″
Elevation (mean sea level)	51 feet below sea level
Riverside County Assessor Parcel Number	APNs 780-040-001, 003, 780-060-001 & 002
Property Size	~ 85.76 Acres

The site is located on southwest corner of 52nd Avenue and Van Buren Street in the City of Coachella California. Figures 1 & 2 show the location of the property relative to the general site vicinity.

2.2 Geology & Hydrogeology

The property is located in the Coachella Valley area of Riverside County, California. The Coachella Valley is part of the tectonically active Salton Trough. The Salton Trough is a closed, internally draining basin bounded in its northerly portion by the San Jacinto and Santa Rosa Mountains to the southwest, the San Bernardino Mountains to the northwest, and the Little San Bernardino Mountains to the northeast. These mountain ranges are composed of granitic and metamorphic rocks that also form the basement complex of the Coachella Valley. Overlying the basement complex, the valley is filled with a series of unconsolidated and semi-consolidated continental clastic materials eroded from the surrounding mountain ranges, lacustrine deposits of ancient Lake Cahuilla, and wind-blown sand deposited in the active blow sand areas.

The northwest-southeast trending San Andreas fault zone dominates the geology of the Coachella Valley. The Banning, Mission Creek, and Garnet Hill faults (which are part of the San Andreas fault system), divide the Coachella Valley into four distinct hydrogeologic subbasins, as the faults are generally impermeable to groundwater flow. Groundwater characteristics in the vicinity of the subject site are governed by the features of the Whitewater River subbasin, which is bound by the Garnet Hill fault to the northwest, and the San Jacinto and Santa Rosa Mountains to the west and south. Groundwater in the Whitewater River subbasin generally flows in a southeasterly direction from the main recharge area near San Gorgonio Pass towards the Salton Sea. Average transmissivity (a measure of groundwater flow rate) of the main aquifer in the subject vicinity is relatively high, averaging 300,000 gallons per columnar foot per day. Average water storage capacity within the main aquifer is eighteen percent (USDA, 1980). Depth to groundwater in the general site vicinity is expected to be in excess of 50 feet below existing ground surface.

The EDR report provides a physical setting source addendum (GeoCheck). The property is located at an elevation of approximately 51 feet below sea level. The topography increases in elevation to the west and north. The EDR report searched for site-specific hydro-geologic information maintained by EDR within a 1.25-mile radius from the property; however, no specific information was found. Near surface soil in the general area is described as fine sandy loam and fine sand that consist of moderately well drained sediments.

The EDR report also searched for public water systems and water wells known to the United States Geological Survey (USGS) and State of California within a one-mile radius of the property. Nine (9) wells were found within 1 mile of the subject site. Groundwater elevations within the site vicinity were not reported.

3.0 USER PROVIDED INFORMATION

A due diligence executive summary was provided by thew client. A previous Phase 1 report stated one 750 gallon above ground storage tank and one 10,000 above ground storage tank will need to be removed in accordance with regulatory guidelines. Existing wells will need to be removed/destroyed in accordance with regulatory guidelines.

A previous Phase 2 indicated concentrations of DDE & DDT concentrations above regulatory levels in the vicinity of the existing metal shed and the vicinity of the residence on site. The summary recommended additional soil sampling to assess the source and limits of the chemicals of concern. In addition, the Phase 2 report recommended additional water testing within the onsite well if the well will be planned for future use.

The *user* has no knowledge, or information, of *Environmental Liens or Activity and Use Limitations (AULs)* relating to the property.

4.0 RECORDS REVIEW

This section covers agency records and readily available and public documents from standard sources.

4.1 Regulatory Records

To identify reported areas of possible environmental impairment on or within a 1.0-mile radius of the *property,* an "Environmental Database Report" was obtained from EDR (Appendix B). This report includes information from the following agencies:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list
- NPL National Priority List
- Proposed NPL Proposed National Priority List Sites
- NPL LIENS Federal Superfund Liens

Federal Delisted NPL site list
- Delisted NPL National Priority List Deletions

Federal CERCLIS list
- FEDERAL FACILITY Federal Facility Site Information listing
- SEMS Superfund Enterprise Management System

Federal CERCLIS NFRAP site list
- SEMS-ARCHIVE Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list
- CORRACTS Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list
- RCRA-TSDF RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

- RCRA-VSQG RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

Federal institutional controls / engineering controls registries
- LUCIS Land Use Control Information System
- US ENG CONTROLS Engineering Controls Sites List
- US INST CONTROL Sites with Institutional Controls

Federal ERNS list
- ERNS Emergency Response Notification System

State- and tribal - equivalent NPL
- RESPONSE State Response Sites

State and tribal landfill and/or solid waste disposal site lists
- SWF/LF Solid Waste Information System

State and tribal leaking storage tank lists
- INDIAN LUST Leaking Underground Storage Tanks on Indian Land
- CPS-SLIC Statewide SLIC Cases

State and tribal registered storage tank lists
- FEMA UST Underground Storage Tank Listing
- AST Aboveground Petroleum Storage Tank Facilities
- INDIAN UST Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites
- VCP Voluntary Cleanup Program Properties
- INDIAN VCP Voluntary Cleanup Priority Listing

State and tribal Brownfields sites
- BROWNFIELDS Considered Brownfields Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists
- US BROWNFIELDS A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites
- WMUDS/SWAT Waste Management Unit Database
- SWRCY Recycler Database
- HAULERS Registered Waste Tire Haulers Listing
- INDIAN ODI Report on the Status of Open Dumps on Indian Lands
- DEBRIS REGION 9 Torres Martinez Reservation Illegal Dump Site Locations
- ODI Open Dump Inventory
- IHS OPEN DUMPS Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites
- US HIST CDL Delisted National Clandestine Laboratory Register

- HIST Cal-Sites Historical Calsites Database
- SCH School Property Evaluation Program
- CDL Clandestine Drug Labs
- Toxic Pits Toxic Pits Cleanup Act Sites
- US CDL National Clandestine Laboratory Register
- PFAS PFAS Contamination Site Location Listing

Local Land Records

- LIENS Environmental Liens Listing
- LIENS 2 CERCLA Lien Information
- DEED Deed Restriction Listing

Records of Emergency Release Reports

- HMIRS Hazardous Materials Information Reporting System
- CHMIRS California Hazardous Material Incident Report System
- LDS Land Disposal Sites Listing
- MCS Military Cleanup Sites Listing
- SPILLS 90 SPILLS 90 data from FirstSearch

Other Ascertainable Records

- FUDS Formerly Used Defense Sites
- DOD Department of Defense Sites
- SCRD DRYCLEANERS State Coalition for Remediation of Drycleaners Listing
- US FIN ASSUR Financial Assurance Information
- EPA WATCH LIST EPA WATCH LIST
- 2020 COR ACTION 2020 Corrective Action Program List
- TSCA Toxic Substances Control Act
- TRIS Toxic Chemical Release Inventory System
- SSTS Section 7 Tracking Systems
- ROD Records of Decision
- RMP Risk Management Plans
- RAATS RCRA Administrative Action Tracking System
- PRP Potentially Responsible Parties
- PADS PCB Activity Database System
- ICIS Integrated Compliance Information System
- FTTS FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide
- Act)/TSCA (Toxic Substances Control Act)
- MLTS Material Licensing Tracking System
- COAL ASH DOE Steam-Electric Plant Operation Data
- COAL ASH EPA Coal Combustion Residues Surface Impoundments List
- PCB TRANSFORMER PCB Transformer Registration Database
- RADINFO Radiation Information Database
- HIST FTTS FIFRA/TSCA Tracking System Administrative Case Listing
- DOT OPS Incident and Accident Data
- CONSENT Superfund (CERCLA) Consent Decrees
- FUSRAP Formerly Utilized Sites Remedial Action Program
- UMTRA Uranium Mill Tailings Sites
- LEAD SMELTERS Lead Smelter Sites
- US AIRS Aerometric Information Retrieval System Facility Subsystem

- US MINES Mines Master Index File
- ABANDONED MINES Abandoned Mines
- FINDS Facility Index System/Facility Registry System
- ECHO Enforcement & Compliance History Information
- UXO Unexploded Ordnance Sites
- DOCKET HWC Hazardous Waste Compliance Docket Listing
- FUELS PROGRAM EPA Fuels Program Registered Listing
- CA BOND EXP. PLAN Bond Expenditure Plan
- Cortese "Cortese" Hazardous Waste & Substances Sites List
- CUPA Listings CUPA Resources List
- DRYCLEANERS Cleaner Facilities
- EMI Emissions Inventory Data
- ENF Enforcement Action Listing
- Financial Assurance Financial Assurance Information Listing
- ICE ICE
- HWP EnviroStor Permitted Facilities Listing
- HWT Registered Hazardous Waste Transporter Database
- MINES Mines Site Location Listing
- MWMP Medical Waste Management Program Listing
- NPDES NPDES Permits Listing
- PEST LIC Pesticide Regulation Licenses Listing
- PROC Certified Processors Database
- UIC UIC Listing
- UIC GEO UIC GEO (GEOTRACKER)
- WASTEWATER PITS Oil Wastewater Pits Listing
- WDS Waste Discharge System
- WIP Well Investigation Program Case List
- MILITARY PRIV SITES MILITARY PRIV SITES (GEOTRACKER)
- PROJECT PROJECT (GEOTRACKER)
- WDR Waste Discharge Requirements Listing
- CIWQS California Integrated Water Quality System
- CERS CERS
- NON-CASE INFO NON-CASE INFO (GEOTRACKER)
- OTHER OIL GAS OTHER OIL & GAS (GEOTRACKER)
- PROD WATER PONDS PROD WATER PONDS (GEOTRACKER)
- SAMPLING POINT SAMPLING POINT (GEOTRACKER)
- WELL STIM PROJ Well Stimulation Project (GEOTRACKER)
- MINES MRDS Mineral Resources Data System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

- EDR MGP EDR Proprietary Manufactured Gas Plants
- EDR Hist Cleaner EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

- RGA LF Recovered Government Archive Solid Waste Facilities List

- RGA LUST Recovered Government Archive Leaking Underground Storage Tank

The search distances used are indicated in the attached EDR report (Appendix B). **The target property was not listed in any databases searched by EDR.** Generally, the sites reported within the EDR were listed as "No Further Action or Inactive". Generally, the sites listed within EDR databases should not pose a significant environmental impact on the subject property.

There are four (4) sites listed as unmapped (orphan list) sites presented in the EDR report. The sites should not pose an environmental concern in the absence of known or documented issues.

4.2 Sanborn Fire Insurance Maps

The subject site is an unmapped property.

4.3 Aerial Photographs

To identify past uses that may have had an environmental impact on the property or surrounding areas, a collection of historical aerial photographs was reviewed. Photographs from 1949, 1953, 1959, 1965, 1972, 1984, 1996, 2002, 2006, 2009, 2012, 2016 and 2020 were readily available for review (copies are included in Appendix C for reference). The following summaries are interpretive and are valid only for the dates flown.

1949- Generally, the subject property and site vicinity appear to be used as farmland. Structures are visible near the southwest corner of the subject site (USDA, 1949).

1953- The property appears to be utilized for agricultural usage. Structures are visible near the southwest corner, middle and northwest corner of the subject site. Numerous agricultural plots are visible within the site vicinity (USDA, 1953).

1959- Generally, the property and site vicinity appear mostly unchanged from the previous photograph (USDA, 1959).

1965- A new structure is visible near the central portion of the subject site. Generally, the site's vicinity appears mostly unchanged from the previous photograph (USGS, 1965).

1972- Generally, the property and site vicinity appear mostly unchanged from the previous photograph (USDA, 1972).

1984- Structures are missing from the central and southwestern section of the subject site. The central portion of the property appears to be used for agricultural use. Various new structures are visible within the site vicinity (USDA, 1984).

1996- New date orchards are visible on the subject site. The property still appears to be used as farmland (USGS/DOQQ, 1996).

2002- Generally, the property and site vicinity appear mostly unchanged from the previous photograph (USGS/DOQQ, 2002).

2006- Generally, the property and site vicinity appear mostly unchanged from the previous photograph (USDA/NAIP, 2006).

2009- Generally, the property and site vicinity appear mostly unchanged from the previous photograph (USDA/NAIP, 2009).

2012- An irrigation pond is visible to the immediate west of the existing structure located on the subject property. Generally, the site vicinity appears mostly unchanged from the previous photograph (USDA/NAIP, 2012).

2016- Generally, the subject property and site vicinity appear mostly unchanged from the previous photograph (USDA/NAIP, 2016).

2020- Generally, the subject property and site vicinity appear mostly unchanged from the previous photograph (USDA/NAIP, 2020).

4.4 Topographic Maps

Sladden Engineering retained EDR to provide historical topographic maps prepared by the USGS for the site vicinity. Historical topographic maps were available for the years 1904, 1941, 1943, 1947, 1956, 1972, 1975, 2012, 2015, 2018 and 2021. The EDR Historical Topographic Map Report is included in Appendix C.

1904 - The subject property is mapped as undeveloped desert land. A north to south trending roadway is mapped to the west of the property. Augustine Indian reservation is mapped to the southeast of the property.

1941 - The subject property remains mapped as undeveloped land. Structures are mapped throughout the site vicinity. Calhoun Street and 52th Avenue are mapped to the west and north, respectively.

1943- The subject property and surrounding area appear mostly unchanged from the previous map.

1947- The subject property and surrounding area appear mostly unchanged from the previous map.

1956- A portion of the subject property is mapped as agricultural land. An irrigation pond is visible on the property. Agricultural property is mapped throughout the site vicinity.

1972- The property appears undeveloped with the exception of an irrigation pond. Agricultural property is mapped throughout the site vicinity.

1975 - A structure is located on the property. Portions of the property appear to be utilized for agricultural use. Structures and agricultural property are scattered throughout the site vicinity.

2012- The property appears undeveloped. Structures are absent from this map. New roadways are mapped within the site vicinity.

2015 - The subject property appears undeveloped. Generally, the site's vicinity appears unchanged from the previous map.

2018- The subject property and surrounding area appear mostly unchanged from the previous map.

2021- The subject property and surrounding area appear mostly unchanged from the previous map.

4.5 City Directory Image Report

Sladden retained EDR to provide a historical city directory search for the property and nearby properties. The city directories identify individuals and businesses by street address. EDR obtained information from city and telephone directories from 1971 to 2020. The EDR City Directory Image Report is included in Appendix C.

4.6 Title Records

Title records were not provided by the client and therefore were not reviewed as a part of this assessment.

5.0 SITE RECONNAISSANCE

The property was visited by Mr. James Minor on May 31, 2024 to observe the general site conditions and adjacent land use relative to this assessment and photodocument general findings. The following observations were made:

The subject property is located on the southwest corner of 52nd Avenue and Van Buren Street in the City of Coachella, California. The property is formally identified by the County of Riverside as APNs 780-040-001, 003, 780-060-001 & 002 and occupies a total area of approximately 85.76 acres. At the time of our investigation, the property was used for date palm tree and grape farming. Drip type irrigation lines were observed along the rows of grapes and date palm trees. Two (2) dilapidated structures along with some trash/debris piles were observed within the central portion on the property. A fenced irrigation pond and pump station were observed adjacent to the structures. CVWD standpipes were observed near the northern side of the property. Various dirt roads transect the subject site. The site is generally level throughout and near the elevation of the adjacent properties and streets. The site is bounded by 52nd Avenue on the north, by Van Buren Street on the east, by Calhoun Street on the west and on the south by existing agricultural property.

The following utilities are available and will likely service the general area.

Potable Water Supply – Coachella Valley Water District
Sewage Disposal System – Coachella Valley Water District
Electricity – Edison
Natural Gas – The Gas Company
Telephone – Frontier

6.0 INTERVIEWS

Interviews with the Owners and Local Government Officials are summarized below.

The Riverside County Department of Environmental Health (RCDEH) and the Regional Water Quality Control Board, Colorado River Region (RWQCB) is the local environmental oversight agencies responsible for site contamination or activities relating to hazardous substances and hazardous waste sites. Because the property was not listed on any of the environmental agency databases reviewed, agency would not be expected to have information regarding the presence or absence of adverse or negative environmental conditions at the site. Past interviews with staff from these agencies confirm they do not have unpublished information relating to adverse or negative environmental conditions at sites not listed in environmental databases and lack of a physical address.

Based on a completed Phase 1 Environmental Site Assessment Questionnaire completed by Mr. Grant King (property manager), the property is currently used for agricultural purposes and is currently vacant. Mr. King stated that previous environmental assessments revealed that the surface soil is contaminated with detected levels of dichloro-diphenyl-trichloroethane (DDT) and dichloro-diphenyl- ethylene (DDE) chemicals. He stated that an onsite well tested positive for coliform and atypical hydrocarbons. In addition, he indicated that previous fuel/chemical storage tanks were located onsite, but these tanks have been removed offsite.

The supplied Phase 1 Environmental Site Assessment Questionnaire is attached to this report within Appendix D.

7.0 FINDINGS / OPINION / CONCLUSIONS

We have performed a Phase I ESA in conformance with the scope and limitations of ASTM Standard E-1527-13 for the site identified as APN's APNs 780-040-001, 003, 780-060-001 & 002. Any exceptions to, or deletions from, this practice are described in Section 8 of this report. This assessment has revealed evidence of a Recognized Environmental Condition in connection with the subject property.

Based on the previous and ongoing farming/agricultural use of the subject property along with the previous environmental reports identifying the presence of DDE, DDT and other hydrocarbons, we recommend that a Phase 2 shallow soil sampling laboratory testing program be performed. The purpose of the phase 2 environmental investigation is to assess the potential presence of residual pesticide/herbicide and hydrocarbon contaminants within the surface soil.

ASTM Standard E1527-13 includes a requirement to address the potential presence of methane or other subsurface gases. Because there are no landfills, dumps, buried organic debris or other methane sources in the site vicinity and no underground petroleum storage tanks on the site, it is our opinion that the potential for methane or other subsurface gases impacting the subject site is "negligible".

8.0 DEVIATIONS

Historical aerial photographs, maps, and other records pre-dating 1904 were not readily available and reasonably ascertainable through standard historical sources and therefore not reviewed as part of this Phase I ESA.

A 50-year chain-of-title review could help identify *environmental liens or activity use limitations (AULs)*. This report, if provided by the *user*, will be reviewed and this report amended in the event *environmental liens or AULs* are identified during the search.

9.0 ADDITIONAL SERVICES

Non-scope considerations listed in ASTM E1527-13 Sections 12.9 and 13 are not part of this report. These optional assessments cover such issues as: business environmental risks, asbestos, radon, lead-based paint, lead in drinking water, etc.

10.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

We declare that, to the best of our professional knowledge and belief, we meet the definition of environmental professional as defined in §312.10 of 40 CFR 312 and we have the specific qualifications based on education, training, and experienced to assess a property of the nature, history, and setting of the subject property. We have developed and performed all the appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

/s/
James W. Minor III
Senior Geologist

/s/
Brett L Anderson
Principal Engineer

11.0 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

Summary qualifications of the individuals who conducted this Phase I ESA and prepared this report are presented below. Their *curriculum vitae* detailing relevant experience are available on request.

James Minor is a California Registered Professional Geologist with over 10 years of experience in geotechnical and environmental consulting. James has performed dozens of Phase 1 Environmental Site Assessments and Geotechnical Investigations throughout Southern California.

Brett Anderson is a California Registered Civil Engineer with over 30 years of experience in civil and environmental engineering. Brett holds a master's degree in geotechnical engineering and has been involved with the preparation of hundreds of Phase I ESAs throughout Southern California.

12.0 REFERENCES

American Society for Materials and Testing, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, Standard E1527-13, November 19, 2015.

Barclay's California Code of Regulations, Register 91, No. 22, May 31, 1991.

Coachella Valley Water District, Engineer's Report on Water Supply and Replenishment Assessment 1993/1994, April 1993.

California Groundwater Bulletin 118 (CGB)

Environmental Data Resources, Inc., The EDR-Radius Map with GeoCheck, May 16, 2024.

USDA, 1949, Environmental Data Resources Aerial Photograph Archive.

USDA, 1953, Environmental Data Resources Aerial Photograph Archive.

USDA, 1959, Environmental Data Resources Aerial Photograph Archive.

USGS, 1965, Environmental Data Resources Aerial Photograph Archive.

USDA, 1972, Environmental Data Resources Aerial Photograph Archive.

USDA, 1984, Environmental Data Resources Aerial Photograph Archive.

USGS/DOQQ, 1996, Environmental Data Resources Aerial Photograph Archive.

USGS/DOQQ 2002, Environmental Data Resources Aerial Photograph Archive.

USGS/NAIP, 2006, Environmental Data Resources Aerial Photograph Archive.

USGS/NAIP, 2009, Environmental Data Resources Aerial Photograph Archive.

USGS/NAIP, 2012, Environmental Data Resources Aerial Photograph Archive.

USGS/NAIP, 2016, Environmental Data Resources Aerial Photograph Archive.

USGS/NAIP, 2020, Environmental Data Resources Aerial Photograph Archive.

USGS, 1904, Topographic Map, 30 Minute Series

USGS, 1941, Topographic Map, 15 Minute Series

USGS, 1943 Topographic Map, 15 Minute Series

USGS, 1944/1947 Topographic Map, 15 Minute Series

USGS 1956, Topographic Map, 7.5 Minute Series

USGS 1972, Topographic Map, 7.5 Minute Series

USGS 1975, Topographic Map, 7.5 Minute Series

USGS, 2012, Topographic Map, 7.5 Minute Series

USGS, 2015, Topographic Map, 7.5 Minute Series

USGS, 2018, Topographic Map, 7.5 Minute Series

USGS, 2021, Topographic Map, 7.5 Minute Series

13.0 LIMITATION AND EXCEPTIONS / USER RELIANCE

This assessment applies to the subject property identified by the County of Riverside as APN's 780-040-001, 003, 780-060-001 & 002 located on southwest corner of 52nd Avenue and Van Buren Street in the City of Coachella California. The conclusions and recommendations rendered in this report are opinions based on readily available and reasonably ascertainable information obtained to date within the scope of work authorized by the client. Use of or reliance on the information and opinions contained in this letter by other parties without consulting this office is at the parties own risk.

It should be noted that any level of assessment cannot ascertain that a property is completely free of chemical or toxic substances; therefore, Sladden Engineering cannot offer the certification of a "clean" property. We believe the scope of work performed has been appropriate to allow an owner, prospective buyer, or seller to make an informed business decision.

The results contained in this report are based upon the information acquired during our assessment. It is possible that variations could exist beyond or between points explored during the course of the investigation. Also, changes in conditions found could occur at some time in the future due to contaminant migration, variations in rainfall, temperature, and/or other factors not apparent at the time of the field investigation.

The services performed by Sladden Engineering have been conducted in a manner consistent with the level of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions in this region. No other warranty is expressed or implied.



Sladden Engineering	SITE LOCATION MAP	FIGURE 1
	Project Number: 544-24159	
	Report Number: 24-05-260	
	Date: June 3, 2024	



Sladden Engineering	SITE PHOTOGRAPH		FIGURE
	Project Number:	544-24159	2
	Report Number:	24-05-260	
	Date:	June 3, 2024	

APPENDIX A

PHOTOGRAPHS OF PROPERTY

Sladden Engineering
45090 Golf Center Parkway, Suite F, Indio, California 92201 (760) 863-0713 Fax (760) 863-0847
6782 Stanton Avenue, Suite C, Buena Park, CA 90621 (714) 523-0952 Fax (714) 523-1369
450 Egan Avenue, Beaumont, CA 92223 (951) 845-7743 Fax (951) 845-8863

Client: Relevant Living	**Project Number: 544-24159**
Project Name: APN's 780-040-001, 003, 780-060-001 & 002	**Site Location: SWC 52nd Avenue & Van Buren, Coachella**

Photograph Number: 1 of 16 **Date:** 05/30/2024 **Facing Direction:** South **Comments:** Existing CVWD standpipes located adjacent to 5nd Avenue.	
Photograph Number: 2 of 16 **Date:** 05/30/2024 **Facing Direction:** South **Comments:** View across the site to the south near the northeast corner of the property. The photograph shows date palm tree and grape orchards.	

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Client: Relevant Living	**Project Number: 544-24159**
Project Name: APN's 780-040-001, 003, 780-060-001 & 002	**Site Location: SWC 52nd Avenue & Van Buren, Coachella**

Photograph Number: 3 of 16 **Date:** 05/30/2024 **Facing Direction:** Southwest **Comments:** View across the site to the southwest near the eastern side of the property. The photograph shows date palm tree and grape orchards.	
Photograph Number: 4 of 16 **Date:** 05/30/2024 **Facing Direction:** Northwest **Comments:** View across the site to the northwest near the southern side of the property. The photograph shows grape orchards.	

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450 Egan Avenue, Beaumont, CA 92223 (951) 845-7743 Fax (951) 845-8863

Client: Relevant Living	**Project Number: 544-24159**
Project Name: APN's 780-040-001, 003, 780-060-001 & 002	**Site Location: SWC 52nd Avenue & Van Buren, Coachella**

Photograph Number: 5 of 16 **Date:** 05/30/2024 **Facing Direction:** East **Comments:** An existing fenced in irrigation reservoir is located near the north side of the property. An existing structure is located to the immediate east of the reservoir.	
Photograph Number: 6 of 16 **Date:** 05/30/2024 **Facing Direction:** Northwest **Comments:** View across the site to the northwest near the southern side of the property. The photograph shows date palm tree orchards.	

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450 Egan Avenue, Beaumont, CA 92223 (951) 845-7743 Fax (951) 845-8863

Client: Relevant Living	**Project Number: 544-24159**
Project Name: APN's 780-040-001, 003, 780-060-001 & 002	**Site Location: SWC 52nd Avenue & Van Buren, Coachella**

Photograph Number: 7 of 16 **Date:** 05/30/2024 **Facing Direction:** West **Comments:** An existing dilapidated structure and debris is located adjacent to the irrigation reservoir.	
Photograph Number: 8 of 16 **Date:** 05/30/2024 **Facing Direction:** West **Comments:** An existing dilapidated structure and debris is located adjacent to the irrigation reservoir.	

Sladden Engineering
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450 Egan Avenue, Beaumont, CA 92223 (951) 845-7743 Fax (951) 845-8863

Client: Relevant Living	**Project Number: 544-24159**
Project Name: APN's 780-040-001, 003, 780-060-001 & 002	**Site Location: SWC 52nd Avenue & Van Buren, Coachella**

Photograph Number: 9 of 16 **Date:** 05/30/2024 **Facing Direction:** N/A **Comments:** Interior view of the existing onsite structure.	
Photograph Number: 10 of 16 **Date:** 05/30/2024 **Facing Direction:** South **Comments:** An existing pump station is located between the structure and irrigation reservoir.	

Sladden Engineering
45090 Golf Center Parkway, Suite F, Indio, California 92201 (760) 863-0713 Fax (760) 863-0847
6782 Stanton Avenue, Suite C, Buena Park, CA 90621 (714) 523-0952 Fax (714) 523-1369
450 Egan Avenue, Beaumont, CA 92223 (951) 845-7743 Fax (951) 845-8863

Client: Relevant Living	**Project Number: 544-24159**
Project Name: APN's 780-040-001, 003, 780-060-001 & 002	**Site Location: SWC 52nd Avenue & Van Buren, Coachella**

Photograph Number: 11 of 16 **Date:** 05/30/2024 **Facing Direction:** West **Comments:** View to the west across the irrigation reservoir.	
Photograph Number: 12 of 16 **Date:** 05/30/2024 **Facing Direction:** South **Comments:** A porta potty is located near the grape orchards.	

Sladden Engineering
45090 Golf Center Parkway, Suite F, Indio, California 92201 (760) 863-0713 Fax (760) 863-0847
6782 Stanton Avenue, Suite C, Buena Park, CA 90621 (714) 523-0952 Fax (714) 523-1369
450 Egan Avenue, Beaumont, CA 92223 (951) 845-7743 Fax (951) 845-8863

Client: Relevant Living	**Project Number: 544-24159**
Project Name: APN's 780-040-001, 003, 780-060-001 & 002	**Site Location: SWC 52nd Avenue & Van Buren, Coachella**

Photograph Number: 15 of 16 **Date:** 05/30/2024 **Facing Direction:** Northwest **Comments:** View across the site from the east side of the existing structure. Photograph shows a date palm orchard.	
Photograph Number: 16 of 16 **Date:** 05/30/2024 **Facing Direction:** East **Comments:** View across the site to the east near the western side of the property. The photograph shows date palm tree orchards.	

APPENDIX B

ENVIRONMENTAL DATABASE REPORT

Relevant Living
SWC 52 Avenue & Van Buren Street
Coachella, CA 92236

Inquiry Number: 7655113.2s
May 16, 2024

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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GEOCHECK ADDENDUM

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527 - 21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E2247 - 16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E1528 - 22) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

SWC 52 AVENUE & VAN BUREN STREET
COACHELLA, CA 92236

COORDINATES

Latitude (North):	33.6684020 - 33° 40' 6.24''
Longitude (West):	116.2025060 - 116° 12' 9.02''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	573934.4
UTM Y (Meters):	3725482.0
Elevation:	51 ft. below sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	50004965 INDIO, CA
Version Date:	2021

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20200416
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
SWC 52 AVENUE & VAN BUREN STREET
COACHELLA, CA 92236

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
Reg	AUGUSTINE RESERVATIO		INDIAN RESERV	Same	3239, 0.613, South
A1	CHUCHIAN RANCH	83859 AVE 52	HWTS	Higher	1 ft.
A2	CHUCHIAN RANCH	83859 AVE 52	HWTS	Higher	1 ft.
3	COACHELLA VALLEY WAT	85-995 AVENUE 52	FINDS	Higher	30, 0.006, NE
B4	CALHOUN AND 52ND ST	CALHOUN AND 52ND STR	NPDES	Higher	41, 0.008, WNW
A5	UNITED BROTHERS CONC	83740 AVENUE 52	HWTS	Higher	87, 0.016, NW
C6	LEJA FARMS	52500 VAN BUREN ST	CERS	Lower	113, 0.021, SE
C7	LEJA FARMS	52500 VAN BUREN ST	FINDS	Lower	113, 0.021, SE
B8	ROBB EVANS & ASSOCIA	51752 CALHOUN ST	HWTS, HAZNET	Higher	371, 0.070, NW
D9	WEST COACHELLA ELEME	VAN BUREN STREET/AVE	ENVIROSTOR, SCH	Higher	585, 0.111, NNE
D10	WEST COACHELLA ELEME	VAN BUREN STREET/AVE	CERS	Higher	587, 0.111, NNE
11	JACKSON AND 52	AVE 52 1/4 MI W OF J	HIST UST	Higher	1007, 0.191, WNW
12	ROBERT PIETRVAK	51575 CALHOUN ST	HWTS	Higher	1028, 0.195, NW
E13	TRIANGLE BAR FARMNA	52995 CALHOUN ST	FINDS	Lower	1208, 0.229, SW
E14	TRIANGLE BAR FARMS C	52995 CALHOUN ST	HWTS, HAZNET	Lower	1208, 0.229, SW
E15	DR FERN STOUT	AVE. 53 & CALHOUN ST	HIST UST	Lower	1446, 0.274, SW
E16	DR FERN STOUT	AVE 53 AND CALHOUN S	HIST UST	Lower	1446, 0.274, SW
17	ARMTEC DEFENSE PRODU		PFAS ECHO	Higher	2410, 0.456, WSW
18	STORE #330	85-101 AVENUE 52	Notify 65	Lower	5715, 1.082, East

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Lists of Federal Delisted NPL sites

Delisted NPL ---------- National Priority List Deletions

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS ---------- Corrective Action Report

Lists of Federal RCRA TSD facilities

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Lists of Federal RCRA generators

RCRA-LQG ---------- RCRA - Large Quantity Generators
RCRA-SQG ---------- RCRA - Small Quantity Generators
RCRA-VSQG ---------- RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System

EXECUTIVE SUMMARY

US ENG CONTROLS Engineering Controls Sites List
US INST CONTROLS Institutional Controls Sites List

Federal ERNS list

ERNS Emergency Response Notification System

Lists of state- and tribal (Superfund) equivalent sites

RESPONSE State Response Sites

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF Solid Waste Information System

Lists of state and tribal leaking storage tanks

LUST Geotracker's Leaking Underground Fuel Tank Report
INDIAN LUST Leaking Underground Storage Tanks on Indian Land
CPS-SLIC Statewide SLIC Cases

Lists of state and tribal registered storage tanks

FEMA UST Underground Storage Tank Listing
UST Active UST Facilities
AST Aboveground Petroleum Storage Tank Facilities
INDIAN UST Underground Storage Tanks on Indian Land

Lists of state and tribal voluntary cleanup sites

INDIAN VCP Voluntary Cleanup Priority Listing
VCP Voluntary Cleanup Program Properties

Lists of state and tribal brownfield sites

BROWNFIELDS Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT Waste Management Unit Database
SWRCY Recycler Database
HAULERS Registered Waste Tire Haulers Listing
INDIAN ODI Report on the Status of Open Dumps on Indian Lands
ODI Open Dump Inventory
DEBRIS REGION 9 Torres Martinez Reservation Illegal Dump Site Locations
IHS OPEN DUMPS Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL Delisted National Clandestine Laboratory Register

EXECUTIVE SUMMARY

HIST Cal-Sites	Historical Calsites Database
CDL	Clandestine Drug Labs
Toxic Pits	Toxic Pits Cleanup Act Sites
CERS HAZ WASTE	California Environmental Reporting System Hazardous Waste
US CDL	National Clandestine Laboratory Register

Local Lists of Registered Storage Tanks

SWEEPS UST	SWEEPS UST Listing
CERS TANKS	California Environmental Reporting System (CERS) Tanks
CA FID UST	Facility Inventory Database

Local Land Records

LIENS	Environmental Liens Listing
LIENS 2	CERCLA Lien Information
DEED	Deed Restriction Listing

Records of Emergency Release Reports

HMIRS	Hazardous Materials Information Reporting System
CHMIRS	California Hazardous Material Incident Report System
LDS	Land Disposal Sites Listing
MCS	Military Cleanup Sites Listing
SPILLS 90	SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated
FUDS	Formerly Used Defense Sites
DOD	Department of Defense Sites
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR	Financial Assurance Information
EPA WATCH LIST	EPA WATCH LIST
2020 COR ACTION	2020 Corrective Action Program List
TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
ROD	Records Of Decision
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
ICIS	Integrated Compliance Information System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
CONSENT	Superfund (CERCLA) Consent Decrees
FUSRAP	Formerly Utilized Sites Remedial Action Program

EXECUTIVE SUMMARY

UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem
US MINES	Mines Master Index File
MINES MRDS	Mineral Resources Data System
ABANDONED MINES	Abandoned Mines
DOCKET HWC	Hazardous Waste Compliance Docket Listing
ECHO	Enforcement & Compliance History Information
UXO	Unexploded Ordnance Sites
FUELS PROGRAM	EPA Fuels Program Registered Listing
PFAS NPL	Superfund Sites with PFAS Detections Information
PFAS FEDERAL SITES	Federal Sites PFAS Information
PFAS TSCA	PFAS Manufacture and Imports Information
PFAS TRIS	List of PFAS Added to the TRI
PFAS RCRA MANIFEST	PFAS Transfers Identified In the RCRA Database Listing
PFAS ATSDR	PFAS Contamination Site Location Listing
PFAS WQP	Ambient Environmental Sampling for PFAS
PFAS NPDES	Clean Water Act Discharge Monitoring Information
PFAS ECHO FIRE TRAINING	Facilities in Industries that May Be Handling PFAS Listing
PFAS PART 139 AIRPORT	All Certified Part 139 Airports PFAS Information Listing
AQUEOUS FOAM NRC	Aqueous Foam Related Incidents Listing
BIOSOLIDS	ICIS-NPDES Biosolids Facility Data
PFAS	PFAS Investigation Site Location Listing
AQUEOUS FOAM	Former Fire Training Facility Assessments Listing
CA BOND EXP. PLAN	Bond Expenditure Plan
CHROME PLATING	Chrome Plating Facilities Listing
Cortese	"Cortese" Hazardous Waste & Substances Sites List
CUPA Listings	CUPA Resources List
DRYCLEANERS	Cleaner Facilities
EMI	Emissions Inventory Data
ENF	Enforcement Action Listing
Financial Assurance	Financial Assurance Information Listing
HIST CORTESE	Hazardous Waste & Substance Site List
HWP	EnviroStor Permitted Facilities Listing
HWT	Registered Hazardous Waste Transporter Database
MINES	Mines Site Location Listing
MWMP	Medical Waste Management Program Listing
PEST LIC	Pesticide Regulation Licenses Listing
PROC	Certified Processors Database
HAZMAT	Hazardous Material Facilities
UIC	UIC Listing
UIC GEO	UIC GEO (GEOTRACKER)
WASTEWATER PITS	Oil Wastewater Pits Listing
WDS	Waste Discharge System
WIP	Well Investigation Program Case List
MILITARY PRIV SITES	MILITARY PRIV SITES (GEOTRACKER)
PROJECT	PROJECT (GEOTRACKER)
WDR	Waste Discharge Requirements Listing
CIWQS	California Integrated Water Quality System
NON-CASE INFO	NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS	OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS	PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT	SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ	Well Stimulation Project (GEOTRACKER)
UST FINDER	UST Finder Database

EXECUTIVE SUMMARY

UST FINDER RELEASE..... UST Finder Releases Database

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP..... EDR Proprietary Manufactured Gas Plants
EDR Hist Auto..... EDR Exclusive Historical Auto Stations
EDR Hist Cleaner..... EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF..... Recovered Government Archive Solid Waste Facilities List
RGA LUST..... Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Lists of state- and tribal hazardous waste facilities

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 01/22/2024 has revealed that there is 1 ENVIROSTOR site within approximately 1.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WEST COACHELLA ELEME	***VAN BUREN STREET/AVE***	***NNE 0 - 1/8 (0.111 mi.)***	***D9***	***16***

EXECUTIVE SUMMARY

Facility Id: 33010064
Status: No Further Action

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Hazardous waste / Contaminated Sites

SCH: This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category. depending on the level of threat to public health and safety or the. environment they pose.

A review of the SCH list, as provided by EDR, and dated 01/22/2024 has revealed that there is 1 SCH site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WEST COACHELLA ELEME Facility Id: 33010064 Status: No Further Action	***VAN BUREN STREET/AVE***	***NNE 0 - 1/8 (0.111 mi.)***	***D9***	***16***

Local Lists of Registered Storage Tanks

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 3 HIST UST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
JACKSON AND 52 Facility Id: 00000046099	AVE 52 1/4 MI W OF J	WNW 1/8 - 1/4 (0.191 mi.)	11	20

Lower Elevation	Address	Direction / Distance	Map ID	Page
DR FERN STOUT Facility Id: 00000053288	AVE. 53 & CALHOUN ST	SW 1/4 - 1/2 (0.274 mi.)	E15	23
DR FERN STOUT	AVE 53 AND CALHOUN S	SW 1/4 - 1/2 (0.274 mi.)	E16	24

Other Ascertainable Records

INDIAN RESERV: This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

A review of the INDIAN RESERV list, as provided by EDR, and dated 12/31/2014 has revealed that there is 1 INDIAN RESERV site within approximately 1.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AUGUSTINE RESERVATIO		S 1/2 - 1 (0.613 mi.)	0	9

EXECUTIVE SUMMARY

FINDS: The Facility Index System contains both facility information and "pointers" to other sources of information that contain more detail. These include: RCRIS; Permit Compliance System (PCS); Aerometric Information Retrieval System (AIRS); FATES (FIFRA [Federal Insecticide Fungicide Rodenticide Act] and TSCA Enforcement System, FTTS [FIFRA/TSCA Tracking System]; CERCLIS; DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes); Federal Underground Injection Control (FURS); Federal Reporting Data System (FRDS); Surface Impoundments (SIA); TSCA Chemicals in Commerce Information System (CICS); PADS; RCRA-J (medical waste transporters/disposers); TRIS; and TSCA. The source of this database is the U.S. EPA/NTIS.

A review of the FINDS list, as provided by EDR, and dated 11/03/2023 has revealed that there are 3 FINDS sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
COACHELLA VALLEY WAT Registry ID:: 110066406945	85-995 AVENUE 52	NE 0 - 1/8 (0.006 mi.)	3	10

Lower Elevation	Address	Direction / Distance	Map ID	Page
LEJA FARMS Registry ID:: 110055707891	52500 VAN BUREN ST	SE 0 - 1/8 (0.021 mi.)	C7	14
TRIANGLE BAR FARMNA Registry ID:: 110066233622	52995 CALHOUN ST	SW 1/8 - 1/4 (0.229 mi.)	E13	22

PFAS ECHO: Regulators and the public have expressed interest in knowing which regulated entities may be using PFAS. EPA has developed a dataset from various sources that show which industries may be handling PFAS. Approximately 120,000 facilities subject to federal environmental programs have operated or currently operate in industry sectors with processes that may involve handling and/or release of PFAS.

A review of the PFAS ECHO list, as provided by EDR, and dated 12/28/2023 has revealed that there is 1 PFAS ECHO site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ARMTEC DEFENSE PRODU		WSW 1/4 - 1/2 (0.456 mi.)	17	25

HWTS: DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.

A review of the HWTS list, as provided by EDR, and dated 01/26/2024 has revealed that there are 6 HWTS sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CHUCHIAN RANCH	83859 AVE 52	0 - 1/8 (0.000 mi.)	A1	9
CHUCHIAN RANCH	83859 AVE 52	0 - 1/8 (0.000 mi.)	A2	9
UNITED BROTHERS CONC	83740 AVENUE 52	NW 0 - 1/8 (0.016 mi.)	A5	11
ROBB EVANS & ASSOCIA	***51752 CALHOUN ST***	***NW 0 - 1/8 (0.070 mi.)***	***B8***	***15***
ROBERT PIETRVAK	51575 CALHOUN ST	NW 1/8 - 1/4 (0.195 mi.)	12	21

Lower Elevation	Address	Direction / Distance	Map ID	Page
TRIANGLE BAR FARMS C	***52995 CALHOUN ST***	***SW 1/8 - 1/4 (0.229 mi.)***	***E14***	***22***

EXECUTIVE SUMMARY

HAZNET: The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000-1,000,000 annually, representing approximately 350,000-500,000 shipments. Data from non-California manifests & continuation sheets are not included at the present time. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, & disposal method. The source is the Department of Toxic Substance Control is the agency. This database begins with calendar year 1993.

A review of the HAZNET list, as provided by EDR, and dated 12/31/2023 has revealed that there are 2 HAZNET sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ROBB EVANS & ASSOCIA GEPAID: CAC002693782	***51752 CALHOUN ST***	***NW 0 - 1/8 (0.070 mi.)***	***B8***	***15***

Lower Elevation	Address	Direction / Distance	Map ID	Page
TRIANGLE BAR FARMS C GEPAID: CAL000378779	***52995 CALHOUN ST***	***SW 1/8 - 1/4 (0.229 mi.)***	***E14***	***22***

NPDES: A listing of NPDES permits, including stormwater.

A review of the NPDES list, as provided by EDR, and dated 02/05/2024 has revealed that there is 1 NPDES site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CALHOUN AND 52ND ST	CALHOUN AND 52ND STR	WNW 0 - 1/8 (0.008 mi.)	B4	11

Notify 65: Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

A review of the Notify 65 list, as provided by EDR, and dated 12/06/2023 has revealed that there is 1 Notify 65 site within approximately 1.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
STORE #330	85-101 AVENUE 52	E 1 - 2 (1.082 mi.)	18	26

CERS: The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

A review of the CERS list, as provided by EDR, and dated 01/16/2024 has revealed that there are 2 CERS sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WEST COACHELLA ELEME	VAN BUREN STREET/AVE	NNE 0 - 1/8 (0.111 mi.)	D10	20

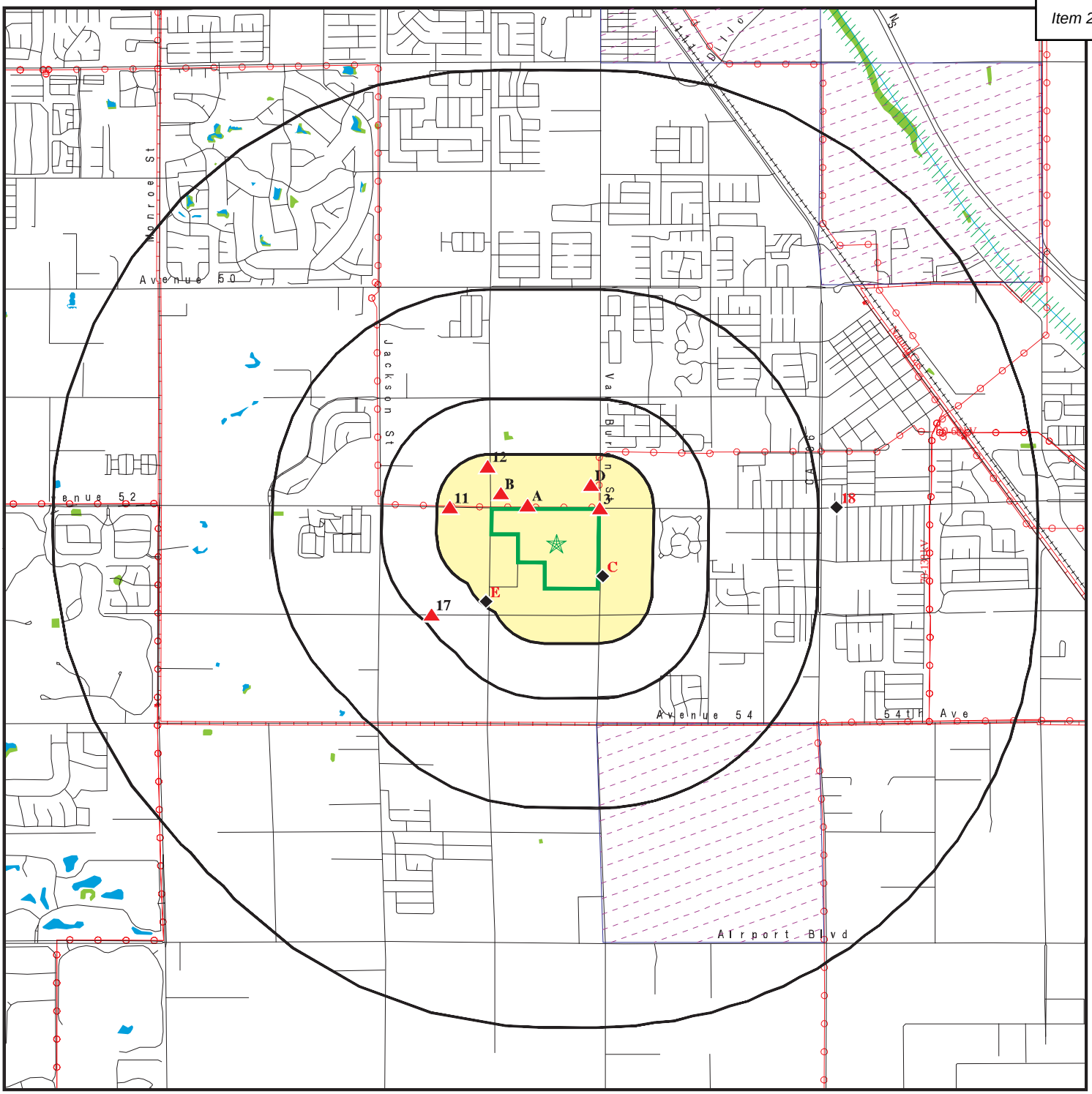
Lower Elevation	Address	Direction / Distance	Map ID	Page
LEJA FARMS	52500 VAN BUREN ST	SE 0 - 1/8 (0.021 mi.)	C6	12

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 5 records.

Site Name	Database(s)
VALLEY SANITARY DISTRICT	CERS HAZ WASTE
	CDL
COACHELLA SANITARY DISTRICT	LUST
COACHELLA VALLEY WATER DISTRICT	LUST
COACHELLA VALLEY MOSQUITO & VECTOR	CPS-SLIC

OVERVIEW MAP - 7655113.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

0 1/2 1 2 Miles

Indian Reservations BIA

Power transmission lines

Pipelines

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

Areas of Concern

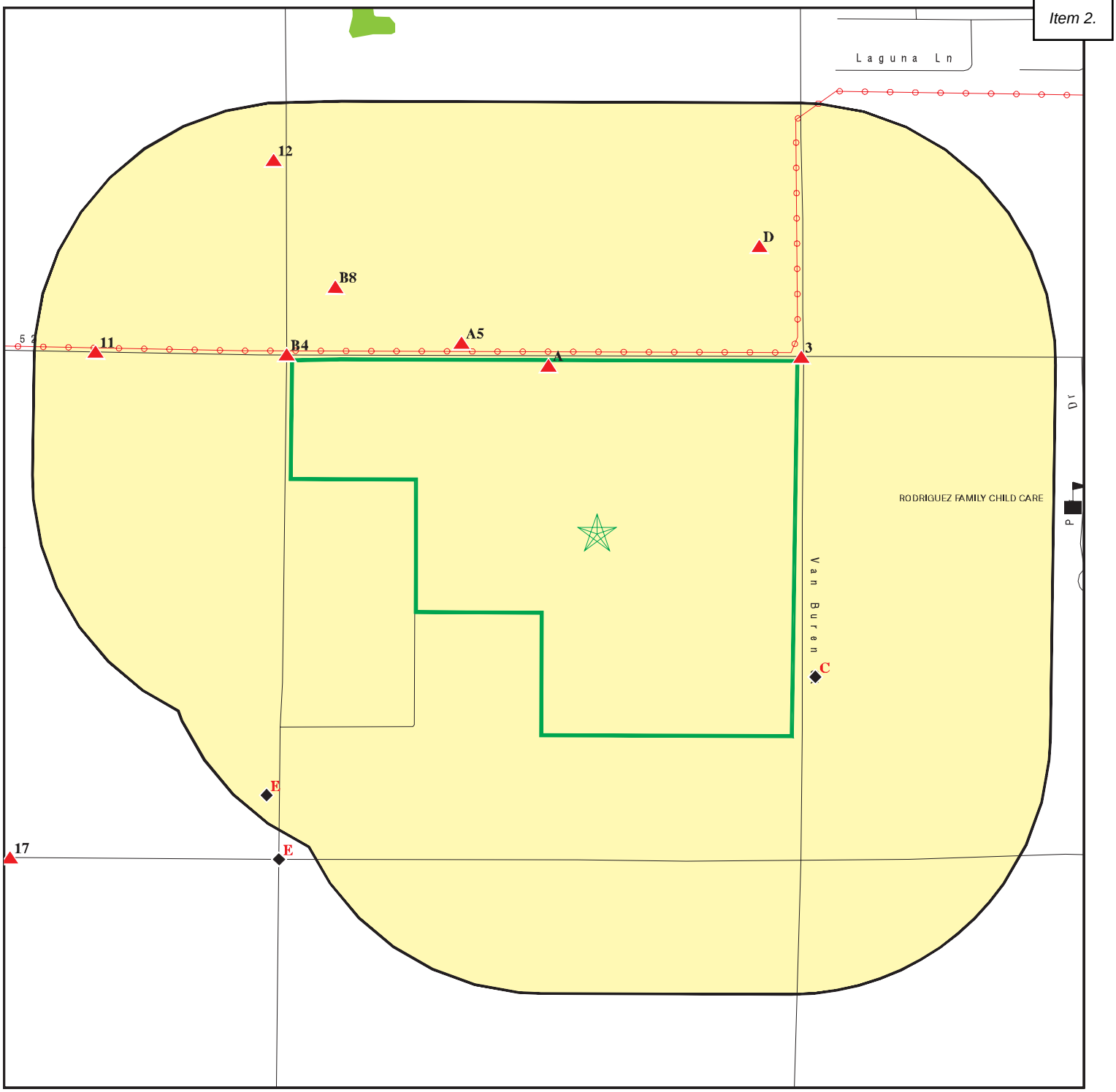
This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Relevant Living	CLIENT:	Proterra Consulting Inc.
ADDRESS:	SWC 52 Avenue & Van Buren Street Coachella CA 92236	CONTACT:	James Minor
LAT/LONG:	33.668402 / 116.202506	INQUIRY #:	7655113.2s
		DATE:	May 16, 2024 5:51 pm

1923

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DETAIL MAP - 7655113.2S



Target Property
Sites at elevations higher than or equal to the target property
Sites at elevations lower than the target property
Manufactured Gas Plants
Sensitive Receptors
National Priority List Sites
Dept. Defense Sites

0 1/8 1/4 1/2 Miles

Indian Reservations BIA
Power transmission lines
Special Flood Hazard Area (1%)
0.2% Annual Chance Flood Hazard
National Wetland Inventory
State Wetlands

Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Relevant Living	CLIENT:	Proterra Consulting Inc.
ADDRESS:	SWC 52 Avenue & Van Buren Street Coachella CA 92236	CONTACT:	James Minor
LAT/LONG:	33.668402 / 116.202506	INQUIRY #:	7655113.2s
		DATE:	May 16, 2024 5:53 pm

1924

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Lists of Federal NPL (Superfund) sites								
NPL	1.250		0	0	0	0	0	0
Proposed NPL	1.250		0	0	0	0	0	0
NPL LIENS	1.250		0	0	0	0	0	0
Lists of Federal Delisted NPL sites								
Delisted NPL	1.250		0	0	0	0	0	0
Lists of Federal sites subject to CERCLA removals and CERCLA orders								
FEDERAL FACILITY	0.750		0	0	0	0	NR	0
SEMS	0.750		0	0	0	0	NR	0
Lists of Federal CERCLA sites with NFRAP								
SEMS-ARCHIVE	0.750		0	0	0	0	NR	0
Lists of Federal RCRA facilities undergoing Corrective Action								
CORRACTS	1.250		0	0	0	0	0	0
Lists of Federal RCRA TSD facilities								
RCRA-TSDF	0.750		0	0	0	0	NR	0
Lists of Federal RCRA generators								
RCRA-LQG	0.500		0	0	0	NR	NR	0
RCRA-SQG	0.500		0	0	0	NR	NR	0
RCRA-VSQG	0.500		0	0	0	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.750		0	0	0	0	NR	0
US ENG CONTROLS	0.750		0	0	0	0	NR	0
US INST CONTROLS	0.750		0	0	0	0	NR	0
Federal ERNS list								
ERNS	0.250		0	0	NR	NR	NR	0
Lists of state- and tribal (Superfund) equivalent sites								
RESPONSE	1.250		0	0	0	0	0	0
Lists of state- and tribal hazardous waste facilities								
ENVIROSTOR	1.250		1	0	0	0	0	1
Lists of state and tribal landfills and solid waste disposal facilities								
SWF/LF	0.750		0	0	0	0	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
Lists of state and tribal leaking storage tanks								
LUST	0.750		0	0	0	0	NR	0
INDIAN LUST	0.750		0	0	0	0	NR	0
CPS-SLIC	0.750		0	0	0	0	NR	0
Lists of state and tribal registered storage tanks								
FEMA UST	0.500		0	0	0	NR	NR	0
UST	0.500		0	0	0	NR	NR	0
AST	0.500		0	0	0	NR	NR	0
INDIAN UST	0.500		0	0	0	NR	NR	0
Lists of state and tribal voluntary cleanup sites								
INDIAN VCP	0.750		0	0	0	0	NR	0
VCP	0.750		0	0	0	0	NR	0
Lists of state and tribal brownfield sites								
BROWNFIELDS	0.750		0	0	0	0	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.750		0	0	0	0	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.750		0	0	0	0	NR	0
SWRCY	0.750		0	0	0	0	NR	0
HAULERS	0.250		0	0	NR	NR	NR	0
INDIAN ODI	0.750		0	0	0	0	NR	0
ODI	0.750		0	0	0	0	NR	0
DEBRIS REGION 9	0.750		0	0	0	0	NR	0
IHS OPEN DUMPS	0.750		0	0	0	0	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.250		0	0	NR	NR	NR	0
HIST Cal-Sites	1.250		0	0	0	0	0	0
SCH	0.500		1	0	0	NR	NR	1
CDL	0.250		0	0	NR	NR	NR	0
Toxic Pits	1.250		0	0	0	0	0	0
CERS HAZ WASTE	0.500		0	0	0	NR	NR	0
US CDL	0.250		0	0	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.500		0	0	0	NR	NR	0
HIST UST	0.500		0	1	2	NR	NR	3
CERS TANKS	0.500		0	0	0	NR	NR	0
CA FID UST	0.500		0	0	0	NR	NR	0
Local Land Records								
LIENS	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	0.250		0	0	NR	NR	NR	0
DEED	0.750		0	0	0	0	NR	0
Records of Emergency Release Reports								
HMIRS	0.250		0	0	NR	NR	NR	0
CHMIRS	0.250		0	0	NR	NR	NR	0
LDS	0.250		0	0	NR	NR	NR	0
MCS	0.250		0	0	NR	NR	NR	0
SPILLS 90	0.250		0	0	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.500		0	0	0	NR	NR	0
FUDS	1.250		0	0	0	0	0	0
DOD	1.250		0	0	0	0	0	0
SCRD DRYCLEANERS	0.750		0	0	0	0	NR	0
US FIN ASSUR	0.250		0	0	NR	NR	NR	0
EPA WATCH LIST	0.250		0	0	NR	NR	NR	0
2020 COR ACTION	0.500		0	0	0	NR	NR	0
TSCA	0.250		0	0	NR	NR	NR	0
TRIS	0.250		0	0	NR	NR	NR	0
SSTS	0.250		0	0	NR	NR	NR	0
ROD	1.250		0	0	0	0	0	0
RMP	0.250		0	0	NR	NR	NR	0
RAATS	0.250		0	0	NR	NR	NR	0
PRP	0.250		0	0	NR	NR	NR	0
PADS	0.250		0	0	NR	NR	NR	0
ICIS	0.250		0	0	NR	NR	NR	0
FTTS	0.250		0	0	NR	NR	NR	0
MLTS	0.250		0	0	NR	NR	NR	0
COAL ASH DOE	0.250		0	0	NR	NR	NR	0
COAL ASH EPA	0.750		0	0	0	0	NR	0
PCB TRANSFORMER	0.250		0	0	NR	NR	NR	0
RADINFO	0.250		0	0	NR	NR	NR	0
HIST FTTS	0.250		0	0	NR	NR	NR	0
DOT OPS	0.250		0	0	NR	NR	NR	0
CONSENT	1.250		0	0	0	0	0	0
INDIAN RESERV	1.250		0	0	0	1	0	1
FUSRAP	1.250		0	0	0	0	0	0
UMTRA	0.750		0	0	0	0	NR	0
LEAD SMELTERS	0.250		0	0	NR	NR	NR	0
US AIRS	0.250		0	0	NR	NR	NR	0
US MINES	0.500		0	0	0	NR	NR	0
MINES MRDS	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.500		0	0	0	NR	NR	0
FINDS	0.250		2	1	NR	NR	NR	3
DOCKET HWC	0.250		0	0	NR	NR	NR	0
ECHO	0.250		0	0	NR	NR	NR	0
UXO	1.250		0	0	0	0	0	0
FUELS PROGRAM	0.500		0	0	0	NR	NR	0
PFAS NPL	0.500		0	0	0	NR	NR	0
PFAS FEDERAL SITES	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
PFAS TSCA	0.500		0	0	0	NR	NR	0
PFAS TRIS	0.500		0	0	0	NR	NR	0
PFAS RCRA MANIFEST	0.500		0	0	0	NR	NR	0
PFAS ATSDR	0.500		0	0	0	NR	NR	0
PFAS WQP	0.500		0	0	0	NR	NR	0
PFAS NPDES	0.500		0	0	0	NR	NR	0
PFAS ECHO	0.500		0	0	1	NR	NR	1
PFAS ECHO FIRE TRAINING	0.500		0	0	0	NR	NR	0
PFAS PART 139 AIRPORT	0.500		0	0	0	NR	NR	0
AQUEOUS FOAM NRC	0.500		0	0	0	NR	NR	0
BIOSOLIDS	0.250		0	0	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
AQUEOUS FOAM	0.500		0	0	0	NR	NR	0
CA BOND EXP. PLAN	1.250		0	0	0	0	0	0
CHROME PLATING	0.750		0	0	0	0	NR	0
Cortese	0.750		0	0	0	0	NR	0
CUPA Listings	0.500		0	0	0	NR	NR	0
DRYCLEANERS	0.500		0	0	0	NR	NR	0
EMI	0.250		0	0	NR	NR	NR	0
ENF	0.250		0	0	NR	NR	NR	0
Financial Assurance	0.250		0	0	NR	NR	NR	0
HIST CORTESE	0.750		0	0	0	0	NR	0
HWP	1.250		0	0	0	0	0	0
HWT	0.500		0	0	0	NR	NR	0
HWTS	0.250		4	2	NR	NR	NR	6
HAZNET	0.250		1	1	NR	NR	NR	2
MINES	0.500		0	0	0	NR	NR	0
MWMP	0.500		0	0	0	NR	NR	0
NPDES	0.250		1	0	NR	NR	NR	1
PEST LIC	0.250		0	0	NR	NR	NR	0
PROC	0.750		0	0	0	0	NR	0
Notify 65	1.250		0	0	0	0	1	1
HAZMAT	0.500		0	0	0	NR	NR	0
UIC	0.250		0	0	NR	NR	NR	0
UIC GEO	0.250		0	0	NR	NR	NR	0
WASTEWATER PITS	0.750		0	0	0	0	NR	0
WDS	0.250		0	0	NR	NR	NR	0
WIP	0.500		0	0	0	NR	NR	0
MILITARY PRIV SITES	0.250		0	0	NR	NR	NR	0
PROJECT	0.250		0	0	NR	NR	NR	0
WDR	0.250		0	0	NR	NR	NR	0
CIWQS	0.250		0	0	NR	NR	NR	0
CERS	0.250		2	0	NR	NR	NR	2
NON-CASE INFO	0.250		0	0	NR	NR	NR	0
OTHER OIL GAS	0.250		0	0	NR	NR	NR	0
PROD WATER PONDS	0.250		0	0	NR	NR	NR	0
SAMPLING POINT	0.250		0	0	NR	NR	NR	0
WELL STIM PROJ	0.250		0	0	NR	NR	NR	0
UST FINDER	0.500		0	0	0	NR	NR	0
UST FINDER RELEASE	0.750		0	0	0	0	NR	0

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	1.250		0	0	0	0	0	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
EDR Hist Auto	0.375		0	0	0	NR	NR	0
EDR Hist Cleaner	0.375		0	0	0	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	0.250		0	0	NR	NR	NR	0
RGA LUST	0.250		0	0	NR	NR	NR	0
- Totals --		0	12	5	3	1	1	22

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID
Direction
Distance
Elevation | Site

MAP FINDINGS

Database(s) | EDR ID Number | EPA ID Number

IND RES **AUGUSTINE RESERVATION** **INDIAN RESERV** **CIND200735**
Region South **, CA** **N/A**
1/2-1
3239 ft.

INDIAN RESERV:

Feature:	Indian Reservation
Name:	Augustine Reservation
Agency:	BIA

A1 **CHUCHIAN RANCH** **HWTS** **S124829815**
83859 AVE 52 **N/A**
< 1/8 **CHOWCHILLA, CA 92236**
1 ft.

Site 1 of 3 in cluster A

Relative: HWTS:
Higher

Name:	CHUCHIAN RANCH
Address:	83859 AVE 52
Address 2:	Not reported
City,State,Zip:	CHOWCHILLA, CA 92236
EPA ID:	CAL000230042
Inactive Date:	06/30/2002
Create Date:	12/20/2001
Last Act Date:	Not reported
Mailing Name:	Not reported
Mailing Address:	85215 AVE 50
Mailing Address 2:	Not reported
Mailing City,State,Zip:	CHOWCHILLA, CA 922360000
Owner Name:	GORDON CHUCHIAN
Owner Address:	85215 AVE 50
Owner Address 2:	Not reported
Owner City,State,Zip:	CHOWCHILLA, CA 922360000
Owner Phone:	Not reported
Owner Fax:	Not reported
Contact Name:	HOWARD CHUCHIAN/OWNER
Contact Address:	85215 AVE 50
Contact Address 2:	Not reported
City,State,Zip:	CHOWCHILLA, CA 922360000
Contact Phone:	Not reported
Contact Fax:	Not reported
Facility Status:	Inactive
Facility Type:	PERMANENT
Category:	STATE
Latitude:	33.671355
Longitude:	-116.109737

Actual:
-47 ft.

A2 **CHUCHIAN RANCH** **HWTS** **S124829814**
83859 AVE 52 **N/A**
< 1/8 **CHOWCHILLA, CA 92236**
1 ft.

Site 2 of 3 in cluster A

Relative: HWTS:
Higher

Name:	CHUCHIAN RANCH
Address:	83859 AVE 52
Address 2:	Not reported

Actual:
-47 ft.

Map ID
Direction
Distance
Elevation | Site | MAP FINDINGS | Database(s) | EDR ID Number EPA ID Number

CHUCHIAN RANCH (Continued) **S124829814**

City,State,Zip:	CHOWCHILLA, CA 92236
EPA ID:	CAL000230041
Inactive Date:	06/30/2003
Create Date:	01/15/2002
Last Act Date:	Not reported
Mailing Name:	Not reported
Mailing Address:	85215 AVE 50
Mailing Address 2:	Not reported
Mailing City,State,Zip:	COACHELLA, CA 922360000
Owner Name:	GORDON CHUCHIAN
Owner Address:	85215 AVE 50
Owner Address 2:	Not reported
Owner City,State,Zip:	CHOWCHILLA, CA 922360000
Owner Phone:	Not reported
Owner Fax:	Not reported
Contact Name:	HOWARD CHUCHIAN/OWNER
Contact Address:	85215 AVE 50
Contact Address 2:	Not reported
City,State,Zip:	CHOWCHILLA, CA 922360000
Contact Phone:	Not reported
Contact Fax:	Not reported
Facility Status:	Inactive
Facility Type:	PERMANENT
Category:	STATE
Latitude:	33.671355
Longitude:	-116.109737

---

3 **COACHELLA VALLEY WATER DISTRICT HEAD QUARTERS** **FINDS** **1023344847**
NE **85-995 AVENUE 52** **N/A**
< 1/8 **COACHELLA, CA 92236**
0.006 mi.
30 ft.

Relative:
Higher

Actual:
-51 ft.

FINDS:
Registry ID: 110066406945

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:
The California Environmental Protection Agency (CalEPA) has recently implemented a new data warehouse system (nSite). This data warehouse combines and merges facility and site information from five different systems managed within CalEPA. The five systems are: California Environmental Reporting System (CERS),EnviroStor, GeoTracker, California Integrated Water Quality System (CIWQS), andToxic Release Inventory (TRI).

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

B4
WNW
< 1/8
0.008 mi.
41 ft.

CALHOUN AND 52ND ST RESURFACING
CALHOUN AND 52ND STREETS
COACHELLA, CA 92236

Site 1 of 2 in cluster B

NPDES

S128080851
N/A

Relative:
Higher

Actual:
-47 ft.

NPDES:

Name:	CALHOUN AND 52ND ST RESURFACING
Address:	CALHOUN AND 52ND STREETS
City,State,Zip:	COACHELLA, CA 92236
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	7 33W005245
Regulatory Measure Type:	Construction
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Expired
Status Date:	01/25/2022
Operator Name:	Riverside County Transportation Department
Operator Address:	4080 Lemon Street
Operator City:	Riverside
Operator State:	California
Operator Zip:	92501

A5
NW
< 1/8
0.016 mi.
87 ft.

UNITED BROTHERS CONCRETE INC
83740 AVENUE 52
COACHELLA, CA 92236

Site 3 of 3 in cluster A

HWTS

S124856247
N/A

Relative:
Higher

Actual:
-46 ft.

HWTS:

Name:	UNITED BROTHERS CONCRETE INC
Address:	83740 AVENUE 52
Address 2:	Not reported
City,State,Zip:	COACHELLA, CA 92236
EPA ID:	CAL000297881
Inactive Date:	06/30/2009
Create Date:	08/24/2005
Last Act Date:	Not reported
Mailing Name:	Not reported
Mailing Address:	PO BOX 756
Mailing Address 2:	Not reported
Mailing City,State,Zip:	THOUSAND PALMS, CA 922760756
Owner Name:	UNITED BROTHERS CONCRET INC
Owner Address:	41905 BOARDWALK STE K
Owner Address 2:	Not reported
Owner City,State,Zip:	PALM DESERT, CA 922119091

UNITED BROTHERS CONCRETE INC (Continued) **S124856247**

Owner Phone:	Not reported
Owner Fax:	Not reported
Contact Name:	ISMAEL ROBLEDO
Contact Address:	TYLER AVE
Contact Address 2:	Not reported
City,State,Zip:	COACHELLA, CA 922369682
Contact Phone:	Not reported
Contact Fax:	Not reported
Facility Status:	Inactive
Facility Type:	PERMANENT
Category:	STATE
Latitude:	33.671235
Longitude:	-116.129329

NAICS:

EPA ID:	CAL000297881
Create Date:	2005-08-24 13:54:31.920
NAICS Code:	23571
NAICS Description:	Concrete Contractors
Issued EPA ID Date:	2005-08-24 13:54:31.90700
Inactive Date:	2009-06-30 00:00:00
Facility Name:	UNITED BROTHERS CONCRETE INC
Facility Address:	83740 AVENUE 52
Facility Address 2:	Not reported
Facility City:	COACHELLA
Facility County:	Not reported
Facility State:	CA
Facility Zip:	922369682

C6 **LEJA FARMS** **CERS** **S123515831**
SE **52500 VAN BUREN ST** **N/A**
< 1/8 **COACHELLA, CA 92236**
0.021 mi.
113 ft. **Site 1 of 2 in cluster C**

Relative:
Lower

Actual:
-58 ft.

CERS:

Name:	LEJA FARMS
Address:	52500 VAN BUREN ST
City,State,Zip:	COACHELLA, CA 92236
Site ID:	396408
CERS ID:	10321198
CERS Description:	Chemical Storage Facilities

Evaluation:

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-09-2019
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Facility is a date farm. Hazardous materials on-site include propane, compressed welding gases (oxygen/acetylene), pesticides, and lubricating oils.
Eval Division:	Riverside County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS,
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-13-2023
Violations Found:	No

LEJA FARMS (Continued) **S123515831**

Eval Type: Routine done by local agency
Eval Notes: Facility is a date farm. Hazardous materials on-site include propane, compressed welding gases, pesticides, and sulfunyl flouride fumigant
Eval Division: Riverside County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS,

Coordinates:
Site ID: 396408
Facility Name: Leja Farms
Env Int Type Code: HMBP
Program ID: 10321198
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.,
Latitude: 33.665610
Longitude: -116.198010

Affiliation:
Affiliation Type Desc: Property Owner
Entity Name: Cheri Leja
Entity Title: Not reported
Affiliation Address: lejafarms@aol.com
Affiliation City: Coachella
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 92236
Affiliation Phone: (760) 285-6959,

Affiliation Type Desc: Environmental Contact
Entity Name: Greg Leja
Entity Title: Not reported
Affiliation Address: 52500 Van Buren St
Affiliation City: Coachella
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92236
Affiliation Phone: ,

Affiliation Type Desc: Legal Owner
Entity Name: Greg Leja
Entity Title: Not reported
Affiliation Address: 52-500 Van Buren
Affiliation City: Coachella
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 92236
Affiliation Phone: (760) 398-5929,

Affiliation Type Desc: Operator
Entity Name: Greg Leja
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported

Map ID
Direction
Distance
Elevation | Site | MAP FINDINGS | Database(s) | EDR ID Number EPA ID Number

LEJA FARMS (Continued) **S123515831**

Affiliation Phone:	(760) 567-3030,
Affiliation Type Desc:	Parent Corporation
Entity Name:	Leja Farms
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	52500 Van Buren
Affiliation City:	Coachella
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92336
Affiliation Phone:	,
Affiliation Type Desc:	CUPA District
Entity Name:	Riverside Cnty Env Health
Entity Title:	Not reported
Affiliation Address:	4065 County Circle Drive, Room 104
Affiliation City:	Riverside
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92503
Affiliation Phone:	(951) 358-5055,
Affiliation Type Desc:	Document Preparer
Entity Name:	Pamela Leja-Romjue and Greg Leja
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

C7 **LEJA FARMS** **FINDS** **1016422698**
SE **52500 VAN BUREN ST** **N/A**
< 1/8 **COACHELLA, CA 92236**
0.021 mi.
113 ft. **Site 2 of 2 in cluster C**

Relative:
Lower

Actual:
-58 ft.

FINDS:
Registry ID: 110055707891

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:
The California Environmental Reporting System (CERS) is a statewide web-based user and information exchange system to support over 140,000 regulated businesses and over 130 local agencies in electronically

LEJA FARMS (Continued) **1016422698**

collecting and reporting significant hazardous materials, hazardous waste and compliance and enforcement data as mandated by California law. Under oversight by Cal/EPA, certified local governing agencies (Unified Program Agencies - UPAs) consolidate, coordinate and provide consistent regulatory activities for six state and federal environmental programs.
The California Environmental Protection Agency (CalEPA) has recently implemented a new data warehouse system (nSite). This data warehouse combines and merges facility and site information from five different systems managed within CalEPA. The five systems are: California Environmental Reporting System (CERS),EnviroStor, GeoTracker, California Integrated Water Quality System (CIWQS), andToxic Release Inventory (TRI).

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

B8 **ROBB EVANS & ASSOCIATES LLC RECEIVER OF 51752 CALH** **HWTS** **S113779845**
NW **51752 CALHOUN ST** **HAZNET** **N/A**
< 1/8 **COACHELLA, CA 92236**
0.070 mi.
371 ft. **Site 2 of 2 in cluster B**

Relative: **Higher**
Actual: **-45 ft.**

HWTS:

Name:	ROBB EVANS & ASSOCIATES LLC RECEIVER OF 51752 CALHOUN ST & 83740 52ND
Address:	51752 CALHOUN ST
Address 2:	Not reported
City,State,Zip:	COACHELLA, CA 92236
EPA ID:	CAC002693782
Inactive Date:	11/13/2012
Create Date:	05/16/2012
Last Act Date:	Not reported
Mailing Name:	Not reported
Mailing Address:	11450 SHELDON ST
Mailing Address 2:	Not reported
Mailing City,State,Zip:	SUN VALLEY, CA 913521121
Owner Name:	ROBB EVANS & ASSOCIATES LLC RECEIVE
Owner Address:	11450 SHELDON ST
Owner Address 2:	Not reported
Owner City,State,Zip:	SUN VALLEY, CA 913521121
Owner Phone:	Not reported
Owner Fax:	Not reported
Contact Name:	COLEEN CALLAHAN
Contact Address:	11450 SHELDON ST
Contact Address 2:	Not reported
City,State,Zip:	SUN VALLEY, CA 913521121
Contact Phone:	Not reported
Contact Fax:	Not reported
Facility Status:	Inactive
Facility Type:	TEMPORARY
Category:	STATE
Latitude:	33.67187
Longitude:	-116.2069

HAZNET:

Name:	ROBB EVANS & ASSOCIATES LLC RECEIVER OF 51752 CALHOUN ST & 83740 52ND
Address:	51752 CALHOUN ST
Address 2:	Not reported

ROBB EVANS & ASSOCIATES LLC RECEIVER OF 51752 CALHOUN ST & 8 (Continued) **S113779845**

City,State,Zip: COACHELLA, CA 92236
Contact: COLEEN CALLAHAN
Telephone: 8187688100
Mailing Name: Not reported
Mailing Address: 11450 SHELDON ST

Year: 2012
Gepaid: CAC002693782
TSD EPA ID: CAT080013352
CA Waste Code: 241 - Tank bottom waste
Disposal Method: H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons: 5.421

Additional Info:
Year: 2012
Gen EPA ID: CAC002693782

Shipment Date: 20120524
Creation Date: 8/7/2012 22:15:13
Receipt Date: 20120530
Manifest ID: 004291426JJK
Trans EPA ID: CAR000189431
Trans Name: ADAMS SERVICES INC
Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported
TSDF EPA ID: CAT080013352
Trans Name: DEMENNO/KERDOON
TSDF Alt EPA ID: Not reported
TSDF Alt Name: Not reported
Waste Code Description: 241 - Tank bottom waste 251 Still bottoms with halogenated organics
RCRA Code: Not reported
Meth Code: H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Quantity Tons: 5.421
Waste Quantity: 1300
Quantity Unit: G
Additional Code 1: Not reported
Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

D9 **WEST COACHELLA ELEMENTARY** **ENVIROSTOR** **S105628771**
NNE **VAN BUREN STREET/AVENUE 52** **SCH** **N/A**
< 1/8 **COACHELLA, CA 92236**
0.111 mi.
585 ft. **Site 1 of 2 in cluster D**

Relative:
Higher

Actual:
-48 ft.

ENVIROSTOR:
Name: WEST COACHELLA ELEMENTARY
Address: VAN BUREN STREET/AVENUE 52
City,State,Zip: COACHELLA, CA 92236
Facility ID: 33010064
Status: No Further Action
Status Date: 07/17/2002

WEST COACHELLA ELEMENTARY (Continued) **S105628771**

Site Code: 404346
Site Type: School Investigation
Site Type Detailed: School
Acres: 20
NPL: NO
Regulatory Agencies: DTSC
Lead Agency: DTSC
Program Manager: Not reported
Supervisor: Javier Hinojosa
Division Branch: Southern California Schools & Brownfields Outreach
Assembly: 36
Senate: 18
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: School District
Latitude: 33.67241
Longitude: -116.1997
APN: NONE SPECIFIED
Past Use: AGRICULTURAL - ROW CROPS
Potential COC: 2,3,7,8-TCDD (dioxin Dioxin (as 2,3,7,8-TCDD TEQ Furan Antimony and compounds Arsenic Barium and compounds Beryllium and compounds Cadmium and compounds Chromium III Chromium VI Cobalt Copper and compounds Lead Mercury (elemental Mercury and compounds Molybdenum Nickel Selenium Silver Thallium and compounds Vanadium and compounds Zinc Aldrin Chlordane DDD DDE DDT Dieldrin Endosulfan Endrin HCH (alpha HCH (beta HCH (gamma) Lindane HCH-technical Heptachlor Heptachlor epoxide Mirex Toxaphene
Confirmed COC: 30001-NO 30004-NO 30006-NO 30007-NO 30008-NO 30009-NO 30010-NO 30013-NO 30014-NO 30542-NO 30058-NO 30067-NO 30515-NO 30309-NO 30313-NO 30314-NO 30315-NO 30316-NO 30357-NO 30108-NO 30152-NO 30153-NO 30156-NO 30207-NO 30587-NO 30594-NO 30400-NO 30402-NO 30407-NO 30261-NO 30528-NO 30043-NO 30080-NO 30154-NO 30298-NO 30308-NO 30021-NO 30023-NO
Potential Description: SOIL, SV
Alias Name: COACHELLA VALLEY UNIFIED SCHOOL DISTRICT
Alias Type: Alternate Name
Alias Name: COACHELLA VALLEY USD-PRPSD W COCHELA EL
Alias Type: Alternate Name
Alias Name: WEST COACHELLA ELEMENTARY
Alias Type: Alternate Name
Alias Name: 404346
Alias Type: Project Code (Site Code)
Alias Name: 33010064
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 07/23/2004
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 07/17/2002
Comments: Not reported

WEST COACHELLA ELEMENTARY (Continued) **S105628771**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Workplan
Completed Date: 02/07/2003
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 04/26/2004
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

SCH:

Name: WEST COACHELLA ELEMENTARY
Address: VAN BUREN STREET/AVENUE 52
City,State,Zip: COACHELLA, CA 92236
Facility ID: 33010064
Site Type: School Investigation
Site Type Detail: School
Site Mgmt. Req.: NONE SPECIFIED
Acres: 20
National Priorities List: NO
Cleanup Oversight Agencies: DTSC
Lead Agency: DTSC
Lead Agency Description: * DTSC
Project Manager: Not reported
Supervisor: Javier Hinojosa
Division Branch: Southern California Schools & Brownfields Outreach
Site Code: 404346
Assembly: 36
Senate: 18
Special Program Status: Not reported
Status: No Further Action
Status Date: 07/17/2002
Restricted Use: NO
Funding: School District
Latitude: 33.67241
Longitude: -116.1997
APN: NONE SPECIFIED
Past Use: AGRICULTURAL - ROW CROPS
Potential COC: 2,3,7,8-TCDD (dioxin, Dioxin (as 2,3,7,8-TCDD TEQ, Furan, Antimony and compounds, Arsenic, Barium and compounds, Beryllium and compounds, Cadmium and compounds, Chromium III, Chromium VI, Cobalt, Copper and compounds, Lead, Mercury (elemental, Mercury and compounds, Molybdenum, Nickel, Selenium, Silver, Thallium and compounds, Vanadium and compounds, Zinc, Aldrin, Chlordane, DDD, DDE,

WEST COACHELLA ELEMENTARY (Continued) **S105628771**

DDT, Dieldrin, Endosulfan, Endrin, HCH (alpha, HCH (beta, HCH (gamma) Lindane, HCH-technical, Heptachlor, Heptachlor epoxide, Mirex, Toxaphene

Confirmed COC: 30001-NO, 30004-NO, 30006-NO, 30007-NO, 30008-NO, 30009-NO, 30010-NO, 30013-NO, 30014-NO, 30542-NO, 30058-NO, 30067-NO, 30515-NO, 30309-NO, 30313-NO, 30314-NO, 30315-NO, 30316-NO, 30357-NO, 30108-NO, 30152-NO, 30153-NO, 30156-NO, 30207-NO, 30587-NO, 30594-NO, 30400-NO, 30402-NO, 30407-NO, 30261-NO, 30528-NO, 30043-NO, 30080-NO, 30154-NO, 30298-NO, 30308-NO, 30021-NO, 30023-NO

Potential Description: SOIL, SV
Alias Name: COACHELLA VALLEY UNIFIED SCHOOL DISTRICT
Alias Type: Alternate Name
Alias Name: COACHELLA VALLEY USD-PRPSD W COCHELA EL
Alias Type: Alternate Name
Alias Name: WEST COACHELLA ELEMENTARY
Alias Type: Alternate Name
Alias Name: 404346
Alias Type: Project Code (Site Code)
Alias Name: 33010064
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 07/23/2004
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 07/17/2002
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Workplan
Completed Date: 02/07/2003
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 04/26/2004
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
D10 NNE < 1/8 0.111 mi. 587 ft.	**WEST COACHELLA ELEME VAN BUREN STREET/AVENUE 52 COACHELLA, CA 92236 Site 2 of 2 in cluster D**	**CERS**	**S128630499 N/A**

Relative: Higher

Actual: -48 ft.

CERS:

Name:	WEST COACHELLA ELEME
Address:	VAN BUREN STREET/AVENUE 52
City,State,Zip:	COACHELLA, CA 92236
Site ID:	610814
CERS ID:	33010064
CERS Description:	School Investigation

Affiliation:

Affiliation Type Desc:	Supervisor
Entity Name:	Javier Hinojosa
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

---

11 WNW 1/8-1/4 0.191 mi. 1007 ft.	**JACKSON AND 52 AVE 52 1/4 MI W OF JACKSON INDIO, CA 92201**	**HIST UST**	**U001573448 N/A**

Relative: Higher

Actual: -44 ft.

HIST UST:

Name:	JACKSON AND 52
Address:	AVE 52 1/4 MI W OF JACKSON
City,State,Zip:	INDIO, CA 92201
File Number:	0001f8af
URL:	https://documents.geotracker.waterboards.ca.gov/ustpdfs/pdf/0001f8af.pdf
Region:	STATE
Facility ID:	00000046099
Facility Type:	Other
Other Type:	RANCH
Contact Name:	Not reported
Telephone:	6193421114
Owner Name:	RANCHERS MANAGEMENT SERVICE IN
Owner Address:	82-375 AVE. 51
Owner City,St,Zip:	INDIO, CA 92201
Total Tanks:	0004
Tank Num:	001
Container Num:	1
Year Installed:	Not reported
Tank Capacity:	00000500
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor
Tank Num:	002
Container Num:	2

JACKSON AND 52 (Continued) **U001573448**

Year Installed:	Not reported
Tank Capacity:	00000500
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor
Tank Num:	003
Container Num:	3
Year Installed:	Not reported
Tank Capacity:	00000500
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor
Tank Num:	004
Container Num:	4
Year Installed:	Not reported
Tank Capacity:	00000500
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor

Click here for Geo Tracker PDF:

12
NW
1/8-1/4
0.195 mi.
1028 ft.

ROBERT PIETRVAK
51575 CALHOUN ST
COACHELLA, CA 92236

HWTS **S124604012**
N/A

Relative:
Higher

Actual:
-43 ft.

HWTS:

Name:	ROBERT PIETRVAK
Address:	51575 CALHOUN ST
Address 2:	Not reported
City,State,Zip:	COACHELLA, CA 92236
EPA ID:	CAC002651989
Inactive Date:	09/22/2010
Create Date:	03/25/2010
Last Act Date:	Not reported
Mailing Name:	Not reported
Mailing Address:	51575 CALHOUN ST
Mailing Address 2:	Not reported
Mailing City,State,Zip:	COACHELLA, CA 922369646
Owner Name:	ROBERT PIETRVAK
Owner Address:	51575 CALHOUN ST
Owner Address 2:	Not reported
Owner City,State,Zip:	COACHELLA, CA 922369646
Owner Phone:	Not reported
Owner Fax:	Not reported
Contact Name:	ROBERT PIETRVAK
Contact Address:	51575 CALHOUN ST
Contact Address 2:	Not reported
City,State,Zip:	COACHELLA, CA 922369646
Contact Phone:	Not reported
Contact Fax:	Not reported

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number

ROBERT PIETRVAK (Continued) **S124604012**

Facility Status:	Inactive
Facility Type:	TEMPORARY
Category:	STATE
Latitude:	33.671162
Longitude:	-116.207752

E13 **TRIANGLE BAR FARMNA INC.** **FINDS** **1023328935**
SW **52995 CALHOUN ST** **N/A**
1/8-1/4 **COACHELLA, CA 92236**
0.229 mi.
1208 ft. **Site 1 of 4 in cluster E**

Relative: **Lower**

Actual: **-53 ft.**

FINDS:
Registry ID: 110066233622

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:
The California Environmental Protection Agency (CalEPA) has recently implemented a new data warehouse system (nSite). This data warehouse combines and merges facility and site information from five different systems managed within CalEPA. The five systems are: California Environmental Reporting System (CERS),EnviroStor, GeoTracker, California Integrated Water Quality System (CIWQS), andToxic Release Inventory (TRI).

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

E14 **TRIANGLE BAR FARMS CORP** **HWTS** **S121019046**
SW **52995 CALHOUN ST** **HAZNET** **N/A**
1/8-1/4 **COACHELLA, CA 92236**
0.229 mi.
1208 ft. **Site 2 of 4 in cluster E**

Relative: **Lower**

Actual: **-53 ft.**

HWTS:

Name:	TRIANGLE BAR FARMS CORP
Address:	52995 CALHOUN ST
Address 2:	Not reported
City,State,Zip:	COACHELLA, CA 92236
EPA ID:	CAL000378779
Inactive Date:	06/30/2016
Create Date:	10/04/2012
Last Act Date:	Not reported
Mailing Name:	Not reported
Mailing Address:	42215 WASHINGTON ST. STE. A135
Mailing Address 2:	Not reported
Mailing City,State,Zip:	COACHELLA, CA 92236
Owner Name:	TRIANGLE BAR FARMS CORP
Owner Address:	42215 WASHINGTON ST. STE. A135
Owner Address 2:	Not reported
Owner City,State,Zip:	COACHELLA, CA 92236
Owner Phone:	Not reported
Owner Fax:	Not reported
Contact Name:	KERRI KERLEY
Contact Address:	42215 WASHINGTON ST. STE. A135
Contact Address 2:	Not reported
City,State,Zip:	COACHELLA, CA 92236

TRIANGLE BAR FARMS CORP (Continued) **S121019046**

Contact Phone: Not reported
Contact Fax: Not reported
Facility Status: Inactive
Facility Type: PERMANENT
Category: STATE
Latitude: 33.665463
Longitude: -116.21025

NAICS:
EPA ID: CAL000378779
Create Date: 2012-10-04 16:17:33.737
NAICS Code: 99999
NAICS Description: Not Otherwise Specified
Issued EPA ID Date: 2012-10-04 16:17:33.64300
Inactive Date: 2016-06-30 00:00:00
Facility Name: TRIANGLE BAR FARMS CORP
Facility Address: 52995 CALHOUN ST
Facility Address 2: Not reported
Facility City: COACHELLA
Facility County: Not reported
Facility State: CA
Facility Zip: 92236

HAZNET:
Name: TRIANGLE BAR FARMS CORP
Address: 52995 CALHOUN ST
Address 2: Not reported
City,State,Zip: COACHELLA, CA 92236
Contact: KERRI KERLEY
Telephone: 7608611134
Mailing Name: Not reported
Mailing Address: 42215 WASHINGTON ST. STE. A135

Year: 2016
Gepaid: CAL000378779
TSD EPA ID: NED981723513
CA Waste Code: 343 - Unspecified organic liquid mixture
Disposal Method: -
Tons: 0.15

E15 **DR FERN STOUT** **HIST UST** **U001573833**
SW **AVE. 53 & CALHOUN ST.,** **N/A**
1/4-1/2 **COACHELLA, CA 92236**
0.274 mi.
1446 ft. **Site 3 of 4 in cluster E**

Relative:
Lower

Actual:
-54 ft.

HIST UST:
Name: DR FERN STOUT
Address: AVE. 53 & CALHOUN ST.,
City,State,Zip: COACHELLA, CA 92236
File Number: Not reported
URL: Not reported
Region: STATE
Facility ID: 00000053288
Facility Type: Other
Other Type: FARM

DR FERN STOUT (Continued) **U001573833**

Contact Name:	Not reported
Telephone:	6193983611
Owner Name:	DR FERN STOUT
Owner Address:	AVE. 53 & CALHOUN ST.,
Owner City,St,Zip:	COACHELL, CA 92236
Total Tanks:	0001
Tank Num:	001
Container Num:	1
Year Installed:	Not reported
Tank Capacity:	00000000
Tank Used for:	WASTE
Type of Fuel:	06
Container Construction Thickness:	Not reported
Leak Detection:	None

E16 **DR FERN STOUT** **HIST UST** **S118409481**
SW **AVE 53 AND CALHOUN ST** **N/A**
1/4-1/2 **COACHELLA, CA 92236**
0.274 mi.
1446 ft. **Site 4 of 4 in cluster E**

Relative: **Lower**

Actual: **-54 ft.**

HIST UST:

Name:	DR FERN STOUT
Address:	AVE 53 AND CALHOUN ST
City,State,Zip:	COACHELLA, CA 92236
File Number:	0001f5ef
URL:	https://documents.geotracker.waterboards.ca.gov/ustpdfs/pdf/0001f5ef.pdf
Region:	Not reported
Facility ID:	Not reported
Facility Type:	Not reported
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	Not reported
Owner Name:	Not reported
Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Total Tanks:	Not reported
Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

Click here for Geo Tracker PDF:

Map ID
Direction
Distance
Elevation | Site

MAP FINDINGS

Database(s) | EDR ID Number | EPA ID Number

17
WSW
1/4-1/2
0.456 mi.
2410 ft.

ARMTEC DEFENSE PRODUCTS CO
COACHELLA, CA

Database(s): **PFAS ECHO**
EDR ID Number: **1027326987**
EPA ID Number: **N/A**

Relative:
Higher

Actual:
-47 ft.

PFAS ECHO:

Name:	ARMTEC DEFENSE PRODUCTS CO
Address:	Not reported
City,State,Zip:	COACHELLA, CA
Latitude:	33.66382
Longitude:	-116.21238
Count:	1
County:	RIVERSIDE
Status:	Unknown
Region:	09
Industry:	Textiles and Leather
ECHO Facility Report:	https://echo.epa.gov/detailed-facility-report?fid=110064261258
Facility Percent Minority:	88.207
Facility Derived Tribes:	Augustine Band of Cahuilla Indians, California - .9 mile(s), Cabazon Band of Cahuilla Indians - 2.6 mile(s), Twenty-Nine Palms Band of Mission Indians of California - 3.2 mile(s), Torres Martinez Desert Cahuilla Indians, California - 4.5 mile(s), Agua Cal
Facility Population:	1939.3
EPA Programs:	-
Federal Facility:	No
Federal Agency:	-
Facility FIPS Code:	06065
Facility Indian Country Flag:	N
Facility Collection Method:	ADDRESS MATCHING-HOUSE NUMBER
Facility Derived HUC:	18100200
Facility Derived WBD:	181002010802
Facility Derived CD113:	36
Facility Derived CB2010:	060650456062007
Facility Major Flag:	-
Facility Active Flag:	-
Facility Inspection Count:	0
Facility Date Last Inspection:	-
Facility Days Last Inspection:	-
Facility Informal Count:	0
Facility Date Last Informal Action:	-
Facility Formal Action Count:	0
Facility Date Last Formal Action:	-
Facility Total Penalties:	0
Facility Penalty Count:	-
Facility Date Last Penalty:	-
Facility Last Penalty AMT:	-
Facility QTRS With NC:	-
Facility Programs With SNC:	0
Facility Compliance Status:	-
Facility SNC Flag:	N
AIR Flag:	N
NPDES Flag:	N
SDWIS Flag:	N
RCRA Flag:	N
TRI Flag:	N
GHG Flag:	N
AIR IDS:	-
CAA Permit Types:	-

Map ID
Direction
Distance
Elevation | Site | MAP FINDINGS | Database(s) | EDR ID Number / EPA ID Number

ARMTEC DEFENSE PRODUCTS CO (Continued) **1027326987**

CAA NAICS:	-
CAA SICS:	-
NPDES IDS:	-
CWA Permit Types:	-
CWA NAICS:	-
CWA SICS:	-
RCRA IDS:	-
RCRA Permit Types:	-
RCRA NAICS:	-
SDWA IDS:	-
SDWA System Types:	-
SDWA Compliance Status:	-
SDWA SNC Flag:	N
TRI IDS:	-
TRI Releases Transfers:	-
TRI On Site Releases:	-
TRI Off Site Transfers:	-
TRI Reporter:	-
Facility IMP Water Flag:	-
EJSCREEN Flag US:	Y
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-116.21238,%22y%22:33.66382,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1

---

18 **STORE #330** **Notify 65** **S100179282**
East **85-101 AVENUE 52** **N/A**
> 1 **COACHELLA, CA 92236**
1.082 mi.
5715 ft.

Relative: **Lower**

Actual: **-68 ft.**

NOTIFY 65:

Name:	STORE #330
Address:	85-101 AVENUE 52
City,State,Zip:	COACHELLA, CA 92236
Date Reported:	Not reported
Staff Initials:	Not reported
Board File Number:	Not reported
Facility Type:	Not reported
Discharge Date:	Not reported
Issue Date:	Not reported
Incident Description:	Not reported
Global ID:	Not reported
Status:	Not reported

Count: 5 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
COACHELLA	S106117705	COACHELLA SANITARY DISTRICT	AVE 56 & VAN BUREN ST		LUST
COACHELLA	S117037745		AVENUE 52 & HIGHWAY 86	92236	CDL
COACHELLA	S106152885	COACHELLA VALLEY WATER DISTRICT	85820 COACHELLA HEIGHTS		LUST
INDIO	S130378940	VALLEY SANITARY DISTRICT	45-500 VAN BUREN STREET	92201	CERS HAZ WASTE
THERMAL	S106660326	COACHELLA VALLEY MOSQUITO & VECTOR	SOUTH SIDE OF AVE. 55, 1/4 MIL	92274	CPS-SLIC

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 02/29/2024
Date Data Arrived at EDR: 03/01/2024
Date Made Active in Reports: 03/27/2024
Number of Days to Update: 26

Source: EPA
Telephone: N/A
Last EDR Contact: 05/01/2024
Next Scheduled EDR Contact: 07/08/2024
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 02/29/2024
Date Data Arrived at EDR: 03/01/2024
Date Made Active in Reports: 03/27/2024
Number of Days to Update: 26

Source: EPA
Telephone: N/A
Last EDR Contact: 05/01/2024
Next Scheduled EDR Contact: 07/08/2024
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Lists of Federal Delisted NPL sites

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 02/29/2024
Date Data Arrived at EDR: 03/01/2024
Date Made Active in Reports: 03/27/2024
Number of Days to Update: 26

Source: EPA
Telephone: N/A
Last EDR Contact: 05/01/2024
Next Scheduled EDR Contact: 07/08/2024
Data Release Frequency: Quarterly

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 12/20/2023
Date Data Arrived at EDR: 12/20/2023
Date Made Active in Reports: 01/24/2024
Number of Days to Update: 35

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 03/26/2024
Next Scheduled EDR Contact: 07/08/2024
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 01/29/2024
Date Data Arrived at EDR: 02/01/2024
Date Made Active in Reports: 02/22/2024
Number of Days to Update: 21

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 05/01/2024
Next Scheduled EDR Contact: 07/22/2024
Data Release Frequency: Quarterly

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 01/29/2024
Date Data Arrived at EDR: 02/01/2024
Date Made Active in Reports: 02/22/2024
Number of Days to Update: 21
Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 05/01/2024
Next Scheduled EDR Contact: 07/22/2024
Data Release Frequency: Quarterly

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/06/2023
Date Made Active in Reports: 12/12/2023
Number of Days to Update: 6
Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/19/2024
Next Scheduled EDR Contact: 07/01/2024
Data Release Frequency: Quarterly

Lists of Federal RCRA TSD facilities

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/06/2023
Date Made Active in Reports: 12/12/2023
Number of Days to Update: 6
Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/19/2024
Next Scheduled EDR Contact: 07/01/2024
Data Release Frequency: Quarterly

Lists of Federal RCRA generators

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/06/2023
Date Made Active in Reports: 12/12/2023
Number of Days to Update: 6
Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/19/2024
Next Scheduled EDR Contact: 07/01/2024
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/06/2023
Date Made Active in Reports: 12/12/2023
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/19/2024
Next Scheduled EDR Contact: 07/01/2024
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/06/2023
Date Made Active in Reports: 12/12/2023
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/19/2024
Next Scheduled EDR Contact: 07/01/2024
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 02/14/2024
Date Data Arrived at EDR: 02/16/2024
Date Made Active in Reports: 04/04/2024
Number of Days to Update: 48

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 05/02/2024
Next Scheduled EDR Contact: 08/19/2024
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 02/13/2024
Date Data Arrived at EDR: 02/21/2024
Date Made Active in Reports: 04/04/2024
Number of Days to Update: 43

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/21/2024
Next Scheduled EDR Contact: 06/03/2024
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 02/13/2024
Date Data Arrived at EDR: 02/21/2024
Date Made Active in Reports: 04/04/2024
Number of Days to Update: 43

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/21/2024
Next Scheduled EDR Contact: 06/03/2024
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/12/2023
Date Data Arrived at EDR: 12/13/2023
Date Made Active in Reports: 02/28/2024
Number of Days to Update: 77

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 03/19/2024
Next Scheduled EDR Contact: 07/01/2024
Data Release Frequency: Quarterly

Lists of state- and tribal (Superfund) equivalent sites

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 01/22/2024
Date Data Arrived at EDR: 01/23/2024
Date Made Active in Reports: 04/08/2024
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/23/2024
Next Scheduled EDR Contact: 08/05/2024
Data Release Frequency: Quarterly

Lists of state- and tribal hazardous waste facilities

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 01/22/2024
Date Data Arrived at EDR: 01/23/2024
Date Made Active in Reports: 04/08/2024
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/23/2024
Next Scheduled EDR Contact: 08/05/2024
Data Release Frequency: Quarterly

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 02/05/2024
Date Data Arrived at EDR: 02/06/2024
Date Made Active in Reports: 04/26/2024
Number of Days to Update: 80

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 05/07/2024
Next Scheduled EDR Contact: 08/19/2024
Data Release Frequency: Quarterly

Lists of state and tribal leaking storage tanks

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)

Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/05/2023
Date Made Active in Reports: 02/28/2024
Number of Days to Update: 85

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Quarterly

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List
Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

LUST REG 1: Active Toxic Site Investigation
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/25/2023
Date Data Arrived at EDR: 01/17/2024
Date Made Active in Reports: 03/13/2024
Number of Days to Update: 56

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 04/17/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/25/2023
Date Data Arrived at EDR: 01/17/2024
Date Made Active in Reports: 03/13/2024
Number of Days to Update: 56

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/17/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/25/2023
Date Data Arrived at EDR: 01/17/2024
Date Made Active in Reports: 03/13/2024
Number of Days to Update: 56

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 04/17/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/25/2023
Date Data Arrived at EDR: 01/17/2024
Date Made Active in Reports: 03/13/2024
Number of Days to Update: 56

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/17/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/25/2023
Date Data Arrived at EDR: 01/17/2024
Date Made Active in Reports: 03/13/2024
Number of Days to Update: 56

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/17/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 10/25/2023
Date Data Arrived at EDR: 01/17/2024
Date Made Active in Reports: 03/13/2024
Number of Days to Update: 56

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 04/17/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/25/2023
Date Data Arrived at EDR: 01/17/2024
Date Made Active in Reports: 03/13/2024
Number of Days to Update: 56

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 04/17/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/04/2023
Date Data Arrived at EDR: 01/17/2024
Date Made Active in Reports: 03/13/2024
Number of Days to Update: 56

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 04/17/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)
Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/05/2023
Date Made Active in Reports: 02/27/2024
Number of Days to Update: 84
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18
Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30
Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28
Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47
Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16
Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22
Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35
Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36
Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11
Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17
Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: No Update Planned

Lists of state and tribal registered storage tanks

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 11/16/2023
Date Data Arrived at EDR: 11/16/2023
Date Made Active in Reports: 02/13/2024
Number of Days to Update: 89
Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 03/19/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)
Military ust sites

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/05/2023
Date Made Active in Reports: 02/28/2024
Number of Days to Update: 85

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Varies

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/05/2023
Date Made Active in Reports: 02/28/2024
Number of Days to Update: 85

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Semi-Annually

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases
UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 11/28/2023
Date Data Arrived at EDR: 11/30/2023
Date Made Active in Reports: 02/27/2024
Number of Days to Update: 89

Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Varies

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 03/08/2024
Next Scheduled EDR Contact: 06/24/2024
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 10/24/2023
Date Data Arrived at EDR: 01/17/2024
Date Made Active in Reports: 03/13/2024
Number of Days to Update: 56

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 04/17/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/24/2023
Date Data Arrived at EDR: 01/17/2024
Date Made Active in Reports: 03/13/2024
Number of Days to Update: 56

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 04/17/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 10/24/2023
Date Data Arrived at EDR: 01/17/2024
Date Made Active in Reports: 03/13/2024
Number of Days to Update: 56

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/17/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/24/2023
Date Data Arrived at EDR: 01/17/2024
Date Made Active in Reports: 03/13/2024
Number of Days to Update: 56

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/17/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 10/24/2023
Date Data Arrived at EDR: 01/17/2024
Date Made Active in Reports: 03/13/2024
Number of Days to Update: 56

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 04/17/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 10/17/2023
Date Data Arrived at EDR: 01/17/2024
Date Made Active in Reports: 03/13/2024
Number of Days to Update: 56

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 04/17/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 10/24/2023
Date Data Arrived at EDR: 01/17/2024
Date Made Active in Reports: 03/13/2024
Number of Days to Update: 56

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 04/17/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 10/24/2023
Date Data Arrived at EDR: 01/17/2024
Date Made Active in Reports: 03/13/2024
Number of Days to Update: 56

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/17/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

Lists of state and tribal voluntary cleanup sites

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 01/22/2024
Date Data Arrived at EDR: 01/23/2024
Date Made Active in Reports: 04/08/2024
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/23/2024
Next Scheduled EDR Contact: 08/05/2024
Data Release Frequency: Quarterly

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 07/08/2021
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 03/18/2024
Next Scheduled EDR Contact: 07/01/2024
Data Release Frequency: Varies

Lists of state and tribal brownfield sites

BROWNFIELDS: Considered Brownfieds Sites Listing

A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 12/13/2023
Date Data Arrived at EDR: 12/13/2023
Date Made Active in Reports: 03/07/2024
Number of Days to Update: 85

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 03/19/2024
Next Scheduled EDR Contact: 07/01/2024
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 03/11/2024
Date Data Arrived at EDR: 03/12/2024
Date Made Active in Reports: 05/10/2024
Number of Days to Update: 59

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/12/2024
Next Scheduled EDR Contact: 06/24/2024
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 04/19/2024
Next Scheduled EDR Contact: 08/05/2024
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 11/29/2023
Date Data Arrived at EDR: 11/29/2023
Date Made Active in Reports: 02/23/2024
Number of Days to Update: 86

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 04/04/2024
Date Data Arrived at EDR: 04/05/2024
Date Made Active in Reports: 04/15/2024
Number of Days to Update: 10

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 04/05/2024
Next Scheduled EDR Contact: 08/19/2024
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 04/22/2024
Next Scheduled EDR Contact: 08/05/2024
Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/15/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176
Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 04/19/2024
Next Scheduled EDR Contact: 08/04/2024
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 02/21/2024
Date Made Active in Reports: 04/04/2024
Number of Days to Update: 43
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/21/2024
Next Scheduled EDR Contact: 06/03/2024
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database
The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21
Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program
This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 01/22/2024
Date Data Arrived at EDR: 01/23/2024
Date Made Active in Reports: 04/08/2024
Number of Days to Update: 76
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/23/2024
Next Scheduled EDR Contact: 08/05/2024
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs
A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 09/28/2023
Date Made Active in Reports: 12/18/2023
Number of Days to Update: 81
Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 05/09/2024
Next Scheduled EDR Contact: 08/12/2024
Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites
Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27
Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

CERS HAZ WASTE: California Environmental Reporting System Hazardous Waste
List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 01/16/2024
Date Data Arrived at EDR: 01/16/2024
Date Made Active in Reports: 04/03/2024
Number of Days to Update: 78
Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 04/16/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Quarterly

US CDL: Clandestine Drug Labs
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 02/21/2024
Date Made Active in Reports: 04/04/2024
Number of Days to Update: 43
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/21/2024
Next Scheduled EDR Contact: 06/03/2024
Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing
Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35
Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HIST UST: Hazardous Substance Storage Container Database
The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18
Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing
Aboveground storage tank sites

Date of Government Version: 02/01/2024
Date Data Arrived at EDR: 02/01/2024
Date Made Active in Reports: 04/24/2024
Number of Days to Update: 83
Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 04/25/2024
Next Scheduled EDR Contact: 08/12/2024
Data Release Frequency: Varies

CA FID UST: Facility Inventory Database
The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CERS TANKS: California Environmental Reporting System (CERS) Tanks

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 01/16/2024
Date Data Arrived at EDR: 01/16/2024
Date Made Active in Reports: 04/03/2024
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 04/16/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Quarterly

Local Land Records

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 02/26/2024
Date Data Arrived at EDR: 02/27/2024
Date Made Active in Reports: 05/15/2024
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/26/2024
Next Scheduled EDR Contact: 06/10/2024
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/29/2024
Date Data Arrived at EDR: 03/01/2024
Date Made Active in Reports: 03/27/2024
Number of Days to Update: 26

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 05/01/2024
Next Scheduled EDR Contact: 07/08/2024
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 02/26/2024
Date Data Arrived at EDR: 02/27/2024
Date Made Active in Reports: 05/14/2024
Number of Days to Update: 77

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 02/27/2024
Next Scheduled EDR Contact: 06/10/2024
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/12/2023
Date Data Arrived at EDR: 12/13/2023
Date Made Active in Reports: 02/28/2024
Number of Days to Update: 77

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 03/20/2024
Next Scheduled EDR Contact: 07/01/2024
Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System
California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 01/23/2024
Date Made Active in Reports: 04/09/2024
Number of Days to Update: 77

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 04/16/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)
Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/05/2023
Date Made Active in Reports: 02/27/2024
Number of Days to Update: 84

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)
Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/05/2023
Date Made Active in Reports: 02/28/2024
Number of Days to Update: 85

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch
Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/06/2023
Date Made Active in Reports: 12/12/2023
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/19/2024
Next Scheduled EDR Contact: 07/01/2024
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/30/2024
Date Data Arrived at EDR: 02/13/2024
Date Made Active in Reports: 04/04/2024
Number of Days to Update: 51

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 05/14/2024
Next Scheduled EDR Contact: 08/26/2024
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 06/07/2021
Date Data Arrived at EDR: 07/13/2021
Date Made Active in Reports: 03/09/2022
Number of Days to Update: 239

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/11/2024
Next Scheduled EDR Contact: 07/22/2024
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/04/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 07/30/2021
Date Data Arrived at EDR: 02/03/2023
Date Made Active in Reports: 02/10/2023
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/09/2024
Next Scheduled EDR Contact: 08/19/2024
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 12/11/2023
Date Data Arrived at EDR: 12/13/2023
Date Made Active in Reports: 02/28/2024
Number of Days to Update: 77

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 03/13/2024
Next Scheduled EDR Contact: 07/01/2024
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA Watch List

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 04/29/2024
Next Scheduled EDR Contact: 08/12/2024
Data Release Frequency: No Update Planned

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/02/2024
Next Scheduled EDR Contact: 08/12/2024
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 06/14/2022
Date Made Active in Reports: 03/24/2023
Number of Days to Update: 283

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/14/2024
Next Scheduled EDR Contact: 06/24/2024
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2022
Date Data Arrived at EDR: 11/13/2023
Date Made Active in Reports: 02/07/2024
Number of Days to Update: 86

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 02/15/2024
Next Scheduled EDR Contact: 05/27/2024
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 01/16/2024
Date Data Arrived at EDR: 01/17/2024
Date Made Active in Reports: 03/27/2024
Number of Days to Update: 70

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/17/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 02/29/2024
Date Data Arrived at EDR: 03/01/2024
Date Made Active in Reports: 03/27/2024
Number of Days to Update: 26

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 05/01/2024
Next Scheduled EDR Contact: 06/10/2024
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 02/01/2024
Date Data Arrived at EDR: 02/08/2024
Date Made Active in Reports: 04/04/2024
Number of Days to Update: 56

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/15/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 09/19/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 10/19/2023
Number of Days to Update: 16

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 05/01/2024
Next Scheduled EDR Contact: 08/12/2024
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 03/20/2023
Date Data Arrived at EDR: 04/04/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 66

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/04/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 03/28/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 01/02/2024
Date Data Arrived at EDR: 01/16/2024
Date Made Active in Reports: 03/13/2024
Number of Days to Update: 57

Source: Nuclear Regulatory Commission
Telephone: 301-415-0717
Last EDR Contact: 04/15/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2022
Date Data Arrived at EDR: 11/27/2023
Date Made Active in Reports: 02/22/2024
Number of Days to Update: 87

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 02/23/2024
Next Scheduled EDR Contact: 06/10/2024
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 02/23/2024
Next Scheduled EDR Contact: 06/10/2024
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 05/02/2024
Next Scheduled EDR Contact: 08/12/2024
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 03/25/2024
Next Scheduled EDR Contact: 07/08/2024
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data
Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80
Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 04/23/2024
Next Scheduled EDR Contact: 08/05/2024
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 01/11/2024
Date Made Active in Reports: 01/16/2024
Number of Days to Update: 5
Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 03/28/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11
Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 03/19/2024
Next Scheduled EDR Contact: 07/01/2024
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546
Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/04/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 03/03/2023
Date Data Arrived at EDR: 03/03/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 98
Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 04/26/2024
Next Scheduled EDR Contact: 08/12/2024
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74
Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 02/15/2024
Next Scheduled EDR Contact: 05/27/2024
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 02/29/2024
Date Data Arrived at EDR: 03/01/2024
Date Made Active in Reports: 03/27/2024
Number of Days to Update: 26
Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 05/01/2024
Next Scheduled EDR Contact: 07/08/2024
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 01/02/2024
Date Data Arrived at EDR: 01/03/2024
Date Made Active in Reports: 01/04/2024
Number of Days to Update: 1

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 04/04/2024
Next Scheduled EDR Contact: 08/19/2024
Data Release Frequency: Quarterly

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/05/2024
Date Data Arrived at EDR: 02/21/2024
Date Made Active in Reports: 04/04/2024
Number of Days to Update: 43

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 02/21/2024
Next Scheduled EDR Contact: 06/03/2024
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 01/07/2022
Date Data Arrived at EDR: 02/24/2023
Date Made Active in Reports: 05/17/2023
Number of Days to Update: 82

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 02/22/2024
Next Scheduled EDR Contact: 06/03/2024
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 02/22/2024
Next Scheduled EDR Contact: 06/03/2024
Data Release Frequency: Varies

MINES MRDS: Mineral Resources Data System

Mineral Resources Data System

Date of Government Version: 08/23/2022
Date Data Arrived at EDR: 11/22/2022
Date Made Active in Reports: 02/28/2023
Number of Days to Update: 98

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 02/22/2024
Next Scheduled EDR Contact: 06/03/2024
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 11/28/2023
Date Data Arrived at EDR: 11/29/2023
Date Made Active in Reports: 12/11/2023
Number of Days to Update: 12

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 03/15/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 11/03/2023
Date Data Arrived at EDR: 11/08/2023
Date Made Active in Reports: 11/20/2023
Number of Days to Update: 12

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 02/27/2024
Next Scheduled EDR Contact: 06/10/2024
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 09/06/2023
Date Data Arrived at EDR: 09/13/2023
Date Made Active in Reports: 12/11/2023
Number of Days to Update: 89

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 04/08/2024
Next Scheduled EDR Contact: 07/22/2024
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 12/17/2023
Date Data Arrived at EDR: 12/28/2023
Date Made Active in Reports: 03/04/2024
Number of Days to Update: 67

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 04/04/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/06/2021
Date Data Arrived at EDR: 05/21/2021
Date Made Active in Reports: 08/11/2021
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 02/20/2024
Next Scheduled EDR Contact: 06/03/2024
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/12/2024
Date Data Arrived at EDR: 02/13/2024
Date Made Active in Reports: 04/04/2024
Number of Days to Update: 51

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 05/14/2024
Next Scheduled EDR Contact: 08/26/2024
Data Release Frequency: Quarterly

PFAS NPL: Superfund Sites with PFAS Detections Information

EPA's Office of Land and Emergency Management and EPA Regional Offices maintain data describing what is known about site investigations, contamination, and remedial actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) where PFAS is present in the environment.

Date of Government Version: 12/28/2023
Date Data Arrived at EDR: 12/28/2023
Date Made Active in Reports: 03/04/2024
Number of Days to Update: 67

Source: Environmental Protection Agency
Telephone: 703-603-8895
Last EDR Contact: 04/05/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Varies

PFAS FEDERAL SITES: Federal Sites PFAS Information

Several federal entities, such as the federal Superfund program, Department of Defense, National Aeronautics and Space Administration, Department of Transportation, and Department of Energy provided information for sites with known or suspected detections at federal facilities.

Date of Government Version: 12/28/2023
Date Data Arrived at EDR: 12/28/2023
Date Made Active in Reports: 03/04/2024
Number of Days to Update: 67

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 04/05/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Varies

PFAS TRIS: List of PFAS Added to the TRI

Section 7321 of the National Defense Authorization Act for Fiscal Year 2020 (NDAA) immediately added certain per- and polyfluoroalkyl substances (PFAS) to the list of chemicals covered by the Toxics Release Inventory (TRI) under Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) and provided a framework for additional PFAS to be added to TRI on an annual basis.

Date of Government Version: 12/28/2023
Date Data Arrived at EDR: 12/28/2023
Date Made Active in Reports: 01/04/2024
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 202-566-0250
Last EDR Contact: 04/05/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Varies

PFAS TSCA: PFAS Manufacture and Imports Information

EPA issued the Chemical Data Reporting (CDR) Rule under the Toxic Substances Control Act (TSCA) and requires chemical manufacturers and facilities that manufacture or import chemical substances to report data to EPA. EPA publishes non-confidential business information (non-CBI) and includes descriptive information about each site, corporate parent, production volume, other manufacturing information, and processing and use information.

Date of Government Version: 12/28/2023
Date Data Arrived at EDR: 12/28/2023
Date Made Active in Reports: 01/04/2024
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 04/05/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Varies

PFAS RCRA MANIFEST: PFAS Transfers Identified In the RCRA Database Listing

To work around the lack of PFAS waste codes in the RCRA database, EPA developed the PFAS Transfers dataset by mining e-Manifest records containing at least one of these common PFAS keywords: PFAS, PFOA, PFOS, PERFL, AFFF, GENX, GEN-X (plus the VT waste codes). These keywords were searched for in the following text fields: Manifest handling instructions (MANIFEST_HANDLING_INSTR), Non-hazardous waste description (NON_HAZ_WASTE_DESCRIPTION), DOT printed information (DOT_PRINTED_INFORMATION), Waste line handling instructions (WASTE_LINE_HANDLING_INSTR), Waste residue comments (WASTE_RESIDUE_COMMENTS).

Date of Government Version: 12/28/2023
Date Data Arrived at EDR: 12/28/2023
Date Made Active in Reports: 01/04/2024
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 04/05/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Varies

PFAS ATSDR: PFAS Contamination Site Location Listing

PFAS contamination site locations from the Department of Health & Human Services, Center for Disease Control & Prevention. ATSDR is involved at a number of PFAS-related sites, either directly or through assisting state and federal partners. As of now, most sites are related to drinking water contamination connected with PFAS production facilities or fire training areas where aqueous film-forming firefighting foam (AFFF) was regularly used.

Date of Government Version: 06/24/2020
Date Data Arrived at EDR: 03/17/2021
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 601

Source: Department of Health & Human Services
Telephone: 202-741-5770
Last EDR Contact: 04/22/2024
Next Scheduled EDR Contact: 08/05/2024
Data Release Frequency: Varies

PFAS WQP: Ambient Environmental Sampling for PFAS

The Water Quality Portal (WQP) is a part of a modernized repository storing ambient sampling data for all environmental media and tissue samples. A wide range of federal, state, tribal and local governments, academic and non-governmental organizations and individuals submit project details and sampling results to this public repository. The information is commonly used for research and assessments of environmental quality.

Date of Government Version: 12/28/2023
Date Data Arrived at EDR: 12/28/2023
Date Made Active in Reports: 03/04/2024
Number of Days to Update: 67

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 04/05/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Varies

PFAS NPDES: Clean Water Act Discharge Monitoring Information

Any discharger of pollutants to waters of the United States from a point source must have a National Pollutant Discharge Elimination System (NPDES) permit. The process for obtaining limits involves the regulated entity (permittee) disclosing releases in a NPDES permit application and the permitting authority (typically the state but sometimes EPA) deciding whether to require monitoring or monitoring with limits. Caveats and Limitations: Less than half of states have required PFAS monitoring for at least one of their permittees and fewer states have established PFAS effluent limits for permittees. New rulemakings have been initiated that may increase the number of facilities monitoring for PFAS in the future.

Date of Government Version: 12/28/2023
Date Data Arrived at EDR: 12/28/2023
Date Made Active in Reports: 03/04/2024
Number of Days to Update: 67

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 04/05/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Varies

PFAS ECHO: Facilities in Industries that May Be Handling PFAS Listing

Regulators and the public have expressed interest in knowing which regulated entities may be using PFAS. EPA has developed a dataset from various sources that show which industries may be handling PFAS. Approximately 120,000 facilities subject to federal environmental programs have operated or currently operate in industry sectors with processes that may involve handling and/or release of PFAS.

Date of Government Version: 12/28/2023
Date Data Arrived at EDR: 12/28/2023
Date Made Active in Reports: 03/04/2024
Number of Days to Update: 67

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 04/05/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Varies

PFAS ECHO FIRE TRAINING: Facilities in Industries that May Be Handling PFAS Listing

A list of fire training sites was added to the Industry Sectors dataset using a keyword search on the permitted facilitys name to identify sites where fire-fighting foam may have been used in training exercises. Additionally, you may view an example spreadsheet of the subset of fire training facility data, as well as the keywords used in selecting or deselecting a facility for the subset. as well as the keywords used in selecting or deselecting a facility for the subset. These keywords were tested to maximize accuracy in selecting facilities that may use fire-fighting foam in training exercises, however, due to the lack of a required reporting field in the data systems for designating fire training sites, this methodology may not identify all fire training sites or may potentially misidentify them.

Date of Government Version: 12/28/2023
Date Data Arrived at EDR: 12/28/2023
Date Made Active in Reports: 03/04/2024
Number of Days to Update: 67

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 04/05/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Varies

PFAS PART 139 AIRPORT: All Certified Part 139 Airports PFAS Information Listing

Since July 1, 2006, all certified part 139 airports are required to have fire-fighting foam onsite that meet military specifications (MIL-F-24385) (14 CFR 139.317). To date, these military specification fire-fighting foams are fluorinated and have been historically used for training and extinguishing. The 2018 FAA Reauthorization Act has a provision stating that no later than October 2021, FAA shall not require the use of fluorinated AFFF. This provision does not prohibit the use of fluorinated AFFF at Part 139 civilian airports; it only prohibits FAA from mandating its use. The Federal Aviation Administration?s document AC 150/5210-6D - Aircraft Fire Extinguishing Agents provides guidance on Aircraft Fire Extinguishing Agents, which includes Aqueous Film Forming Foam (AFFF).

Date of Government Version: 12/28/2023
Date Data Arrived at EDR: 12/28/2023
Date Made Active in Reports: 03/04/2024
Number of Days to Update: 67

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 04/05/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Varies

AQUEOUS FOAM NRC: Aqueous Foam Related Incidents Listing

The National Response Center (NRC) serves as an emergency call center that fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. The spreadsheets posted to the NRC website contain initial incident data that has not been validated or investigated by a federal/state response agency. Response center calls from 1990 to the most recent complete calendar year where there was indication of Aqueous Film Forming Foam (AFFF) usage are included in this dataset. NRC calls may reference AFFF usage in the ?Material Involved? or ?Incident Description? fields.

Date of Government Version: 12/28/2023
Date Data Arrived at EDR: 12/28/2023
Date Made Active in Reports: 03/04/2024
Number of Days to Update: 67

Source: Environmental Protection Agency
Telephone: 202-267-2675
Last EDR Contact: 04/05/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Varies

PCS ENF: Enforcement data
No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 03/29/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Varies

PCS: Permit Compliance System
PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 12/16/2016
Date Data Arrived at EDR: 01/06/2017
Date Made Active in Reports: 03/10/2017
Number of Days to Update: 63

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 03/29/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: No Update Planned

BIOSOLIDS: ICIS-NPDES Biosolids Facility Data
The data reflects compliance information about facilities in the biosolids program.

Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 01/03/2024
Date Made Active in Reports: 01/16/2024
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 202-564-4700
Last EDR Contact: 04/16/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

PFAS: PFAS Contamination Site Location Listing
A listing of PFAS sites included in the Envirostor and GeoTracker databases. Locations of potential sources of per - and polyfluoroalkyl substances (PFAS). This does not mean that PFAS has been produced, used, or discharged at these sites.

Date of Government Version: 11/30/2023
Date Data Arrived at EDR: 11/30/2023
Date Made Active in Reports: 02/26/2024
Number of Days to Update: 88

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/06/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Varies

AQUEOUS FOAM: Former Fire Training Facility Assessments Listing
Airports shown on this list are those believed to use Aqueous Film Forming Foam (AFFF), and certified by the Federal Aviation Administration (FAA) under Title 14, Code of Federal Regulations (CFR), Part 139 (14 CFR Part 139). This list was created by SWRCB using information available from the FAA. Location points shown are from the latitude and longitude listed on the FAA airport master record.

Date of Government Version: 11/30/2023
Date Data Arrived at EDR: 11/30/2023
Date Made Active in Reports: 02/23/2024
Number of Days to Update: 85

Source: State Water Resources Control Board
Telephone: 916-341-5455
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Varies

CA BOND EXP. PLAN: Bond Expenditure Plan
Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CHROME PLATING: Chrome Plating Facilities Listing

This listing represents chrome plating facilities the California State Water Resources Control Board staff identified as possibly being a source of Per- and polyfluoroalkyl substance (PFAS) contamination. Sites and locations were identified by staff with the Division of Water Quality in the California State Water Board. Data was collected from the CA Air Resources Board 2013 and 2018 - Cr VI emission survey, CA Emission Inventory, CA HAZ Waste discharge database and by reviewing storm water permits. Former chrome plating sites are also included that are open site investigation or remediation cases with the Regional Water Quality Control Boards and the Department of Toxic Substances Control.

Date of Government Version: 11/30/2023
Date Data Arrived at EDR: 11/30/2023
Date Made Active in Reports: 02/23/2024
Number of Days to Update: 85

Source: State Water Resources Control Board
Telephone: 916-341-5455
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Varies

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 12/13/2023
Date Data Arrived at EDR: 12/13/2023
Date Made Active in Reports: 03/07/2024
Number of Days to Update: 85

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 03/19/2024
Next Scheduled EDR Contact: 07/01/2024
Data Release Frequency: Quarterly

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing

list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 02/14/2024
Date Data Arrived at EDR: 02/21/2024
Date Made Active in Reports: 05/08/2024
Number of Days to Update: 77

Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 05/09/2024
Next Scheduled EDR Contact: 08/19/2024
Data Release Frequency: Varies

DRYCLEAN VENTURA CO DIST: Drycleaner Facility Listing

A listing of drycleaner facility locations, for the Ventura County Air Pollution Control District.

Date of Government Version: 01/04/2024
Date Data Arrived at EDR: 01/16/2024
Date Made Active in Reports: 02/08/2024
Number of Days to Update: 23

Source: Ventura County Air Pollution Control District
Telephone: 805-645-1421
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN AMADOR: Amador Air District Drycleaner Facility Listing

A listing of drycleaner facility locations, for the Amador Air Quality Management District

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 77

Source: Amador Air Quality Management District
Telephone: 209-257-0112
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing

A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 02/20/2024
Date Data Arrived at EDR: 02/22/2024
Date Made Active in Reports: 05/08/2024
Number of Days to Update: 76

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 02/20/2024
Next Scheduled EDR Contact: 06/03/2024
Data Release Frequency: Varies

DRYCLEAN MOJAVE DESERT DIST: Mojave Desert Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Mojave Desert Air Quality Management District.

Date of Government Version: 04/15/2024
Date Data Arrived at EDR: 04/17/2024
Date Made Active in Reports: 04/24/2024
Number of Days to Update: 7

Source: Mojave Desert Air Quality Management District
Telephone: 760-245-1661
Last EDR Contact: 04/16/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN BUTTE CO DIST: Butte County Air Quality Management DistrictDrycleaner Facility Listing
Butte County Air Quality Management DistrictDrycleaner Facility Listing.

Date of Government Version: 04/25/2023
Date Data Arrived at EDR: 10/18/2023
Date Made Active in Reports: 01/16/2024
Number of Days to Update: 90

Source: Butte County Air Quality Management District
Telephone: 530-332-9400
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN FEATHER RIVER DIST: Feather River Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Feather River Air Quality Management District.

Date of Government Version: 03/08/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 06/05/2023
Number of Days to Update: 88

Source: Feather River Air Quality Management District
Telephone: 530-634-7659
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SAN DIEGO CO DIST: San Diego County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the San Diego County Air Pollution Control District.

Date of Government Version: 03/19/2024
Date Data Arrived at EDR: 03/21/2024
Date Made Active in Reports: 04/12/2024
Number of Days to Update: 22

Source: San Diego County Air Pollution Control District
Telephone: 858-586-2616
Last EDR Contact: 03/19/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities
A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 04/02/2024
Date Data Arrived at EDR: 04/05/2024
Date Made Active in Reports: 04/15/2024
Number of Days to Update: 10

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 03/08/2024
Next Scheduled EDR Contact: 06/10/2024
Data Release Frequency: Annually

DRYCLEAN GRANT: Grant Recipients List
Assembly Bill 998 (AB 998) established the Non-Toxic Dry Cleaning Incentive Program to provide financial assistance to the dry cleaning industry to switch from systems using perchloroethylene (Perc), an identified toxic air contaminant and potential human carcinogen, to non-toxic and non-smog forming alternatives.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 01/26/2024
Date Made Active in Reports: 04/16/2024
Number of Days to Update: 81

Source: California Air Resources Board
Telephone: 916-323-0006
Last EDR Contact: 04/25/2024
Next Scheduled EDR Contact: 08/05/2024
Data Release Frequency: Varies

DRYCLEAN LAKE CO DIST: Lake County Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Lake County Air Quality Management District,

Date of Government Version: 02/15/2024
Date Data Arrived at EDR: 02/16/2024
Date Made Active in Reports: 05/02/2024
Number of Days to Update: 76

Source: Lake County Air Quality Management District
Telephone: 707-263-7000
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 02/26/2024
Date Data Arrived at EDR: 02/27/2024
Date Made Active in Reports: 05/15/2024
Number of Days to Update: 78

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 02/26/2024
Next Scheduled EDR Contact: 06/10/2024
Data Release Frequency: Varies

DRYCLEAN MENDO CO DIST: Mendocino County Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Mendocino County Air Quality Management District.

Date of Government Version: 02/26/2024
Date Data Arrived at EDR: 02/28/2024
Date Made Active in Reports: 05/15/2024
Number of Days to Update: 77

Source: Mendocino County Air Quality Management District
Telephone: 707-463-4354
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN EAST KERN DIST: Eastern Kern Air Pollution Control District District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Eastern Kern Air Pollution Control District.

Date of Government Version: 01/12/2023
Date Data Arrived at EDR: 04/26/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 79

Source: Eastern Kern Air Pollution Control District
Telephone: 661-862-9684
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN IMPERIAL CO DIST: Imperial County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Imperial County Air Pollution Control District

Date of Government Version: 04/25/2023
Date Data Arrived at EDR: 04/26/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 79

Source: Imperial County Air Pollution Control District
Telephone: 442-265-1800
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN YOLO-SOLANO DIST: Yolo-Solano Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Yolo-Solano Air Quality Management District.

Date of Government Version: 01/04/2024
Date Data Arrived at EDR: 01/05/2024
Date Made Active in Reports: 03/20/2024
Number of Days to Update: 75

Source: Yolo-Solano Air Quality Management District
Telephone: 530-757-3650
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SHASTA CO DIST: Shasta County Air Quality Management District District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Shasta County Air Quality Management District.

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 78

Source: Shasta County Air Quality Management District
Telephone: 530-225-5674
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN MONTEREY BAY DIST: Monterey Bay Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Monterey Bay Air Quality Management District.

Date of Government Version: 01/03/2024
Date Data Arrived at EDR: 01/05/2024
Date Made Active in Reports: 03/20/2024
Number of Days to Update: 75

Source: Monterey Bay Air Quality Management District
Telephone: 831-647-9411
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SAN LUIS OB CO DIST: San Luis Obispo County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the San Luis Obispo County Air Pollution Control District.

Date of Government Version: 01/03/2024
Date Data Arrived at EDR: 01/04/2024
Date Made Active in Reports: 03/20/2024
Number of Days to Update: 76

Source: San Luis Obispo County Air Pollution Control District
Telephone: 805-781-5756
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN PLACER CO DIST: Placer County Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Placer County Air Quality Management District.

Date of Government Version: 05/15/2023
Date Data Arrived at EDR: 05/17/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 89

Source: Placer County Air Quality Management District
Telephone: 530-745-2335
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SAN JOAQ VAL DIST: San Joaquin Valley Air Pollution Control District District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the San Joaquin Valley Air Pollution Control District.

Date of Government Version: 01/04/2024
Date Data Arrived at EDR: 01/04/2024
Date Made Active in Reports: 03/21/2024
Number of Days to Update: 77

Source: San Joaquin Valley Air Pollution Control District
Telephone: 559-230-6001
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN BAY AREA DIST: Bay Area Air Quality Management District Drycleaner Facility Listing
Bay Area Air Quality Management District Drycleaner Facility Listing.

Date of Government Version: 02/20/2019
Date Data Arrived at EDR: 05/30/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1432

Source: Bay Area Air Quality Management District
Telephone: 415-516-1916
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN CALAVERAS CO DIST: Calaveras County Environmental Management Agency Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Calaveras County Environmental Management Agency.

Date of Government Version: 06/17/2019
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1412

Source: Calaveras County Environmental Management Agency
Telephone: 209-754-6399
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Varies

DRYCLEAN NO COAST UNIFIED DIST: North Coast Unified Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the North Coast Unified Air Quality Management District.

Date of Government Version: 11/30/2016
Date Data Arrived at EDR: 04/19/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1473

Source: North Coast Unified Air Quality Management District
Telephone: 707-443-3093
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN NO SIERRA DIST: Northern Sierra Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Northern Sierra Air Quality Management District,

Date of Government Version: 05/07/2019
Date Data Arrived at EDR: 05/07/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1455

Source: Northern Sierra Air Quality Management District
Telephone: 530-274-9350
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SANTA BARB CO DIST: Santa Barbara County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Santa Barbara County Air Pollution Control District.

Date of Government Version: 02/19/2019
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1475

Source: Santa Barbara County Air Pollution Control District
Telephone: 805-961-8867
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN TEHAMA CO DIST: Tehama County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Tehama County Air Pollution Control District.

Date of Government Version: 04/24/2019
Date Data Arrived at EDR: 04/24/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1468

Source: Tehama County Air Pollution Control District
Telephone: 530-527-3717
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN GLENN CO DIST: Glenn County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Glenn County Air Pollution Control District.

Date of Government Version: 01/08/2024
Date Data Arrived at EDR: 01/10/2024
Date Made Active in Reports: 03/27/2024
Number of Days to Update: 77

Source: Glenn County Air Pollution Control District
Telephone: 530-934-6500
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN NO SONOMA CO DIST: Norther Sonoma County County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Northern Sonoma County Air Pollution Control District.,

Date of Government Version: 01/05/2024
Date Data Arrived at EDR: 01/10/2024
Date Made Active in Reports: 03/27/2024
Number of Days to Update: 77

Source: Santa Barbara County Air Pollution Control District
Telephone: 707-433-5911
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SACRAMENTO METO DIST: Sacramento Metropolitan Air Quality Management DistrictDrycleaner Facility Listing
A listing of drycleaner facility locations, for the Sacramento Metropolitan Air Quality Management District.

Date of Government Version: 01/03/2024
Date Data Arrived at EDR: 01/10/2024
Date Made Active in Reports: 03/27/2024
Number of Days to Update: 77

Source: Sacramento Metropolitan Air Quality Management District
Telephone: 916-874-3958
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

EMI: Emissions Inventory Data
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 06/09/2023
Date Made Active in Reports: 08/30/2023
Number of Days to Update: 82

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 03/14/2024
Next Scheduled EDR Contact: 06/24/2024
Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 01/16/2024
Date Data Arrived at EDR: 01/16/2024
Date Made Active in Reports: 04/03/2024
Number of Days to Update: 78

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 04/16/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

FIN ASSURANCE 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 01/11/2024
Date Data Arrived at EDR: 01/16/2024
Date Made Active in Reports: 04/03/2024
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 04/12/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

FIN ASSURANCE 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 02/07/2024
Date Data Arrived at EDR: 02/28/2024
Date Made Active in Reports: 05/15/2024
Number of Days to Update: 77

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 05/02/2024
Next Scheduled EDR Contact: 08/19/2024
Data Release Frequency: Varies

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 02/07/2024
Date Data Arrived at EDR: 02/07/2024
Date Made Active in Reports: 02/07/2024
Number of Days to Update: 0

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/14/2024
Next Scheduled EDR Contact: 08/26/2024
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 01/02/2024
Date Data Arrived at EDR: 01/03/2024
Date Made Active in Reports: 03/21/2024
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 04/04/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Quarterly

HWTS: Hazardous Waste Tracking System

DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.

Date of Government Version: 01/26/2024
Date Data Arrived at EDR: 01/30/2024
Date Made Active in Reports: 04/17/2024
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-324-2444
Last EDR Contact: 05/09/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 01/03/2024
Date Made Active in Reports: 03/21/2024
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 04/04/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Annually

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 11/29/2023
Date Data Arrived at EDR: 11/29/2023
Date Made Active in Reports: 02/23/2024
Number of Days to Update: 86

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 11/08/2023
Date Data Arrived at EDR: 11/22/2023
Date Made Active in Reports: 02/16/2024
Number of Days to Update: 86

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 02/27/2024
Next Scheduled EDR Contact: 06/10/2024
Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 02/05/2024
Date Data Arrived at EDR: 02/06/2024
Date Made Active in Reports: 04/25/2024
Number of Days to Update: 79

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 05/07/2024
Next Scheduled EDR Contact: 08/19/2024
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 11/22/2023
Date Data Arrived at EDR: 11/22/2023
Date Made Active in Reports: 02/16/2024
Number of Days to Update: 86

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 02/27/2024
Next Scheduled EDR Contact: 06/10/2024
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 11/29/2023
Date Data Arrived at EDR: 11/29/2023
Date Made Active in Reports: 02/23/2024
Number of Days to Update: 86

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 12/06/2023
Date Data Arrived at EDR: 12/06/2023
Date Made Active in Reports: 02/29/2024
Number of Days to Update: 85

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 03/08/2024
Next Scheduled EDR Contact: 06/24/2024
Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/03/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 01/26/2021
Number of Days to Update: 82

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 04/25/2024
Next Scheduled EDR Contact: 08/12/2024
Data Release Frequency: Annually

SANTA CRUZ CO SITE MITI: Site Mitigation Listing
Sites may become contaminated with toxic chemicals through illegal dumping or disposal, from leaking underground storage tanks, or through industrial or commercial activities.The goal of the site mitigation program is to protect the public health and the environment while facilitating completion of contaminated site clean-up projects in a timely manner.

Date of Government Version: 12/03/2018
Date Data Arrived at EDR: 06/23/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 20

Source: Santa Cruz Environmental Health Services
Telephone: 831-454-2761
Last EDR Contact: 05/09/2024
Next Scheduled EDR Contact: 08/26/2024
Data Release Frequency: Varies

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 11/29/2023
Date Data Arrived at EDR: 11/29/2023
Date Made Active in Reports: 02/27/2024
Number of Days to Update: 90

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)
Underground control injection sites

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/05/2023
Date Made Active in Reports: 02/28/2024
Number of Days to Update: 85

Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 02/11/2021
Date Data Arrived at EDR: 07/01/2021
Date Made Active in Reports: 09/29/2021
Number of Days to Update: 90

Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 04/04/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 05/09/2024
Next Scheduled EDR Contact: 08/26/2024
Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 03/15/2024
Next Scheduled EDR Contact: 07/01/2024
Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/05/2023
Date Made Active in Reports: 02/28/2024
Number of Days to Update: 85

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)
Projects sites

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/05/2023
Date Made Active in Reports: 02/28/2024
Number of Days to Update: 85

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing
In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 11/29/2023
Date Data Arrived at EDR: 11/29/2023
Date Made Active in Reports: 02/22/2024
Number of Days to Update: 85

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System
The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 02/26/2024
Date Data Arrived at EDR: 02/27/2024
Date Made Active in Reports: 05/14/2024
Number of Days to Update: 77

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 02/27/2024
Next Scheduled EDR Contact: 06/10/2024
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 01/16/2024
Date Data Arrived at EDR: 01/16/2024
Date Made Active in Reports: 04/03/2024
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 04/16/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/05/2023
Date Made Active in Reports: 02/28/2024
Number of Days to Update: 85

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/05/2023
Date Made Active in Reports: 02/28/2024
Number of Days to Update: 85

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)

Produced water ponds sites

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/05/2023
Date Made Active in Reports: 02/28/2024
Number of Days to Update: 85

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)

Sampling point - public sites

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/05/2023
Date Made Active in Reports: 02/28/2024
Number of Days to Update: 85

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)

Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/05/2023
Date Made Active in Reports: 02/28/2024
Number of Days to Update: 85
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Varies

UST FINDER RELEASE: UST Finder Releases Database

US EPA's UST Finder data is a national composite of leaking underground storage tanks. This data contains information about, and locations of, leaking underground storage tanks. Data was collected from state sources and standardized into a national profile by EPA's Office of Underground Storage Tanks, Office of Research and Development, and the Association of State and Territorial Solid Waste Management Officials.

Date of Government Version: 06/08/2023
Date Data Arrived at EDR: 10/31/2023
Date Made Active in Reports: 01/18/2024
Number of Days to Update: 79
Source: Environmental Protecton Agency
Telephone: 202-564-0394
Last EDR Contact: 05/08/2024
Next Scheduled EDR Contact: 08/19/2024
Data Release Frequency: Semi-Annually

UST FINDER: UST Finder Database

EPA developed UST Finder, a web map application containing a comprehensive, state-sourced national map of underground storage tank (UST) and leaking UST (LUST) data. It provides the attributes and locations of active and closed USTs, UST facilities, and LUST sites from states and from Tribal lands and US territories . UST Finder contains information about proximity of UST facilities and LUST sites to: surface and groundwater public drinking water protection areas; estimated number of private domestic wells and number of people living nearby; and flooding and wildfires.

Date of Government Version: 06/08/2023
Date Data Arrived at EDR: 10/04/2023
Date Made Active in Reports: 01/18/2024
Number of Days to Update: 106
Source: Environmental Protection Agency
Telephone: 202-564-0394
Last EDR Contact: 05/08/2024
Next Scheduled EDR Contact: 08/19/2024
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A
Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 03/28/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks
Underground storage tank sites located in Alameda county.

Date of Government Version: 12/26/2023
Date Data Arrived at EDR: 12/26/2023
Date Made Active in Reports: 03/19/2024
Number of Days to Update: 84

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 03/28/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List
Cupa Facility List

Date of Government Version: 04/27/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 77

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 04/25/2024
Next Scheduled EDR Contact: 08/12/2024
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing
Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 03/28/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 12/18/2023
Date Data Arrived at EDR: 12/18/2023
Date Made Active in Reports: 03/13/2024
Number of Days to Update: 86

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 03/15/2024
Next Scheduled EDR Contact: 07/01/2024
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/06/2020
Date Data Arrived at EDR: 04/23/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 78

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 04/25/2024
Next Scheduled EDR Contact: 08/12/2024
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 01/19/2024
Date Data Arrived at EDR: 01/24/2024
Date Made Active in Reports: 04/09/2024
Number of Days to Update: 76

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 04/19/2024
Next Scheduled EDR Contact: 08/05/2024
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

Date of Government Version: 02/05/2024
Date Data Arrived at EDR: 02/08/2024
Date Made Active in Reports: 04/26/2024
Number of Days to Update: 78

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 04/19/2024
Next Scheduled EDR Contact: 08/05/2024
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List
CUPA facility list.

Date of Government Version: 08/08/2022
Date Data Arrived at EDR: 08/09/2022
Date Made Active in Reports: 09/01/2022
Number of Days to Update: 23

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 04/19/2024
Next Scheduled EDR Contact: 08/05/2024
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 06/28/2021
Date Data Arrived at EDR: 12/21/2021
Date Made Active in Reports: 03/03/2022
Number of Days to Update: 72

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 03/28/2024
Next Scheduled EDR Contact: 07/08/2024
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 04/12/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List
CUPA facility list.

Date of Government Version: 08/12/2021
Date Data Arrived at EDR: 08/12/2021
Date Made Active in Reports: 11/08/2021
Number of Days to Update: 88

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 05/09/2024
Next Scheduled EDR Contact: 08/26/2024
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List
Cupa facility list.

Date of Government Version: 01/17/2024
Date Data Arrived at EDR: 01/18/2024
Date Made Active in Reports: 04/03/2024
Number of Days to Update: 76

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 04/12/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 05/09/2024
Next Scheduled EDR Contact: 08/26/2024
Data Release Frequency: Varies

KERN COUNTY:

CUPA KERN: CUPA Facility List
A listing of sites included in the Kern County Hazardous Material Business Plan.

Date of Government Version: 10/30/2023
Date Data Arrived at EDR: 11/01/2023
Date Made Active in Reports: 01/23/2024
Number of Days to Update: 83

Source: Kern County Public Health
Telephone: 661-321-3000
Last EDR Contact: 04/25/2024
Next Scheduled EDR Contact: 08/12/2024
Data Release Frequency: Varies

UST KERN: Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 04/25/2024
Date Data Arrived at EDR: 05/01/2024
Date Made Active in Reports: 05/08/2024
Number of Days to Update: 7

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 04/25/2024
Next Scheduled EDR Contact: 08/12/2024
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 12/03/2020
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/14/2021
Number of Days to Update: 78

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 05/09/2024
Next Scheduled EDR Contact: 08/26/2024
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List
Cupa facility list

Date of Government Version: 02/05/2024
Date Data Arrived at EDR: 02/08/2024
Date Made Active in Reports: 04/26/2024
Number of Days to Update: 78

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 04/08/2024
Next Scheduled EDR Contact: 07/22/2024
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List
Cupa facility list

Date of Government Version: 07/31/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 11/09/2020
Number of Days to Update: 80

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 04/12/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 03/08/2024
Next Scheduled EDR Contact: 06/24/2024
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 01/16/2024
Date Data Arrived at EDR: 01/18/2024
Date Made Active in Reports: 03/26/2024
Number of Days to Update: 68

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 04/12/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 01/09/2024
Date Data Arrived at EDR: 01/10/2024
Date Made Active in Reports: 03/27/2024
Number of Days to Update: 77

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 04/09/2024
Next Scheduled EDR Contact: 07/22/2024
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 12/31/2022
Date Data Arrived at EDR: 01/12/2023
Date Made Active in Reports: 03/29/2023
Number of Days to Update: 76

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 04/05/2024
Next Scheduled EDR Contact: 07/22/2024
Data Release Frequency: Varies

LOS ANGELES AST: Active & Inactive AST Inventory
A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/19/2024
Next Scheduled EDR Contact: 07/01/2024
Data Release Frequency: Varies

LOS ANGELES CO LF METHANE: Methane Producing Landfills
This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 04/13/2023
Date Data Arrived at EDR: 07/13/2023
Date Made Active in Reports: 09/27/2023
Number of Days to Update: 76

Source: Los Angeles County Department of Public Works
Telephone: 626-458-6973
Last EDR Contact: 04/11/2024
Next Scheduled EDR Contact: 07/22/2024
Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory
A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 12/01/2023
Date Data Arrived at EDR: 12/13/2023
Date Made Active in Reports: 12/14/2023
Number of Days to Update: 1

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/19/2024
Next Scheduled EDR Contact: 07/01/2024
Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory
A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 12/01/2023
Date Data Arrived at EDR: 12/13/2023
Date Made Active in Reports: 03/07/2024
Number of Days to Update: 85

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/19/2024
Next Scheduled EDR Contact: 07/01/2024
Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 07/11/2023
Date Data Arrived at EDR: 10/17/2023
Date Made Active in Reports: 01/09/2024
Number of Days to Update: 84

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 04/18/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 04/05/2024
Next Scheduled EDR Contact: 07/22/2024
Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 65

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 04/12/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 04/12/2023
Date Data Arrived at EDR: 05/02/2023
Date Made Active in Reports: 06/13/2023
Number of Days to Update: 42

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 04/12/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/10/2020
Date Data Arrived at EDR: 08/12/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 72

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 05/09/2024
Next Scheduled EDR Contact: 08/26/2024
Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/02/2018
Number of Days to Update: 29

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 03/22/2024
Next Scheduled EDR Contact: 07/08/2024
Data Release Frequency: Semi-Annually

MENDOCINO COUNTY:

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/22/2021
Date Data Arrived at EDR: 11/18/2021
Date Made Active in Reports: 11/22/2021
Number of Days to Update: 4

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 02/20/2024
Next Scheduled EDR Contact: 06/03/2024
Data Release Frequency: Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 11/15/2023
Date Data Arrived at EDR: 11/20/2023
Date Made Active in Reports: 02/15/2024
Number of Days to Update: 87

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 05/08/2024
Next Scheduled EDR Contact: 08/26/2024
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 02/22/2021
Date Data Arrived at EDR: 03/02/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 78

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 02/16/2024
Next Scheduled EDR Contact: 06/03/2024
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 10/04/2021
Date Data Arrived at EDR: 10/06/2021
Date Made Active in Reports: 12/29/2021
Number of Days to Update: 84

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 03/22/2024
Next Scheduled EDR Contact: 07/08/2024
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 02/16/2024
Next Scheduled EDR Contact: 06/03/2024
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 02/16/2024
Next Scheduled EDR Contact: 06/03/2024
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List
CUPA facility list.

Date of Government Version: 10/31/2023
Date Data Arrived at EDR: 11/03/2023
Date Made Active in Reports: 01/23/2024
Number of Days to Update: 81

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 04/16/2024
Next Scheduled EDR Contact: 08/05/2024
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 10/10/2023
Date Data Arrived at EDR: 11/01/2023
Date Made Active in Reports: 01/23/2024
Number of Days to Update: 83

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/02/2024
Next Scheduled EDR Contact: 08/12/2024
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 10/10/2023
Date Data Arrived at EDR: 11/01/2023
Date Made Active in Reports: 01/23/2024
Number of Days to Update: 83

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/02/2024
Next Scheduled EDR Contact: 08/12/2024
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 10/10/2023
Date Data Arrived at EDR: 11/01/2023
Date Made Active in Reports: 01/23/2024
Number of Days to Update: 83

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/02/2024
Next Scheduled EDR Contact: 08/12/2024
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 11/09/2023
Date Data Arrived at EDR: 11/09/2023
Date Made Active in Reports: 11/21/2023
Number of Days to Update: 12

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 02/26/2024
Next Scheduled EDR Contact: 06/10/2024
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 04/12/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 01/04/2024
Date Data Arrived at EDR: 01/04/2024
Date Made Active in Reports: 03/29/2024
Number of Days to Update: 85

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 12/05/2023
Next Scheduled EDR Contact: 06/24/2024
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 01/04/2024
Date Data Arrived at EDR: 01/04/2024
Date Made Active in Reports: 03/21/2024
Number of Days to Update: 77

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/08/2024
Next Scheduled EDR Contact: 06/24/2024
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 11/07/2022
Date Data Arrived at EDR: 12/21/2022
Date Made Active in Reports: 03/16/2023
Number of Days to Update: 85

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 03/25/2024
Next Scheduled EDR Contact: 07/08/2024
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 11/07/2022
Date Data Arrived at EDR: 12/09/2022
Date Made Active in Reports: 03/01/2023
Number of Days to Update: 82

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 03/25/2024
Next Scheduled EDR Contact: 07/08/2024
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List
Cupa facility list

Date of Government Version: 01/17/2024
Date Data Arrived at EDR: 01/18/2024
Date Made Active in Reports: 01/26/2024
Number of Days to Update: 8

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 05/09/2024
Next Scheduled EDR Contact: 08/12/2024
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 02/13/2024
Date Data Arrived at EDR: 02/14/2024
Date Made Active in Reports: 05/02/2024
Number of Days to Update: 78

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 04/25/2024
Next Scheduled EDR Contact: 08/12/2024
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 11/27/2023
Date Data Arrived at EDR: 11/27/2023
Date Made Active in Reports: 02/16/2024
Number of Days to Update: 81

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 02/27/2024
Next Scheduled EDR Contact: 06/10/2024
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/01/2023
Date Data Arrived at EDR: 01/31/2024
Date Made Active in Reports: 04/17/2024
Number of Days to Update: 77

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 04/12/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 07/22/2021
Date Data Arrived at EDR: 10/19/2021
Date Made Active in Reports: 01/13/2022
Number of Days to Update: 86

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 04/12/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 02/23/2024
Next Scheduled EDR Contact: 06/10/2024
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 02/01/2024
Date Data Arrived at EDR: 02/01/2024
Date Made Active in Reports: 04/24/2024
Number of Days to Update: 83

Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 04/25/2024
Next Scheduled EDR Contact: 08/12/2024
Data Release Frequency: Varies

LUST SAN FRANCISCO: Local Oversite Facilities
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 04/25/2024
Next Scheduled EDR Contact: 08/12/2024
Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 02/01/2024
Date Data Arrived at EDR: 02/01/2024
Date Made Active in Reports: 04/24/2024
Number of Days to Update: 83

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 04/25/2024
Next Scheduled EDR Contact: 08/12/2024
Data Release Frequency: Quarterly

SAN FRANCISO COUNTY:

SAN FRANCISCO MAHER: Maher Ordinance Property Listing
a listing of properties that fall within a Maher Ordinance, for all of San Francisco

Date of Government Version: 01/15/2024
Date Data Arrived at EDR: 01/18/2024
Date Made Active in Reports: 04/05/2024
Number of Days to Update: 78

Source: San Francisco Planning
Telephone: 628-652-7483
Last EDR Contact: 04/16/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 03/08/2024
Next Scheduled EDR Contact: 06/24/2024
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List
Cupa Facility List.

Date of Government Version: 02/14/2024
Date Data Arrived at EDR: 02/14/2024
Date Made Active in Reports: 05/02/2024
Number of Days to Update: 78

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 05/09/2024
Next Scheduled EDR Contact: 08/26/2024
Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 02/20/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 64

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/07/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 03/29/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 61

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/01/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 05/09/2024
Next Scheduled EDR Contact: 08/26/2024
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List
Cupa facility list

Date of Government Version: 02/21/2024
Date Data Arrived at EDR: 02/22/2024
Date Made Active in Reports: 05/08/2024
Number of Days to Update: 76

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 05/09/2024
Next Scheduled EDR Contact: 08/26/2024
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 02/16/2024
Next Scheduled EDR Contact: 06/03/2024
Data Release Frequency: No Update Planned

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 05/09/2024
Next Scheduled EDR Contact: 08/26/2024
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 05/09/2024
Next Scheduled EDR Contact: 08/26/2024
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 08/13/2019
Number of Days to Update: 68

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 02/23/2024
Next Scheduled EDR Contact: 06/10/2024
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 09/15/2021
Date Data Arrived at EDR: 09/16/2021
Date Made Active in Reports: 12/09/2021
Number of Days to Update: 84

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 02/23/2024
Next Scheduled EDR Contact: 06/10/2024
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List
Cupa Facility list

Date of Government Version: 07/02/2021
Date Data Arrived at EDR: 07/06/2021
Date Made Active in Reports: 07/14/2021
Number of Days to Update: 8

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 03/15/2024
Next Scheduled EDR Contact: 07/01/2024
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 06/30/2021
Date Data Arrived at EDR: 06/30/2021
Date Made Active in Reports: 09/24/2021
Number of Days to Update: 86

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 03/15/2024
Next Scheduled EDR Contact: 07/01/2024
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List
Cupa facility list

Date of Government Version: 02/08/2022
Date Data Arrived at EDR: 02/10/2022
Date Made Active in Reports: 05/04/2022
Number of Days to Update: 83

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 04/05/2024
Next Scheduled EDR Contact: 07/22/2024
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 08/03/2023
Date Data Arrived at EDR: 08/24/2023
Date Made Active in Reports: 09/12/2023
Number of Days to Update: 19

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 02/26/2024
Next Scheduled EDR Contact: 06/10/2024
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List
Cupa facilities

Date of Government Version: 12/05/2023
Date Data Arrived at EDR: 02/01/2024
Date Made Active in Reports: 02/28/2024
Number of Days to Update: 27

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 05/09/2024
Next Scheduled EDR Contact: 08/12/2024
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List
Cupa facility list

Date of Government Version: 01/17/2024
Date Data Arrived at EDR: 01/18/2024
Date Made Active in Reports: 04/03/2024
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 04/12/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List
Cupa program facilities

Date of Government Version: 10/07/2022
Date Data Arrived at EDR: 10/07/2022
Date Made Active in Reports: 12/21/2022
Number of Days to Update: 75

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 04/25/2024
Next Scheduled EDR Contact: 08/12/2024
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 04/12/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 12/26/2023
Date Data Arrived at EDR: 01/24/2024
Date Made Active in Reports: 04/08/2024
Number of Days to Update: 75

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 04/15/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/22/2024
Next Scheduled EDR Contact: 07/08/2024
Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 05/02/2024
Next Scheduled EDR Contact: 08/19/2024
Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 12/26/2023
Date Data Arrived at EDR: 01/23/2024
Date Made Active in Reports: 04/09/2024
Number of Days to Update: 77

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 04/15/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 11/28/2023
Date Data Arrived at EDR: 11/29/2023
Date Made Active in Reports: 02/26/2024
Number of Days to Update: 89

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 12/18/2023
Date Data Arrived at EDR: 12/26/2023
Date Made Active in Reports: 03/19/2024
Number of Days to Update: 84

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 03/22/2024
Next Scheduled EDR Contact: 07/08/2024
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 01/22/2024
Date Data Arrived at EDR: 01/23/2024
Date Made Active in Reports: 04/08/2024
Number of Days to Update: 76

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 04/19/2024
Next Scheduled EDR Contact: 08/05/2024
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 02/05/2024
Date Data Arrived at EDR: 02/06/2024
Date Made Active in Reports: 04/25/2024
Number of Days to Update: 79

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/07/2024
Next Scheduled EDR Contact: 08/19/2024
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 03/29/2024
Next Scheduled EDR Contact: 07/15/2024
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 11/30/2023
Date Made Active in Reports: 12/01/2023
Number of Days to Update: 1

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 04/25/2024
Next Scheduled EDR Contact: 08/05/2024
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/08/2024
Next Scheduled EDR Contact: 07/22/2024
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/18/2022
Number of Days to Update: 80

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 05/13/2024
Next Scheduled EDR Contact: 08/26/2024
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/01/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: Endeavor Business Media
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data
Source: Endeavor Business Media
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.
Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

RELEVANT LIVING
SWC 52 AVENUE & VAN BUREN STREET
COACHELLA, CA 92236

TARGET PROPERTY COORDINATES

Latitude (North):	33.668402 - 33° 40' 6.25''
Longitude (West):	116.202506 - 116° 12' 9.02''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	573934.4
UTM Y (Meters):	3725482.0
Elevation:	51 ft. below sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	50004965 INDIO, CA
Version Date:	2021

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

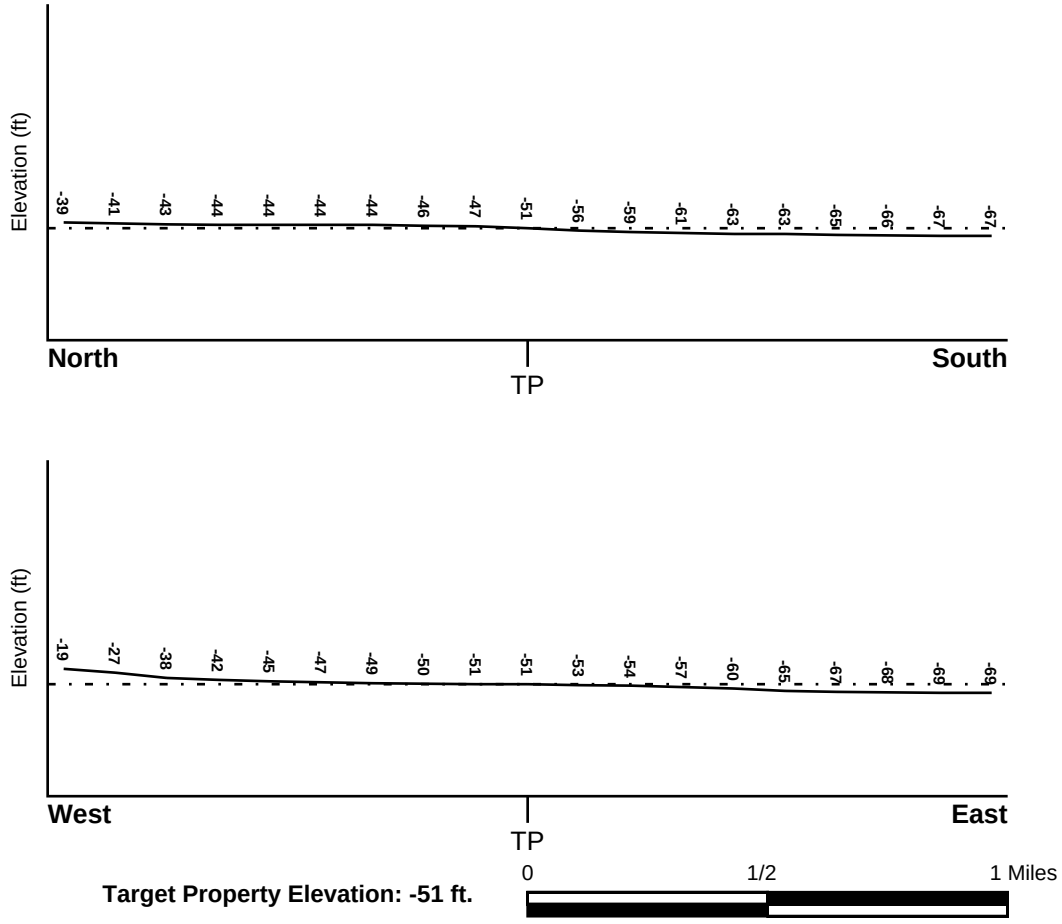
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SSE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Target Property Elevation: -51 ft.

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06065C2262G	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06065C2261G	FEMA FIRM Flood data
06065C2270G	FEMA FIRM Flood data
06065C2264G	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
INDIO	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

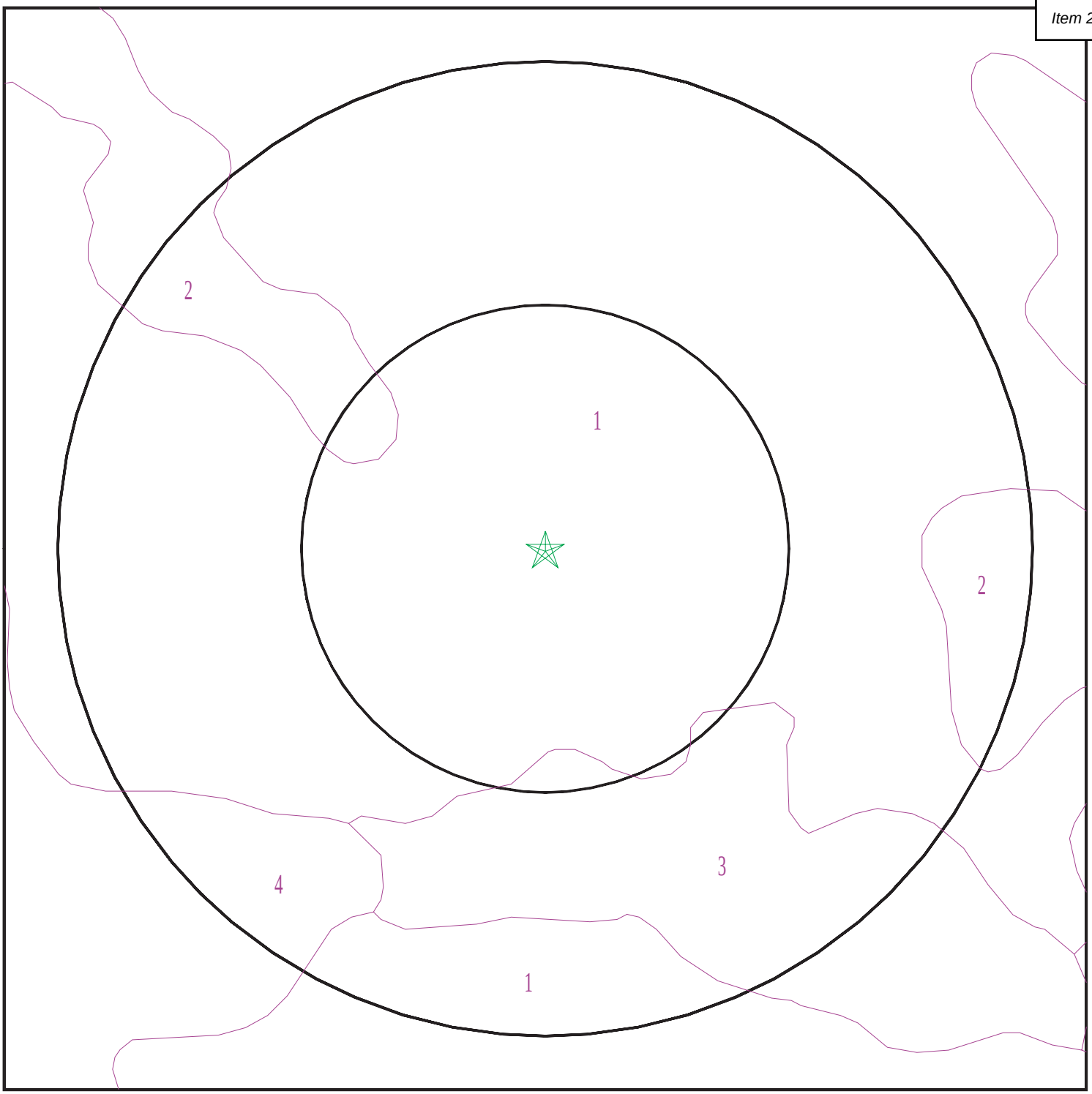
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 7655113.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Relevant Living	CLIENT:	Proterra Consulting Inc.
ADDRESS:	SWC 52 Avenue & Van Buren Street Coachella CA 92236	CONTACT:	James Minor
LAT/LONG:	33.668402 / 116.202506	INQUIRY #:	7655113.2s
		DATE:	May 16, 2024 5:53 pm

2013

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Gilman

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 122 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 8.4 Min: 7.9
2	7 inches	59 inches	stratified loamy sand to silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 8.4 Min: 7.9

Soil Map ID: 2

Soil Component Name: Coachella

Soil Surface Texture: fine sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Moderately well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 122 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 8.4 Min: 7.9
2	11 inches	59 inches	stratified sand to loamy fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 8.4 Min: 7.9

Soil Map ID: 3

Soil Component Name: Indio

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 122 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 8.4 Min: 7.9
2	9 inches	59 inches	very fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 8.4 Min: 7.9

Soil Map ID: 4

Soil Component Name: Indio

Soil Surface Texture: very fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 122 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	very fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 8.4 Min: 7.9

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	9 inches	59 inches	very fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 8.4 Min: 7.9

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	6974	1/8 - 1/4 Mile NNE

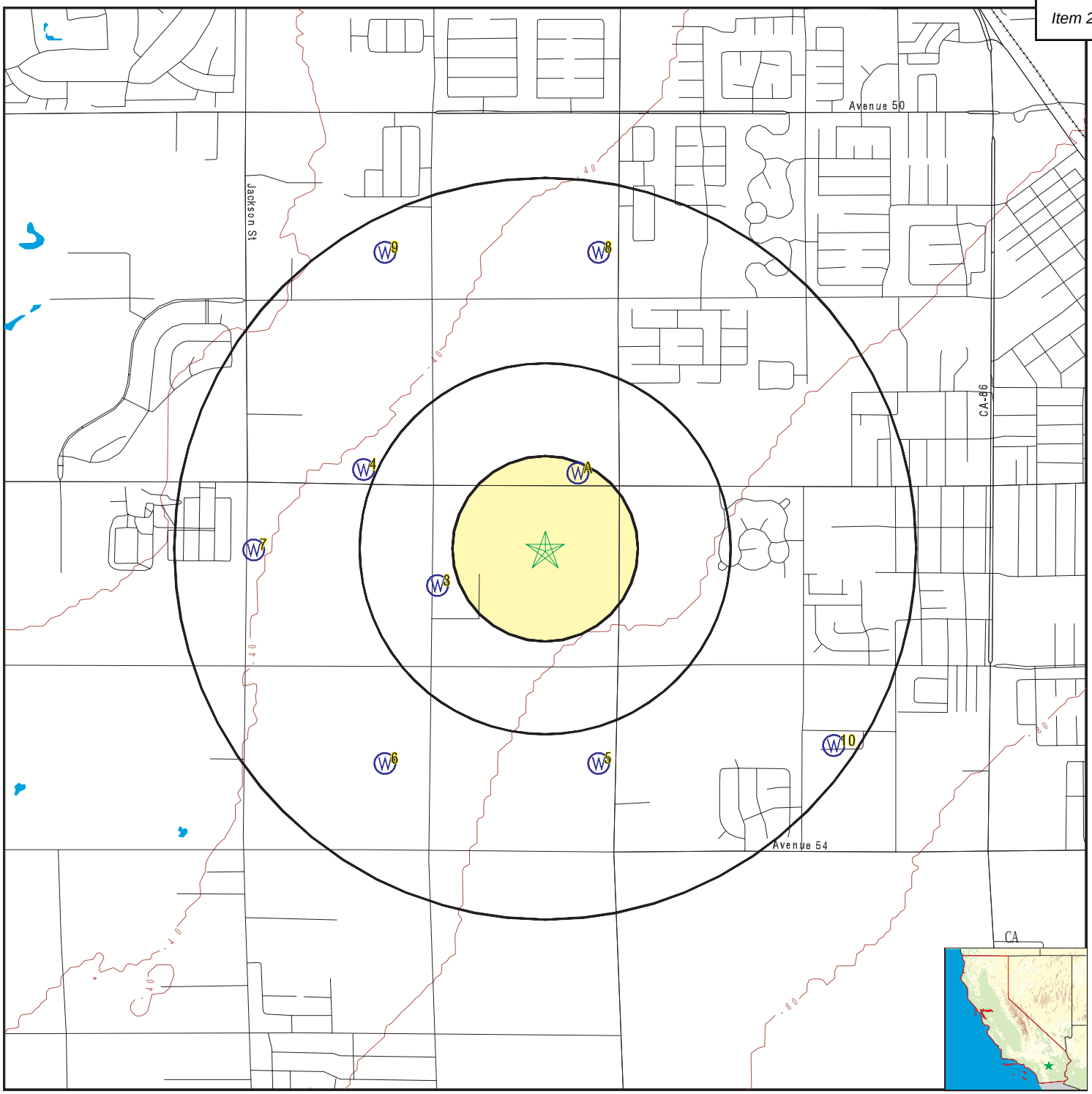
GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A2	CADDW2000005380	1/8 - 1/4 Mile NNE
3	6987	1/4 - 1/2 Mile WSW
4	CADWR0000036310	1/2 - 1 Mile WNW
5	CADDW2000023699	1/2 - 1 Mile SSE
6	CADDW2000020914	1/2 - 1 Mile SW
7	6986	1/2 - 1 Mile West
8	CADDW2000011363	1/2 - 1 Mile North
9	CADDW2000013396	1/2 - 1 Mile NNW
10	CADWR0000019891	1/2 - 1 Mile SE

PHYSICAL SETTING SOURCE MAP - 7655113.2s

Item 2.



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	Relevant Living	CLIENT:	Proterra Consulting Inc.
ADDRESS:	SWC 52 Avenue & Van Buren Street Coachella CA 92236	CONTACT:	James Minor
		INQUIRY #:	7655113.2s
LAT/LONG:	33.668402 / 116.202506	DATE:	May 16, 2024 5:53 pm

2019

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A1
NNE
1/8 - 1/4 Mile
Higher

CA WELLS **6974**

Seq:	6974	Prim sta c:	06S/07E-01R01 S
Frds no:	3301123001	County:	33
District:	63	User id:	33C
System no:	3301123	Water type:	G
Source nam:	WELL 01	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	334017.0	Longitude:	1161202.0
Precision:	2	Status:	AR
Comment 1:	83-876 AVE. 52	Comment 2:	COACHELLA CA 92236
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	3301123	System nam:	Coachella Heights Mwc
Hqname:	Not Reported	Address:	Not Reported
City:	Not Reported	State:	Not Reported
Zip:	Not Reported	Zip ext:	Not Reported
Pop serv:	0	Connection:	0
Area serve:	Not Reported		

A2
NNE
1/8 - 1/4 Mile
Higher

CA WELLS **CADDW2000005380**

GAMA:

Well ID:	CA3301123_001_001	Well Type:	MUNICIPAL
Source:	DDW	Other Names:	3301123-001
GAMA Pfas testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=CA3301123_001_001&store_num=		
GeoTracker Data:	Not Reported		

3
WSW
1/4 - 1/2 Mile
Higher

CA WELLS **6987**

Seq:	6987	Prim sta c:	06S/07E-12G02 S
Frds no:	3301684001	County:	33
District:	63	User id:	33C
System no:	3301684	Water type:	G
Source nam:	WELL 01	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	334001.0	Longitude:	1161224.0
Precision:	3	Status:	AR
Comment 1:	52-500 CALHOUN ST., COACHELLA	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	3301684	System nam:	Treasure Chest Mwc
Hqname:	Not Reported	Address:	Not Reported
City:	Not Reported	State:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Zip:	Not Reported	Zip ext:	Not Reported
Pop serv:	0	Connection:	0
Area serve:	Not Reported		

4
WNW **CA WELLS** **CADWR0000036310**
1/2 - 1 Mile
Higher

Well ID:	06S07E12D001S	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	06S07E12D001S	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=06S07E12D001S&store_num=		
GeoTracker Data:	Not Reported		

5
SSE **CA WELLS** **CADDW2000023699**
1/2 - 1 Mile
Lower

GAMA:

Well ID:	CA3301684_001_001	Well Type:	MUNICIPAL
Source:	DDW	Other Names:	3301684-001
GAMA Pfas testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=CA3301684_001_001&store_num=		
GeoTracker Data:	Not Reported		

6
SW **CA WELLS** **CADDW2000020914**
1/2 - 1 Mile
Lower

GAMA:

Well ID:	CA3301812_001_001	Well Type:	MUNICIPAL
Source:	DDW	Other Names:	3301812-001
GAMA Pfas testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=CA3301812_001_001&store_num=		
GeoTracker Data:	Not Reported		

7
West **CA WELLS** **6986**
1/2 - 1 Mile
Higher

Seq:	6986	Prim sta c:	06S/07E-12D01 S
Frds no:	3301812001	County:	33
District:	63	User id:	33C
System no:	3301812	Water type:	G
Source nam:	WELL 01	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	334006.0	Longitude:	1161255.0
Precision:	2	Status:	AR
Comment 1:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Comment 2:	CA 92236	25	
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	3301812	System nam:	Rancho Pueblo
Hqname:	Not Reported	Address:	Not Reported
City:	Not Reported	State:	Not Reported
Zip:	Not Reported	Zip ext:	Not Reported
Pop serv:	0	Connection:	0
Area serve:	Not Reported		

8
North **CA WELLS** **CADDW2000011363**
1/2 - 1 Mile
Higher

GAMA:

Well ID:	CA3301455_001_001	Well Type:	MUNICIPAL
Source:	DDW	Other Names:	3301455-001
GAMA Pfas testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=CA3301455_001_001&store_num=		
GeoTracker Data:	Not Reported		

9
NNW **CA WELLS** **CADDW2000013396**
1/2 - 1 Mile
Higher

GAMA:

Well ID:	CA3301524_001_001	Well Type:	MUNICIPAL
Source:	DDW	Other Names:	3301524-001
GAMA Pfas testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=CA3301524_001_001&store_num=		
GeoTracker Data:	Not Reported		

10
SE **CA WELLS** **CADWR0000019891**
1/2 - 1 Mile
Lower

Well ID:	06S08E07P001S	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	06S08E07P001S	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=06S08E07P001S&store_num=		
GeoTracker Data:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for RIVERSIDE County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for RIVERSIDE COUNTY, CA

Number of sites tested: 12

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.117 pCi/L	100%	0%	0%
Living Area - 2nd Floor	0.450 pCi/L	100%	0%	0%
Basement	1.700 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

Groundwater Ambient Monitoring & Assessment Program
State Water Resources Control Board
Telephone: 916-341-5577
The GAMA Program is Californias comprehensive groundwater quality monitoring program. GAMA collects data by testing the untreated, raw water in different types of wells for naturally-occurring and man-made chemicals. The GAMA data includes Domestic, Monitoring and Municipal well types from the following sources, Department of Water Resources, Department of Heath Services, EDF, Agricultural Lands, Lawrence Livermore National Laboratory, Department of Pesticide Regulation, United States Geological Survey, Groundwater Ambient Monitoring and Assessment Program and Local Groundwater Projects.

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

Geothermal Wells Listing
Department of Conservation
Telephone: 916-445-9686
Geothermal well means a well constructed to extract or return water to the ground after it has been used for heating or cooling purposes. Geothermal wells in California (except for wells on federal leases which are administered by the Bureau of Land Management) are permitted, drilled, operated, and permanently sealed and closed (plugged and abandoned) under requirements and procedures administered by the Geothermal Section of the Department of Conservations Geologic Energy Management Division (CalGEM, formerly DOGGR).

California Oil and Gas Well Locations
Source: Dept of Conservation, Geologic Energy Management Division
Telephone: 916-323-1779
Oil and Gas well locations in the state.

California Earthquake Fault Lines
Source: California Division of Mines and Geology
The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon
Source: Department of Public Health
Telephone: 916-210-8558
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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APPENDIX C

HISTORICAL REFERENCE DOCUMENTS

Relevant Living

SWC 52 Avenue & Van Buren Street

Coachella, CA 92236

Inquiry Number: 7655113.3

May 16, 2024

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

05/16/24

Site Name:

Relevant Living
SWC 52 Avenue & Van Buren
Coachella, CA 92236
EDR Inquiry # 7655113.3

Client Name:

Proterra Consulting Inc.
1022 East Garvey Avenue
Monterey Park, CA 91775
Contact: James Minor

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Proterra Consulting Inc. were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # C168-4772-895A

PO # PT-SL24-04

Project PT-SL24-04

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results

Certification #: C168-4772-895A

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

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2029

Relevant Living

SWC 52 Avenue & Van Buren Street

Coachella, CA 92236

Inquiry Number: 7655113.8

May 16, 2024

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

05/1

Site Name:

Relevant Living
SWC 52 Avenue & Van Buren
Coachella, CA 92236
EDR Inquiry # 7655113.8

Client Name:

Proterra Consulting Inc.
1022 East Garvey Avenue
Monterey Park, CA 91775
Contact: James Minor

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Search Results:

Year	Scale	Details	Source
2020	1"=500'	Flight Year: 2020	USDA/NAIP
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
2002	1"=500'	Acquisition Date: January 01, 2002	USGS/DOQQ
1996	1"=500'	Acquisition Date: September 26, 1996	USGS/DOQQ
1984	1"=500'	Flight Date: August 24, 1984	USDA
1972	1"=500'	Flight Date: August 17, 1972	USDA
1965	1"=500'	Flight Date: August 31, 1965	USGS
1959	1"=500'	Flight Date: September 06, 1959	USDA
1953	1"=500'	Flight Date: October 20, 1953	USDA
1949	1"=500'	Flight Date: February 15, 1949	USDA

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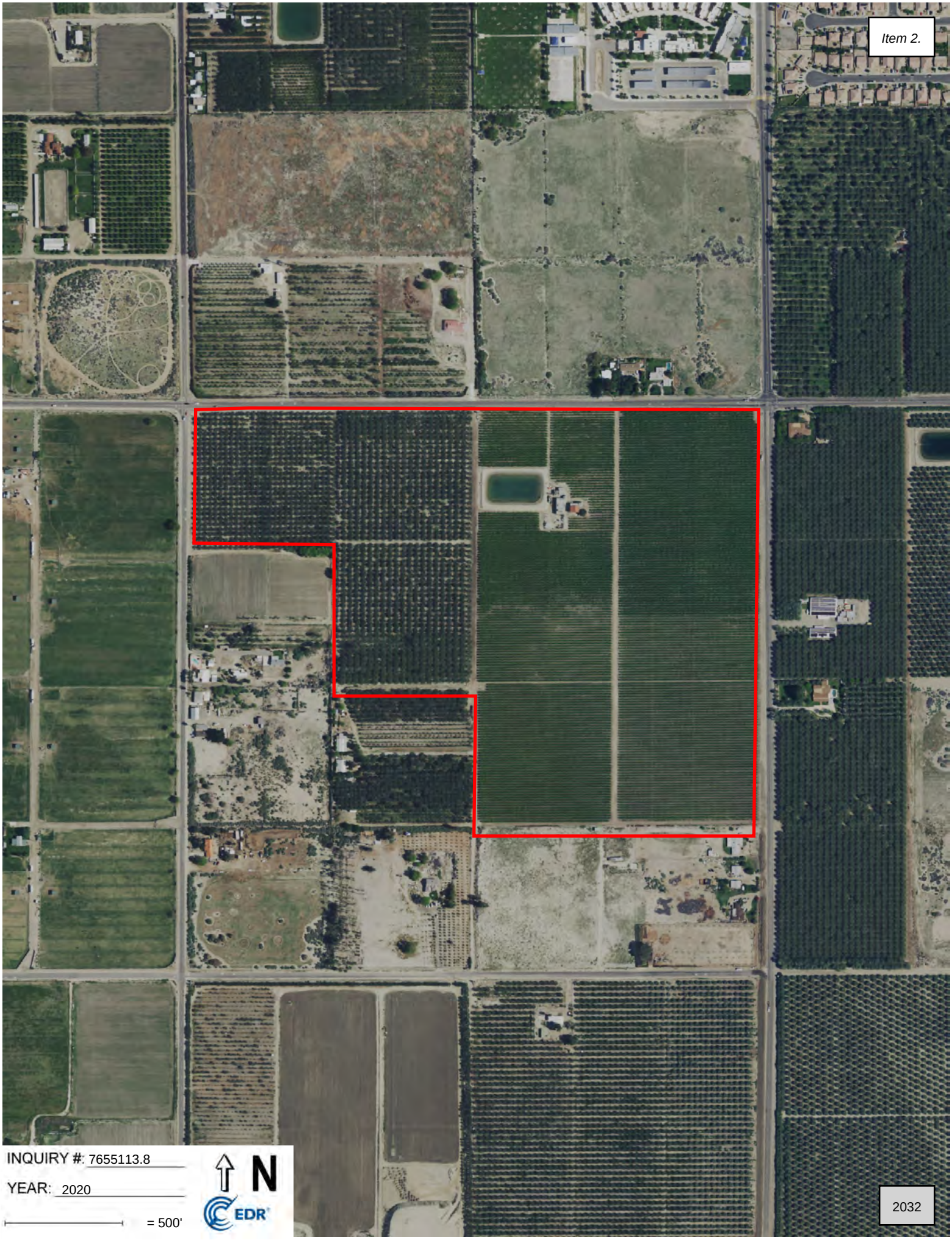
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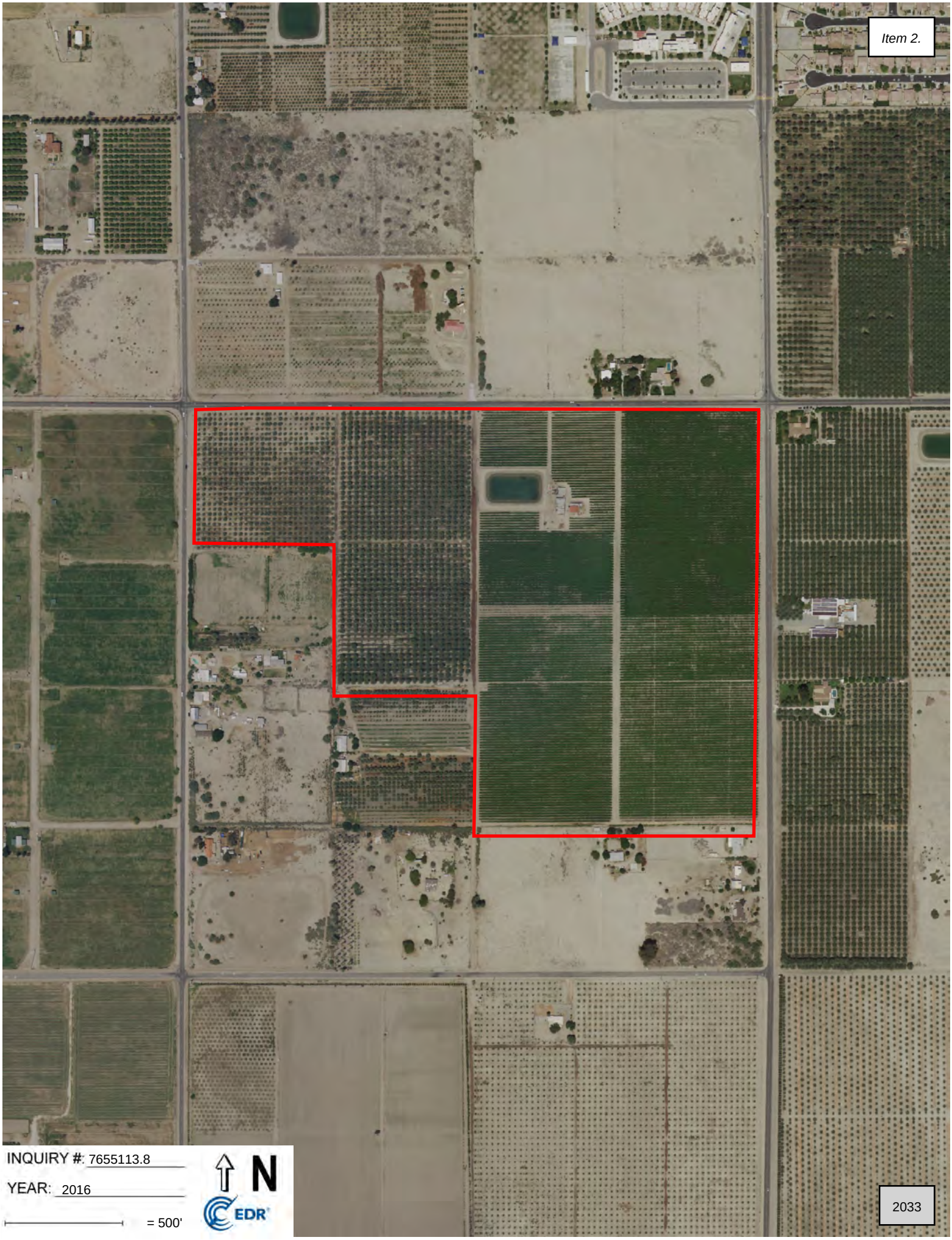
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2031


INQUIRY #: 7655113.8
YEAR: 2020
= 500'
N
EDR
2032



INQUIRY #: 7655113.8

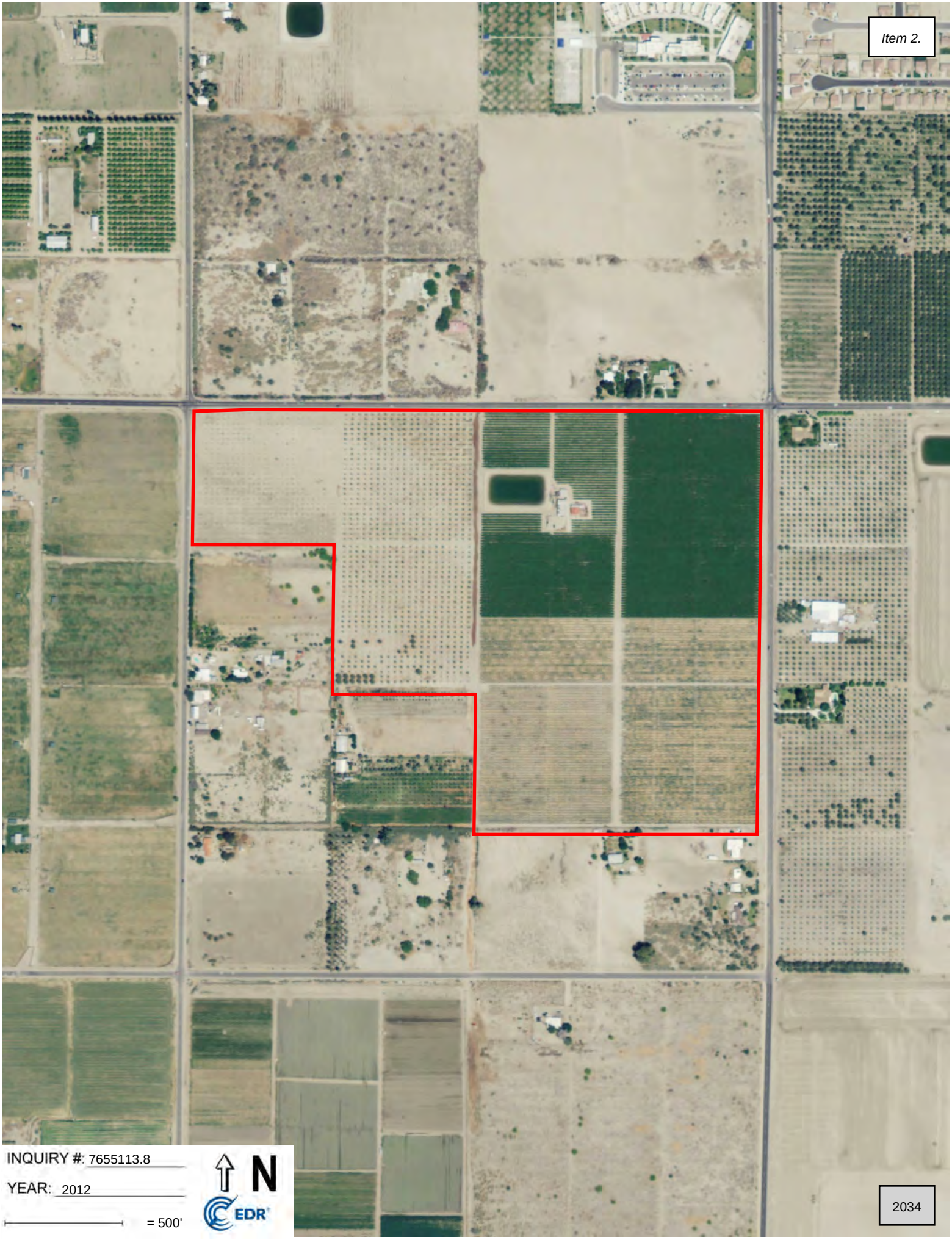
YEAR: 2016

= 500'

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EDR

2033



INQUIRY #: 7655113.8

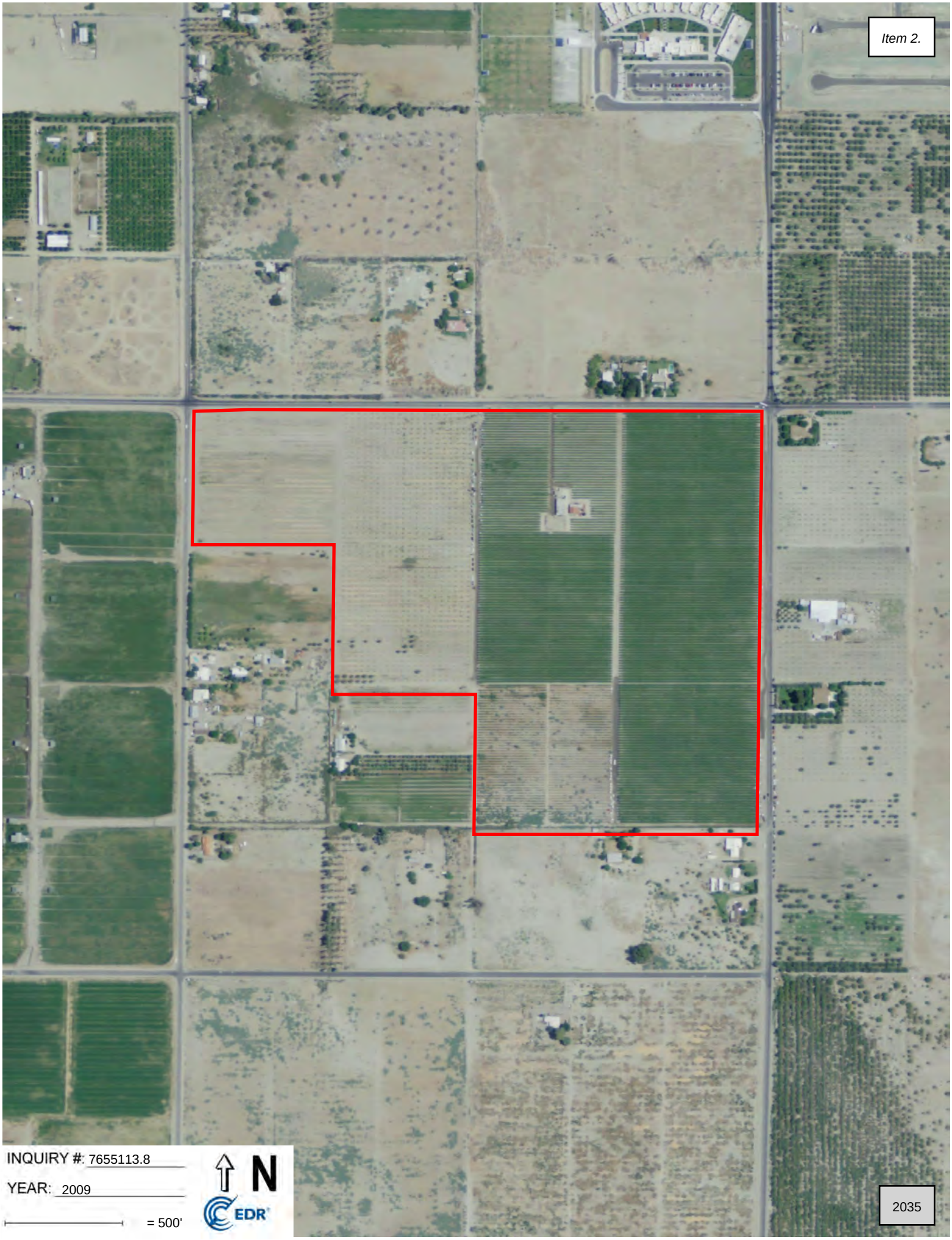
YEAR: 2012

= 500'

N

EDR

2034



INQUIRY #: 7655113.8

YEAR: 2009

= 500'

N

EDR

2035



INQUIRY #: 7655113.8

YEAR: 2006

= 500'

N

EDR

2036



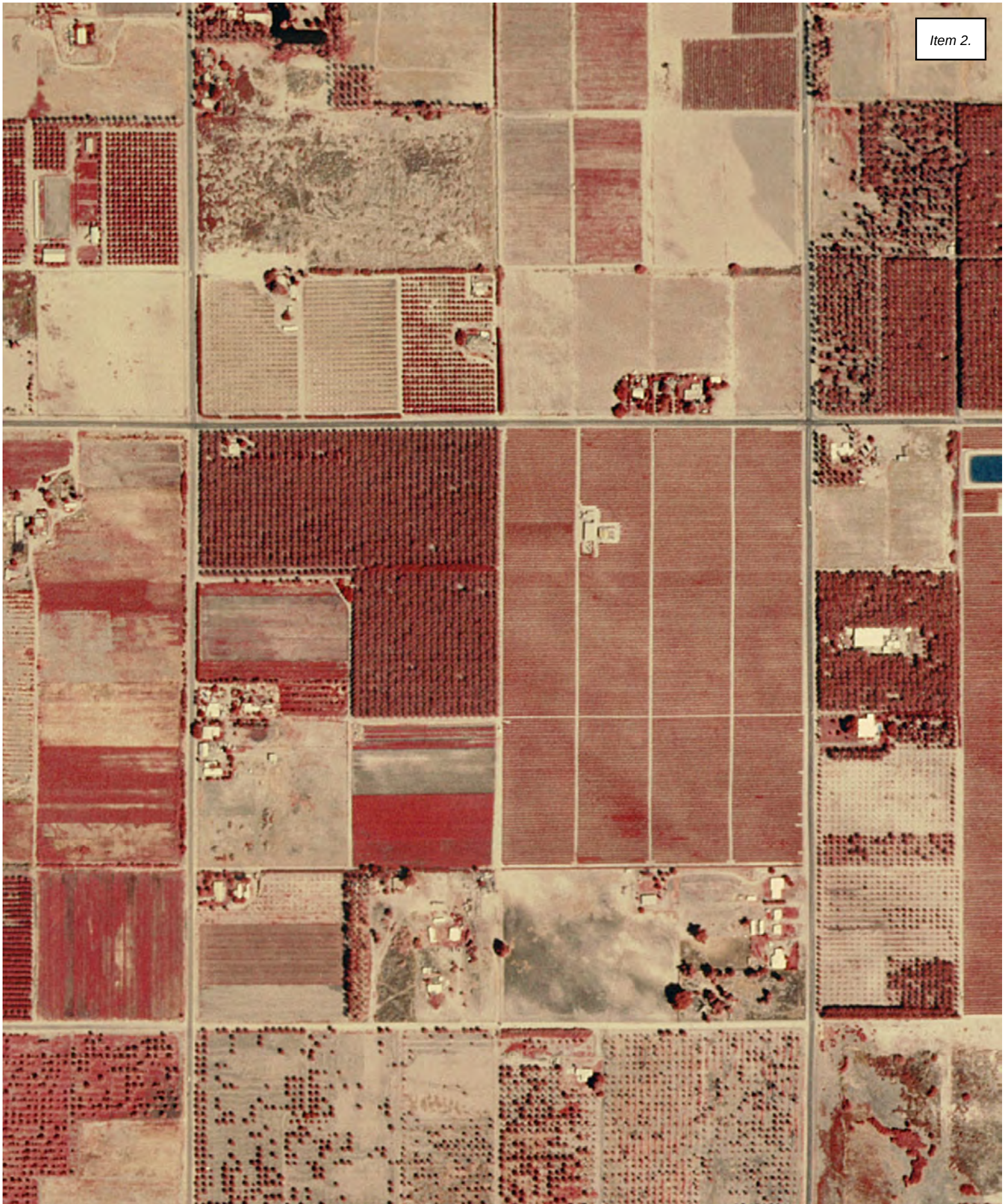
INQUIRY #: 7655113.8

YEAR: 2002

= 500'

N

EDR



INQUIRY #: 7655113.8

YEAR: 1996

= 500'

N

EDR

Subject boundary not shown because it exceeds image extent or image is not georeferenced.



INQUIRY #: 7655113.8

YEAR: 1984

= 500'

N

EDR



INQUIRY #: 7655113.8

YEAR: 1972

= 500'

N

EDR

2040



INQUIRY #: 7655113.8

YEAR: 1965

= 500'

N

EDR



INQUIRY #: 7655113.8

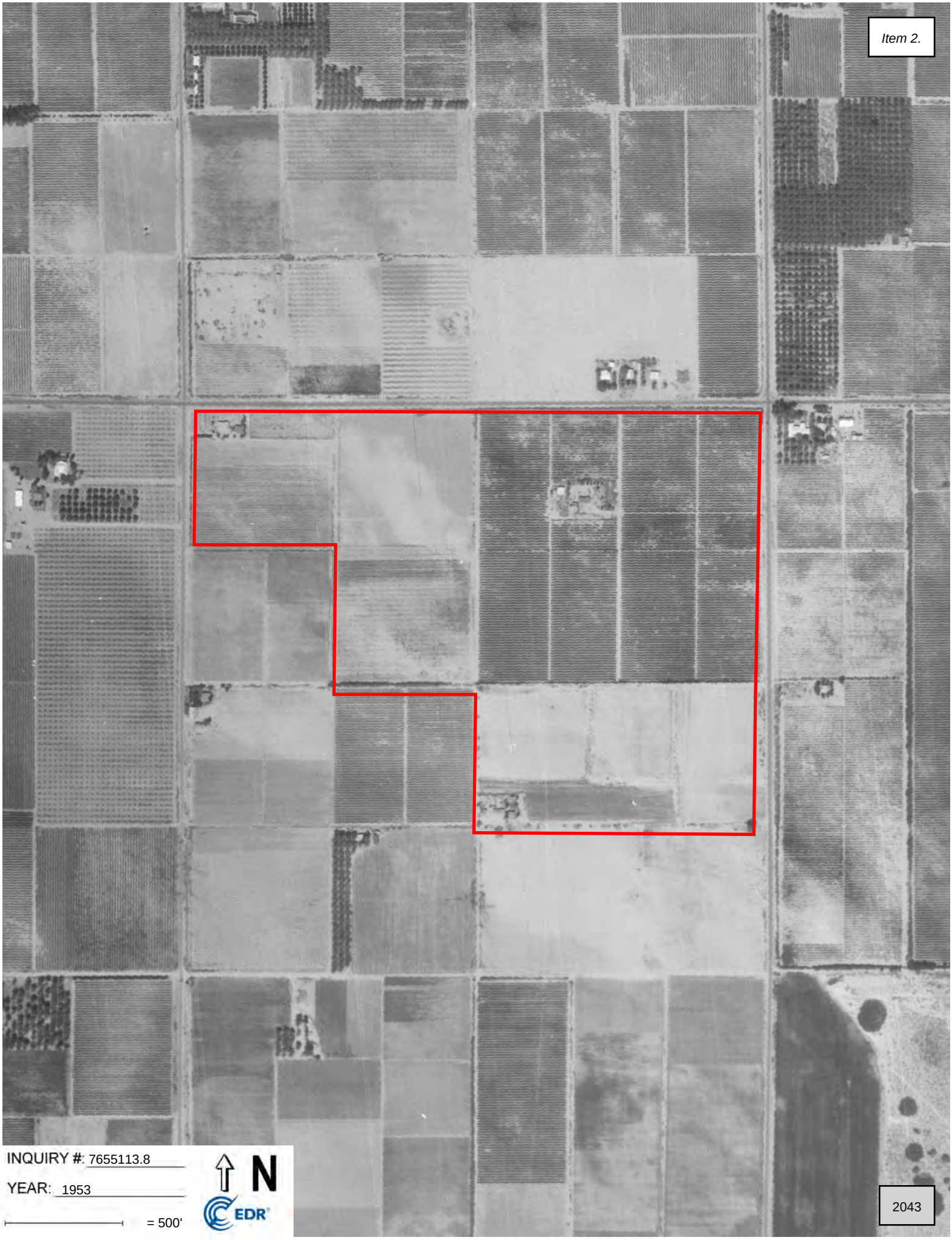
YEAR: 1959

= 500'

N

EDR

2042



INQUIRY #: 7655113.8

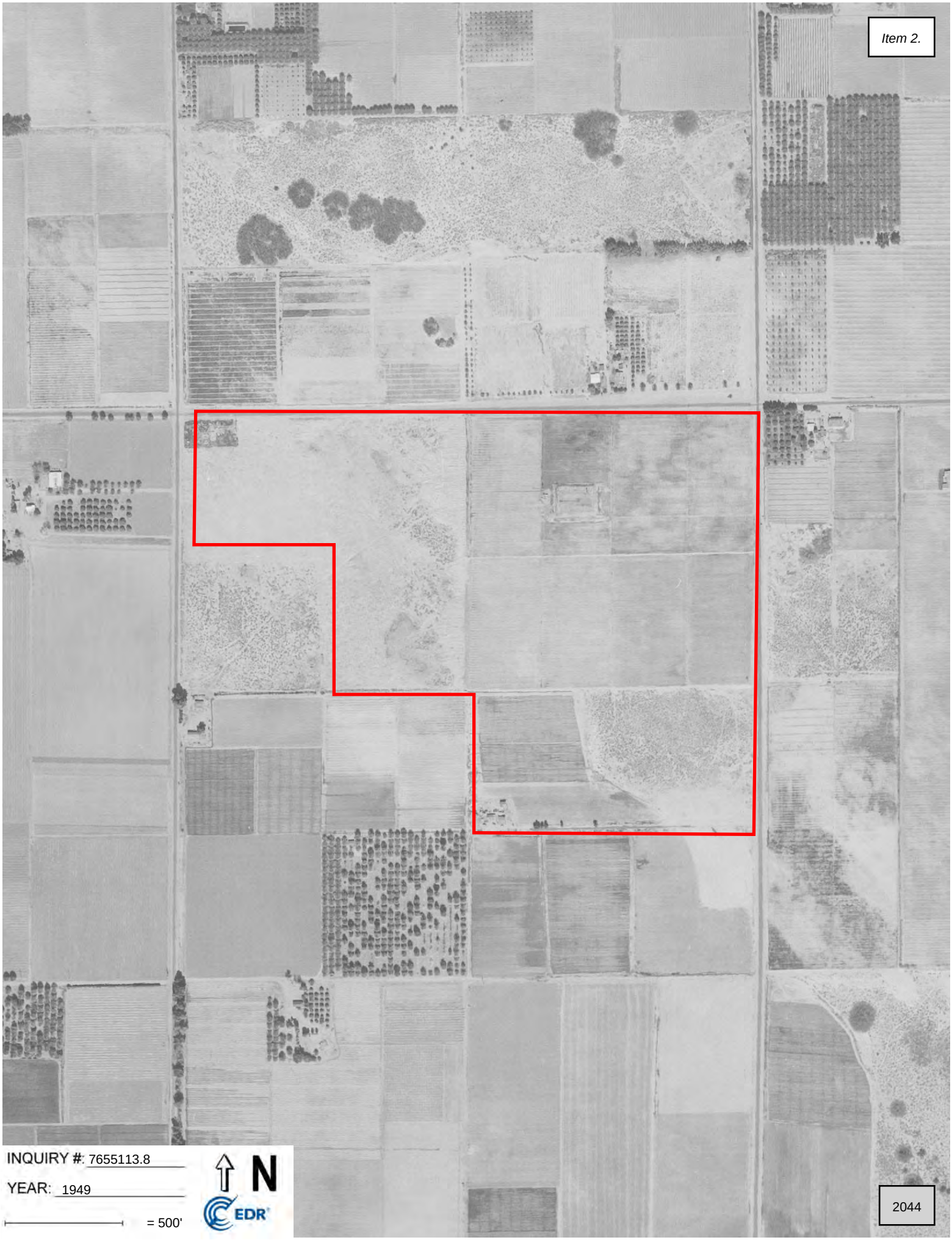
YEAR: 1953

= 500'

N

EDR

2043



INQUIRY #: 7655113.8

YEAR: 1949

= 500'

N

EDR

2044

Relevant Living

SWC 52 Avenue & Van Buren Street

Coachella, CA 92236

Inquiry Number: 7655113.4

May 16, 2024

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

05/1

Site Name:	Client Name:
Relevant Living	Proterra Consulting Inc.
SWC 52 Avenue & Van Buren	1022 East Garvey Avenue
Coachella, CA 92236	Monterey Park, CA 91775
EDR Inquiry # 7655113.4	Contact: James Minor

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Proterra Consulting Inc. were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:

P.O.# PT-SL24-04

Project: PT-SL24-04

Coordinates:

Latitude:	33.668402 33° 40' 6" North
Longitude:	-116.202506 -116° 12' 9" West
UTM Zone:	Zone 11 North
UTM X Meters:	573932.70
UTM Y Meters:	3725675.30
Elevation:	-50.98' below sea level

Maps Provided:

2021	1943
2018	1941
2015	1904
2012	
1975	
1972	
1956	
1947	

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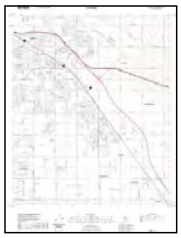
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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2021 Source Sheets



Indio
2021
7.5-minute, 24000

2018 Source Sheets



Indio
2018
7.5-minute, 24000

2015 Source Sheets



Indio
2015
7.5-minute, 24000

2012 Source Sheets



Indio
2012
7.5-minute, 24000

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1975 Source Sheets



Indio
1975
7.5-minute, 24000
Aerial Photo Revised 1975

1972 Source Sheets



Indio
1972
7.5-minute, 24000
Aerial Photo Revised 1972

1956 Source Sheets



Indio
1956
7.5-minute, 24000
Aerial Photo Revised 1953

1947 Source Sheets



COACHELLA
1947
15-minute, 50000

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1943 Source Sheets



Coachella
1943
15-minute, 62500
Aerial Photo Revised 1941

1941 Source Sheets



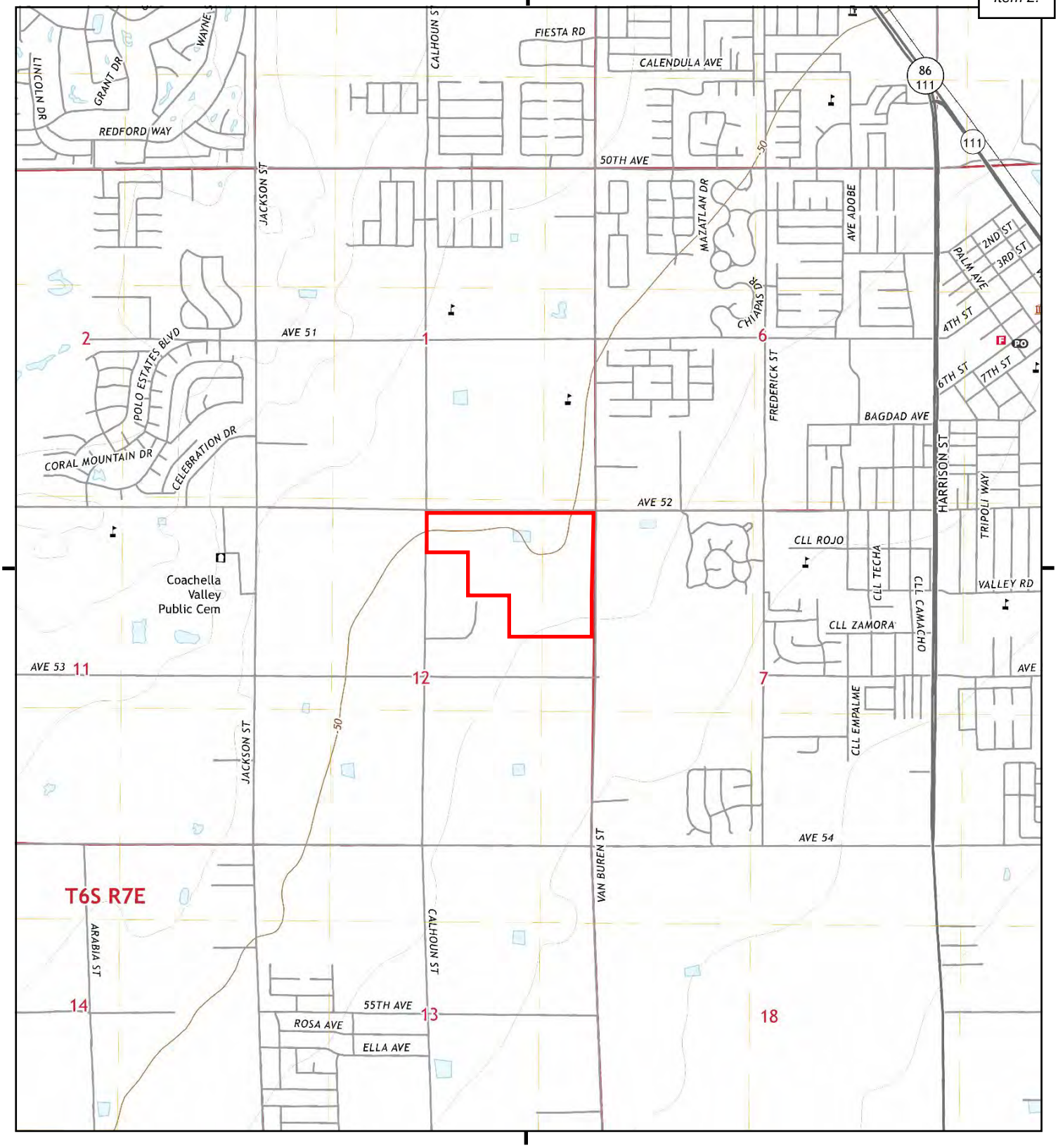
Coachella
1941
15-minute, 62500
Aerial Photo Revised 1941

1904 Source Sheets



Indio
1904
30-minute, 125000

Historical Topo Map



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

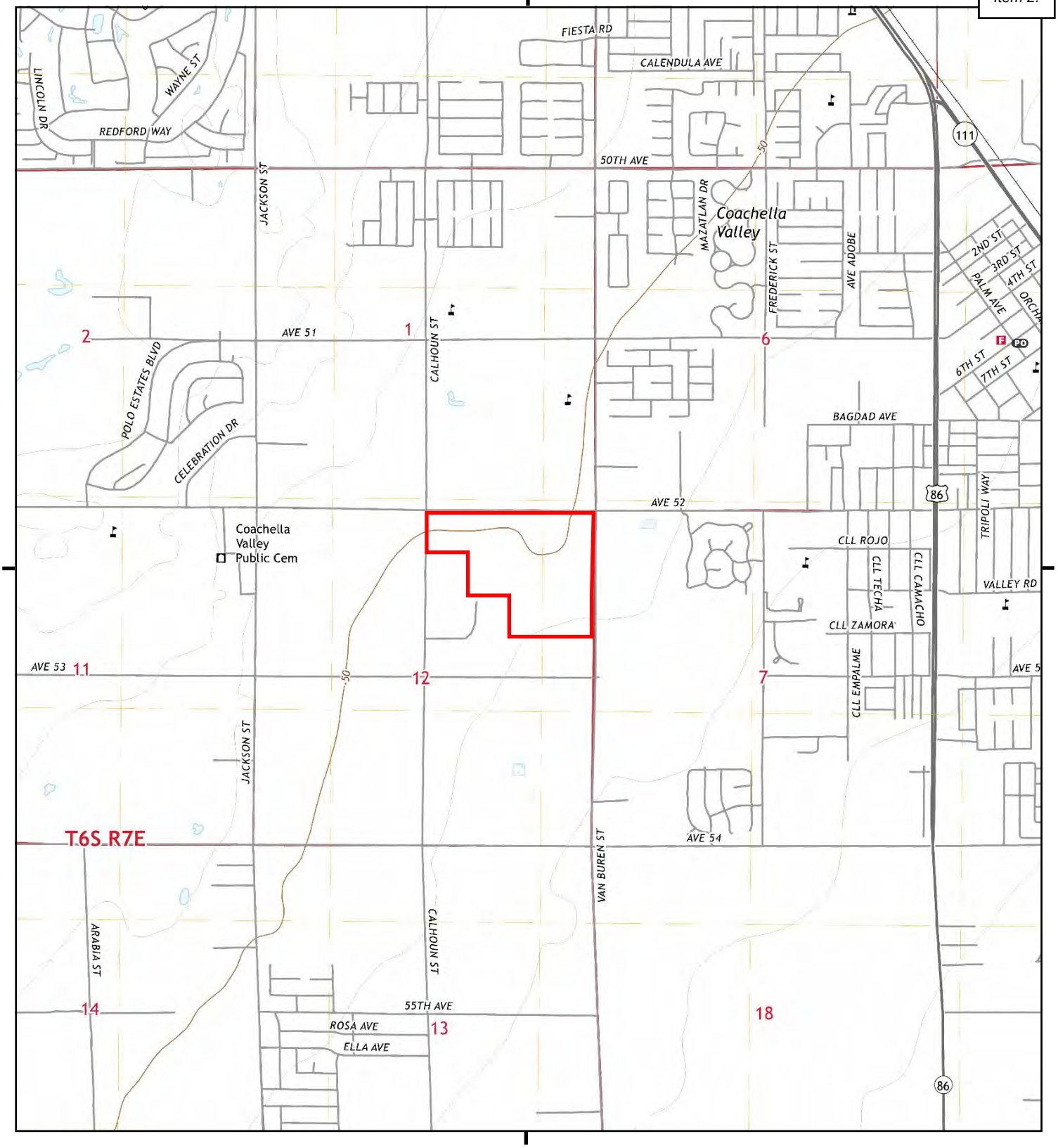
TP, Indio, 2021, 7.5-minute

SITE NAME: Relevant Living
ADDRESS: SWC 52 Avenue & Van Buren Street
Coachella, CA 92236
CLIENT: Proterra Consulting Inc.

2050

Historical Topo Map

Item 2.



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

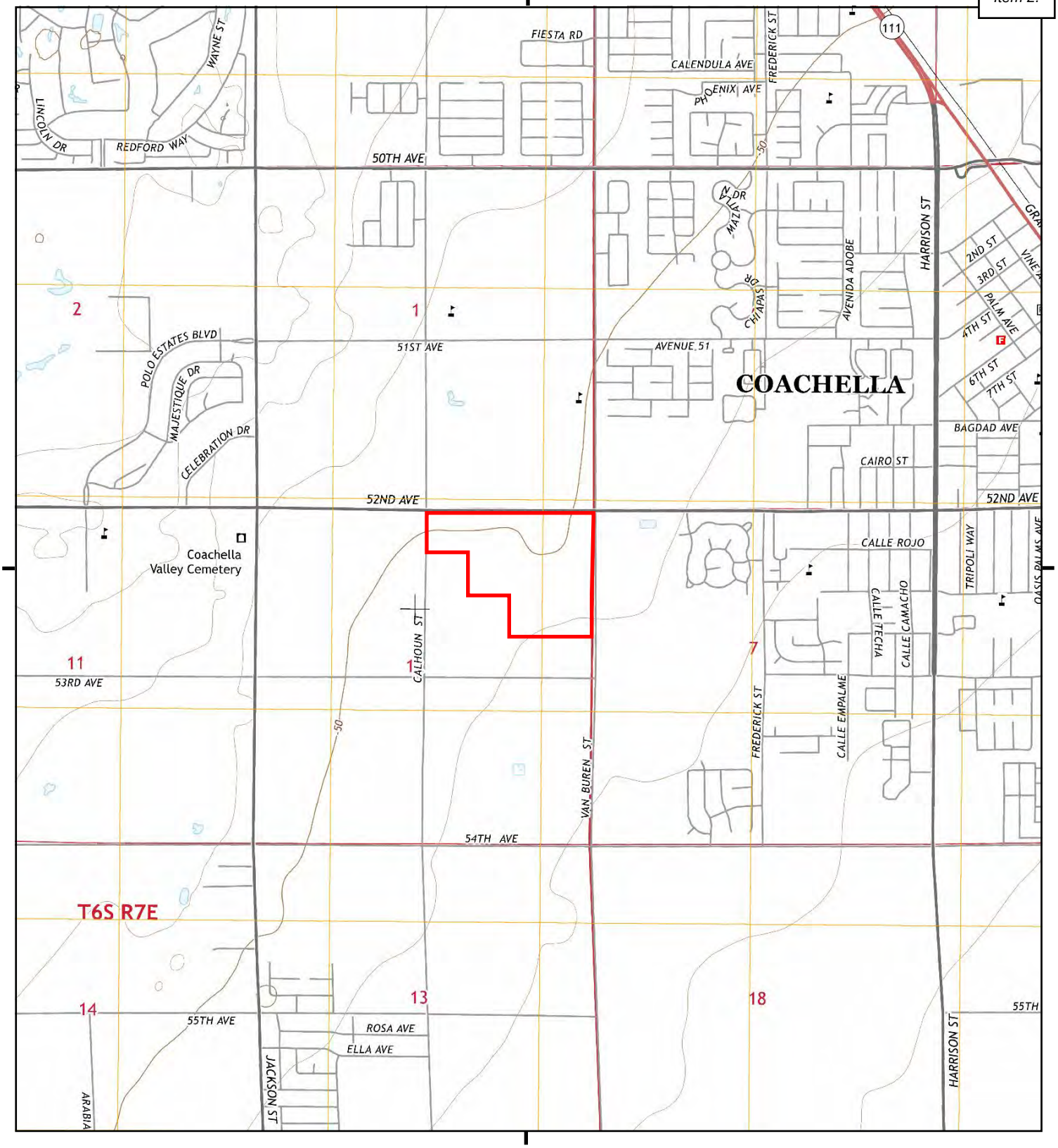
NW N NE
W E
SW S SE

TP, Indio, 2018, 7.5-minute

SITE NAME: Relevant Living
ADDRESS: SWC 52 Avenue & Van Buren Street
Coachella, CA 92236
CLIENT: Proterra Consulting Inc.

2051

Historical Topo Map



This report includes information from the following map sheet(s).

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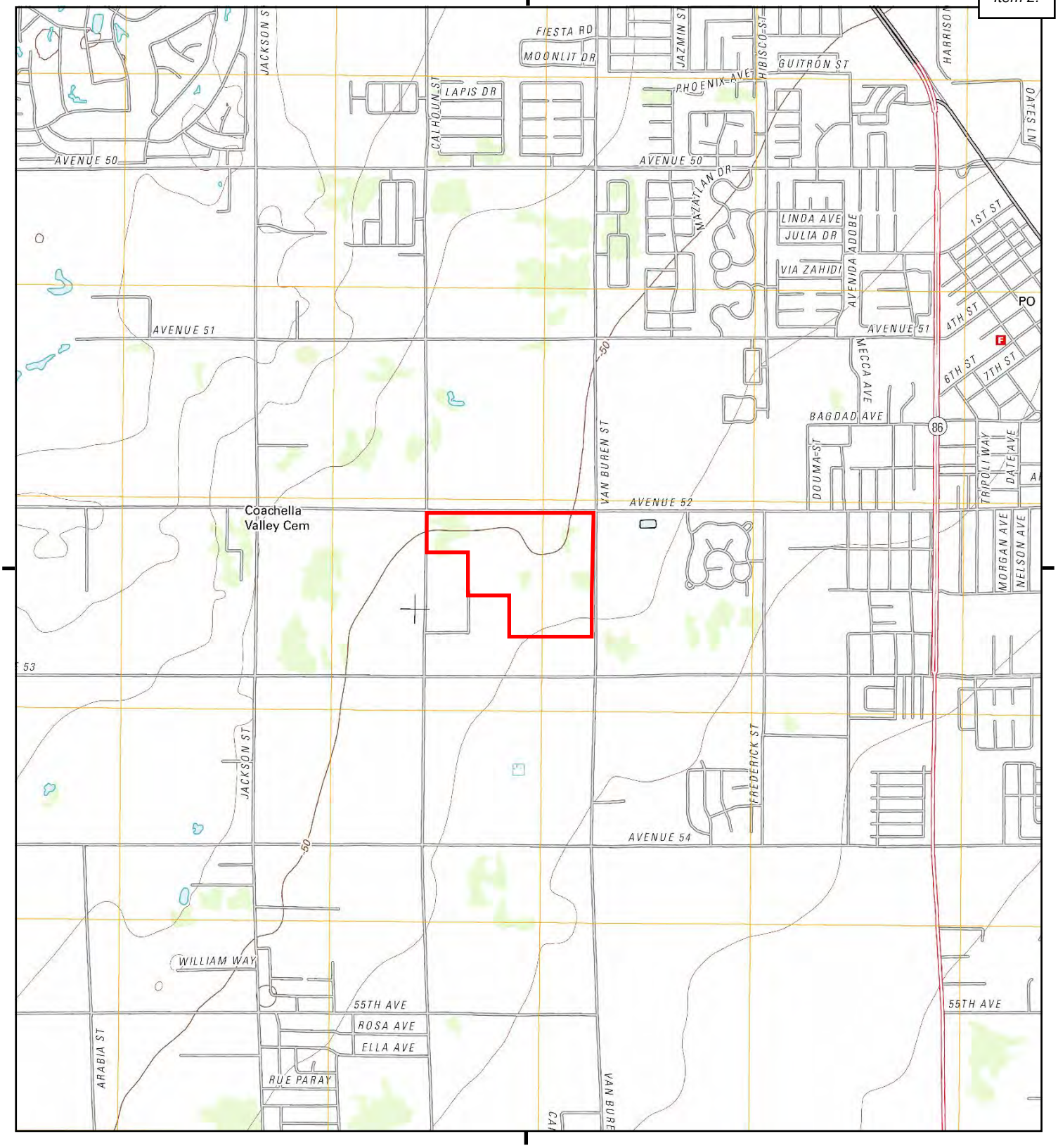
NW N NE
W E
SW S SE

TP, Indio, 2015, 7.5-minute

SITE NAME: Relevant Living
ADDRESS: SWC 52 Avenue & Van Buren Street
Coachella, CA 92236
CLIENT: Proterra Consulting Inc.

2052

Historical Topo Map



This report includes information from the following map sheet(s).

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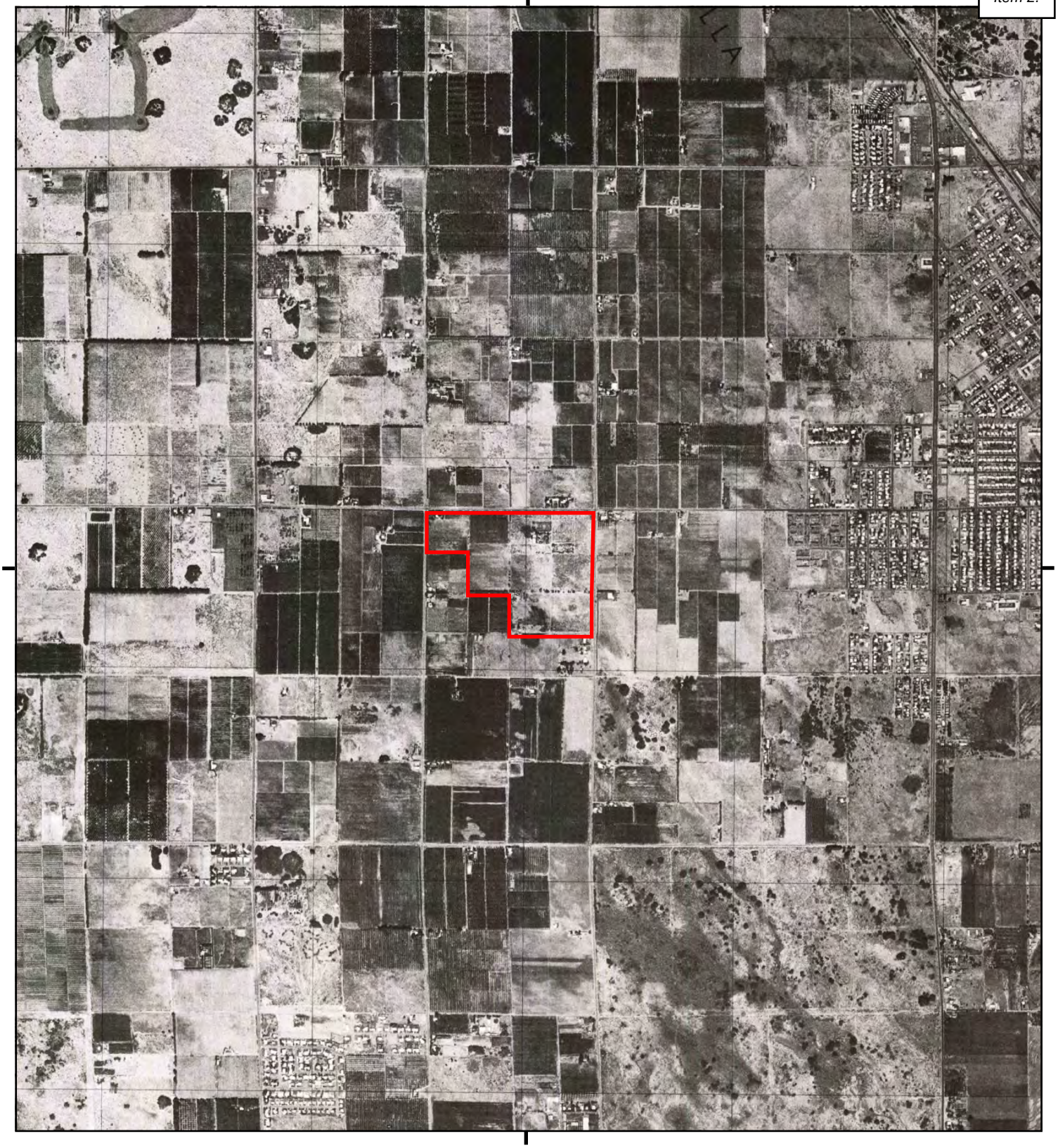
NW N NE
W E
SW S SE

TP, Indio, 2012, 7.5-minute

SITE NAME: Relevant Living
ADDRESS: SWC 52 Avenue & Van Buren Street
Coachella, CA 92236
CLIENT: Proterra Consulting Inc.

2053

Historical Topo Map



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

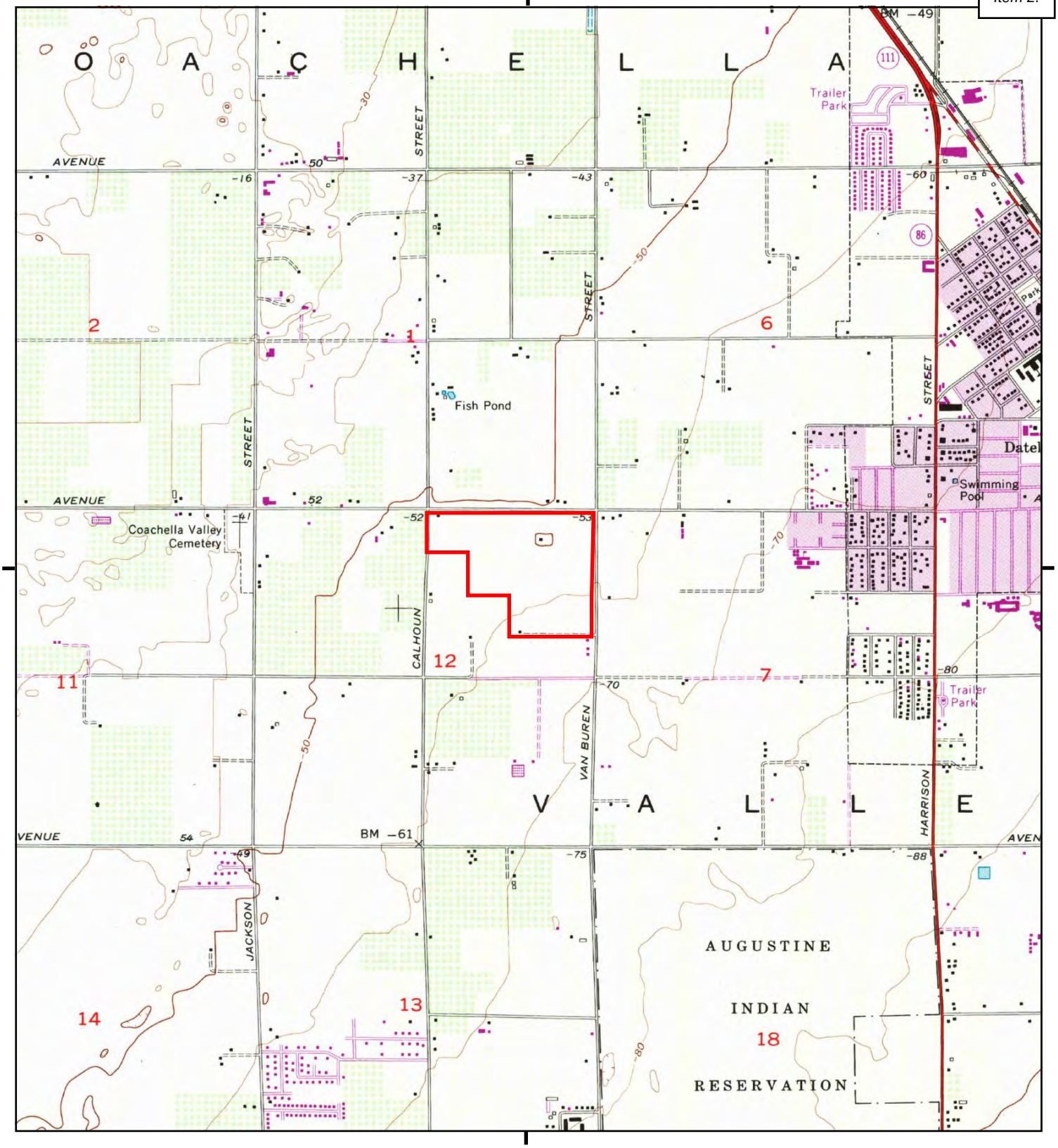
NW N NE
W E
SW S SE

TP, Indio, 1975, 7.5-minute

SITE NAME: Relevant Living
ADDRESS: SWC 52 Avenue & Van Buren Street
Coachella, CA 92236
CLIENT: Proterra Consulting Inc.

2054

Historical Topo Map



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

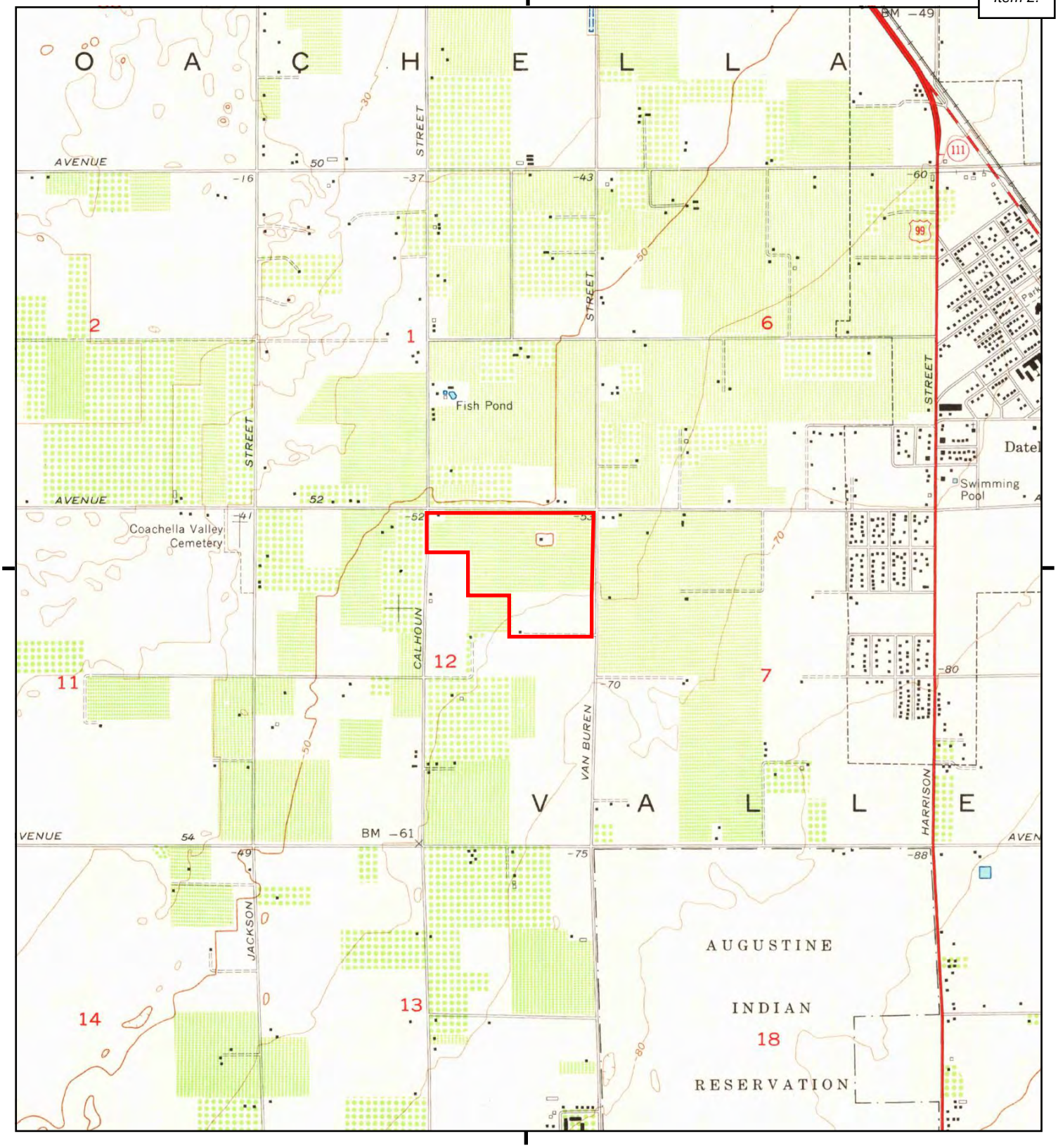
NW N NE
W E
SW S SE

TP, Indio, 1972, 7.5-minute

SITE NAME: Relevant Living
ADDRESS: SWC 52 Avenue & Van Buren Street
Coachella, CA 92236
CLIENT: Proterra Consulting Inc.

2055

Historical Topo Map



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

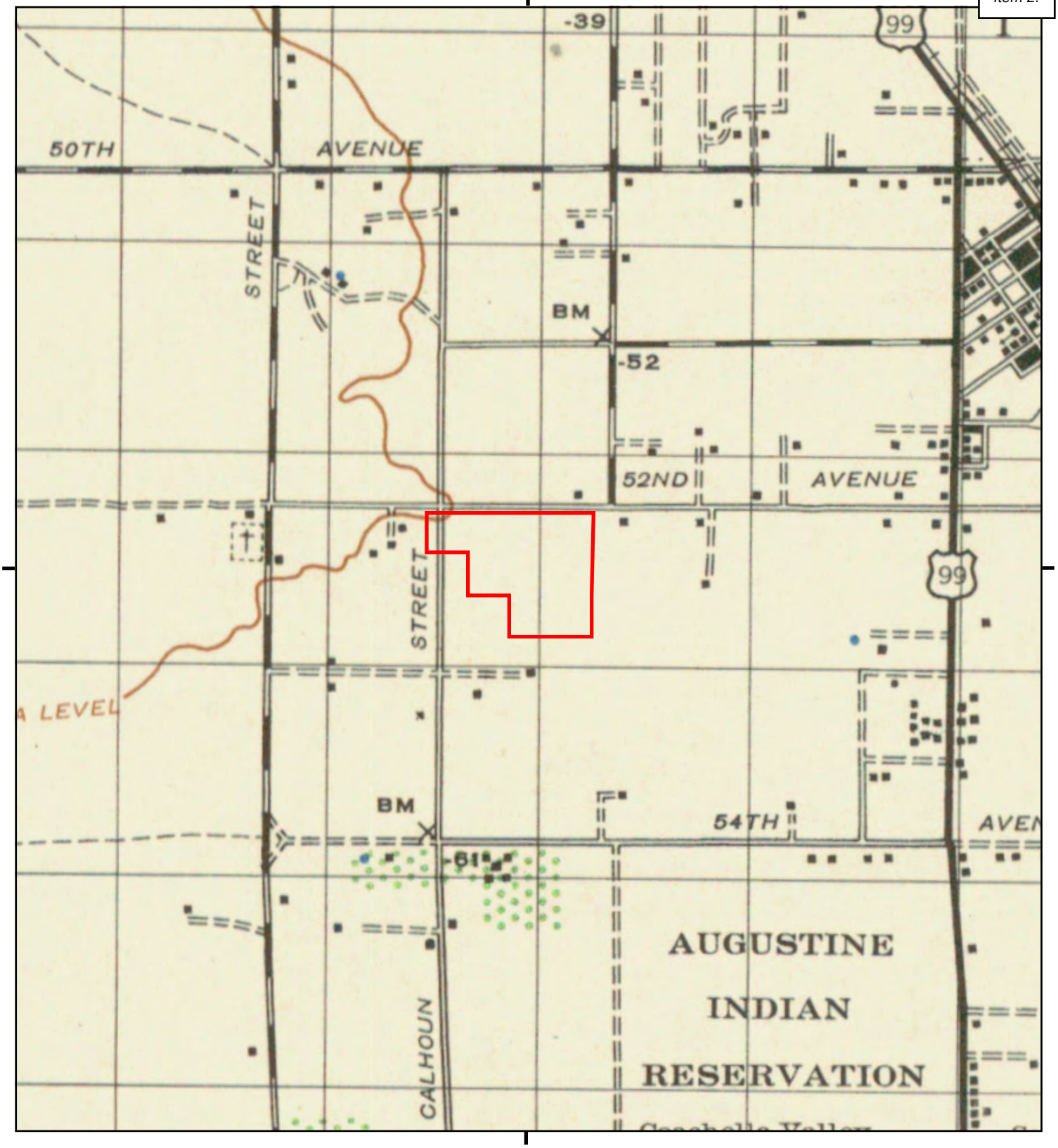
NW N NE
W E
SW S SE

TP, Indio, 1956, 7.5-minute

SITE NAME: Relevant Living
ADDRESS: SWC 52 Avenue & Van Buren Street
Coachella, CA 92236
CLIENT: Proterra Consulting Inc.

2056

Historical Topo Map



This report includes information from the following map sheet(s).

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NW N NE
W E
SW S SE

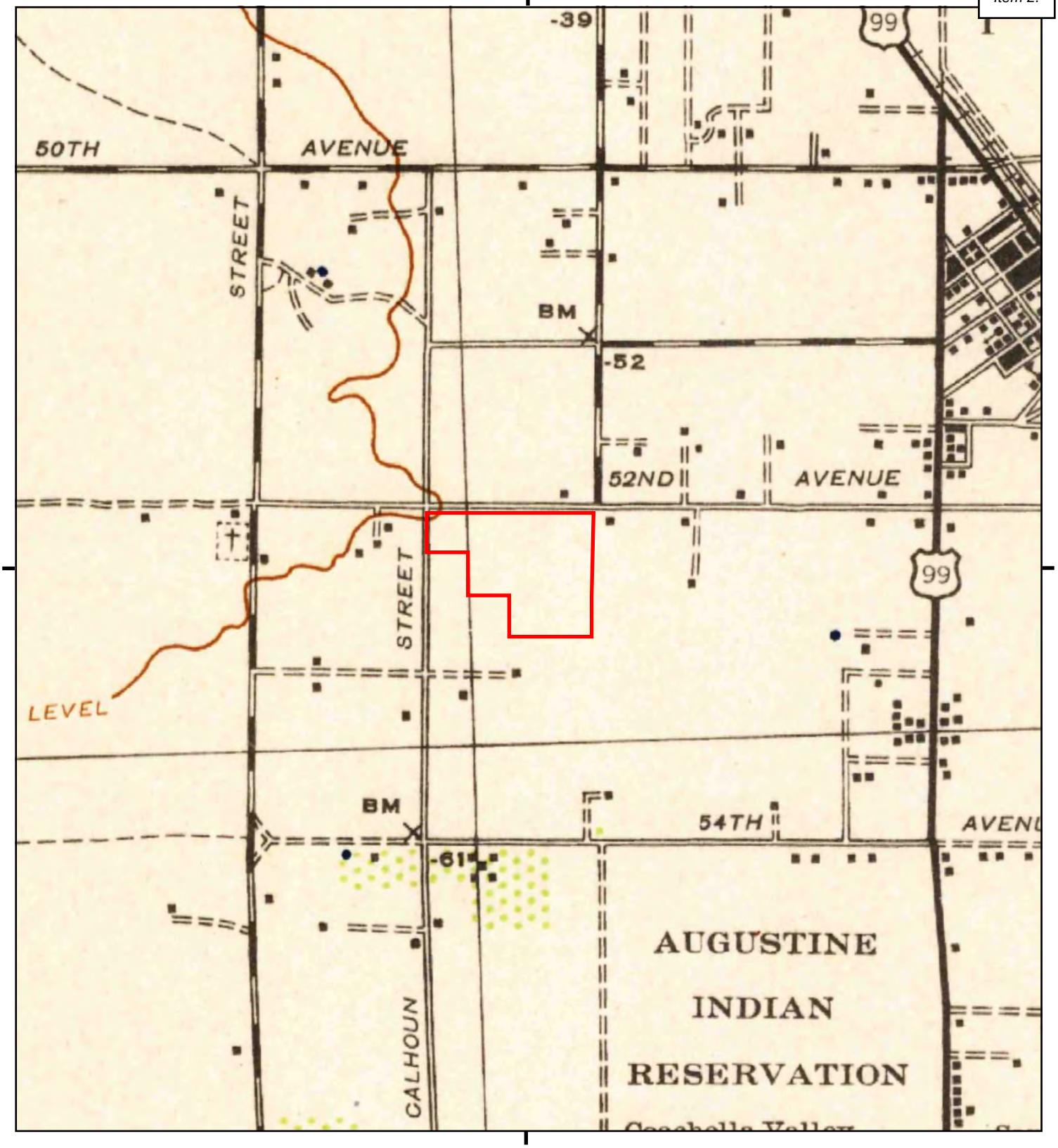
TP, COACHELLA, 1947, 15-minute

SITE NAME: Relevant Living
ADDRESS: SWC 52 Avenue & Van Buren Street
Coachella, CA 92236
CLIENT: Proterra Consulting Inc.

N

2057

Historical Topo Map



This report includes information from the following map sheet(s).

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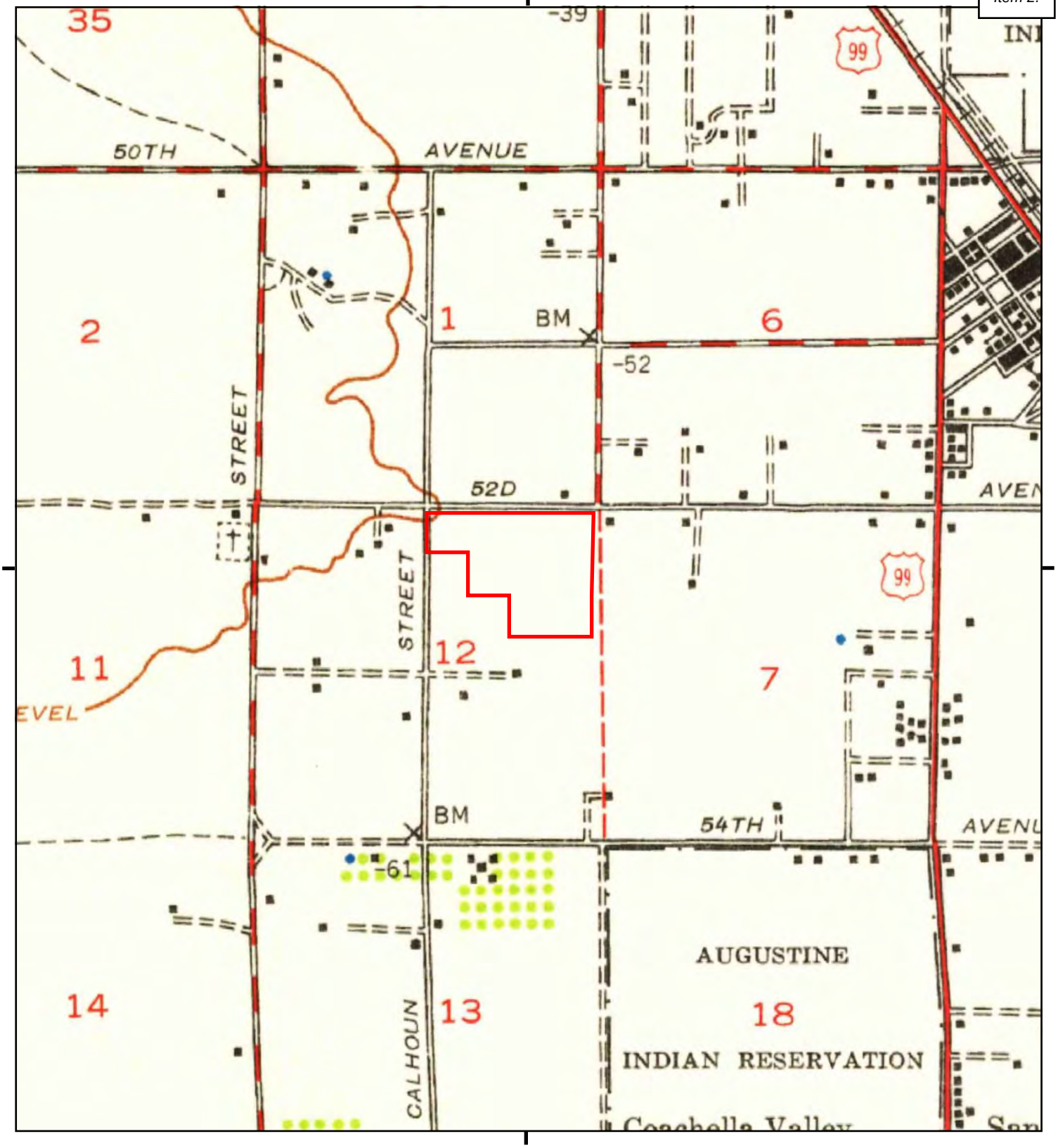
NW N NE
W E
SW S SE

TP, Coachella, 1943, 15-minute

SITE NAME: Relevant Living
ADDRESS: SWC 52 Avenue & Van Buren Street
Coachella, CA 92236
CLIENT: Proterra Consulting Inc.

2058

Historical Topo Map



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

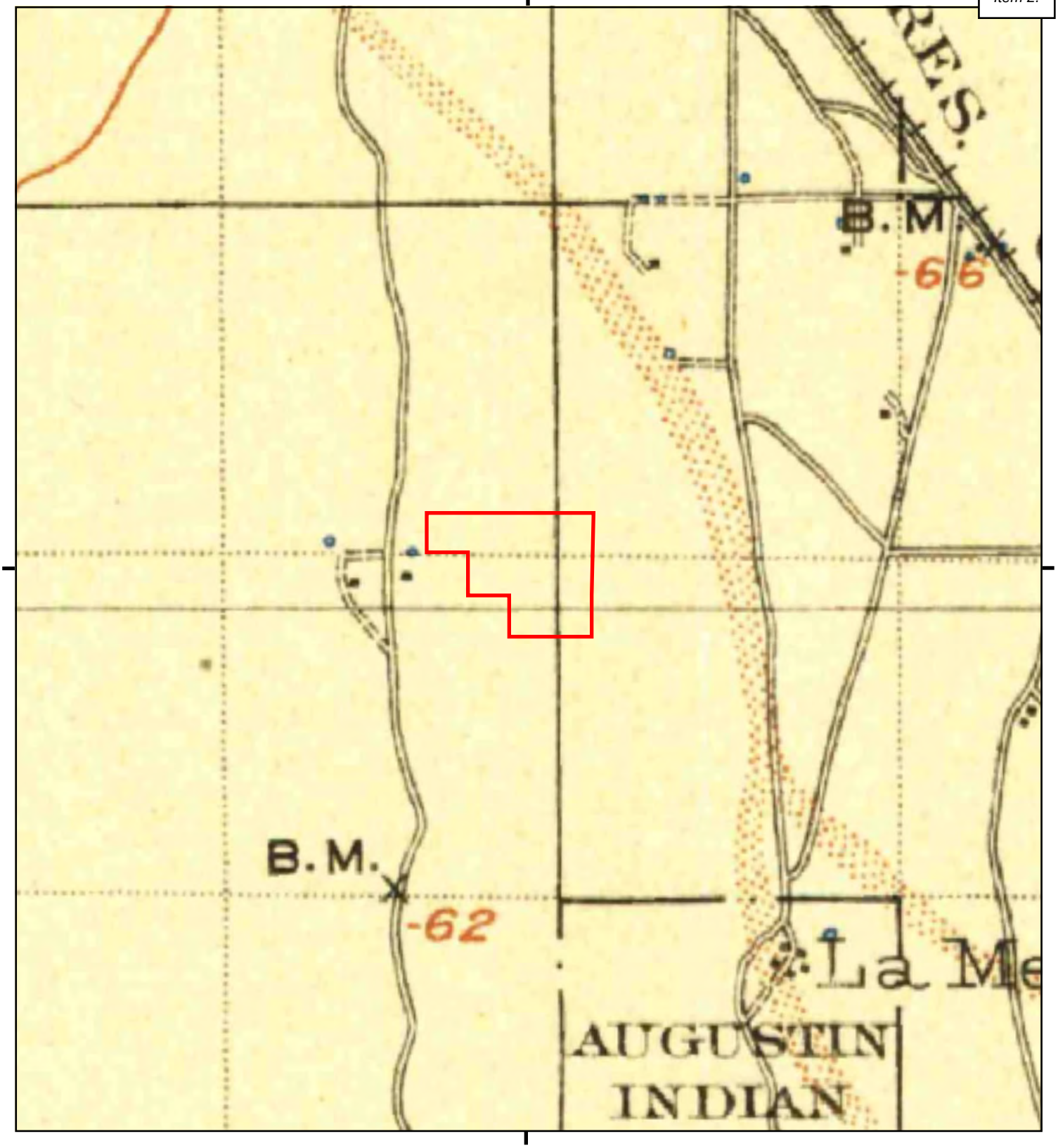
NW N NE
W E
SW S SE

TP, Coachella, 1941, 15-minute

SITE NAME: Relevant Living
ADDRESS: SWC 52 Avenue & Van Buren Street
Coachella, CA 92236
CLIENT: Proterra Consulting Inc.

2059

Historical Topo Map



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Indio, 1904, 30-minute

SITE NAME: Relevant Living
ADDRESS: SWC 52 Avenue & Van Buren Street
Coachella, CA 92236
CLIENT: Proterra Consulting Inc.

2060

Relevant Living
SWC 52 Avenue & Van Buren Street
Coachella, CA 92236

Inquiry Number: 7655113.5
May 21, 2024

The EDR-City Directory Image Report

EDR® Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION

Executive Summary

Findings

City Directory Images

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available business directory data at approximately five year intervals.

RECORD SOURCES

The EDR City Directory Report accesses a variety of business directory sources, including Haines, InfoUSA, Polk, Cole, Bresser, and Stewart. Listings marked as EDR Digital Archive access Cole and InfoUSA records. The various directory sources enhance and complement each other to provide a more thorough and accurate report.

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	Target Street	Cross Street	Source
2020	☑	☐	EDR Digital Archive
2017	☑	☐	Cole Information
2014	☑	☐	Cole Information
2010	☑	☐	Cole Information
2005	☑	☐	Cole Information
2000	☑	☐	Cole Information
1995	☑	☐	Cole Information
1992	☑	☐	Cole Information
1990	☑	☐	Haines Criss-Cross Directory
1985	☑	☐	Haines Criss-Cross Directory
1980	☑	☐	Haines Criss-Cross Directory
1976	☑	☐	Haines Criss-Cross Directory
1971	☐	☐	Haines Criss-Cross Directory

FINDINGS

TARGET PROPERTY STREET

SWC 52 Avenue & Van Buren Street
Coachella, CA 92236

Year	CD Image	Source	
52ND AVE			
2000	pg A31	Cole Information	
1992	-	Cole Information	Target and Adjoining not listed in Source
1990	pg A36	Haines Criss-Cross Directory	
1990	pg A37	Haines Criss-Cross Directory	
1985	pg A40	Haines Criss-Cross Directory	
1980	pg A42	Haines Criss-Cross Directory	
1980	pg A43	Haines Criss-Cross Directory	
1976	pg A45	Haines Criss-Cross Directory	
1976	pg A46	Haines Criss-Cross Directory	
1971	-	Haines Criss-Cross Directory	Street not listed in Source
AVENUE 52			
2020	pg A2	EDR Digital Archive	
2017	pg A7	Cole Information	
2014	pg A13	Cole Information	
2010	pg A19	Cole Information	
2005	pg A25	Cole Information	
1995	pg A33	Cole Information	
VAN BUREN ST			
2020	pg A6	EDR Digital Archive	
2017	pg A12	Cole Information	
2014	pg A18	Cole Information	
2010	pg A24	Cole Information	
2005	pg A30	Cole Information	
2000	pg A32	Cole Information	

FINDINGS

Year	CD Image	Source	
1995	pg A34	Cole Information	
1992	pg A35	Cole Information	
1990	pg A38	Haines Criss-Cross Directory	
1990	pg A39	Haines Criss-Cross Directory	
1985	pg A41	Haines Criss-Cross Directory	
1980	pg A44	Haines Criss-Cross Directory	
1976	pg A47	Haines Criss-Cross Directory	
1971	-	Haines Criss-Cross Directory	Street not listed in Source

FINDINGS

CROSS STREETS

No Cross Streets Identified

City Directory Images

AVENUE 52 2020

82489	ABRAHAM HERNANDEZ
	MICHAEL REULE
	ROSA ORTEGA
	RUSSELL BORBON
	SHARON KALKOSKE
82827	ELODIA VEGA
82847	JASON WILBERTS
	REBEKAH WILBERTS
83030	JOAQUIN ALVARADO
	JOSEFINA ALVARADO
83151	JANICE SCHMID
83266	WILLIAM ATKINSON
83682	AGUSTINA ARELLANO
	MONICA ALVARADO
83890	JULIE HUSTON
	RUSSELL HUSTON
	SARAH HUSTON
84045	GUADELUPE BERNAL
84165	JOSE MALDONADO
84390	MARTIN AGUILAR
84500	ALONSO GOMEZ
	ANA BILLICANA
	BAUDELIO QUINTERO
	BLANCA CASTANEDA
	BLANCA HERNANDEZ
	BRENDA SANDOVAL
	CARLOS ESPINOZA
	CHRISTOPHER HERNANDEZ
	DELMIRA DAVILA
	ELVIA LUNA
	ESMERALDA DOMINGUEZ
	FRANCISCO MUNOZ
	GERRARDO BEDOLLA
	JOSE ESPINOZA
	JOSE ZARAGOZA
	LAZARO MONTANO
	LEONARDO VASQUEZ
	LORENA ZARAGOZA
	LUZ ESPINOZA
	LUZ PEREZ
	MARTHA TORRES
	MONICA PEREZ
	PETRA CASTANEDA
	RAMONA QUINTERO
	RICARDO HERNANDEZ
	ROBERTO GUTIERREZ
	ROSA GUTIERREZ
	RUBEN TORRES
	SILVIA JIMENEZ
	VICTORIA LOPEZ

AVENUE 52 2020 (Cont'd)

84620 INEZ SARABIA
SUSANNA HERRERA
84640 ROSA PEREZ
84657 JASON RODRIGUEZ
SYLVIA RODRIGUEZ
84699 DINAH RAZO
ROSA RAZO
WENCESLAO RAZO
WENEISALAO RAZO
84720 GRISELDA BELTRAN
84735 ALICIA SANCHEZ
GUADALUPE SANCHEZ
84743 JOSE LOPEZ
JUAN RIVERA
84751 ENRIQUETA RODRIGUEZ
PEDRO RODRIGUEZ
84786 CARMEL ROMERO
84840 FRANCINE BATRES
KATHY PENALBER
MARGIE PENALBER
84871 ALFRED DELATORRE
MANUEL DELATORRE
NELLIE DELATORRE
85101 TONY HAWARA
85215 BALDEMAR RAMOS
BENILDE RAMOS
MIRANDA RAMOS
PAULA RAMOS
SAMUEL RAMOS
85225 GLORIA ESQUIVEL
NOELIA GUERRA
85235 FRANCISCO SALCIDO
MARIA SALCIDO
NORMA GARCIA
VENERANDA SALCIDO
85245 AARON GIL
CARMEN REYES
85255 JESSE RODRIGUEZ
85265 EMMANUEL SANTOS
MARIA SANTOS
OLIVIA SANTOS
SALOMON SANTOS
85266 CHEYENNE YANEZ
JUANITA YANEZ
RICHARD YANEZ
SALVADOR YANEZ
85275 JOHN LOPEZ
JOSE LOPEZ
85276 MARIA ZEPEDA
85286 DEISY RIVERA

AVENUE 52 2020 (Cont'd)

85286 TERESA RIVERA
85295 GILDA GALINDO
85296 LEONIDES ALFARO
85306 ALFREDO AGUILAR
MARTHA AGUILAR
RAQUEL LOPEZ
85325 VANESSA ESPEJEL
VICENTE ESPEJEL
85335 FRANCISCO MAGDALENO
ROSALVA MAGDALENO
85345 MIGUEL ROCHA
85365 CHRISTINA CASTILLO
RODOLFO CASTILLO
RUDY CASTILLO
85375 MARIA VEGA
ROBERTO VEGA
85395 GERONIMO OCHOA
LUCIA BASILIO
RACHEL OCHOA
85405 TRINA PENA
VICTOR PENA
85415 RAQUEL MUNOZ
85425 ESPERANZ REYES
RAUL REYES
85445 IRMA FIGUEROA
85455 JUANITA HUERTA
85456 BRITTNEY LOPEZ
REBECCA LOPEZ
SAMUEL LEAL
85465 JANICE AHRENS
KERRY AHRENS
TODD AHRENS
WILLIAM AHRENS
85475 JOSEFINA BRIONES
OLGA BRIONES
85485 RAFAEL MURILLO
85495 ELIAS LOPEZ
JENNIE LOPEZ
85536 JUAN RAMIREZ
MARIA LEON
85546 ARACELI ESTRADA
85556 JESUS SANCHEZ
MARIA CHAIDEZ
MARIA SANCHEZ
PATRICIA SANCHEZ
SILVANO SANCHEZ
85628 MARISA VILLARREAL
85646 ELSA SANDOVAL
85662 ALVARO SANDOVAL
85680 AMBROSE TABALDO

AVENUE 52 2020 (Cont'd)

85680	LAURA GOMEZ
	VERONICA TABALDO
86045	CATHY CANADA
	CLINT AUSTIN
	DAN VALDEZ
	JER STALLINGS
	PAUL CANADA
86235	DAN JENSEN
	DENNIS JENSEN
	DON DAVIS
	HUGO BARAJAS
	LORENA ESPINOZA
	SERGIO ZAMBRANO
86998	ANGELA AYALA
	BILMA AMP
	ED LANGHAM
	LUIS AYALA
	MATT MCCLELLAND
	PATRICIA DAWSON
	SEBASTIAN GALMARINI
	YOLANDA AYALA

VAN BUREN ST 2020

48263	CLAUDIA CHAVEZ
48267	OCTAVIO MENDOZA
	ORLANDO LOPEZ
48441	GUADALUPE VILLALOBOS
48665	ALEJANDRO JIMENEZ
	JAVIER SOLIZ
	SHELLEY SOLIZ
48725	ESTHER ALVARADO
48785	ESTELA MENDOZA
	MARIA AGUIRRE
	NOEL ALVAREZ
	PEDRO ALVAREZ
50503	DAVID LONG
	JAMES HAILE
51375	CORAL MOUNTAIN ACADEMY
52500	GLENDA LEJA
	LEJA FARMS
	PAMELA LEJA-ROMJUE
	PATRICK LEJA
52815	ALFRED PASILLAS
	CHARLES PASILLAS
	JOHN PASILLAS
	TEODORA PASILLAS
52821	JOSEFINA PACIS
52911	ELEANOR SALAS
	LAWRENCE SALAS
	PHILIP SALAS
	REGINA SALAS
	SERENA SALAS
	SHARON SALAS
52955	OTILIA CANELA
52965	RAFAEL CARRILLO
53780	ALICIA FERNANDEZ
	FELIPE FERNANDEZ
	FERNANDEZ DATE SALES
	GUADALUPE BERNAL
	MARIA FERNANDEZ
	SERGIO FERNANDEZ

AVENUE 52 2017

82489 CAHUILLA DESERT ACADEMY
82827 VEGA, ELODIA
82847 WILBERTS, JASON
82925 COACHELLA VALLEY CEMETERY
83030 ALVARADO, JOAQUIN Z
83151 SCHMID LASER LEVELING
SCHMID, STEVEN T
83200 MARTINEZ, GEORGE
83266 ATKINSON, WILLIAM G
83682 ARELLANO, AGUSTINA A
83876 BERASMAL, ERIC
84045 BERNAL, GUADELUPE
84165 MALDONADO, APOLINAR
84390 LEON, LUZ M
84500 ACOSTA, CHARMARIE
ACOSTA, CYNTHIA A
AGUIRRE, PEDRO
ALVARADO, JOSE M
ARRIAGA, JUANA
ARRIOLA, R
BARRAGAN, VERONICA
BAUTISTA, ROBERTO
BEDOLLA, GERRARDO P
BERDIJA, DELFINO
BERNAL, ARTURO
BILLICANA, ANA E
BOLANOS, SAMUEL
CABRERA, A
CAMACHO, LEONEL
CASTANEDA, MARIANO
CERVANTES, RAQUEL
CHAVEZ, MIQUEL
CIFUENTES, MARIO
CISNEROS, ARTURO B
COBIAN, ADOLFO
CORONA, JESSICA
CORONEL, ADRIANA
CORTEZ, ROBERTO A
CORTEZ, VANESSA
DAVILA, DIANA P
DEGAMBOA, GRACIELA J
DENIS, JANET
DIAZ, SANCHEZ L
ESPINOZA, ALFREDO
ESPINOZA, JOSE M
GARCIA, DANIEL D
GARCIA, ISABEL M
GARCIA, ISAIAS G
GARCIA, VANESSA
GOMEZ, MARTIN

AVENUE 52 2017 (Cont'd)

84500 GONZALEZ, DIANA L
GONZALEZ, EIDA
GONZALEZ, JOSE
GONZALEZ, PASCUAL
GUTIERREZ, JOSE T
GUTIERREZ, ROBERTO G
HERNANDEZ, LESLIE M
HERNANDEZ, RIGOBERTO
HURTADO, MANUEL
IRMA, FALCON
ISLAS, MARIA
IZAGUIRRE, WENDY
JAMES, TEENA
JIMENEZ, ARMANDO A
JUAREZ, LUCIA M
LAGUNES, MEDINA
LOPEZ, MARISSA
LOPEZ, NALLELI
LUNA, ELVIA
MADERA, JAIME
MANQUEROS, DAVID D
MATA, AURORA
MEJIA, PEDRO
MENDEZ, BERNARDO
MENDOZA, OSVALDO
MEZA, FERNANDO B
MEZA, PEDRO
MOLINALUSADO, A
MONTANO, MANUEL R
MUNOZ, JOSE
MUNOZ, LAURA
NABA, SALVADOR
NAVA, SALVADOR
NORZAGARAY, STEPHANIE
PADILLA, URSULA
PARTIDA, BELEM
PAYES, JORGE A
PELAYO, ANA A
PENA, TEODOLO M
PEREZ, UBALDO C
POLLARD, ASHLEY
QUINTERO, RAMONA
RAMIREZ, OMAR
RESENDEZ, KAREN
REYES, TERESA V
RIOS, ANA
RIOS, SANDALIO Z
RODRGUEZ, ISRAEL
RODRIGUEZ, ISAAC
RUBIO, ELIZABETH R

AVENUE 52 2017 (Cont'd)

84500 RUIZ, JULIAN
SALCEDO, TENNILLE
SANCHEZ, CINDY C
SANCHEZ, EFREN
SANDOVAL, BRENDA D
SANDOVAL, JOSE J
SANTOS, ALBERTO A
SAUCEDO, MARIO
SAVALA, ABEL W
SOTO, LUISA M
TELCASTRE, TOMAS
TERAN, J
TORRES, ANA
TURCIOS, JOSE
VALDEZ, ALEJANDRO R
VALENZUELA, JUAN
VASQUEZ, ALBERTO Z
VAZQUEZ, YANET
VIDANA, KATARINA
VILLARREAL, LUCY
ZARAGOZA, MAGDALENA
84540 GUILLEN, EUDELIA
MODESTO, MARIA
ROSAS, JUANA
84560 COACHELLA COMMUNITY HOMES
ESTRADA, MONICA
FLORES, ALMA
GUERRERO, JOSEFINA
84580 SALDIVAR, GABRIEL
SALDOVAR, MIRAM G
SANCHEZ, RAFELA
84600 MAGANA, GONZALO
MONTANA, GUADULPE
RODRIGUE, SILVESTRE A
84620 ESPINOZA, SOFIA
GOMES, SAMANTA
LOPEZ, ROSA I
SARABIA, INEZ
84627 PALACIOS, NORMA E
84640 CARRILLO, BRENDA
PEREZ, JOSE
84657 RODRIGUEZ, SYLVIA R
84660 VALADEZ, GUTIERREZ G
84680 CASTILLA, TANIA
HERNANDEZ, JUANA
MARTINEZ, DAVID
ROCHA, JUAN
84687 GARCIA, MARGARET A
84699 GARCIA, TIANA
84700 PALLARES, MANUELA

AVENUE 52 2017 (Cont'd)

84700	SANDOVAL, LAURA
84710	COACHELLA COMMUNITY HOMES
84720	BELTRAN, FELIPE
	COACHELLA COMMUNITY HOMES
	SANCHEZ, HILDA
	WILLIAMS, PATRICIA
84735	MILLAN, YOLANDA
84740	GARCIA, GABRIEL
	NEGRETE, TANYA
	TORRES, JOSE
84751	RODRIGUEZ, PEDRO
84761	RAZO, WENCESLAO A
84786	ROMERO, CARMELO
84831	CONSTANTINO, JOSE L
84840	BATRES, FRANCINE M
	PENALBER, TONY H
84851	GONZLEZ, LUIS A
84871	DELATORRE, MANUEL
85101	BEERTOWN MARKET
85215	RAMOS, SAMUEL
85225	ESQUIVEL, SYLVIA G
85235	GARCIA, NORMA J
85245	REYES, CARMEN M
85265	SANTOS, EMANUEL
85266	YANEZ, RICHARD V
85275	LOPEZ, JOSE T
85285	GONZALEZ, ANGELA L
85286	RIVERA, LUIS A
85295	GALINDO, GILDA
85306	AGUILAR, ALFREDO E
85325	ESPEJEL, VICENTE
85335	MAGDALENO, FRANCISCO G
85336	EAMACHO, MARISA
85345	ROCHA, BERTHA L
85355	MEJORADO, MARIA E
85365	CASTILLO, RODOLFO C
85375	VEGA, ROBERTO B
85385	MORALES, CLARISSA E
85395	HURTADO, BASILIO
85405	PENA, VICTOR S
85415	SAENZ, OFELIA
85425	REYES, RAUL U
85435	LEMUS, LAURA M
85445	FIGUEROA, IRMA R
85455	HUERTA, JUANITA O
85456	LEAL, SAMUEL
85465	AHRENS, WILLIAM D
85475	BRIONES, JOSEFINA S
85485	MURILLO, RAFAEL N
85536	ALVAREZ, ANITA

AVENUE 52 2017 (Cont'd)

85546 ESTRADA, DAVID
85556 CHAIDEZ, MARIA
85628 VILLARREAL, MARIA G
85646 SANDOVAL, PILAR F
85662 HERNANDEZ, MONICA M
85680 TABALDO, AMBROSE P
85820 CVWD WEATHER INFORMATION LINE
85989 JONES BROS CONSTRUCTION CO
86015 COACHELLARIVERSIDE SCRAP IRON & MET
86025 OLD WORLD STONE
86045 UNITED WATERWORKS
WELLS SUPPLY COMPANY
86235 OASIS RANCH MANAGEMENT
SUNKIST GROWERS INC
86998 AYALAS AUTO REPAIR
CACHELLA TIRE SHOP
HAWTHORNE LIFT SYSTEMS
87871 LOPEZ, ABIGAIL T

Target Street	Cross Street	Source
✓	-	Cole Information

VAN BUREN ST 2017

48263	MENDOZA, OCTAVIO C
48267	MENDOZA, OCTAVIO C
48441	HERNANDEZ, ALEXANDER
48665	SOLIZ, ISAIAH J
48667	DURAN, MONICA
48785	MENDOZA, ESTELA A
50503	NIGOSIANS PYRAMID DATE GARDEN
	SOLIS, BRIJITO
50800	LAST, SUSANA
50830	CERVANTES, BEATRICE
51375	CORAL MOUNTAIN ACADEMY
52500	LEJA FARMS
52815	PASILLAS, JOHN M
52821	PACIS, JOSEFINA B
52911	SALAS, PHILIP A
52955	GALLARDO, ANABEL
52965	CARRILLO, RAFAEL
53780	BALTRAN, MARIA
55497	BORREGO COMMUNITY HEALTH FOU

AVENUE 52 2014

82489 CAHUILLA DESERT ACADEMY
82847 WILBERTS, JASON
82925 COACHELLA VALLEY CEMETERY
83030 ALVARADO, JOAQUIN Z
83151 SCHMID LASER LEVELING
SCHMID, STEVEN T
83200 OCCUPANT UNKNOWN,
83230 MARTINEZ, ELOISA C
83240 BARCENAS, LAURO
83266 ATKINSON, WILLIAM G
83682 ALVARADO, AUGUSTINE B
83874 OCCUPANT UNKNOWN,
83876 GARZA, ARTURO B
83890 HUSTON, RUSSELL E
84045 LEJA, ROMJUE P
84165 MALDONADO, APOLINAR
84390 GONZALEZ, EFIGENIA
84500 ACOSTA, CHARMARIE
AGUILAR, ROSAURA
ALEJO, SERGIO R
ALVAREZ, MARVIN
ARRIAGA, JANETTE
BALLESTEROS, FRANSICO
BARCENAS, ERNIE
BARRAGAN, VERONICA
BASILIO, ELDA
BASILIO, JASSON
BELTRAN, JESUS
BELTRAN, ROSARIO
BILLICANA, ANA E
CAMACHO, ESPINOZA C
CAMPA, ELIZABETH
CAMPUZANO, MARIA C
CASTANEDA, MARIANO
CASTREJON, MONICA
CISNEROS, MARISELA
CORONA, JESSICA
CORONADO, OMAR
CORONAS, JOSEFINA
CORRO, ANDREA
CORTEZ, ROBERTO A
CRUZ, BERENICE
CRUZ, ERICA
DEGAMBOA, GRACIELA J
DELARA, VIRGINIA
DIAZ, SANCHEZ L
DOMINGUEZ, PEDRO
DUARTE, ADOLFO S
FLORES, MANUEL
FRANCO, ERNESTINA

AVENUE 52 2014 (Cont'd)

84500 GALVEZ, BERNICE
GARCIA, ISAIAS C
GARCIA, VANESSA
GILARREAGA, JOSUE
GOMEZ, STEPHANIE
GONZALEZ, JUAN I
GRAJEDA, MELISSA
GUTIERREZ, JOSE T
HERNANDEZ, RIGOBERTO
HOBBS, MICHAEL
JIMENEZ, ANTHONY
JIMENEZ, ARMANDO A
JONES, ADELA
JUAREZ, ANGELICA C
LAGUNES, MEDINA
LAZARO, MARIA
LOPEZ, JUAN C
LOPEZ, NALLELI
MADRIGAL, MANUEL Y
MARTINEZ, GUSTAVO
MARTINEZ, ISIDORO
MEDELLIN, ANTONIA
MEDINA, ALEJANDRA
MENDEZ, BERNARDO
MENDOZA, ARMANDO
MENDOZA, CHRISTINA
MEZA, FERNANDO B
MEZA, PEDRO
MONTANO, MANUEL R
MONTELLANO, FRANCISCO
MORALES, MAYRA
MORENO, JOSE
MUNOZ, GUADALUPE
NORZAGARAY, STEPHANIE
OBESO, IRMA Y
OLEA, BEATRIZ
OLGUIN, MARIA
ORCHARD VILLAS APARTMENTS
PARTIDA, BELEM
PELAYO, ANA A
PEREZ, JESSE A
PEREZ, ROSA
PINEDA, JUAN
PLACENCIA, FATIMA
PONCE, CINTHYA
QUINTERO, RAMONA
RAYA, JOSE G
REYES, INEZ
RIOS, SANDALIO Z
ROCHA, JUAN

AVENUE 52 2014 (Cont'd)

84500	ROMAN, MARIBEL I
	ROMERO, RAYMOND
	SANCHEZ, ADOLFO
	SANDEZ, ANDREW
	SANDOVAL, ROSAURA
	SANTOS, ALBERTO A
	SANTOS, ROBERTA
	SAUCEDO, MARIO
	SILVA, MARTHA
	SOTO, ANGELICA
	TELCASTRE, TOMAS
	TORRES, RUBEN
	TREJO, JOSE A
	TREVINO, SONIA
	TURCIOS, JOSE
	VALDEZ, ALEJANDRO R
	VALENZUELA, JUAN
	VASQUEZ, ALBERTO Z
	VAZQUEZ, YANET
	VEGA, JOSE L
	VEGA, SONIA
	VENDEJAS, ROMAN
	VILLASENOR, ARTURO
	VIRGEN, ERIKA
	ZAMORA, SERGIO F
	ZARAGOZA, MAGDALENA
	ZAZUETA, JOSE T
	ZENDEJAS, ROMAN
84540	GUILLEN, EUDELIA
	MUNOZ, ANA R
	ROSAS, CALIXTO J
	RUBIO, HERMELINDA
84560	COACHELLA COMMUNITY HOMES
	ESTRADA, MONICA
	FLORES, ALMA
	GUERRERO, JOSEFINA
	LARA, JOSE
84580	FLORES, GUADALUPE
84600	AGUILAR, RODRIGUE S
	FLORES, SANDRA
	MAGANA, GONZALO
84620	GARCIA, MUNOZ F
	HERRERA, ELIAS L
	SANCHEZ, ADRIANA
84627	OCCUPANT UNKNOWN,
84657	RODRIGUEZ, SYLVIA
84660	VALADEZ, GUTIERREZ G
84680	MARTINEZ, DAVID
84687	GARCIA, MARGARET A
84699	RAZO, WENCESLAO A

AVENUE 52 2014 (Cont'd)

84700 ESPINOZA, SERGIO B
GAMBOA, ALBERTA
SANDOVAL, LAURA
84720 BELTRAN, FELIPE
DUENAS, CRISTINA
RODRIGUEZ, SILVESTRE A
SANDOVAL, ALEXANDRA
84721 CALDERON, MARIA
84735 SANCHEZ, GUADALUPE
84740 GARCIA, GABRIEL
84743 RIVERA, FRANCISCO Q
84751 RODRIGUEZ, PEDRO
84786 ROMERO, CARMELO
84831 OCCUPANT UNKNOWN,
84840 PENALBER, TONY H
84871 DELATORRE, MANUEL
85101 BEERTOWN MARKET
85215 RAMOS, BALDEMAR M
85225 ESQUIVEL, GLORIA V
85235 SALCIDO, MARIA L
85245 REYES, CARMEN M
85255 RODRIGUEZ, JESSE N
85265 SANTOS, EMANUEL
85266 YANEZ, JUANITA R
85268 VILLARREAL, MARISA
85275 LOPEZ, JOSE T
85276 ZEPEDA, MARIA R
85285 GONZALES, LOURDES
85286 RIVERA, LUIS A
85295 OCCUPANT UNKNOWN,
85296 ATONDO, JAVIER
85306 AGUILAR, ALFREDO
85325 ESPEJEL, VICENTE
85335 MAGDALENO, FRANCISCO G
85336 EAMACHO, MARISA
85345 LOPEZ, BERTHA
85355 GAMBOA, AGUSTIN P
85365 TREVINO, CRISTIN
85375 VEGA, ROBERTO B
85385 MORALES, FRANCISCO V
85395 HURTADO, BASILIO
85405 GONZALES, TRINA T
85415 OCCUPANT UNKNOWN,
85425 REYES, RAUL U
85435 OCCUPANT UNKNOWN,
85445 FIGUEROA, IRMA R
85455 HUERTA, JUANITA O
85456 LEAL, SAMUEL
85465 AHRENS, WILLIAM D
85475 BRIONES, OLGA

AVENUE 52 2014 (Cont'd)

85485 MURILLO, RAFAEL N
85495 LOPEZ, ELIAS
85526 PADILLA, JOSE F
85536 ALVAREZ, ANITA
85546 ESTRADA, ARACELY R
85556 SANCHEZ, SILVANO M
85628 VILLARREAL, MARIA G
85646 SANDOVAL, PILAR F
85662 SANDOVAL, ALVARO S
85680 OCCUPANT UNKNOWN,
85989 JONES BROS CONSTRUCTION CO
86015 COACHELLA RIVERSIDE SCRAP IRON & ME
86025 OLD WORLD STONE
86045 WELLS SUPPLY COMPANY
86235 FRESHPIC HARVEST LLC
OASIS RANCH MANAGEMENT
SEA VIEW PACKING
SUNKIST GROWERS INC
86998 AYALAS AUTO REPAIR
HAWTHORNE LIFT SYSTEMS
87871 LOPEZ, ABIGAIL T

Target Street	Cross Street	Source
✓	-	Cole Information

VAN BUREN ST 2014

48267 MENDOZA, OCTAVIO C
48441 MUNIZ, NORMA
48665 SOLIZ, JAVIER R
48667 DURAN, MONICA
48687 OCCUPANT UNKNOWN,
48725 ALVARDO, ESTHER P
48785 OCCUPANT UNKNOWN,
50503 NIGOSIANS PYRAMID DATE GARDEN
SOLIS, BRIJITO
50800 CERVANTES, GREGORY C
50807 OCCUPANT UNKNOWN,
50830 CERVANTES, BEATRICE
52500 LEJA FARMS
52815 PASILLAS, JOHN M
52821 PACIS, JOSEFINA B
52911 OCCUPANT UNKNOWN,
52955 GALLARDO, ANABEL
52965 CARRILLO, RAFAEL
52985 OCCUPANT UNKNOWN,
53700 GAMEZ, YOLANDA
53780 BALTRAN, MARIA

AVENUE 52 2010

82489 CAHUILLA DESERT ACADEMY
82827 WILBERTS, THOMAS J
82847 OCCUPANT UNKNOWN,
82925 COACHELLA VALLEY CEMETERY
83030 ALVARADO, JOAQUIN Z
83151 SCHMID LASER LEVELING
SCHMID, STEVEN T
83200 OCCUPANT UNKNOWN,
83230 MARTINEZ, ELOISA C
83240 BARCENAS, LAURO
83266 ATKINSON, COMMIE
83682 ALVARADO, AUGUSTINE B
83740 SCHMID, STAN T
83876 OCCUPANT UNKNOWN,
83890 HUSTON, RUSSELL E
84045 LEJA, ROMJUE P
84165 OCCUPANT UNKNOWN,
84390 RODRIGUEZ, CANDELARIO
84500 AGUILAR, BENIGNO
ALEJO, SERGIO R
ALVAREZ, MARVIN
ANDRADE, JAVIER
AREVALO, SANDRA
ARRIAGA, ZURISADAY
AVILA, MANUEL
AVINA, TIERRA
AZALOS, CARMEN
BARCENAS, MAYRA L
BASILIO, ELDA
BAUTISTA, ROBERTO
BELTRAN, ROSARIO
BILLICANA, ANA E
BONILLA, YOLANDA
BOTELLO, FABIAN
CALDERON, MARISELA C
CAMPA, ELIZABETH
CARDONA, TERESA
CISNEROS, GUADALUPE
CORONA, JOSE J
CORONADO, OMAR
CORTEZ, ROBERTO A
CRUZ, BERENICE
DELGADO, HERNANDEZ F
DIMAS, MARGARITA
DURAN, GUADALUPE
ELENES, KARINA
ESPINOZA, ALFREDO
ESTRADA, JORGE
FELIX, NOLBERTA
FERNANDEZ, PABLO

AVENUE 52 2010 (Cont'd)

84500 FLORES, JAVIER F
FUENTES, PABLO P
GALLARDO, CLOTILDE
GARCIA, ALFREDO R
GARCIA, ISAIAS C
GERARDO, FERNANDO
GILARREAGA, JOSUE
GOMEZ, LIZETH
GONZALEZ, ALFONSO
GUTIERREZ, JOSE T
HERMOSILLO, JUDITH A
HERNANDEZ, ELOY
HIGUERA, MARIA C
IBARRA, ISRAEL
IRIBE, MARIA
IVARRA, BRENDA
IZAGUIRRE, LUIS
IZAGUIRRE, WENDY
JAUREGUI, EVE
JIMENEZ, ARMANDO A
JONES, ADELA
LOPEZ, ADRIANA
LOPEZ, JOSE
LOPEZ, RAYMUNDO
MARQUEZ, JUAN A
MARTINEZ, VALENTINE
MELENDEZ, HECTOR M
MENDOZA, MARIA T
MERAZ, JUAN
MEZA, JUAN
MIRANDA, FRANCISCO
MONTANO, MANUEL R
MUNOZ, GUADALUPE
MUNOZ, JOSE
NORZAGARAY, STEPHANIE
OBESO, IRMA Y
OLEA, BEATRIZ
ORCHARD VILLAS APARTMENTS
PARAMO, BALTAZAR
PELAYO, ANA A
PELCASTRE, PALAFOX T
PENA, JOSE
PENUELAS, OMAR
PEREZ, ANGEL M
PLACENCIA, FATIMA
PULIDO, CARLOS C
QUINTERO, MARCELA
RAMOS, JUAN R
RASAR, ANGELINA
RECIO, LAZARO

AVENUE 52 2010 (Cont'd)

84500	REYES, CLARISA
	RIVERA, JOEL A
	ROBLES, JUAN
	RODRIGUEZ, RICHARD J
	ROMAN, MARIBEL I
	ROMERO, RAYMOND
	RUIZ, JULIAN
	SAJA, JUAN
	SALDIVAR, KARINA
	SANCHEZ, SONIA
	SANDOVAL, JOSE D
	SANTOS, ALBERTO A
	SARABIA, PERLA G
	SMITH, ALLEN
	SOSA, MARIA
	SOTO, ALICIA
	SOTO, MARIA
	SUAREZ, NESTOR
	TALAVERA, MARIA
	TELCASTRE, TOMAS
	TORRES, CARLOS
	TREJO, JOSE A
	TREVINO, BEATRICE
	VALDEZ, ALEJANDRO R
	VALENZUELA, GUADALUPE
	VARGAS, CRISTINA
	VASQUEZ, ALBERTO Z
	VASQUEZ, RUBEN R
	VEGA, JOSE L
	VILLALOBOS, ELODIA
	YUDID, NEGRETTE
	ZAMORA, BENJAMIN
	ZARAGOZA, MARIA L
	ZAZUETA, JOSE T
84540	ALVAREZ, EMMA V
	GUILLEN, EUDELIA
	MUNOZ, ANA R
	ROSAS, CALIXTO J
	RUBIO, HERMELINDA
	SANDOVAL, ELENA S
84560	FLORES, ALMA
	GUERRERO, JOSEFINA
	MONTEROSA, LILIAN
	TSUJIMURA, ROSARIO
	VALADEZ, NICOLASA G
84580	DANIEL, NORMA
	LOPEZ, HERLINDA L
	PEREZ, JUAN
	VALENCIA, MARISOL O
84600	AGUILAR, RODRIGZ S

AVENUE 52 2010 (Cont'd)

84600 FLORES, SANDRA
MAGANA, GONZALO
SRENAS, ROSA
84620 GARCIA, MUNOZ F
SANCHEZ, ADRIANA
84640 MALDONO, MARIA
PEREZ, ROSA P
RAMIREZ, MARICELA
RODRIGUEZ, MARTIN P
84660 CERVANTES, GUADALUPE
LOPEZ, JOHN L
VALADEZ, GUTIERREZ G
84680 MARTINEZ, DAVID
MARTINEZ, MAGDALENA
ROCHA, CELIA
84687 GARCIA, MARGARET A
84699 RAZO, WENCESLAO A
84700 BARRAGAN, CLEMENTINA M
ESPINOZA, SOFIA
GARCIA, GABRIEL
84720 COACHELLA COMMUNITY HOMES
CORTEZ, RAUL S
DUENAS, CRISTINA
LEMUS, CHRISTINA
84721 CALDERON, MARIA
84735 SANCHEZ, NANCY
84740 NUNEZ, MARIA D
VANSCOY, RAUL
84743 ORDUNO, JOHN K
84751 OCCUPANT UNKNOWN,
84761 OCCUPANT UNKNOWN,
84763 ARRIAGA, ZURISADAY
84786 ROMERO, CARMELO
84831 CERINA, ANNITA
84840 PENALBER, TONY H
84871 LATORRE, MANUEL D
85101 BAJA MEAT MARKET
85215 RAMOS, BALDEMAR B
85225 ESQUIVEL, GLORIA V
85235 SALCIDO, MARIA L
85245 REYES, CARMEN A
85255 RODRIGUEZ, JESSE N
85265 SANTOS, SALOMON M
85266 YANEZ, JUANITA R
85275 LOPEZ, JOHN A
85276 ZEPEDA, MARIA R
85285 LUNA, A
85286 RIVERA, TERESA T
85295 AROZ, HENRIETTA D
85296 YSLAS, ELIZARDO S

AVENUE 52 2010 (Cont'd)

85325 RIVERA, EVANGELINA
85335 MAGDALENO, FRANCISCO G
85336 CASTANEDA, ANNABEL
85345 LOPEZ, BERTHA
85355 OCCUPANT UNKNOWN,
85365 TREVINO, CRISTIN
85375 VEGA, ROBERTO B
85385 MORALES, FRANCISCO V
85395 HURTADO, RICARDO B
85425 REYES, ESPERANZ U
85435 OCCUPANT UNKNOWN,
85445 FIGUEROA, IRMA R
85455 HUERTA, JUANITA O
85456 LOPEZ, REBECCA G
85465 AHRENS, WILLIAM D
85475 BRIONES, JOSEFINA S
85485 SANCHEZ, ERMELIND G
85495 LOPEZ, ELIAS
85526 PADILLA, ANGEL
85536 RAMIREZ, JUAN G
85546 ESTRADA, JOSE
85556 SANCHEZAGUIRRE, MARIA Q
85628 VILLARREAL, MARISA
85646 SANDOVAL, JAVIER M
85662 SANDOVAL, GAUDENCIA F
86015 COACHELLARIVERSIDE SCRAP IRON
86025 OLD WORLD STONE
86045 WELLS SUPPLY CO
86235 DAVID H BERG & CO
FRESHPIC HARVEST
SEA VIEW PACKING
THERMAL PALLET
86998 HAWTHORNE LIFT SYSTEMS
87871 VILLANUEVA, FRANCISCO

Target Street	Cross Street	Source
✓	-	Cole Information

VAN BUREN ST 2010

48267 LOPEZ, ORLANDO R
48665 MIXON, SHELLEY L
48667 DURAN, MONICA
48687 OCCUPANT UNKNOWN,
48725 ALVARADO, ESTHER P
48785 ALVAREZ, PEDRO G
50503 SOLIS, JOSE B
50540 NIGOSIAN, NICK
50800 OCCUPANT UNKNOWN,
50807 OCCUPANT UNKNOWN,
50830 OCCUPANT UNKNOWN,
52500 LEJA FARMS
52815 PASILLAS, JOHN M
52821 PACIS, JOSEFINA B
52911 SALAS, LAWRENCE P
52955 AGUILAR, JEANETTE
52985 OCCUPANT UNKNOWN,
53700 GAMEZ, YOLANDA
53780 FERNANDEZ DATE SALES
PENA, FRANCISCA M

AVENUE 52 2005

82295 OCCUPANT UNKNOWN,
82375 ARRIAGA, RAMON M
DA VALL DATE GARDENS RETAIL SALES
DAVALL DATE GARDENS
82489 COECHELLA VALLEY SCHOOL DST
THE CALIFORNIA STATE GEAR UP
82827 WILBERTS, VALDA
82847 OCCUPANT UNKNOWN,
82867 KESTELL, BRET M
82925 COACHELLA VALLEY PUBLIC CEMETERY
83030 OCCUPANT UNKNOWN,
83151 JANICE SCHMID
SCHMID LASER LEVELING
SCHMID, STEVEN T
83240 BARCENAS, LAURO
83266 ATKINSON, WILLIAM G
83682 OCCUPANT UNKNOWN,
83738 OCCUPANT UNKNOWN,
83740 JORDAN, JAMES
SCHMID, STAN T
83859 CASTRO, ERASMO
83870 OROPEZA, ROSA M
83890 HUSTON, RUSSELL E
84045 LEJA, ROMJUE P
84165 PEREZ, SYLVIA P
84390 AGUILAR, BENJAMIN
84500 ACOSTA, ELIAZAR
ALVARADO, ANA
ALVAREZ, MERCEDES
ANDRADE, JAVIER
ANGULO, CIRIA
ARAGON, YOLANDA
ARELLANO, YADIRA
BOJORQEZ, HILDA
CARLIN, GERARDO M
CHAVEZ, MARIBEL
CHAVEZ, RUBEN
CONTRERAS, ARMANDO
CORRALES, MARGARITA
CORTEZ, HERMILA
CRUZ, HERMINIO
CUTIERREZ, CYNTHIA
DELACRUZ, ISAIAS G
DELARA, ERIC
DELGADO, HERNANDEZ F
DESERT STORM ELECTRIC
DOMINGUEZ, PABLO
DUARTE, JUAN N
ELENES, FRANCES
ESPINOZA, ELVA

AVENUE 52 2005 (Cont'd)

84500 FERRATT, FRANCISCO
FLORES, JAVIER
FRIAS, DANTE E
FUENTES, PABLO
GARCIA, ARMANDO
GLASS, MARIA
GOMEZ, PEDRO A
GONZALES, ROBERTO B
GONZALEZ, ALFONSO
GONZALEZ, GLORIA
GONZALEZ, RAFAEL
GUITERREZ, CYNTHIA
GURROLA, JOSE D
GUTIERREZ, RUBEN
HERMOSILLO, JUDITH
HERNANDEZ, RAFAEL
HOYA, ANGELINA D
HUARACHA, FRANCISCA
IBARRA, ANGELICA
JIMENEZ, ARMANDO A
LEON, JUAN E
LERMA, MARTINEZ R
LOPEZ, MARISSA S
LOPEZ, SOLEDAD M
LUNA, ROSA E
MADRIGAL, MANUEL Y
MARIN, MAURICIO
MARQUEZ, ELVIRA
MARTINEZ, ABELINO
MARTINEZ, FERNANDO
MENDEZ, RICKY
MONTENEGRO, ANTONIO
MONTIEL, ALCANTAR L
MONTOSAR, MARIA
MORALES, MAYRA
MORENO, MARIA L
NAVARETTE, CRISTINA
NUNEZ, SALVADOR D
OCHOA, MARIA L
OLIVAS, STEPHANIE
ORCHARD VILLAS APARTMENTS
PACHECO, ROSA
PALACIOS, TRINDAD
PAZ, MARTIN
QUEVEDO, FERNANDO
RAIMIREZ, EDUARDO
REYES, TERESA V
RIOS, SANDALIO Z
RIVAS, GUADALUPE
RODRIGUEZ, RICHARD

AVENUE 52 2005 (Cont'd)

84500 SALCEDO, TENNILLE
SANTOS, ALBERTO A
SARABIA, PERLA G
SAVALA, ABEL W
SERVIN, LETICIA
SMALL, MARK D
SOTO, MARIA
UVALLE, JOE
VALDEZ, ALEJANDRO R
VALENZUELA, EDUARDO
VASQUEZ, LEONARDO
ZAMORA, BENJAMIN
ZAZUETA, GABRIELA
ZEPEDA, IRMA M
84540 ALVAREZ, EMMA V
BAUTISTA, ALMA
MUNOZ, ANA R
PIMENTEL, LIZVETH
84560 MONTEROSA, LILIAN
PORTILLO, RAFAEL
TSUJIMURA, ROSARIO
84580 DELGADO, C
LOPEZ, HERLINDA M
SALDIVAR, MIRAM
84600 AGUILAR, SILVESTRE
FLORES, SANDRA
LOPEZ, ANGEL O
OCHOA, IGNACIO E
OCNOA, SARA
84620 AVINA, CYNTHIA
GUEVARA, MARIA C
REYES, MARILU S
VALDOVINOS, YOANA
84627 SAENZ, LAURA
84640 BECERRA, DELIA
GONZALEZ, JOSE J
LOPEZ, GUSTAVO C
PEREZ, ROSA
84657 RUIZ, TOMMIE L
84660 CERVANTES, GUADALUPE
VALADEZ, GUTIERREZ G
84680 AGUIRRE, ANA M
CAMPOS, HUMBERTO
DELGUTIERREZ, MARIA D
RIOS, KARLA
ROCHA, CELIA
84687 GARCIA, MARGARET A
84699 RAZO, WENCESLAO A
84700 ARGUELLAS, RODRIGO M
CHAVEZ, NELIDA

AVENUE 52 2005 (Cont'd)

84700 ESPINOZA, SERGIO B
84720 COACHELLA COMMUNITY HOMES
LOPEZ, KARLA
SANCHEZ, HILDA
TORRES, CARLOS
84721 CALDERON, MARIA
84735 SANCHEZ, LUPE
84740 BRAMBILA, NANCY
GARCIA, GABRIEL
NUNEZ, MARIA D
84743 OCCUPANT UNKNOWN,
84751 OCCUPANT UNKNOWN,
84761 LENA, WENCESLAO Y
84763 ARRIAGA, ZURISADAY
84786 ROMERO, CARMELO
84840 PENABLER, TONY
PENALBER, TONY H
84851 OCCUPANT UNKNOWN,
84985 OCCUPANT UNKNOWN,
85101 EL TORO LOCO
85215 OCCUPANT UNKNOWN,
85225 ESQUIVEL, GLORIA V
RENDON, ROSANGEL
85235 SALCIDO, MARIA L
85245 GOMEZ, CONCEPCION
VANESSA REYES
85255 RODRIGUEZ, JESSE P
85265 AUDELO, MARIA S
85266 YANEZ, RICHARD V
85275 LOPEZ, JOSE T
85276 ZEPEDA, MARIA R
85285 MACIEL, NORMA A
85286 RIVERA, TERESA T
85296 YSLAS, ELIZARDO S
85306 AGUILAR, ALFREDO
85325 CARRANZA, ABRAHAM P
85335 MAGDALENO, FRANCISCO G
85345 ROCHA, MIGUEL A
85355 MARTINEZ, DANIEL
85365 CASTILLO, RODOLFO C
85375 VEGA, ROBERTO B
85385 MORALES, C
85395 OCHOA, RACHEL B
85405 GONZALES, TRINA R
85415 MUNOZ, RAQUEL
85435 PLASCENCIA, LUZ
85445 FIGUEROA, IRMA R
85455 HUERTA, JUANITA O
85456 LOPEZ, REBECCA G
85465 AHRENS, WILLIAM D

AVENUE 52 2005 (Cont'd)

85475 BRIONES, JOSEFINA S
85485 MURILLO, RAFAEL N
85495 LOPEZ, ELIAS
85525 OCCUPANT UNKNOWN,
85526 PADILLA, ELENA C
85536 RAMIREZ, JUAN G
85546 RUIZ, JULIAN
85556 CHAIDEZ, MARIA
85646 OCCUPANT UNKNOWN,
85662 SANDOVAL, GAUDENCIA F
86015 RIVERSIDE SCRAP IRON & METAL CORP
86025 TENSLEEP TECHNOLOGIES INC
86045 MARDEN SUSCO
86235 BERG DAVID H & CO
FRESH PIC HARVEST LLC
OASIS RANCH MANAGEMENT
STEPHEN ROOT LABOR CONTRACTING

Target Street	Cross Street	Source
✓	-	Cole Information

VAN BUREN ST 2005

48441	OLACHEA, MARIBEL
48665	JIMENEZ, ALEX S
48687	NAVA, EDUARDO
48785	CHAN, JORGE R
50503	NIGOSIANS PYRAMID DATE GARDEN
	SOLIS, JOSE B
50540	NIGOSIAN, NICK
50800	RAMIREZ, JUAQUIN G
50830	OCCUPANT UNKNOWN,
51330	OCCUPANT UNKNOWN,
52500	LEJA FARMS
	LEJA, PATRICK L
52815	PASILLAS, JOHN
52821	PACIS, JOSEFINA B
52911	SALAS, LAWRENCE P
52955	ALVAREZ, LORENA
52965	AGUILAR, JEANETTE
52985	OCCUPANT UNKNOWN,
53700	GAMEZ, YOLANDA
53780	FERNANDEZ, FELIPE B

Target Street	Cross Street	Source
✓	-	Cole Information

52ND AVE 2000

82375 DA VALL DATE GARDENS
DA VALL DATE GARDENS RETAIL SALES
82489 CAHUILLA DESERT ACADEMY
82925 COACHELLA VALLEY CEMETERY
83151 SCHMID LASER LEVELING
84720 COACHELLA COMMUNITY HOMES
85101 CIRCLE 7
85989 JONES BROTHERS CONSTRUCTION COMPANY
86015 COACHELLA RIVERSIDE SCRAP IRON & METAL CORPORATION
86025 AMCOR CAPITAL
86045 SHAFFER ENGINEERING
86235 BERG DAVID H & COMPANY
FREST PIC HARVEST LLC
86998 BROOKS & ASSOCIATES
88121 HENRYS AUTOMOTIVE

Target Street	Cross Street	Source
✓	-	Cole Information

VAN BUREN ST 2000

48267	TERRY, MICHELE
48665	JIMENEZ, EVA D
48785	OCCUPANT UNKNOWN,
50830	OCCUPANT UNKNOWN,
52500	LEJA FARMS
	LEJA, PAT
52815	PASILLAS, ALFRED
52821	OCCUPANT UNKNOWN,
52911	SALAS, LARRY
52965	HERRERA, PANFILO
53700	RINCONDEDIAZANS, MARIA
53750	OCCUPANT UNKNOWN,
53780	FERNANDEZ, FELIPE
	SANTANAVELASCO, JOSE M

Target Street	Cross Street	Source
✓	-	Cole Information

AVENUE 52 1995

82375	DA VALL DATE GARDENS
	DA VALL DATE GARDENS RETAIL
82925	COACHELLA VALLEY CEMETERY
83151	SCHMID LASER LEVELING
85101	CIRCLE K FOOD STORE
85405	BETTY HOWARD
86015	RIVERSIDE SCRAP IRON & METAL
86045	SHAFFER ENGINEERING
86235	SUN WORLS INTL INC
86600	DESERT COTTONSEED PRODUCTS CO

Target Street	Cross Street	Source
✓	-	Cole Information

VAN BUREN ST 1995

51330	DEANDA, NAOMI
52500	LEJA FARMS
	LEJA, PAT
52815	PASILLAS, ALFRED
52911	SALAS, LARRY Y
52955	OCCUPANT UNKNOWNN
52965	OCCUPANT UNKNOWNN
52985	CERVANTES, O C
	VELASQUEZ, JOSE L
53000	TUITE, T N

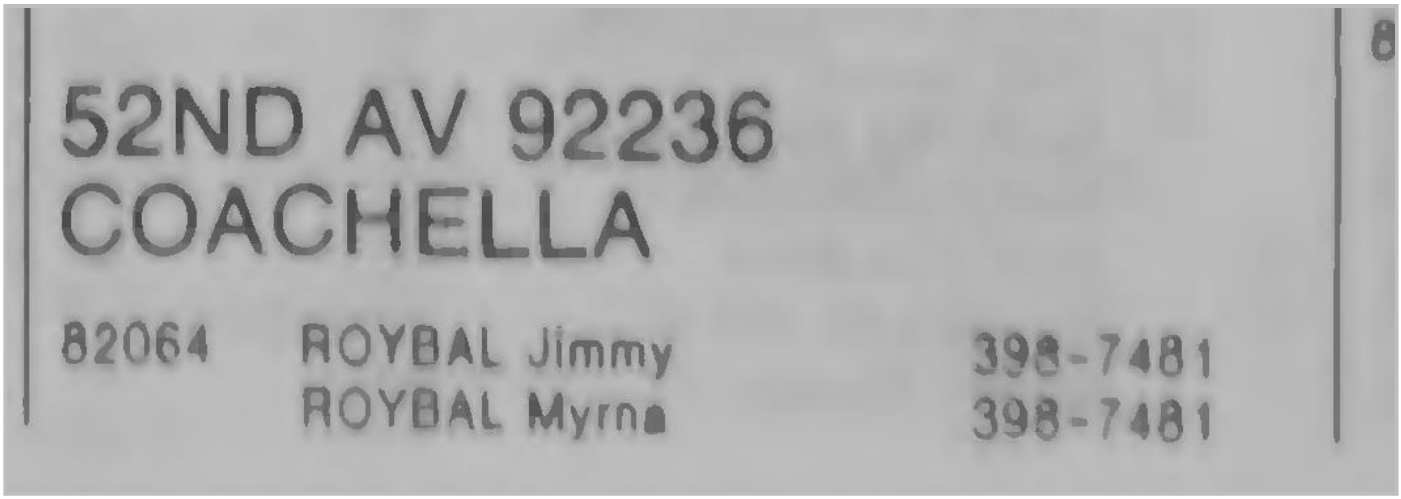
Target Street	Cross Street	Source
✓	-	Cole Information

VAN BUREN ST 1992

50503	NIGOSIANS GARDEN
51332	VELASQUES, ALFONSO
	VELASQUEZ, NICOLAS
52500	LEJA FARMS
	LEJA, PAT
52815	PASILLAS, ALFRED
52911	SALAS, LARRY Y
52985	TAFOLLA, C
53000	TUITE, T N

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

52ND AVE 1990



Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

52ND AVE 1990



52ND AV		92236 CONT	
82375	DAVALL David C	398-5336	9
82513	VILLA Jose	398-6697	6
82531	XXXX	00	
82827	WILBERTS Jay D	398-7784	1
82828	AVENA Efrain	00	4
82847	WILBERTS Thos	398-8545	3
82867	KESTELL Bret M	398-0740	
82897	XXXX	00	
82925	★COACHELLA VLY CMTRY	398-3221	2
82955	XXXX	00	
83030	XXXX	00	
83151	SCHMID Steven	398-8344	3
83200	XXXX	00	
83230	XXXX	00	
83234	XXXX	00	
83266	DEFLAVIO Edward	398-6611	1
83284	XXXX	00	
83286	XXXX	00	
83465	BELTRAN Manuel	398-3161	+0
	GUTIERREZ Jose J	398-1692	+0
83682	XXXX	00	
83740	SCHMID Thos G	398-5660	3
83859	CASTRO Maria I	398-1479	+0
	MALDONADO Jose	398-1830	9
83870	XXXX	00	
83874	PEREZ Luis Amezcua	398-8374	3
83876	XXXX	00	
83890	HUSTON Russell	398-7658	
	HUSTON Sarah	398-7658	
84165	XXXX	00	
84390	NIETO Brenda I	398-8553	+0
84518	XXXX	00	
84540	BONILLA Simon	398-4340	+0
	ORTEGA Agustin	398-5149	9
	SANCHEZ Leticia	398-4409	9
	ULLOA Tomas S	398-3269	+0
84560	XXXX	00	
84580	SERVIN Dani V	398-0927	9
	SERVIN Leticia	398-0927	
84600	GALLEGOS Rosemary	398-3674	8
	RUIZ Maria U	398-6862	+0
84620	XXXX	00	
84633	XXXX	00	
84639	CASTILLO David	398-0414	
84640	ROSAS Isabel	398-8507	+0
	VERAZAS E	398-7777	9
84645	XXXX	00	
84648	XXXX	00	
84660	★COACHELLA CMNTY HME	398-6411	2
	VERGARA Jose Luis	398-8052	9
84680	XXXX	00	
84687	XXXX	00	
84699	RAZO Rosa	398-5176	2
	RAZO Wenceslao	398-0866	
84700	BRAVO Jose Luis	398-1014	7
	MACHUCA Cruz	398-3606	9
	ZAPATA Gloria	398-5088	3
84716	XXXX	00	
84720	DIAZ Martha P	398-7242	9
	DIAZ Martin F	398-4940	+0
	PALOMAR Maria	398-8193	6
84735	XXXX	00	
84740	GONZALEZ Osvaldo	398-5719	9
	OCAMPO Maibel	398-2593	+0
84743	XXXX	00	
84747	ORDUNO Anarosa	398-6674	9
	ORDUNO Baldemar	398-6674	
84751	BROCK Algene	398-3910	
	BROCK Elizabeth	398-3910	9
84762	XXXX	00	
84786	ROMERO Carmel R	00	4
84831	XXXX	00	
84840	DOMINGUEZ Tana	398-6240	
	PENALBER Tony	398-5667	
85101	★CIRCLE K FOOD 0330	398-2821	
85215	XXXX	00	
85225	ESQUIVEL Gloria	398-1942	9
85235	SALCIDO Frank	398-0638	
85245	XXXX	00	
85255	RODRIGUEZ Jesse	398-5124	
	RODRIGUEZ Rafaela	398-5124	
85275	XXXX	00	
85276	XXXX	00	
85285	MACIEL Jose N	398-0509	+0
85295	AROZ Nettie	398-5431	
85296	XXXX	00	
85306	ABDELNOUR Nick	398-5695	
85325	YSIANO Mike	398-0418	
	YSIANO P L	398-8526	9
85335	XXXX	00	
85345	ROCHA Miguel A	398-5535	
85365	MARIN Frank	398-5729	
85375	VEGA Roberto B	398-6424	
85385	MORALES Frank V	398-0676	
85395	XXXX	00	
85405	★HOWARD BETTY	398-5169	
85415	XXXX	00	
85425	XXXX	00	
85435	XXXX	00	
85445	XXXX	00	
85446	OCHOA Anastacio	398-0595	
	PEREZ Rebecca	398-0595	
85455	XXXX	00	
85456	XXXX	00	
85465	AHRENS Bill	398-5610	
85475	XXXX	00	
85495	LOPEZ Elias	398-0925	
85525	ALVAREZ Manuel	00	+0
	ESCOBEDO Euloglo	398-7723	9
	ORTEGA Clara	398-7625	2
	PINEDO Felicitas	398-2343	
85526	PADILLA Elena	398-5449	
85536	XXXX	00	
85546	XXXX	00	
85556	CHAIDEZ Maria	398-7877	6
85600	XXXX	00	
85662	HURTADO Rosendo Jr	398-2873	+0
85680	RODRIGUEZ Isabel	398-0513	4
85989	★JONES BROS CONST	347-2291	
	★JONES BROS CONSTR	398-5536	
86015	★COACHELLA SCRAP IRN	398-7772	9
86025	★DESERT VLY DATE	398-0999	6
86045	★SHAFFER ENGINEERING	398-6580	
86235	★SUPERIOR FARMING CO	398-9867	8
	★SUPERIOR FARMING CO	398-9861	8
	★SUPERIOR FARMING CO	398-6105	8
86480	BROWN Cheryle	398-2721	
	BROWN J T	398-5042	
	BROWN Naomi	398-5042	
86600	CELEDON Aurelio	00	4
86800	SANCHEZ Alfonso Q	398-5442	6
86900	ABREU Jaime A	398-3450	+0
86998	XXXX	00	
NO #	LAWRENCE Frank R	398-4051	
★	12 BUS 124 RES	14 NEW	

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

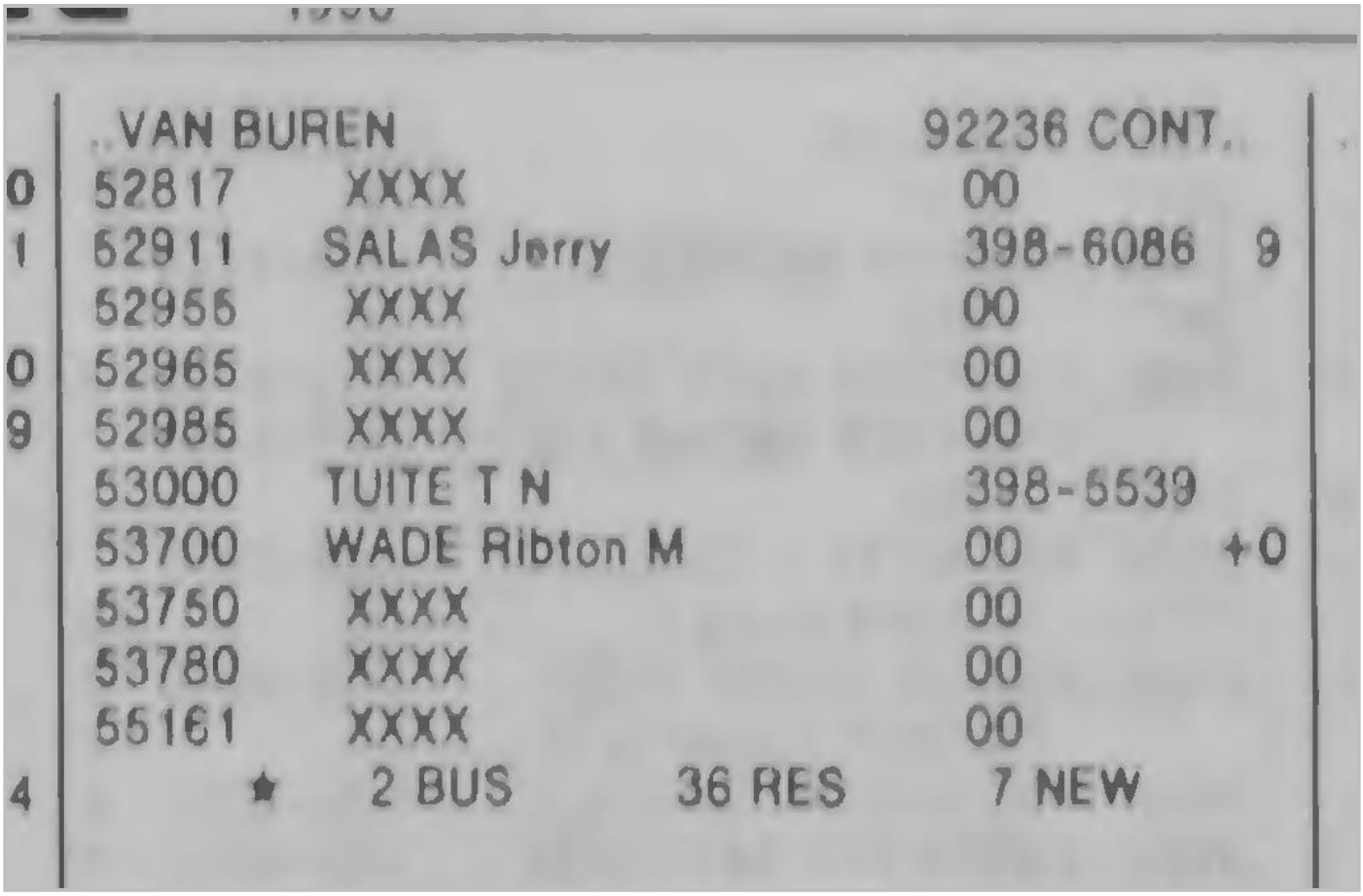
VAN BUREN ST 1990

VAN BUREN 92236
COACHELLA

48200	DURAN Catarino	342-2734	1
48267	LOPEZ Ernest	347-3084	
48441	ERICKSON Leif	347-9197	
	LOPEZ Rosalba	347-3634	8
48725	CRUZ Magdalena	342-3644	+0
	SANCHEZ Leonardo	342-7892	7
50503	★NIGOBIANS GARDEN	398-5182	7
	★PYRAMID DATE GARDNS	398-5182	
	BOLIS Brigido Z	00	4
50540	DOMINQUEZ Ester	398-8546	+0
	PACHECO Juan	00	+0
50545	XXXX	00	
50547	XXXX	00	
50800	CERVANTES Gergorio	00	4
	FONSECA Hector	398-4352	+0
51300	XXXX	00	
51330	XXXX	00	
51331	ALAPIZCO Salome F	00	4
	BARRAZA Rogelio B	00	4
	TREVINO Bertha	398-5263	9
51332	BECERRIL Constanti	00	4
	DIAZ Margarita Z	398-8438	+0
	GUTIERREZ Sanjuans	00	4
52500	LEJA Pat	398-0340	
	LEJA Pat	398-8702	4
52715	XXXX	00	
52815	ISIDORO Pablo	00	+0
	PASILLAS Alfred	398-0362	

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

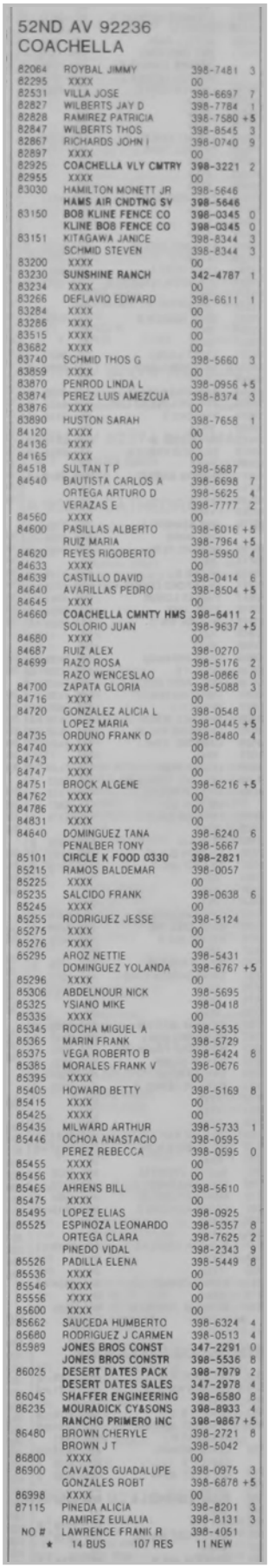
VAN BUREN ST 1990



	VAN BUREN		92236 CONT.	
0	52817	XXXX	00	
1	52911	SALAS Jerry	398-6086	9
	52956	XXXX	00	
0	52965	XXXX	00	
9	52985	XXXX	00	
	53000	TUITE T N	398-6539	
	53700	WADE Ribton M	00	+0
	53750	XXXX	00	
	53780	XXXX	00	
	55161	XXXX	00	
4	★	2 BUS 36 RES	7 NEW	

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

52ND AVE 1985



52ND AV 92236
COACHELLA

82064	ROYBAL JIMMY	398-7481	3
82295	XXXX	00	
82531	VILLA JOSE	398-6697	7
82827	WILBERTS JAY D	398-7784	1
82828	RAMIREZ PATRICIA	398-7580	+5
82847	WILBERTS THOS	398-8545	3
82867	RICHARDS JOHN I	398-0740	9
82897	XXXX	00	
82925	COACHELLA VLY CMTRY	398-3221	2
82955	XXXX	00	
83030	HAMILTON MONETT JR	398-5646	
	HAMS AIR CNDTNG SV	398-5646	
83150	BOB KLINE FENCE CO	398-0345	0
	KLINE BOB FENCE CO	398-0345	0
83151	KITAGAWA JANICE	398-8344	3
	SCHMID STEVEN	398-8344	3
83200	XXXX	00	
83230	SUNSHINE RANCH	342-4787	1
83234	XXXX	00	
83266	DEFLAVIO EDWARD	398-6611	1
83284	XXXX	00	
83286	XXXX	00	
83515	XXXX	00	
83682	XXXX	00	
83740	SCHMID THOS G	398-5660	3
83859	XXXX	00	
83870	PENROD LINDA L	398-0956	+5
83874	PEREZ LUIS AMEZCUA	398-8374	3
83876	XXXX	00	
83890	HUSTON SARAH	398-7658	1
84120	XXXX	00	
84136	XXXX	00	
84165	XXXX	00	
84518	SULTAN T P	398-5687	
84540	BAUTISTA CARLOS A	398-6698	7
	ORTEGA ARTURO D	398-5625	4
	VERAZAS E	398-7777	2
84560	XXXX	00	
84600	PASILLAS ALBERTO	398-6016	+5
	RUIZ MARIA	398-7964	+5
84620	REYES RIGOBERTO	398-5950	4
84633	XXXX	00	
84639	CASTILLO DAVID	398-0414	6
84640	AVARILLAS PEDRO	398-8504	+5
84645	XXXX	00	
84660	COACHELLA CMNTY HMS	398-6411	2
	SOLORIO JUAN	398-9637	+5
84680	XXXX	00	
84687	RUIZ ALEX	398-0270	
84699	RAZO ROSA	398-5176	2
	RAZO WENCESLAO	398-0866	0
84700	ZAPATA GLORIA	398-5088	3
84716	XXXX	00	
84720	GONZALEZ ALICIA L	398-0548	0
	LOPEZ MARIA	398-0445	+5
84735	ORDUNO FRANK D	398-8480	4
84740	XXXX	00	
84743	XXXX	00	
84747	XXXX	00	
84751	BROCK ALGENE	398-6216	+5
84762	XXXX	00	
84786	XXXX	00	
84831	XXXX	00	
84840	DOMINGUEZ TANA	398-6240	6
	PENALBER TONY	398-5667	
85101	CIRCLE K FOOD 0330	398-2821	
85215	RAMOS BALDEMAR	398-0057	
85225	XXXX	00	
85235	SALCIDO FRANK	398-0638	6
85245	XXXX	00	
85255	RODRIGUEZ JESSE	398-5124	
85275	XXXX	00	
85276	XXXX	00	
85295	AROZ NETTIE	398-5431	
	DOMINGUEZ YOLANDA	398-6767	+5
85296	XXXX	00	
85306	ABDELNOUR NICK	398-5695	
85325	YSIANO MIKE	398-0418	
85335	XXXX	00	
85345	ROCHA MIGUEL A	398-5535	
85365	MARIN FRANK	398-5729	
85375	VEGA ROBERTO B	398-6424	8
85385	MORALES FRANK V	398-0676	
85395	XXXX	00	
85405	HOWARD BETTY	398-5169	8
85415	XXXX	00	
85425	XXXX	00	
85435	MILWARD ARTHUR	398-5733	1
85446	OCHOA ANASTACIO	398-0595	
	PEREZ REBECCA	398-0595	0
85455	XXXX	00	
85456	XXXX	00	
85465	AHRENS BILL	398-5610	
85475	XXXX	00	
85495	LOPEZ ELIAS	398-0925	
85525	ESPINOZA LEONARDO	398-5357	8
	ORTEGA CLARA	398-7625	2
	PINEDO VIDAL	398-2343	9
85526	PADILLA ELENA	398-5449	8
85536	XXXX	00	
85546	XXXX	00	
85556	XXXX	00	
85600	XXXX	00	
85662	SAUCEDA HUMBERTO	398-6324	4
85680	RODRIGUEZ J CARMEN	398-0513	4
85989	JONES BROS CONST	347-2291	0
	JONES BROS CONSTR	398-5536	8
86025	DESERT DATES PACK	398-7979	2
	DESERT DATES SALES	347-2978	4
86045	SHAFFER ENGINEERING	398-6580	8
86235	MOURADICK CY&SONS	398-8933	4
	RANCHO PRIMERO INC	398-9867	+5
86480	BROWN CHERYLE	398-2721	8
	BROWN J T	398-5042	
86800	XXXX	00	
86900	CAVAZOS GUADALUPE	398-0975	3
	GONZALES ROBT	398-6878	+5
86998	XXXX	00	
87115	PINEDA ALICIA	398-8201	3
	RAMIREZ EULALIA	398-8131	3
NO #	LAWRENCE FRANK R	398-4051	

★ 14 BUS 107 RES 11 NEW

Target Street	Cross Street	Source
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VAN BUREN ST 1985

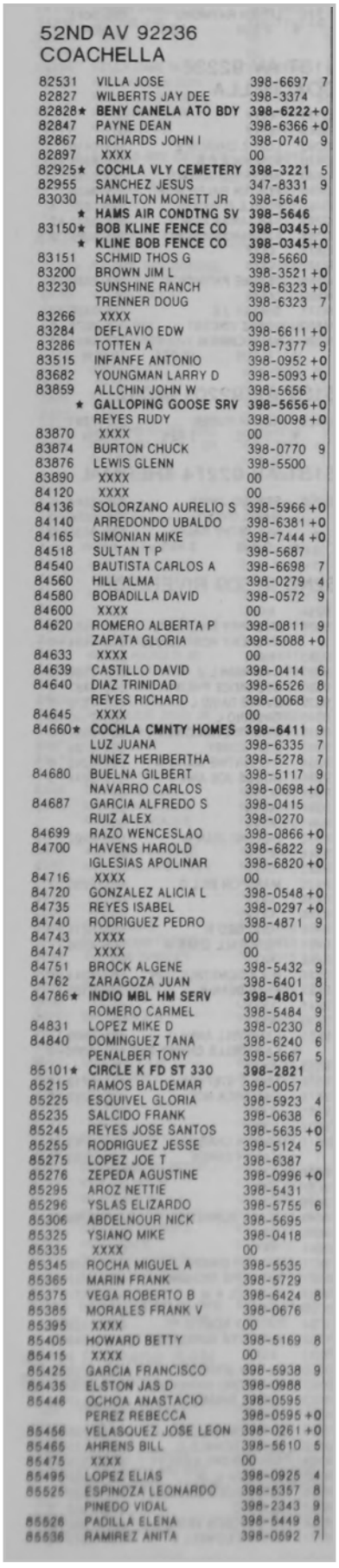
VAN BUREN 92236
COACHELLA

50503	NIGOSIANS PYRAMID	398-5182	
	PYRAMID DATE GARDNS	398-5182	
50540	ZACARIAS MARIA	398-6356	+5
50545	XXXX	00	
50547	XXXX	00	
50770	XXXX	00	
50800	VALDEZ SALVADOR	398-8063	+5
50830	XXXX	00	
50850	XXXX	00	
51300	LOPEZ ROBT	398-5911	4
51330	XXXX	00	
51331	XXXX	00	
51332	XXXX	00	
52500	LEJA PAT	398-0340	
	LEJA PAT	398-8702	4
52715	XXXX	00	
52815	PASILLAS ALFRED	398-0362	
52817	XXXX	00	
52911	LARRIVA JULIO	398-6086	9
52955	GOMEZ BERNARDINO L	398-5990	8
52965	XXXX	CO	
52985	XXXX	00	
53000	TUITE T N	398-5539	
53780	XXXX	00	
54501	COLEMAN S M	398-6485	9

★ 2 BUS 23 RES 2 NEW

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

52ND AVE 1980

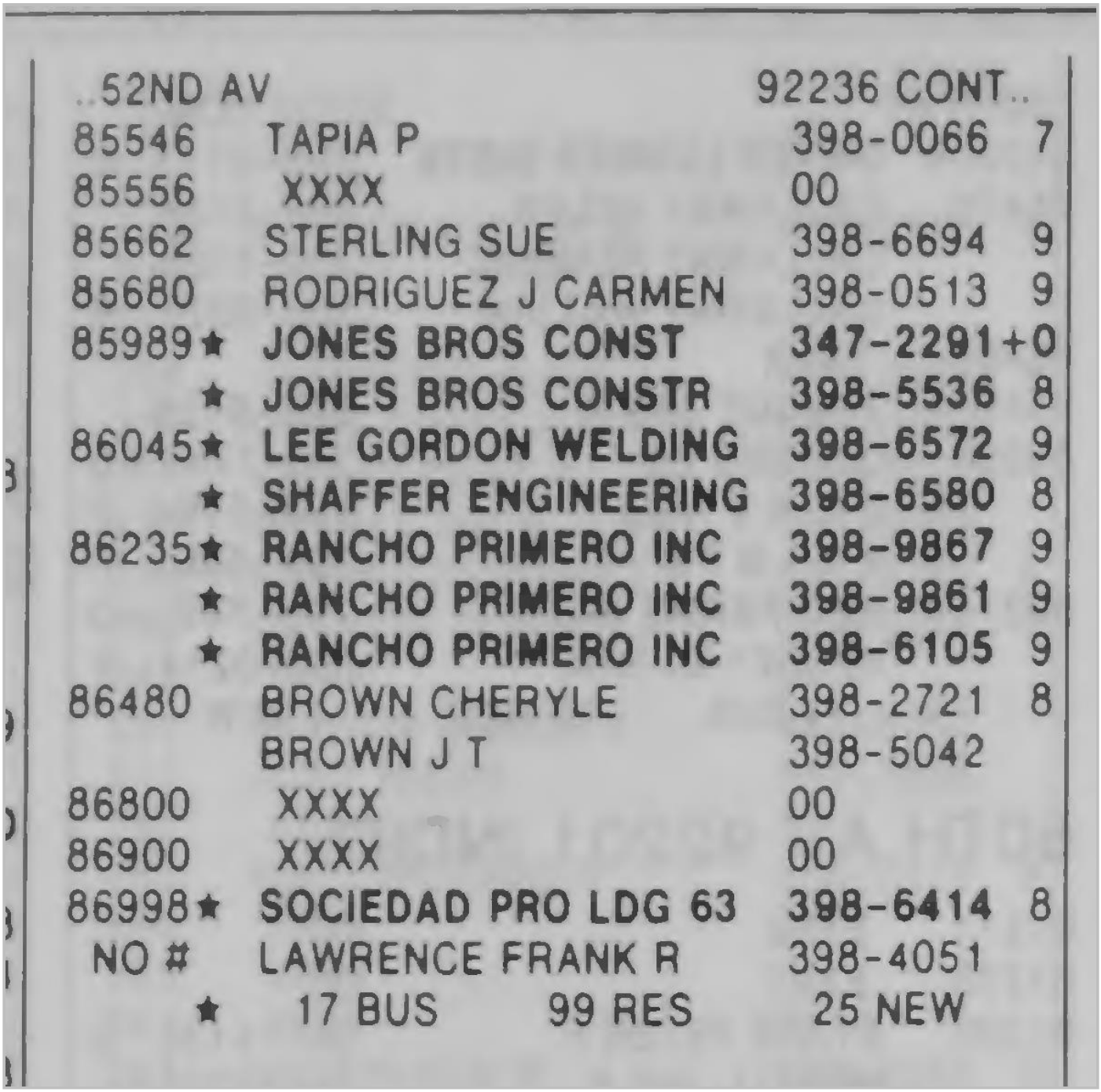


52ND AV 92236
COACHELLA

82531	VILLA JOSE	398-6697 7
82827	WILBERTS JAY DEE	398-3374
82828★	**BENY CANELA ATO BDY**	**398-6222+0**
82847	PAYNE DEAN	398-6366 +0
82867	RICHARDS JOHN I	398-0740 9
82897	XXXX	00
82925★	**COCHLA VLY CEMETERY**	**398-3221 5**
82955	SANCHEZ JESUS	347-8331 9
83030	HAMILTON MONETT JR	398-5646
★	**HAMS AIR CONDTNG SV**	**398-5646**
83150★	**BOB KLINE FENCE CO**	**398-0345+0**
★	**KLINE BOB FENCE CO**	**398-0345+0**
83151	SCHMID THOS G	398-5660
83200	BROWN JIM L	398-3521 +0
83230	SUNSHINE RANCH	398-6323 +0
	TRENNER DOUG	398-6323 7
83266	XXXX	00
83284	DEFLAVIO EDW	398-6611 +0
83286	TOTTEN A	398-7377 9
83515	INFANFE ANTONIO	398-0952 +0
83682	YOUNGMAN LARRY D	398-5093 +0
83859	ALLCHIN JOHN W	398-5656
★	**GALLOPING GOOSE SRV**	**398-5656+0**
	REYES RUDY	398-0098 +0
83870	XXXX	00
83874	BURTON CHUCK	398-0770 9
83876	LEWIS GLENN	398-5500
83890	XXXX	00
84120	XXXX	00
84136	SOLORZANO AURELIO S	398-5966 +0
84140	ARREDONDO UBALDO	398-6381 +0
84165	SIMONIAN MIKE	398-7444 +0
84518	SULTAN T P	398-5687
84540	BAUTISTA CARLOS A	398-6698 7
84560	HILL ALMA	398-0279 4
84580	BOBADILLA DAVID	398-0572 9
84600	XXXX	00
84620	ROMERO ALBERTA P	398-0811 9
	ZAPATA GLORIA	398-5088 +0
84633	XXXX	00
84639	CASTILLO DAVID	398-0414 6
84640	DIAZ TRINIDAD	398-6526 8
	REYES RICHARD	398-0068 9
84645	XXXX	00
84660★	**COCHLA CMNTY HOMES**	**398-6411 9**
	LUZ JUANA	398-6335 7
	NUNEZ HERIBERTHA	398-5278 7
84680	BUELNA GILBERT	398-5117 9
	NAVARRO CARLOS	398-0698 +0
84687	GARCIA ALFREDO S	398-0415
	RUIZ ALEX	398-0270
84699	RAZO WENCESLAO	398-0866 +0
84700	HAVENS HAROLD	398-6822 9
	IGLESIAS APOLINAR	398-6820 +0
84716	XXXX	00
84720	GONZALEZ ALICIA L	398-0548 +0
84735	REYES ISABEL	398-0297 +0
84740	RODRIGUEZ PEDRO	398-4871 9
84743	XXXX	00
84747	XXXX	00
84751	BROCK ALGENE	398-5432 9
84762	ZARAGOZA JUAN	398-6401 8
84786★	**INDIO MBL HM SERV**	**398-4801 9**
	ROMERO CARMEL	398-5484 9
84831	LOPEZ MIKE D	398-0230 8
84840	DOMINGUEZ TANA	398-6240 6
	PENALBER TONY	398-5667 5
85101★	**CIRCLE K FD ST 330**	**398-2821**
85215	RAMOS BALDEMAR	398-0057
85225	ESQUIVEL GLORIA	398-5923 4
85235	SALCIDO FRANK	398-0638 6
85245	REYES JOSE SANTOS	398-5635 +0
85255	RODRIGUEZ JESSE	398-5124 5
85275	LOPEZ JOE T	398-6387
85276	ZEPEDA AGUSTINE	398-0996 +0
85295	AROZ NETTIE	398-5431
85296	YSLAS ELIZARDO	398-5755 6
85306	ABDELNOUR NICK	398-5695
85325	YSIANO MIKE	398-0418
85335	XXXX	00
85345	ROCHA MIGUEL A	398-5535
85365	MARIN FRANK	398-5729
85375	VEGA ROBERTO B	398-6424 8
85385	MORALES FRANK V	398-0676
85395	XXXX	00
85405	HOWARD BETTY	398-5169 8
85415	XXXX	00
85425	GARCIA FRANCISCO	398-5938 9
85435	ELSTON JAS D	398-0988
85446	OCHOA ANASTACIO	398-0595
	PEREZ REBECCA	398-0595 +0
85456	VELASQUEZ JOSE LEON	398-0261 +0
85465	AHRENS BILL	398-5610 5
85475	XXXX	00
85495	LOPEZ ELIAS	398-0925 4
85525	ESPINOZA LEONARDO	398-5357 8
	PINEDO VIDAL	398-2343 9
85526	PADILLA ELENA	398-5449 8
85536	RAMIREZ ANITA	398-0692 7

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

52ND AVE 1980



..52ND AV 92236 CONT..

85546	TAPIA P	398-0066	7
85556	XXXX	00	
85662	STERLING SUE	398-6694	9
85680	RODRIGUEZ J CARMEN	398-0513	9
85989 ★	JONES BROS CONST	347-2291	+0
★	JONES BROS CONSTR	398-5536	8
86045 ★	LEE GORDON WELDING	398-6572	9
★	SHAFFER ENGINEERING	398-6580	8
86235 ★	RANCHO PRIMERO INC	398-9867	9
★	RANCHO PRIMERO INC	398-9861	9
★	RANCHO PRIMERO INC	398-6105	9
86480	BROWN CHERYLE	398-2721	8
	BROWN J T	398-5042	
86800	XXXX	00	
86900	XXXX	00	
86998 ★	SOCIEDAD PRO LDG 63	398-6414	8
NO #	LAWRENCE FRANK R	398-4051	
★	17 BUS 99 RES	25 NEW	

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

VAN BUREN ST 1980



VAN BUREN 92236
COACHELLA

50503★	**NIGOSIANS PYRAMID**	**398-5182**	5
★	**PYRAMID DATE GARDNS**	**398-5182**	5
50540	VASQUEZ CIRO	398-5028	
51332★	**DOUBLE D G DTE RNCH**	**398-6171**	7
★	**DUNN JIM ORGNC DATE**	**398-6171**	8
★	**GREAT DATE IN MNG**	**398-6171**	8
52500	LEJA PAT	398-0340	
52715	WILLIAMS HUBERT	398-6230	+0
52815	PASILLAS ALFRED	398-0362	
52817	XXXX	00	
52911	LARRIVA JULIO	398-6086	9
52955	GOMEZ BERNARDINO	398-5990	8
52965	XXXX	00	
52985	GARCIA PEDRO	398-5620	+0
	RAMOS ARTURO	398-7462	+0
53000	TUITE T N	398-5539	
53700	XXXX	00	
53750	XXXX	00	
53780	FUTTERMAN ARTHUR	398-6868	+0
54501	COLEMAN S M	398-6485	9
★	5 BUS 15 RES	4 NEW	

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

52ND AVE 1976



52ND AV 92236 COACHELLA

81200 XXXX 00
81234 MURRAY MICHAEL J 398-6250+6
81751 DAVIDSON CLAUDE 398-6201+6
81758 XXXX 00
82531 VILLA JOSE 398-0857 5
82827 WILBERTS JAY DEE 398-3374
82847 XXXX 00
82867 *RICHARDS JOHN I 398-3221 5
82897 XXXX 00
82925 *COACHLA VLY CEMETRY 398-3221 5
83030 HAMILTON MONETT JR 398-5646
*HAMS AIR CONDTNG SV 398-5646
83151 SCHMID THOS G 398-5660
83200 XXXX 00
83286 SCHMID STEVE 398-0940+6
83859 ALLCHIN JOHN W 398-5656
DRURY MARCUS 398-5000 5
83870 ROBERTSON JANIE 398-0516 4
83874 NEHL RITA YORK 398-0327 5
83876 LEWIS GLENN 398-5500
83890 MICHAELS B 398-6535 5
84109 MARTINEZ BLANCA 398-6735+6
84120 XXXX 00
84165 NAVARRO JOE 398-0824+6
84518 SULTAN T P 398-5687
84540 GARZA RAMON 398-0827+6
JIMENEZ ALONZO 398-5995
84560 HILL ALMA 398-0279 4
84580 MARTINEZ FLORENCE 398-0580 5
ORDUNO EMMA 398-5022 4
SEGOVIANO ANGELA 398-5947
84600 RODRIGUEZ AMPARO 398-6280+6
84620 ARRIAGA Y 398-6575+6
GONZALEZ DELMA 398-6277
ZAPATA GLORIA 398-5038+6
84633 XXXX 00
84639 CASTILLO DAVID 398-0414+6
84640 REYES RICHARD 398-0068 5
84645 XXXX 00
84660 ARIZMENDI TOMAS 398-0640
*COACHELLA CMNTY HMS 398-0111
GAINES R A 398-0889+6
TAYLOR V 398-5290+6
84680 ALVAREZ MARIA B 398-0708 5
SANTIAGO ESTHER 398-0449+6
84687 GARCIA ALFREDO S 398-0415
RUIZ ALEX 398-0270
84700 ARAUJO ESTHER 398-6600+6
WEST BURTON 398-6220+6
84720 XXXX 00
84735 *M V M HARVESTING 398-5418 4
84740 XXXX 00
84743 ORDUNO ESTOLFO 398-0642
84747 RAMIREZ EDDIE 398-0029 5
84751 BRODIT FRANK 398-0071 5
84762 ARREOLA ERNESTO 398-5690+6
84786 ROMERO JOHN 398-0077
84831 XXXX 00
84840 DOMINGUEZ TANA 398-6240+6
PENALBER TONY 398-5667 5
85101 *CIRCLE K FD STR 330 398-5017 4
*CIRCLE K FOOD 330 398-2821
85215 RAMOS BALDEMAR 398-0057
85225 ESQUIVEL GLORIA 398-5923 4
85235 SALCIDO FRANK 398-0638+6
85255 RODRIGUEZ JESSE 398-5124 5
85275 LOPEZ JOE T 398-6387
85276 ZEPEDA AUGUSTINE 398-0914
ZEPEDA RAMONA 398-0914
85295 AROZ NETTIE 398-5431
85296 YSLAS ELIZARDO 398-5755+6
85306 ABDELNOUR NICK 398-5695
85325 YSIANO MIKE 398-0418
85335 JOHNSON KENNITH 398-6853+6
85345 ROCHA MIGUEL A 398-5535
85365 MARIN ESTELLA 398-0370 4
MARIN FRANK 398-5729
85375 VEGA ROBERTO B 398-5344
85385 MORALES FRANK V 398-0676
85395 CEDENO RAMON R 398-6686+6
85405 HOWARD BETTY 398-5169 4
HOWARD J 398-6490 5
85415 FLORES LOUIE 398-0696
85425 PALOMARES HILARIO 398-5733
85435 ELSTON JAS D 398-0988
85446 OCHOA ANASTACIO 398-0595
OCHOA REBECCA 398-0595
85456 GALVAN LEO 398-0681 5
85465 AHRENS BILL 398-5610 5
85475 XXXX 00
85495 LOPEZ ELIAS 398-0925 4
85525 AVILA JOSE 398-0826 4
HERNANDEZ MARIO 398-5903
PINEDO VIDAL 398-2343
85526 PADILLA EUTIQVIO C 398-5449 4
85536 RAMIREZ JUAN 398-5231 4
85556 XXXX 00
86480 BROWN NAOMI B 398-5042
86800 SPOHN O 398-0820 4
86900 OGLESBY B T 398-6459 4
87115 RUSHING CHAS JR 398-0598+6

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

52ND AVE 1976



Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

VAN BUREN ST 1976



VAN BUREN 92236 COACHELLA

```
50503*NIGOSIANS PYRAMID      398-5182 5
     *PYRAMID DATE GRDNS     398-5182 5
50540 VASQUEZ CIRO           398-5028
      VASQUEZ LUCINDO        398-0443+6
50545  XXXX                  OO
50547*RIVRSDE CO CONSTBLE    398-5726
50800  XXXX                  OO
50830  XXXX                  OO
50850  XXXX                  OO
51330  XXXX                  OO
51332 FROST C                398-5718 5
     *STAGECOACH LEATHER     398-6507 5
      VANBLARICOM R B        398-0646
52500 LEJA PAT               398-0340
52815 PASILLAS ALFRED        398-0362
52817 SAGE RONALD            398-6761+6
52955 LUNA LUIS G SR         398-6683+6
52965  XXXX                  OO
53000 TUITE T N              398-5539
53700  XXXX                  OO
53750  XXXX                  OO
53780 FOERSTNER CLARKE       398-5390
     *   4 BUS   18 RES    3 NEW
```

APPENDIX D

PHASE I ENVIRONMENTAL SITE ASSESSMENT QUESTIONNAIRE

PHASE I ENVIRONMENTAL SITE ASSESSMENT QUESTIONNAIRE

Client:	Relevant Partners
Project:	The Ranch at Coachella
Site Address:	52nd Ave and Van Buren, Coachella
Person Interviewed:	Grant King
Employer:	
Position / Title:	Managing Partner
Term:	
Date of Interview:	
Interviewer:	

- What is the current use of the property? Agricultural
- When was the property first developed? The site is currently vacant
- Has the property been used for an industrial purpose in the past? ☐ Yes ☒ No

  If yes, what? _____
- Have any of the following operations ever existed on the property? ☒ NONE

☐ Automotive services
☒ Chemical/petroleum processing
☒ Electrical utility servicing
☐ Equipment servicing
☐ Fuel dispensing
☐ Hazardous materials storage, use, or handling
☐ Hazardous waste handling
☐ Heavy equipment storage
☐ Manufacturing (industrial/commercial)
☐ Paint blending or mixing
☐ Retail or commercial sales (except consumer products)

- Describe the prior uses and owners of the property (include approximate dates).

Agricultural Uses- Owner: Gordon Chuchian- For the past 30 years

Unknown previous owners

PHASE I ENVIRONMENTAL SITE ASSESSMENT QUESTIONNAIRE

- Describe the current uses and owners of the adjoining properties?

North:	Agriculutral and Residential, unknown owner
South:	Agricultural
East:	Agricultural and Residentail, unknown owner
West:	Agricultural

- Describe the prior uses and owners of the adjoining properties?

North:	
South:	
East:	
West:	

- Have any of the following items ever been stored or used on the property? *(Substances stored on site in containers routinely sold to the public are usually not a concern.)*

Automotive or industrial batteries. ☐ Yes ☒ No

Any chemicals contained in drums, sacks, or 5-gallon pails. ☐ Yes ☒ No

If yes, describe. _____

If yes, is a chemical inventory listing if available? ☐ Yes ☐ No (If yes, obtain a copy.)

- Are there currently or have there ever been any ASTs or USTs on the property? ☒ Yes ☐ No

If yes, provide additional information.

Qty	Contents	AST or UST	Gallons	Construction Materials	Install. Date	(A)ctive (I)nactive (R)emoved	Notes
	Gasoline						
	Diesel						
	Fuel Oil						
	Hydraulic Oil						
	Used Oil						
	Water						

Based on the DD Summary Report received by the seller, one 750 gallon aboveground tank and one 10,000 gallon aboveground storage tank are present on the site. Both need removal.

PHASE I ENVIRONMENTAL SITE ASSESSMENT QUESTIONNAIRE

If yes, provide additional information.

- ☒ Cleanup required
- ☐ Cleanup performed
- ☐ GW contamination remaining
- ☐ Soil contamination remaining
- ☐ State approval of closure
- ☐ Tank and piping did not leak
- ☐ Under further investigation
- ☐ Other actions? (specify)

- Has there ever been any of the following air emission sources on site? ☒ NONE

- ☐ Boilers
- ☐ Fuel-fired units
- ☐ Hazardous air pollutants
- ☐ Incinerators
- ☐ Lead gas fumes
- ☐ Lead paint
- ☐ Solvent cleaners
- ☐ Solvent storage drums or tanks
- ☐ Solvent/VOC processing
- ☐ Spray booths
- ☐ Vapor degreasers
- ☐ Other (specify) _____

If yes, explain. _____

If yes, were the emissions federal- or state-permitted? ☐ Yes ☐ No

Explain. _____

- Has there ever been any of the following wastewater discharge sources or receivers on site? ☐ NONE UNKNOWN

- ☐ Boiler blowdown
- ☐ Holding ponds/tanks
- ☐ Leaching fields
- ☐ Well fields
- ☐ On-site treatment
- ☐ Process waste water
- ☐ Public sewer systems
- ☐ Septic system
- ☐ Other _____

If yes, explain. _____

If yes, were the discharges federal- or state-permitted? _____

Explain. _____

PHASE I ENVIRONMENTAL SITE ASSESSMENT QUESTIONNAIRE

- Have any agricultural chemicals been used at the property on a regular basis? ☒ Yes ☐ No

  If yes, describe. For agricultural purposes

- Has the current owner ever had a solid waste disposal permit? ☐ Yes ☐ No UNKNOWN

  If yes, what waste streams? _____

- Have any of the following been dumped above ground, buried, and/or burned on the property? ☒ NONE

  ☐ Hazardous substances _____ ☐ Unidentified waste materials _____

  ☐ Petroleum products_____ ☐ Any other waste materials _____

  ☐ Tires _____ _____

- Have contaminated or hazardous wastes ever been generated or disposed on the property, or transported to or from the property? ☐ Yes ☒ No

  If yes, what waste type and average monthly quantity (or total generated the previous year)?

  ☐ Ignitable (flammable) _____ ☐ Contaminated water_____

  ☐ Corrosive (acids / caustics)_____ ☐ Petroleum _____

  ☐ Solvents _____ ☐ Other _____

  ☐ Contaminated soil_____

  If yes, describe the process that generated the wastes (cleaning, spills, manufacturing by-products, obsolete or defective inventory) _____

  If yes, which generator status that applies?

  ☐ LQG (> 2,200 lb. or 300 gal/mo) ☐ One-time generator

  ☐ SQG (200 - 2,200 lb. or 25 - 300 gal/mo) ☐ Other _____

  ☐ Conditionally exempt (<200 lb. or 25 gal/mo)

  List the site's EPA Identification Number _____

PHASE I ENVIRONMENTAL SITE ASSESSMENT QUESTIONNAIRE

- Has there ever been any of the following non-compliance complaints, notices, violations, or citations? ☐ NONE UNKNOWN

☐ City or local environmental agency administrative or judicial orders
☐ County environmental agency administrative or judicial orders
☐ State environmental agency administrative or judicial orders
☐ EPA administrative orders
☐ Fire department
☐ Other (note below)

- Have personnel from any federal, state, or local agency ever visited the facility? ☐ Yes ☐ No UNKNOWN

If yes, who and why? _____

- Are there any environmental liens encumbering the property? ☐ Yes ☐ No UNKNOWN

If yes, describe. _____

- Have any on-site releases of substances ever impacted the property? ☒ Yes ☐ No

If yes, describe. Yes, soil contamination with DDE and DDT mentioned in the previous environmental assessments

- Have any releases from adjoining properties ever impacted the property? ☐ Yes ☐ No UNKNOWN

If yes, describe. _____

- Were any prior environmental assessments of the site ever completed? ☒ Yes ☐ No

If yes, describe. Phase I and Phase II Environmental Assessments

- Do any of the following records exist that document the environmental status of the site? ☐ NONE

☐ Administrative notice of violation or noncompliance
☐ Air sampling investigation report
☒ Asbestos survey report
☐ CERCLA notice of potentially responsible party
☐ Emergency spill notification or response form

PHASE I ENVIRONMENTAL SITE ASSESSMENT QUESTIONNAIRE

- ☒ Environmental site assessment report
- ☐ Environmental audit or survey report
- ☒ Groundwater sampling or investigation report
- ☐ Hazardous waste activity notification form
- ☐ PCB annual report
- ☐ Pollution control permits or registration form
- ☐ RCRA hazardous waste biannual/annual report
- ☐ RCRA hazardous waste manifest
- ☐ SARA Title III filings (Emergency Planning and Community Right-to-Know Act)
- ☒ Soil sampling/investigation report
- ☐ UST closure report
- ☐ UST notification/registration form
- ☐ Land usage permit or restriction form
- ☐ Other (specify) _____

If yes, describe. _____

- Has there ever been any environmental cleanup of the property? ☐ NONE UNKNOWN

If yes, regulated under which of the following regulations/programs?

- ☐ CAA (VOCs, ACM, SO_2, CO, Pb, O_3)
- ☐ CWA (on-site WWTP, WW discharges)
- ☐ CERCLA / Superfund
- ☐ Hazardous materials spills
- ☐ RCRA (USTs, haz waste areas)
- ☐ SDWA (Pb, pesticides)
- ☐ State law or criminal liability (third party contamination suit)
- ☐ TSCA (PCBs)
- ☐ Voluntary cleanup (contaminated soil, water, air, structures)
- ☐ Other (specify below)

_____

- Has any e□uipment on the property been tested for PCBs? ☐ Yes ☐ No UNKNOWN

If yes, what results?_____

- Have there been any known PCBs on the property? ☐ Yes ☐ No UNKNOWN

PHASE I ENVIRONMENTAL SITE ASSESSMENT QUESTIONNAIRE

If yes, in what equipment?

☐ Capacitor
☐ Cable / switch
☐ Circuit breaker
☐ Transformer
☐ Light ballast
☐ Heat exchanger
☐ Voltage regulator
☐ Hydraulic system
☐ Other (specify)

- Have any of the following PCB-related activities occurred in association with the property? ☐ NONE UNKNOWN

☐ Annual inventory reporting
☐ Decontamination of e□uipment
☐ Inspection report
☐ Treatment on-site
☐ Disposal off-site
☐ Release notification or response
☐ Other (specify)

- Has there been any known illnesses or deaths of current or former site personnel, customers, or surrounding populations due to any of the following? ☐ NONE UNKNOWN

☐ Air emissions
☐ Indoor air □uality
☐ Asbestos
☐ Contaminated soil
☐ Groundwater
☐ Drinking water
☐ Chemical exposure
☐ Other (specify)

If yes, explain. _____

- Has any site leveling or fill material imported from off-site been used on the property?
☐ Yes ☐ No UNKNOWN

If yes, what was the source? _____

If yes, where was the fill used? _____

- Is the site served by a public water supply? ☒ Yes ☐ No

- Are there any private water wells on the property? ☒ Yes ☐ No

PHASE I ENVIRONMENTAL SITE ASSESSMENT QUESTIONNAIRE

If yes, have the wells ever been tested? ☒ Yes ☐ No

Results. The agricultural well tested positive for coliform and an atypical hydrocarbon based on the DD summary received from Seller

- Are any floor drains present on the property? ☐ Yes ☐ No UNKNOWN

If yes, do floor drains empty directly into a ☐ sanitary sewer or ☐ storm sewer?

Explain. _____

If yes, is there any pre-treatment prior to discharge? ☐ Yes ☐ No

Explain. _____

If yes and connected to a storm sewer, what is the location of the outfall?

_____

- What utilities serve the property?

Electric. Unknown

Gas. There is a 4" gas main located on Calhoun Street based on DD summary

Telephone. Verizon based on DD

Water. A 12" waterline based on DD Report and IRR Line from site assesment

Sanitary. Unknown

Other. _____

- Are there any designated wetlands on the property or areas which may be considered wetlands? ☐ Yes ☐ No UNKNOWN

If yes, describe. _____

- Have there ever been any pits, ponds, or lagoons on the property? ☐ Yes ☐ No UNKNOWN

If yes, describe. _____

- Has there been any known ACMs or UF materials on site? ☒ Yes ☐ No

If yes, explain. the presence of asbestos materials requiring abatement before demolition is mentioned

PHASE I ENVIRONMENTAL SITE ASSESSMENT QUESTIONNAIRE

- Have any surveys been conducted, which may have involved materials sampling or indoor air sampling, to determine if ACMs or UF materials exist on site?

  ☐ Yes ☐ No

  If yes, explain. _____

- Have any of the following other ACM- / UF-related activities occurred on site?

  ☐ NONE

  ☐ ACM/UF abatement contracting

  ☐ ACM/UF processing or manufacturing

  ☐ ACM/UF sale or distribution

  ☐ Other (specify)

  _____

- Has there ever been any known radon on site? ☐ Yes ☐ No UNKNOWN

  If yes, explain. _____

- Has there ever been any known radioactive materials manufacturing, processing, or handling activities on site or adjacent to the site? ☐ Yes ☐ No UNKNOWN

  If yes, explain. _____

- Are there currently any CFCs on site? ☐ Yes ☐ No UNKNOWN

  If yes, explain. _____

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November 21, 2024

Ms. Isabel Ronda
Relevant Group
6417 Selma Avenue, 2nd Floor
Los Angeles, Ca 90028

Re: Limited Phase II Environmental Site Assessment (ESA) Ranch Project being an approximately 86-acre property, on the Southwest Corner of Avenue 52 and Van Buren Street in Coachella, California.

Dear Ms. Ronda:

Kimley-Horn and Associates, Inc. ("Kimley-Horn" or "Consultant") is pleased to submit this Limited Phase II ESA to Relevant Group ("Client") for the Ranch Project as defined by Assessor Parcel Numbers (APN's) 780-040-001, 780-040-003, 780-060-002, and 780-060-001 herein referenced as the Subject Property. The Subject Property consists of approximately 86-acre on the Southwest corner of Avenue 52 and Van Buren Street in Coachella, CA, California.

The intent of this limited Phase II (ESA) on the Subject Property is to determine the absence/presence of hazardous and petroleum materials in concentrations of concern.

1.0 Background:

1.1 An ASTM E-1527-13 Phase I ESA was completed for the Ranch Project by Sladden Engineering in June 2024. Based on the recommendations of the Phase I ESA, Kimley-Horn's proposed a Limited Phase II ESA to address the Recognized Environmental Concern (REC) identified within the Phase I ESA, which included the following:

REC 1: "Previous and ongoing farming/agricultural use of the subject property along with the previous environmental reports identify the presence of DDE, DDT and other hydrocarbon, we recommend that a Phase 2 shallow soil sampling laboratory testing program be performed."

1.2 Additionally, a historical memorandum dated June 26, 2008, indicated a Phase I ESA and Phase II ESA were completed by Moore Twinning in 2008 with results indicating the following:

- ***Summary 1***: "*General areas of the site were assessed for environmental persistent chemicals (OCPs and arsenic). The results revealed detectable concentrations of DDE and DDT in the near surface soil and attenuated with depth to two deep below ground surface (bgs). However, the environmental concerns associated with these are low and are below regulatory threshold".*

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- ***Summary 2:*** *"However, near the existing metal shed and in the vicinity of the residence of the site the results from the soil sample indicated concentrations of the OCPs, DDE & DDT, which exceed the regulatory levels. {any soils on the site with high concentration will need to be removed offsite as a hazardous material}"*

Kimely-Horn was not able to discern which regulatory threshold the above-mentioned results were compared to and note that changes in thresholds have occurred since 2008 for the low detections of OCPs.

2.0 Scope Rationale:

2.1 To address the REC identified within the Sladden Phase I ESA and Summary 1 from the Moore Twinning Phase IIs, Kimely-Horn completed soil sampling within the active agricultural fields following DTSC and CalEPA's *Interim Guidance for Sampling Agricultural Properties (Interim Guidance)*.

2.2 Based on Section 3.3 of the *Interim Guidance* where two crops were grown on the site, only discrete samples from within the same crop area may be composited. Since both date palms and grapes have been grown on the property, two distinct site areas were sampled following the *Interim Guidance* defined as Area 1 and Area 2. Areas 1 and 2 are defined by the agricultural field sampling within Sections 3.0 and 4.0 below and depicted in **Figure 1, Subject Property Plan and Boring Location Map.**

- Area 1 is defined as the date grove (TBX) borings within the approximately 50-acre date grove.

- Area 2 is defined as the grape vines (GPX) boring within the approximately 26-acre grape vineyard.

2.3 To address Summary 2 and potential exceedances of DDE and DDT, which were reported in 2008, Kimley-Horn completed three soil samples (RX). Laboratory sampling procedures are described in Section III, Soil Sampling Investigation.

3.0 Soil Sampling Investigation

3.1 Agricultural Field Sampling: The *Interim Guidance* assumes a relatively even distribution of chemicals across an agricultural field of a property, and recommends compositing discrete samples to allow for increased sampling coverage for the Subject Property. Composite surface samples are made up of a maximum of four discrete surface samples from adjacent sampling locations. Analysis of the composite samples is determined by the following Sections of the *Interim Guidance*:

- Section 3.1.1 states "Based on data from former agricultural properties over the past seven years, the only pesticide class requiring analyses at agricultural properties are OCPs"

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- Section 3.1.2 states "Based on data from former agricultural properties, the only heavy metal required for routine analyses for these properties is arsenic"

3.2 Area 1: Only July 6, 2024, a total of 64 discrete soil samples were completed based on gridded sampling plan to a depth of 1-foot below ground surface (bgs). The borings were completed using a hand auger and samples were collected from 0.5-1.0-feet bgs with similar volume. The 64 discrete samples were composited into 16 samples as describe in Section 3.4. The location of the discrete and composited samples is illustrated in **Figure 1, Subject Property Plan and Boring Location Map.**

3.3 Area 2: Additionally on July 6, 2024, a total of 36 discrete soil samples were completed based on gridded sampling plan to a depth of 1-foot bgs. The borings were completed using a hand auger and samples were collected from 0.5-1.0-feet bgs with similar volume. The 36 discrete samples were composited into 9 samples as describe in Section 3.4.

3.4 Upon completion of the four discrete samples within one grid area, the samples were homogenized and one discrete sample collected and placed within a laboratory provided container. Additionally, one sample was completed for arsenic analysis co-located with one of the discrete pesticide samples based on the sampling events described in Section 3.2 and 3.3.

3.5 The soil samples were placed in a cooler and delivered to a state-certified laboratory under chain-of-custody protocol.

3.6 Residential Sampling: Only July 6, 2024, a total of three (3) discrete soil samples were completed to a depth of 1-foot below ground surface (bgs). The borings were completed using a hand auger and samples were collected from 0.5-1.0-feet bgs with similar volume. Samples for total petroleum hydrocarbon (TPH) analyses were collected using Terra Core® samplers. Soil for additional analyses were collected in laboratory supplied jars from the sampler. Locations are defined below:

- One sample was completed in the vicinity of a metal shed; however, it is unknown if the same shed identified within the 2008 analysis (R1)
- One sample adjacent to onsite well and fertilizer tote (R2).
- One sample was completed south of the residential structure (R3).

3.7 The location of the discrete samples surrounding the residence is illustrated in **Figure 1, Subject Property Plan and Boring Location Map.**

3.8 Based on the results discussed in Section 4 – Soil Sampling Results, exceedances were identified within two of the three samples. Kimley-Horn remobilized on September 6, 2024, to complete samples surrounding the initial boring to a depth of 3-feet bgs. **Figure 2, R2 Step-out Sampling Locations and Results** and **Figure 3, R3 Step-out Sampling Locations and Results** depicts where the step out locations were completed surrounding the soil borings. Details pertaining to the results are reported in Section 4- Soil Sampling Results.

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4.0 Laboratory Analysis

4.1 Agricultural Field Sampling Analysis: The soil samples completed within the agricultural fields were analyzed for the following:

- California Title 22 metals by EPA Method 6010 analyzed by arsenic only.
- Pesticides by EPA Method 8081.

4.2 Residential Sampling Analysis: Samples near the residential structures were analyzed for the following:

- Pesticides by EPA Method 8081.
- California Title 22 metals by EPA Method 6010 analyzed by arsenic only.
- Total petroleum hydrocarbons as gasoline range organics (TPH-GRO), diesel range organics (TPH-DRO), and oil range organics (TPH-ORO) by EPA Method 8015.

The above analytical parameter list is consistent with the constituents of concern potentially present at the site based on the past operations identified during completion of the Phase I ESA.

5.0 Soil Sampling Results

5.1 Field Observations: No staining, odors were observed in the samples that would indicate the presence of contaminants.

5.2 Laboratory Results: The analytical results for soil are summarized in Tables 1, 2, 3 and 4. The laboratory analysis reports are included in Attachment A. Key results from the July 2024 sampling are summarized below.

Sample ID	Maximum Detection (mg/kg)								
	4,4'-DDD	4,4'-DDE	4,4'-DDT	Chlordane	Dieldrin	Arsenic	TPH-G [5]	TPH-D [5]	TPH-ORO [5]
TB [1]	0.00069	0.066	0.0021	0.049	0.0010	2.9	--	--	--
	TB1-1	*TB12-1*	*TB16-1*	*TB1-1*	*TB1-1*	*TB8-1*	--	--	--
GB [2]	ND	0.110	0.0170	ND	ND	4.30	--	--	--
	--	*GB7-1*	*GB7-1*	--	--	*GB5-1*	--	--	--
Res [R]	0.07000	***2.40***	0.20	ND	**0.096**	3.8	ND	44	870
	R3-1	*R2-1*	*R1-1*	--	*R3-1*	*R1-1*	--	*R2-1*	*R2-1*
SFRWQCB ESL [3] (mg/kg)	**2.7**	**1.83**	**1.89**	**0.48**	**0.037**	**11 [4]**	**430**	**255**	**12,000**

(1) TB - Borings completed within Date Groves. Only crop included was young and mature date palms.
(2) GB - Borings completed within the Grape Vineyard. Only crop included was differing varietals of grapes.
(3) Screening limit is the San Francisco Regional Water Quality Control Board (SFRWQCB) Environmental Screening Level (ESL) for direct exposure to human health assuming a residential risk scenario.
(4) The SFRWQCB ESL for arsenic for residential exposure scenario is 0.067 mg/kg, 0.31 mg/kg for commercial/industrial, and 2.03 mg/kg for construction work scenario; however, the screening level listed is the regional background concentration of arsenic (Duverge, 2011), accepted by the SFRWQCB.
(5) Total Petroleum Hydrocarbons - Gasoline Range inclusive of C4-C12 (TPH-G); - Diesel Range inclusive of C12-C22 (TPH-D); and Oil Range inclusive of C23-C32 (TPH-O).

5.2.1 No exceedances of pesticides or arsenic were identified in Area 1 or Area 2 of the agricultural field sampling.

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5.2.2 No exceedances of pesticides, arsenic or TPH were identified in the residential soil sampling except for the following described in Section 5.2.3 and 5.2.4.

5.2.3 One exceedance of 4,4-DDE was detected in sample R2-1 adjacent to the water well and fertilizer storage area in the July 6, 2024, sampling event with the detection of 2.40 mg/kg. Three step-out borings were completed on September 6, 2024, as depicted in **Figure 2, R2-Step-out Sampling Locations and Results.** Additionally, a confirmation sample was completed at 1-ft and 2-ft bgs at the original location, which were below a residential standard. Each step-out sample was below the residential screening level.

5.2.4 One exceedance of Dieldrin was detected in sample R3-1 adjacent to the former residence from the July 6, 2024, sampling event with the detection of 0.096 mg/kg. Four step-out and a replicate from the initial borings were completed on September 6, 2024, surrounding the original boring to a depth of 3-feet bgs. See **Figure 3, R3-Step-out Sampling Locations and Results** with the following results:

- Initial boring:
  - R3-1: 0.096 mg/kg
  - R3B-1: 0.039 mg/kg
  - R3B-2: 0.016 mg/kg
- Step outs:
  - North
    - R3N-1: 0.091 mg/kg
    - R3N-2: 0.016 mg/kg
  - South
    - R3S-1: 0.026 mg/kg
  - East
    - R3E-1: 0.10 mg/kg
    - R3E-2: 0.073 mg/kg
    - R3E-3: 0.042 mg/kg
  - West
    - R3W-1: 0.042 mg/kg
    - R3W-2: 0.0075 mg/kg

6.0 Conclusions

6.1 Agricultural Field Sampling: The laboratory analytical results do not indicate evidence for significant release(s) associated with the historical agricultural operations conducted at the Subject Property based on the REC identified within the Sladden Phase I ESA. The detected levels of pesticides are below the California Regional Water Quality Control Board (RWQCB)-San Francisco Region Environmental Screening Levels (ESLs) for residential soil and for the protection of soil and groundwater and would not likely trigger actions if reported to a regulatory agency.

6.2 Agricultural Field Sampling: Arsenic was detected at concentrations that exceed the ESLs for residential soil; however, the concentrations of arsenic reported in the soil samples collected during this investigation are below the typical Southern California background level of

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11 mg/kg per California Department of Toxic Substances Control (DTSC), Human and Ecological Risk Office (Hero).

6.3 Residential Sampling: Areas around the former residential structure indicate exceedances above residential screening level for 4,4-DDE at the R2 location and dieldrin at the R3 location. As the properties intent is for residential development, these *de minims* areas should be isolated or removed prior to mass grading. The summary within this report identifies the extents for isolation and removal based on depth and visually described within Figures 3 and 4. If the property is planned for commercial development versus residential, the detections of 4,4-DDE is below the 8.27 mg/kg screening level and dieldrin is below the 1.6 mg/kg screening level.

6.4 Please note that the results and conclusions in this report are based on, and limited to, the soil the limited soil investigation and the laboratory analyses that were completed.

6.5 Should you have any questions about these results, or wish to conduct additional investigations, please contact us at cassie.bretschger@kimely-horn.com or jennifer.steen@kimely-horn.com.

Sincerely,

Cassie Bretscher, M.S., ENV-SP

Attachments:

Table 1 - Summary of Pesticide Analysis Results
Table 2 - Summary of Total Petroleum Hydrocarbon (TPH) and Metal Analysis
Table 3 - Summary of Pesticide Step-out Analysis Results
Table 4 - Summary of Total Petroleum Hydrocarbon (TPH) and Metal Step-out Analysis

Figure 1: Subject Property Plan and Boring Location Map.
Figure 2: R2 Step-out Sampling Locations and Results
Figure 3: R3 Step-out Sampling Locations and Results

Attachment A: Laboratory Analysis Report

Tables

Table 1 - Summary of Pesticide Analysis Results
Relevant Partners - Coachella, California

Sample ID, Depth [1]	Analysis Results (mg/kg)																		
	Aldrin	alpha-BHC	beta-BHC	delta-BHC	gamma-BHC (Lindane)	Chlordane (Technical)	4,4'-DDD	4,4'-DDE	4,4'-DDT	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin	Endrin aldehyde	Heptachlor	Heptachlor epoxide	Methoxychlor	Toxaphene
TB1-1	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	0.049	0.00069	0.0088	0.0018	0.001	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.050
TB2-1	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.050	0.00015	0.0095	0.0017	0.00019	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.050
TB3-1	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.050	ND<0.00050	0.0049	0.00067	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.050
TB4-1	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.050	0.00011	0.0054	0.0011	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.050
TB5-1	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.050	0.00024	0.0059	0.0014	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.050
TB6-1	ND<0.0010	ND<0.0010	ND<0.0010	ND<0.0010	ND<0.0010	ND<0.10	0.00035	0.015	0.0013	ND<0.0010	ND<0.0010	ND<0.0010	ND<0.0010	ND<0.0010	ND<0.0010	ND<0.0010	ND<0.0010	ND<0.0010	ND<0.10
TB7-1	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.050	ND<0.00050	0.0031	0.00061	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.050
TB81	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.050	ND<0.00050	0.009	0.0012	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.050
TB9-1	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.050	ND<0.00050	0.0092	0.001	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.050
TB10-1	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<1.0	ND<0.010	0.081	0.00099	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<1.0
TB11-1	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.050	ND<0.00050	0.0064	0.00058	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.050
TB121	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.50	ND<0.0050	0.066	0.0019	0.00067	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.50
TB13-1	ND<0.0010	ND<0.0010	ND<0.0010	ND<0.0010	ND<0.0010	ND<0.10	ND<0.0010	0.019	0.00052	ND<0.0010	ND<0.0010	ND<0.0010	ND<0.0010	ND<0.0010	ND<0.0010	ND<0.0010	ND<0.0010	ND<0.0010	ND<0.10
TB14-1	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.50	ND<0.0050	0.064	0.0013	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.50
TB15-1	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.50	ND<0.0050	0.045	0.00087	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.50
TB16-1	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.50	ND<0.0050	0.056	0.0021	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.50
GB1-1	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<1.0	ND<0.010	0.029	0.0033	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<1.0
GB2-1	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.050	ND<0.00050	0.0062	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.00050	ND<0.050
GB3-1	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.25	ND<0.0025	0.023	0.0066	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.25
GB4-1	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.25	ND<0.0025	0.02	0.008	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.25
GB5-1	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.50	ND<0.0050	0.035	0.001	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.50
GB6-1	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.50	ND<0.0050	0.06	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.50
GB7-1	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<1.0	ND<0.010	0.11	0.017	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<1.0
GB8-1	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.25	ND<0.0025	0.013	0.0024	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.25
GB9-1	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.50	ND<0.0050	0.08	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.50
R1-1	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.25	0.00099	0.032	0.0057	0.0005	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.25
R2-1	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<25	0.05	2.40	0.20	0.035	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<25
R3-1	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<1.0	0.07	0.19	0.031	0.096	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<1.0
SFRWQCB ESL [2] (mg/kg)	**29.0**	**--**	**--**	**--**	**--**	**0.48**	**2.67**	**1.83**	**1.89**	**0.037**	**420**	**420**	**420**	**290**	**--**	**--**	**13.0**	**4,800**	**2.2**

Sampling completed July 11, 2024

(1) TB - Borings completed within Date Groves. Only crop included was young and mature date palms. GB - Borings completed within the Grape Vineyard. Only crop included was differing varietals of grapes. R - Borings completed surrounding the former residence.
(2) Screening limit is the San Francisco Regional Water Quality Control Board (SFRWQCB) Environmental Screening Level (ESL) for direct exposure to human health assuming a residential risk scenario.

Table 2 - Summary of Total Petroleum Hydrocarbon (TPH) and Metal Analysis
Relevant Partners - Coachella, California

Sample ID, Depth [1]	Analysis Results (mg/kg)			
	Arsenic [3]	TPH -Gasoline Range Organics (C4 - C12)	TPH - Diesel Range Organics (C12 - C22)	TPH - Oil Range Organics (C23 - C32)
R1-1	1.3	ND<1.0	4.1	30
R2-1	3.8	ND<1.0	44	870
R3-1	1.8	ND<1.0	3.8	21
TB1-1	2.2	--	--	--
TB2-1	2.8	--	--	--
TB3-1	1.9	--	--	--
TB4-1	1.9	--	--	--
TB5-1	1.8	--	--	--
TB6-1	2.2	--	--	--
TB7-1	2.3	--	--	--
TB81	2.9	--	--	--
TB9-1	2.2	--	--	--
TB10-1	1.7	--	--	--
TB11-1	1.5	--	--	--
TB12-1	1.7	--	--	--
TB13-1	1.7	--	--	--
TB14-1	1.9	--	--	--
TB15-1	1.7	--	--	--
TB16-1	2.0	--	--	--
GB1-1	2.0	--	--	--
GB2-1	3.1	--	--	--
GB3-1	2.3	--	--	--
GB4-1	2.3	--	--	--
GB5-1	4.3	--	--	--
GB6-1	2.7	--	--	--
GB7-1	3.2	--	--	--
GB8-1	4.3	--	--	--
GB9-1	2.8	--	--	--
SFRWQCB ESL [2] (mg/kg)	**11**	**430**	**255**	**12,000**

Sampling completed July 11, 2024

(1) TB - Borings completed within Date Groves. Only crop included was young and mature date palms. GB - Borings completed within the Grape Vineyard. Only crop included was differing varietals of grapes. R - Borings completed surrounding the former residence.
(2) Screening limit is the San Francisco Regional Water Quality Control Board (SFRWQCB) Environmental Screening Level (ESL) for direct exposure to human health assuming a residential risk scenario.
(3) The SFRWQCB ESL for arsenic for residential exposure scenario is 0.067 mg/kg, 0.31 mg/kg for commercial/industrial, and 2.03 mg/kg for construction work scenario; however, the screening level listed is the regional background concentration of arsenic (Duverge, 2011), accepted by the SFRWQCB.

Table 3 - Summary of Pesticide Step-out Analysis Results
Relevant Partners - Coachella, California

Sample ID, Depth [1]	Sample Date	Analysis Results (mg/kg)																		
		Aldrin	alpha-BHC	beta-BHC	delta-BHC	gamma-BHC (Lindane)	Chlordane (Technical)	4,4'-DDD	4,4'-DDE	4,4'-DDT	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin	Endrin aldehyde	Heptachlor	Heptachlor epoxide	Methoxychlor	Toxaphene
R1-1	7/11/2024	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.25	0.00099	0.032	0.0057	0.0005	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.25
R2-1	7/11/2024	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<25	0.05	2.40	0.20	0.035	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<25
R2B-1	9/6/2024	ND>0.00041	ND>0.00029	ND>0.0012	ND>0.00076	ND>0.00061	0.14	0.008	0.061	0.075	0.0011	ND>0.00074	ND>0.00064	ND>0.00087	ND>0.00029	ND>0.00047	ND>0.00050	ND>0.00052	ND>0.00060	ND>0.038
R2B-2	9/6/2024	ND>0.000082	ND>0.000058	ND>0.00024	ND>0.00015	ND>0.00012	0.026	0.0016	0.011	0.014	0.00016	ND>0.00015	ND>0.00013	ND>0.00017	ND>0.000058	ND>0.000094	ND>0.00010	ND>0.00010	ND>0.00012	ND>0.0076
R2N-1	9/6/2024	ND>0.00082	ND>0.00058	ND>0.0024	ND>0.0015	ND>0.0012	0.26	0.0076	0.2	0.048	0.0027	ND>0.0015	ND>0.0013	ND>0.0017	ND>0.00058	ND>0.00094	ND>0.0010	ND>0.0010	ND>0.0012	ND>0.076
R2E-1	9/6/2024	ND>0.00041	ND>0.00029	ND>0.0012	ND>0.00076	ND>0.00061	0.36	0.0096	0.2	0.08	ND>0.00069	ND>0.00074	ND>0.00064	ND>0.00087	ND>0.00029	ND>0.00047	ND>0.00050	ND>0.00052	ND>0.00060	ND>0.038
R2W-1	9/6/2024	ND>0.00041	ND>0.00029	ND>0.0012	ND>0.00076	ND>0.00061	0.074	0.0037	0.019	0.0034	0.0039	ND>0.00074	ND>0.00064	ND>0.00087	ND>0.00029	ND>0.00047	ND>0.00050	ND>0.00052	ND>0.00060	ND>0.038
R3-1	7/11/2024	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<1.0	0.07	0.19	0.031	0.096	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<1.0
R3B-1	9/6/2024	ND>0.010	ND>0.010	ND>0.010	ND>0.010	ND>0.010	0.25	0.0065	0.11	0.0099	0.039	ND>0.010	ND>0.010	ND>0.010	ND>0.010	ND>0.010	ND>0.010	ND>0.010	ND>0.010	ND>0.20
R3B-2	9/6/2024	ND>0.0050	ND>0.0050	ND>0.0050	ND>0.0050	ND>0.0050	0.086	0.0018	0.033	0.0014	0.016	ND>0.0050	ND>0.0050	ND>0.0050	ND>0.0050	ND>0.0050	ND>0.0050	ND>0.0050	ND>0.0050	ND>0.10
R3N-1	9/6/2024	ND>0.010	ND>0.010	ND>0.010	ND>0.010	ND>0.010	0.62	0.025	0.14	0.025	0.091	ND>0.010	ND>0.010	ND>0.010	ND>0.010	ND>0.010	ND>0.010	ND>0.010	ND>0.010	ND>0.20
R3N-2	9/6/2024	ND>0.00050	ND>0.00050	ND>0.00050	ND>0.00050	ND>0.00050	0.16	0.0041	0.023	0.0039	0.016	ND>0.00050	ND>0.00050	ND>0.00050	ND>0.00050	ND>0.00050	ND>0.00050	ND>0.00050	ND>0.00050	ND>0.010
R3W-1	9/6/2024	ND>0.0025	ND>0.0025	ND>0.0025	ND>0.0025	ND>0.0025	0.23	0.0071	0.048	0.0088	0.042	ND>0.0025	ND>0.0025	ND>0.0025	ND>0.0025	ND>0.0025	ND>0.0025	ND>0.0025	ND>0.0025	ND>0.050
R3W-2	9/6/2024	ND>0.00050	ND>0.00050	ND>0.00050	ND>0.00050	ND>0.00050	0.041	0.00085	0.0064	0.00097	0.0075	ND>0.00050	ND>0.00050	ND>0.00050	ND>0.00050	ND>0.00050	ND>0.00050	ND>0.00050	ND>0.00050	ND>0.010
R3E-1	9/6/2024	ND>0.010	ND>0.010	ND>0.010	ND>0.010	ND>0.010	0.37	0.01	0.16	0.012	0.10	ND>0.010	ND>0.010	ND>0.010	ND>0.010	ND>0.010	ND>0.010	ND>0.010	ND>0.010	ND>0.20
R3E-2	9/6/2024	ND>0.010	ND>0.010	ND>0.010	ND>0.010	ND>0.010	0.39	0.0059	0.11	0.0064	0.073	ND>0.010	ND>0.010	ND>0.010	ND>0.010	ND>0.010	ND>0.010	ND>0.010	ND>0.010	ND>0.20
R3E-3	9/6/2024	ND>0.0050	ND>0.0050	ND>0.0050	ND>0.0050	ND>0.0050	0.19	0.0021	0.063	0.0023	0.042	ND>0.0050	ND>0.0050	ND>0.0050	ND>0.0050	ND>0.0050	ND>0.0050	ND>0.0050	ND>0.0050	ND>0.10
R3S-1	9/6/2024	ND>0.0050	ND>0.0050	ND>0.0050	ND>0.0050	ND>0.0050	0.2	0.0043	0.1	0.0053	0.026	ND>0.0050	ND>0.0050	ND>0.0050	ND>0.0050	ND>0.0050	ND>0.0050	ND>0.0050	ND>0.0050	ND>0.10
SFRWQCB ESL [2] (mg/kg)		**29.0**	**--**	**--**	**--**	**--**	**0.48**	**2.67**	**1.83**	**1.89**	**0.037**	**420**	**420**	**420**	**290**	**--**	**--**	**13.0**	**4,800**	**2.2**

Sampling completed July 11, 2024 and September 6, 2024

(1) TB - Borings completed within Date Groves. Only crop included was young and mature date palms. GB - Borings completed within the Grape Vineyard. Only crop included was differing varietals of grapes. R - Borings completed surrounding the former residence.
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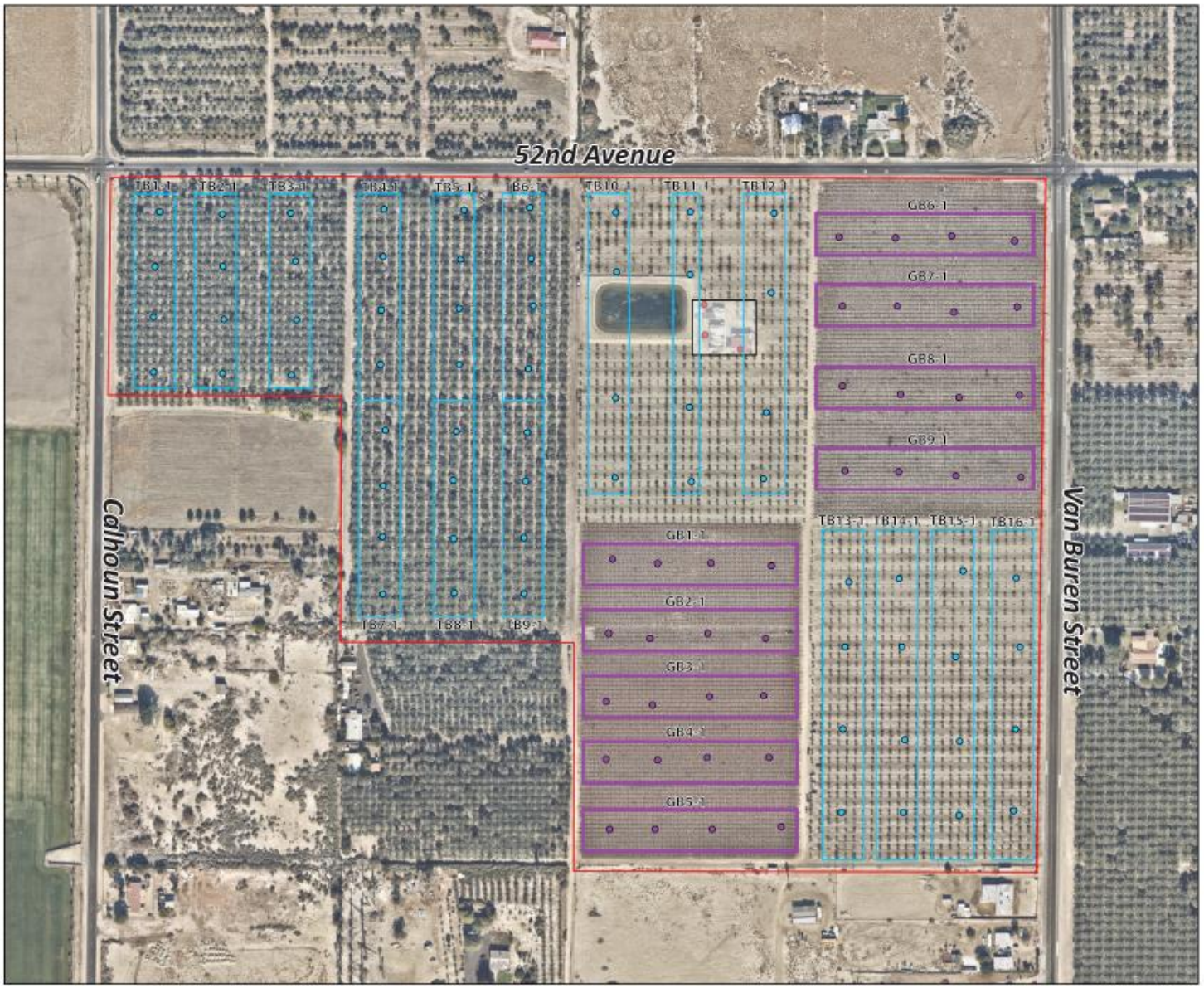
Table 4 - Summary of Total Petroleum Hydrocarbon (TPH) and Metal Step-out Analysis
Relevant Partners - Coachella, California

Sample ID, Depth [1]	Sample Date	Analysis Results (mg/kg)			
		Arsenic [3]	TPH -Gasoline Range Organics (C4 - C12)	TPH - Diesel Range Organics (C12 - C22)	TPH - Oil Range Organics (C23 - C32)
R1-1	7/11/2024	1.3	ND<1.0	4.1	30
R2-1	7/11/2024	3.8	ND<1.0	44	870
R2B-1	9/6/2024	1.4	--	--	--
R2B-2	9/6/2024	1.3	ND>0.42	1.8	10
R2N-1	9/6/2024	1.1	ND>0.53	3.7	46
R2E-1	9/6/2024	1.7	ND>0.49	27	34
R2W-1	9/6/2024	2.5	ND>0.48	27	32
R3-1	7/11/2024	1.8	ND<1.0	3.8	21
R3B-1	9/6/2024	1.5	--	--	--
R3B-2	9/6/2024	1.4	--	--	--
R3N-1	9/6/2024	1.9	--	--	--
R3W-1	9/6/2024	1.4	--	--	--
R3E-1	9/6/2024	1.5	--	--	--
R3S-1	9/6/2024	1.7	--	--	--
SFRWQCB ESL [2] (mg/kg)		**11**	**430**	**255**	**12,000**

Sampling completed July 11, 2024 and September 6,2024

(1) TB - Borings completed within Date Groves. Only crop included was young and mature date palms. GB - Borings completed within the Grape Vineyard. Only crop included was differing varietals of grapes. R - Borings completed surrounding the former residence.
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Figures





Legend

Date Grove Sampling
- TBX-1

Grape Vineyward Sampling
- GBX-1

Residential Sampling
- RX-1

Project Boundary

Figure 1: Subject Property Plan and Boring Location Map



Figure 2: R2 Step-out Sampling Locations and Results

Results depicted are detections are of 4,4-DDE based on th
initial exceedance. Other detections are summarized in Table 3



Residential Sampling Locations from July 2024. Note: Not to scale.

Figure 3: R3 Step-out Sampling Locations and Results

Kimley»Horn

Results depicted are detections are of Dieldrin based on the exceedance. Other detections are summarized in Ta

Attachment A: Laboratory Analysis Report

Date of Report: 07/22/2024

Cassie Bretschger

Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Client Project:	[none]
Pace Project:	Coachella
Pace Work Order:	2411098
Invoice ID:	B500727

Enclosed are the results of analyses for samples received by the laboratory on 7/13/2024. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Ragen Williams
Client Service Rep

Stuart Buttram
Operations Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
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Sample Results

2411098-01 - TB1-1
Organochlorine Pesticides (EPA Method 8081A) 19
Total Concentrations (TTLC) 20

2411098-02 - TB2-1
Organochlorine Pesticides (EPA Method 8081A) 21
Total Concentrations (TTLC) 22

2411098-03 - TB3-1
Organochlorine Pesticides (EPA Method 8081A) 23
Total Concentrations (TTLC) 24

2411098-04 - TB4-1
Organochlorine Pesticides (EPA Method 8081A) 25
Total Concentrations (TTLC) 26

2411098-05 - TB5-1
Organochlorine Pesticides (EPA Method 8081A) 27
Total Concentrations (TTLC) 28

2411098-06 - TB6-1
Organochlorine Pesticides (EPA Method 8081A) 29
Total Concentrations (TTLC) 30

2411098-07 - TB7-1
Organochlorine Pesticides (EPA Method 8081A) 31
Total Concentrations (TTLC) 32

2411098-08 - TB8-1
Organochlorine Pesticides (EPA Method 8081A) 33
Total Concentrations (TTLC) 34

2411098-09 - TB9-1
Organochlorine Pesticides (EPA Method 8081A) 35
Total Concentrations (TTLC) 36

2411098-10 - TB10-1
Organochlorine Pesticides (EPA Method 8081A) 37
Total Concentrations (TTLC) 38

2411098-11 - TB11-1
Organochlorine Pesticides (EPA Method 8081A) 39
Total Concentrations (TTLC) 40

2411098-12 - TB12-1
Organochlorine Pesticides (EPA Method 8081A) 41
Total Concentrations (TTLC) 42

2411098-13 - TB13-1
Organochlorine Pesticides (EPA Method 8081A) 43
Total Concentrations (TTLC) 44

2411098-14 - TB14-1
Organochlorine Pesticides (EPA Method 8081A) 45
Total Concentrations (TTLC) 46

2411098-15 - TB15-1
Organochlorine Pesticides (EPA Method 8081A) 47
Total Concentrations (TTLC) 48

2411098-16 - TB16-1
Organochlorine Pesticides (EPA Method 8081A) 49
Total Concentrations (TTLC) 50

2411098-17 - R1-1
Organochlorine Pesticides (EPA Method 8081A) 51

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Total Petroleum Hydrocarbons 52
Total Petroleum Hydrocarbons (EPA 8015B/5035) 53
Total Concentrations (TTLC) 54

2411098-18 - R2-1

Organochlorine Pesticides (EPA Method 8081A) 55
Total Petroleum Hydrocarbons 56
Total Petroleum Hydrocarbons (EPA 8015B/5035) 57
Total Concentrations (TTLC) 58

2411098-19 - R3-1

Organochlorine Pesticides (EPA Method 8081A) 59
Total Petroleum Hydrocarbons 60
Total Petroleum Hydrocarbons (EPA 8015B/5035) 61
Total Concentrations (TTLC) 62

2411098-20 - GB-1-1

Organochlorine Pesticides (EPA Method 8081A) 63
Total Concentrations (TTLC) 64

2411098-21 - GB-2-1

Organochlorine Pesticides (EPA Method 8081A) 65
Total Concentrations (TTLC) 66

2411098-22 - GB-3-1

Organochlorine Pesticides (EPA Method 8081A) 67
Total Concentrations (TTLC) 68

2411098-23 - GB-4-1

Organochlorine Pesticides (EPA Method 8081A) 69
Total Concentrations (TTLC) 70

2411098-24 - GB-5-1

Organochlorine Pesticides (EPA Method 8081A) 71
Total Concentrations (TTLC) 72

2411098-25 - GB-6-1

Organochlorine Pesticides (EPA Method 8081A) 73
Total Concentrations (TTLC) 74

2411098-26 - GB-7-1

Organochlorine Pesticides (EPA Method 8081A) 75
Total Concentrations (TTLC) 76

2411098-27 - GB-8-1

Organochlorine Pesticides (EPA Method 8081A) 77
Total Concentrations (TTLC) 78

2411098-28 - GB-9-1

Organochlorine Pesticides (EPA Method 8081A) 79
Total Concentrations (TTLC) 80

Quality Control Reports

Organochlorine Pesticides (EPA Method 8081A)

Method Blank Analysis 81
Laboratory Control Sample 83
Precision and Accuracy 85

Total Petroleum Hydrocarbons

Method Blank Analysis 88
Laboratory Control Sample 89
Precision and Accuracy 90

Total Petroleum Hydrocarbons (EPA 8015B/5035)

Method Blank Analysis 91
Laboratory Control Sample 92
Precision and Accuracy 93

Total Concentrations (TTLC)

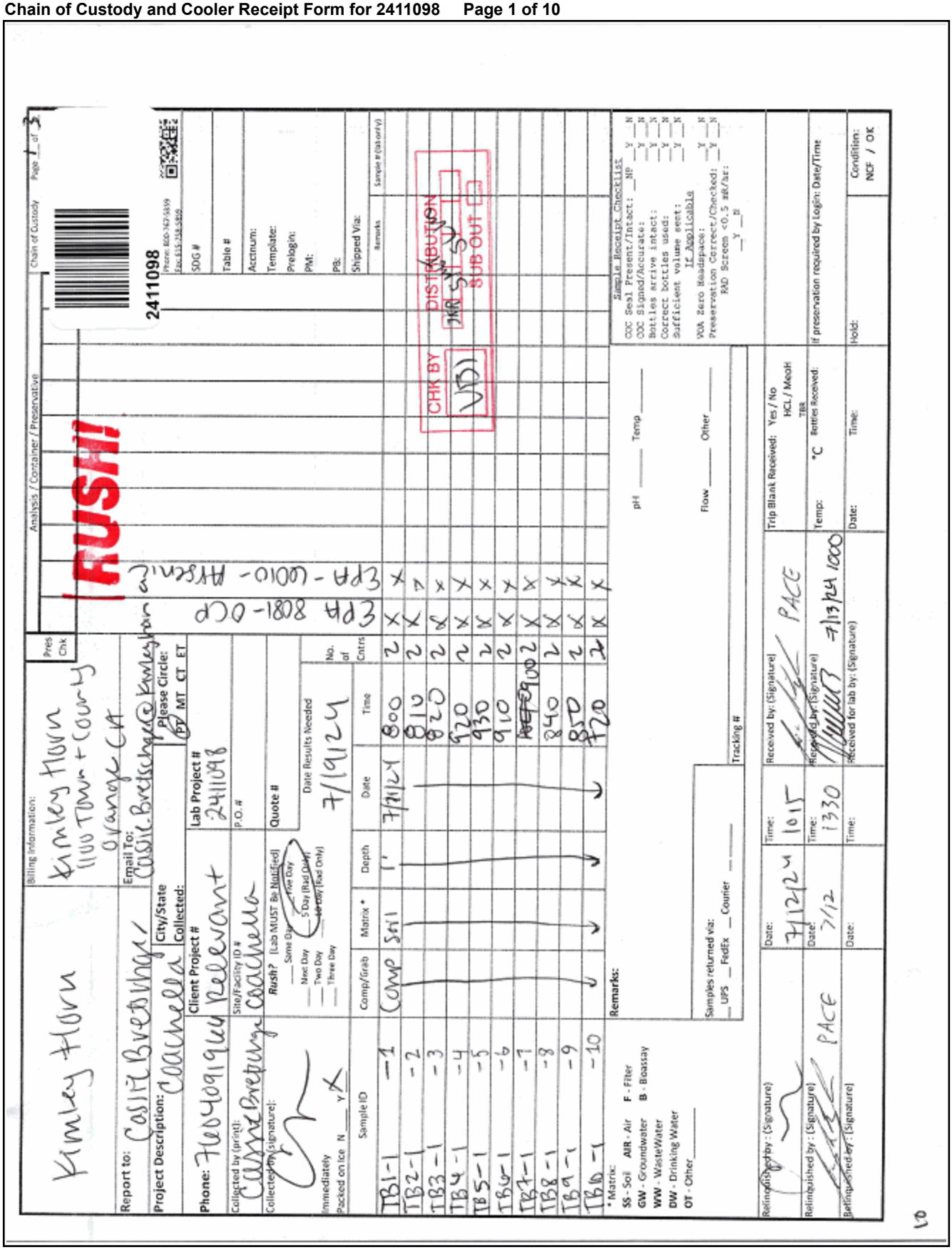
Table of Contents

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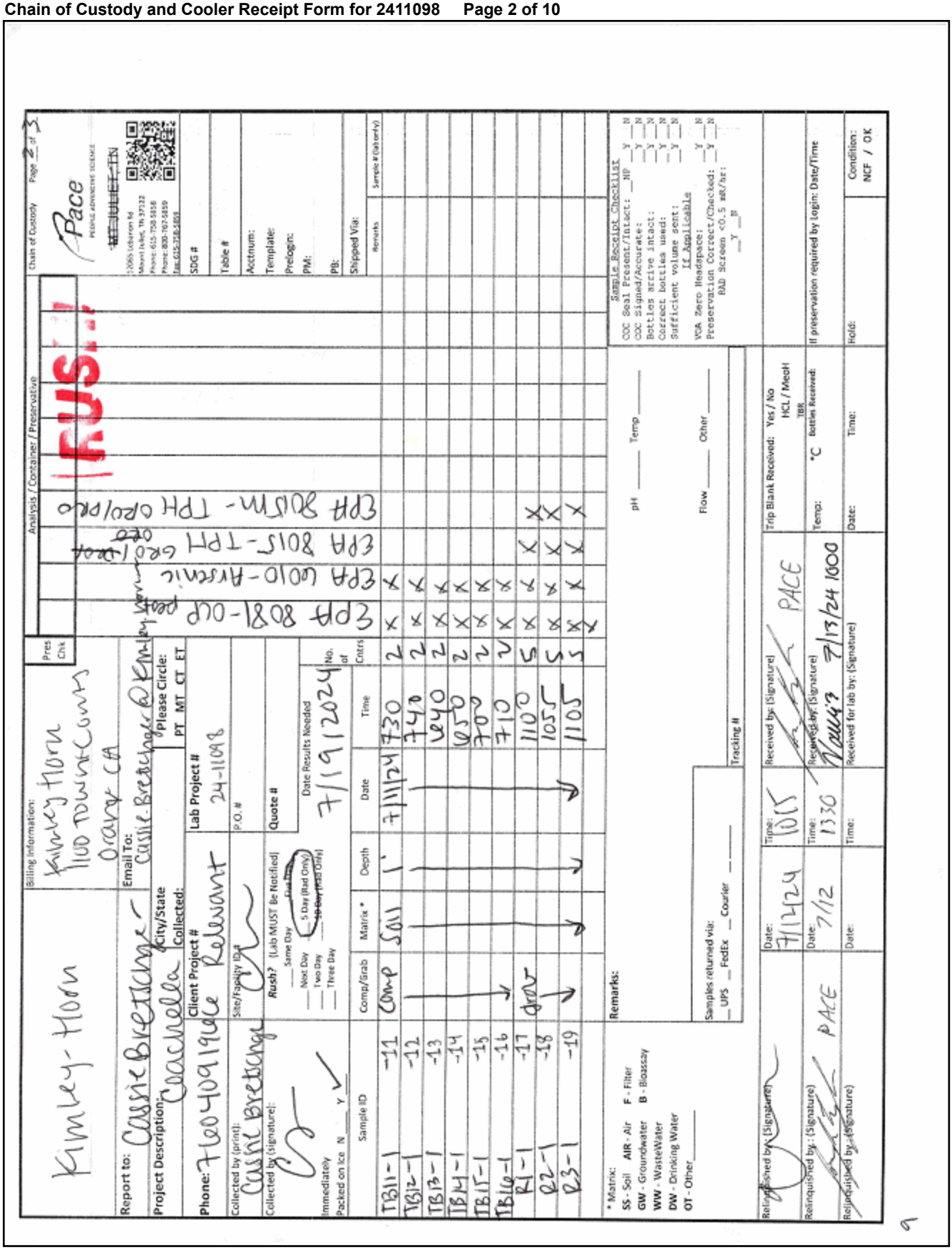
Notes

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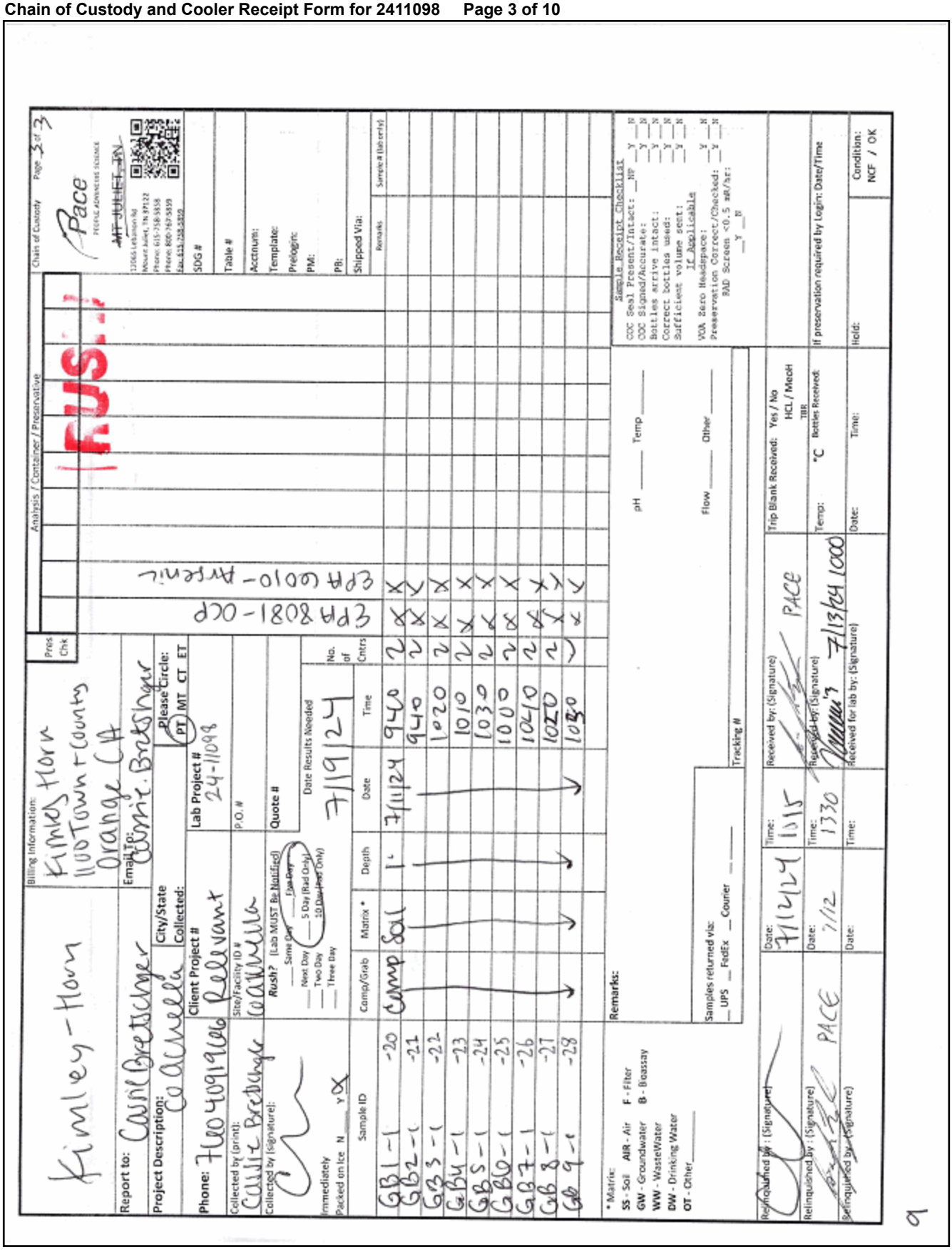
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Chain of Custody and Cooler Receipt Form for 2411098 Page 2 of 10



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Chain of Custody and Cooler Receipt Form for 2411098 Page 4 of 10

PACE ANALYTICAL — COOLER RECEIPT FORM — Page 1 Of 7

Submission #: 24-11098

SHIPPING INFORMATION
Fed Ex ☐ UPS ☐ GSO / GLS ☐ Hand Delivery ☐
Pace Lab Field Service ☑ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☐ None ☐ Box ☐
Other ☐ (Specify)_____

FREE LIQUID
YES ☐ NO ☐
(W) S

Refrigerant: Ice ☐ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☐ Intact? Yes ☐ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☐ Comments:

All samples received? Yes ☐ No ☐ All samples containers intact? Yes ☐ No ☐ Description(s) match COC? Yes ☐ No ☐

COC Received ☐ YES ☐ NO

Emissivity: 0.97 Container: N/A Thermometer ID: 274
Temperature: (A) 5.5 °C / (C) 5.5 °C
Date/Time 7/13/24 1000
Analyst Init VBL

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	21	22	23	24	25	26	17	18	19	20
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr^{+6}										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK							CL2 7/13/24			
40ml VOA VIAL							A-C	A-C	A-C	
QT EPA 1664B										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608.3/808IA										
QT EPA 515.1/8151A										
QT EPA 525.2										
QT EPA 525.2 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548.1										
QT EPA 549.2										
QT EPA 8015M										
QT EPA 8270C										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR CL2 7/13/24	B	B	B	B	B	B	D	D	D	B
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT							A-C	A-C	A-C	
SUMMA CANISTER CL2 7/13/24										

Comments: (-13 BA Sample ID doesn't match) (-14/15, and -16 Ars sample ID doesn't match)
Sample Numbering Completed By: CL2 Date/Time: 7/13/24 1132
A = Actual / C = Corrected

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PACE ANALYTICAL — COOLER RECEIPT FORM — Page 2 Of 7

Submission #: 24-11098

SHIPPING INFORMATION	SHIPPING CONTAINER	FREE LIQUID
Fed Ex ☐ UPS ☐ GSO / GLS ☐ Hand Delivery ☐ Pace Lab Field Service ☑ Other ☐ (Specify)_____	Ice Chest ☑ None ☐ Box ☐ Other ☐ (Specify)_____	YES ☐ NO ☐ (W) S

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☐ Intact? Yes ☐ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☑ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☐ No ☑

COC Received ☑ YES ☐ NO

Emissivity: 0.97 Container: N/A Thermometer ID: 274

Temperature: (A) 5.5 °C / (C) 5.5 °C

Date/Time 7/13/24

Analyst Init VBL 1000

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	27	28	9	10
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr^{+6}										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664B										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL - 504										
QT EPA 508/608.3/8081A										
QT EPA 515.1/8151A										
QT EPA 525.2										
QT EPA 525.2 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548.1										
QT EPA 549.2										
QT EPA 8015M										
QT EPA 8270C										
8oz / 16oz / 32oz AMBER										
(8oz) / 16oz / 32oz JAR							B	B		
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments: -21, -24, -25, -26, and -28 A's, B's time doesn't match.

Sample Numbering Completed By: CL2 Date/Time: 7/13/24 1822

A = Actual / C = Corrected

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PACE ANALYTICAL — COOLER RECEIPT FORM — Page 3 Of 7

Submission #: 24-11098

SHIPPING INFORMATION	SHIPPING CONTAINER	FREE LIQUID
Fed Ex ☒ UPS ☐ GSO / GLS ☐ Hand Delivery ☐	Ice Chest ☒ None ☐ Box ☐	YES ☐ NO ☐
Pace Lab Field Service ☐ Other ☐ (Specify)_____	Other ☐ (Specify)_____	W / S

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☐ Intact? Yes ☐ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☒ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☐ No ☒

COC Received ☒ YES ☐ NO

Emissivity: 0.97 Container: N/A Thermometer ID: 274 Date/Time 7/13/24

Temperature: (A) 4.4 °C / (C) 4.4 °C Analyst Init VBI 1000

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr+6										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664B										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608.3/8081A										
QT EPA 515.1/8151A										
QT EPA 525.2										
QT EPA 525.2 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548.1										
QT EPA 549.2										
QT EPA 8015M										
QT EPA 8270C										
8oz / 16oz / 32oz AMBER										
8oz 16oz / 32oz JAR	B	B	B	B	B	B	B	B	B	A
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER VBI 7/15/24										

Comments: (-27D received, Received Saturated.)

Sample Numbering Completed By: CL2 Date/Time: 7/13/24 11:22

A = Actual / C = Corrected

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PACE ANALYTICAL — COOLER RECEIPT FORM — Page 4 Of 7

Submission #: 24-11098

SHIPPING INFORMATION	SHIPPING CONTAINER	FREE LIQUID
Fed Ex ☐ UPS ☐ GSO / GLS ☐ Hand Delivery ☐ Pace Lab Field Service ☑ Other ☐ (Specify)_____	Ice Chest ☐ None ☐ Box ☐ Other ☐ (Specify)_____	YES ☐ NO ☐ (WT / S)

Refrigerant: Ice ☐ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☐ Intact? Yes ☐ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☐ Comments:

All samples received? Yes ☐ No ☐ All samples containers intact? Yes ☐ No ☐ Description(s) match COC? Yes ☐ No ☐

COC Received ☐ YES ☐ NO

Emissivity: 0.97 Container: N/A Thermometer ID: 274 Date/Time 7/13/24

Temperature: (A) 4.4 °C / (C) 4.4 °C Analyst Init VBI 1000

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr6										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664B										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608.3/8081A										
QT EPA 515.1/8151A										
QT EPA 525.2										
QT EPA 525.2 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548.1										
QT EPA 549.2										
QT EPA 8015M										
QT EPA 8270C										
8oz / 16oz / 32oz AMBER			CL2 7/13/24	CL2 7/13/24						
8oz / 16oz / 32oz JAR	A	A	A B	A B	B	B				
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments:

Sample Numbering Completed By: CL2 Date/Time: 7/13/24 11:22

A = Actual / C = Corrected

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PACE ANALYTICAL — COOLER RECEIPT FORM — Page 5 Of 7

Submission #: 24-11098

SHIPPING INFORMATION
Fed Ex ☒ UPS ☐ GSO / GLS ☐ Hand Delivery ☐
Pace Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☐ None ☐ Box ☐
Other ☐ (Specify)_____

FREE LIQUID
YES ☐ NO ☐
(W) / S

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☐ Intact? Yes ☐ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☒ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☐ No ☒

COC Received ☒ YES ☐ NO

Emissivity: 0.97 Container: N/A Thermometer ID: 274

Temperature: (A) 5.2 °C / (C) 5.2 °C

Date/Time 7/13/24 1000

Analyst Init VBL

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr^{+6}										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664B										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608.3/8081A										
QT EPA 515.1/8151A										
QT EPA 525.2										
QT EPA 525.2 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548.1										
QT EPA 549.2										
QT EPA 8015M										
QT EPA 8270C										
8oz / 16oz / 32oz ~~AMBER~~ JAR 8oz										B
8oz / 16oz / 32oz JAR 4oz	A	A	A	A	A	A	A	A	A	
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments:_____
Sample Numbering Completed By: CL2 Date/Time: 7/13/24 1122
A = Actual / C = Corrected

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PACE ANALYTICAL — COOLER RECEIPT FORM — Page 6 Of 7

Submission #: 24-110986

SHIPPING INFORMATION	SHIPPING CONTAINER	FREE LIQUID
Fed Ex ☒ UPS ☐ GSO / GLS ☐ Hand Delivery ☐	Ice Chest ☒ None ☐ Box ☐	YES ☒ NO ☐
Pace Lab Field Service ☐ Other ☐ (Specify)_____	Other ☐ (Specify)_____	(W) / S

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☐ Intact? Yes ☐ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☒ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☐ No ☒

COC Received ☒ YES ☐ NO

Emissivity: 0.97 Container: N/A Thermometer ID: 274

Temperature: (A) 5.2 °C / (C) 5.2 °C

Date/Time 7/13/24 1000

Analyst Init VB

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr6										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664B										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL - SM										
QT EPA 508/608.3/8081A										
QT EPA 515.1/8151A										
QT EPA 525.2										
QT EPA 525.2 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548.1										
QT EPA 549.2										
QT EPA 8015M										
QT EPA 8270C										
8oz / 16oz / 32oz AMBER										
(8oz) 16oz / 32oz JAR	B	B	A	A	A	A				
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments:

Sample Numbering Completed By: CL2 Date/Time: 7/13/24 1122

A = Actual / C = Corrected

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Chain of Custody and Cooler Receipt Form for 2411098 Page 10 of 10

PACE ANALYTICAL — COOLER RECEIPT FORM — Page 7 Of 7

Submission #: 24-11098

SHIPPING INFORMATION	SHIPPING CONTAINER	FREE LIQUID
Fed Ex ☒ UPS ☐ GSO / GLS ☐ Hand Delivery ☐	Ice Chest ☒ None ☐ Box ☐	YES ☐ NO ☐
Pace Lab Field Service ☑ Other ☐ (Specify)_____	Other ☐ (Specify)_____	W / S

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☐ Intact? Yes ☐ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☒ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☐ No ☒

COC Received ☒ YES ☐ NO

Emissivity: 0.97 Container: N/A Thermometer ID: 274

Temperature: (A) 5.2 °C / (C) 5.2 °C

Date/Time 7/13/24 1000

Analyst Init VBI

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	21	20	22	24	25	26	27	28	29	10
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr+6										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664B										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608.3/8081A										
QT EPA 515.1/8151A										
QT EPA 525.2										
QT EPA 525.2 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548.1										
QT EPA 549.2										
QT EPA 8015M										
QT EPA 8270C										
8oz / 16oz / 32oz AMBER 8OZ JAR			A							
8oz / 16oz / 32oz JAR 4OZ	A	A		A	A	A	A	A	A	
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments:

Sample Numbering Completed By: CLL Date/Time: 7/13/24 1122

A = Actual / C = Corrected

Rev 23 05/20/22

[S:\WPDocs\WordPerfect\LAB_DOCS\FORMS\SAMREC rev 23]

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
2411098-01	**COC Number:**	---	**Receive Date:**	07/13/2024 10:00
	Project Number:	---	**Sampling Date:**	07/11/2024 08:00
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	TB1-1	**Lab Matrix:**	Solids
	Sampled By:	Cassie B.	**Sample Type:**	Soil
2411098-02	**COC Number:**	---	**Receive Date:**	07/13/2024 10:00
	Project Number:	---	**Sampling Date:**	07/11/2024 08:10
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	TB2-1	**Lab Matrix:**	Solids
	Sampled By:	Cassie B.	**Sample Type:**	Soil
2411098-03	**COC Number:**	---	**Receive Date:**	07/13/2024 10:00
	Project Number:	---	**Sampling Date:**	07/11/2024 08:20
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	TB3-1	**Lab Matrix:**	Solids
	Sampled By:	Cassie B.	**Sample Type:**	Soil
2411098-04	**COC Number:**	---	**Receive Date:**	07/13/2024 10:00
	Project Number:	---	**Sampling Date:**	07/11/2024 09:20
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	TB4-1	**Lab Matrix:**	Solids
	Sampled By:	Cassie B.	**Sample Type:**	Soil
2411098-05	**COC Number:**	---	**Receive Date:**	07/13/2024 10:00
	Project Number:	---	**Sampling Date:**	07/11/2024 09:30
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	TB5-1	**Lab Matrix:**	Solids
	Sampled By:	Cassie B.	**Sample Type:**	Soil
2411098-06	**COC Number:**	---	**Receive Date:**	07/13/2024 10:00
	Project Number:	---	**Sampling Date:**	07/11/2024 09:10
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	TB6-1	**Lab Matrix:**	Solids
	Sampled By:	Cassie B.	**Sample Type:**	Soil
2411098-07	**COC Number:**	---	**Receive Date:**	07/13/2024 10:00
	Project Number:	---	**Sampling Date:**	07/11/2024 09:00
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	TB7-1	**Lab Matrix:**	Solids
	Sampled By:	Cassie B.	**Sample Type:**	Soil

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
2411098-08	**COC Number:**	---	**Receive Date:**	07/13/2024 10:00
	Project Number:	---	**Sampling Date:**	07/11/2024 08:40
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	TB8-1	**Lab Matrix:**	Solids
	Sampled By:	Cassie B.	**Sample Type:**	Soil
2411098-09	**COC Number:**	---	**Receive Date:**	07/13/2024 10:00
	Project Number:	---	**Sampling Date:**	07/11/2024 08:50
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	TB9-1	**Lab Matrix:**	Solids
	Sampled By:	Cassie B.	**Sample Type:**	Soil
2411098-10	**COC Number:**	---	**Receive Date:**	07/13/2024 10:00
	Project Number:	---	**Sampling Date:**	07/11/2024 07:20
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	TB10-1	**Lab Matrix:**	Solids
	Sampled By:	Cassie B.	**Sample Type:**	Soil
2411098-11	**COC Number:**	---	**Receive Date:**	07/13/2024 10:00
	Project Number:	---	**Sampling Date:**	07/11/2024 07:30
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	TB11-1	**Lab Matrix:**	Solids
	Sampled By:	Cassie B.	**Sample Type:**	Soil
2411098-12	**COC Number:**	---	**Receive Date:**	07/13/2024 10:00
	Project Number:	---	**Sampling Date:**	07/11/2024 07:40
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	TB12-1	**Lab Matrix:**	Solids
	Sampled By:	Cassie B.	**Sample Type:**	Soil
2411098-13	**COC Number:**	---	**Receive Date:**	07/13/2024 10:00
	Project Number:	---	**Sampling Date:**	07/11/2024 06:40
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	TB13-1	**Lab Matrix:**	Solids
	Sampled By:	Cassie B.	**Sample Type:**	Soil
2411098-14	**COC Number:**	---	**Receive Date:**	07/13/2024 10:00
	Project Number:	---	**Sampling Date:**	07/11/2024 06:50
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	TB14-1	**Lab Matrix:**	Solids
	Sampled By:	Cassie B.	**Sample Type:**	Soil

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1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
2411098-15	**COC Number:**	---	**Receive Date:**	07/13/2024 10:00
	Project Number:	---	**Sampling Date:**	07/11/2024 07:00
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	TB15-1	**Lab Matrix:**	Solids
	Sampled By:	Cassie B.	**Sample Type:**	Soil
2411098-16	**COC Number:**	---	**Receive Date:**	07/13/2024 10:00
	Project Number:	---	**Sampling Date:**	07/11/2024 07:10
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	TB16-1	**Lab Matrix:**	Solids
	Sampled By:	Cassie B.	**Sample Type:**	Soil
2411098-17	**COC Number:**	---	**Receive Date:**	07/13/2024 10:00
	Project Number:	---	**Sampling Date:**	07/11/2024 11:00
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	R1-1	**Lab Matrix:**	Solids
	Sampled By:	Cassie B.	**Sample Type:**	Soil
2411098-18	**COC Number:**	---	**Receive Date:**	07/13/2024 10:00
	Project Number:	---	**Sampling Date:**	07/11/2024 10:55
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	R2-1	**Lab Matrix:**	Solids
	Sampled By:	Cassie B.	**Sample Type:**	Soil
2411098-19	**COC Number:**	---	**Receive Date:**	07/13/2024 10:00
	Project Number:	---	**Sampling Date:**	07/11/2024 11:05
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	R3-1	**Lab Matrix:**	Solids
	Sampled By:	Cassie B.	**Sample Type:**	Soil
2411098-20	**COC Number:**	---	**Receive Date:**	07/13/2024 10:00
	Project Number:	---	**Sampling Date:**	07/11/2024 09:40
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	GB-1-1	**Lab Matrix:**	Solids
	Sampled By:	Cassie B.	**Sample Type:**	Soil
2411098-21	**COC Number:**	---	**Receive Date:**	07/13/2024 10:00
	Project Number:	---	**Sampling Date:**	07/11/2024 09:40
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	GB-2-1	**Lab Matrix:**	Solids
	Sampled By:	Cassie B.	**Sample Type:**	Soil

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Orange, CA 92868

Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
2411098-22	**COC Number:**	---	**Receive Date:**	07/13/2024 10:00
	Project Number:	---	**Sampling Date:**	07/11/2024 10:20
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	GB-3-1	**Lab Matrix:**	Solids
	Sampled By:	Cassie B.	**Sample Type:**	Soil
2411098-23	**COC Number:**	---	**Receive Date:**	07/13/2024 10:00
	Project Number:	---	**Sampling Date:**	07/11/2024 10:10
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	GB-4-1	**Lab Matrix:**	Solids
	Sampled By:	Cassie B.	**Sample Type:**	Soil
2411098-24	**COC Number:**	---	**Receive Date:**	07/13/2024 10:00
	Project Number:	---	**Sampling Date:**	07/11/2024 10:30
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	GB-5-1	**Lab Matrix:**	Solids
	Sampled By:	Cassie B.	**Sample Type:**	Soil
2411098-25	**COC Number:**	---	**Receive Date:**	07/13/2024 10:00
	Project Number:	---	**Sampling Date:**	07/11/2024 10:00
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	GB-6-1	**Lab Matrix:**	Solids
	Sampled By:	Cassie B.	**Sample Type:**	Soil
2411098-26	**COC Number:**	---	**Receive Date:**	07/13/2024 10:00
	Project Number:	---	**Sampling Date:**	07/11/2024 10:40
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	GB-7-1	**Lab Matrix:**	Solids
	Sampled By:	Cassie B.	**Sample Type:**	Soil
2411098-27	**COC Number:**	---	**Receive Date:**	07/13/2024 10:00
	Project Number:	---	**Sampling Date:**	07/11/2024 10:20
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	GB-8-1	**Lab Matrix:**	Solids
	Sampled By:	Cassie B.	**Sample Type:**	Soil
2411098-28	**COC Number:**	---	**Receive Date:**	07/13/2024 10:00
	Project Number:	---	**Sampling Date:**	07/11/2024 10:50
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	GB-9-1	**Lab Matrix:**	Solids
	Sampled By:	Cassie B.	**Sample Type:**	Soil

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Orange, CA 92868

Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2411098-01 | **Client Sample Name:** TB1-1, 7/11/2024 8:00:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.00050	0.000018	EPA-8081A	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.000038	EPA-8081A	ND		1
beta-BHC	ND	mg/kg	0.00050	0.000048	EPA-8081A	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000037	EPA-8081A	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.000018	EPA-8081A	ND		1
Chlordane (Technical)	**0.049**	**mg/kg**	**0.050**	**0.0010**	**EPA-8081A**	**ND**	**J**	**1**
4,4'-DDD	**0.00069**	**mg/kg**	**0.00050**	**0.000064**	**EPA-8081A**	**ND**		**1**
4,4'-DDE	**0.0088**	**mg/kg**	**0.00050**	**0.000095**	**EPA-8081A**	**ND**		**1**
4,4'-DDT	**0.0018**	**mg/kg**	**0.00050**	**0.000040**	**EPA-8081A**	**ND**		**1**
Dieldrin	**0.0010**	**mg/kg**	**0.00050**	**0.000036**	**EPA-8081A**	**ND**		**1**
Endosulfan I	ND	mg/kg	0.00050	0.000020	EPA-8081A	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000034	EPA-8081A	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.000026	EPA-8081A	ND		1
Endrin	ND	mg/kg	0.00050	0.000065	EPA-8081A	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000018	EPA-8081A	ND		1
Heptachlor	ND	mg/kg	0.00050	0.000086	EPA-8081A	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.000017	EPA-8081A	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.000094	EPA-8081A	ND		1
Toxaphene	ND	mg/kg	0.050	0.0014	EPA-8081A	ND		1
TCMX (Surrogate)	52.6	%	20 - 130 (LCL - UCL)		EPA-8081A			1
Decachlorobiphenyl (Surrogate)	34.6	%	40 - 130 (LCL - UCL)		EPA-8081A		S09	1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	07/16/24 20:20	07/17/24 23:18	HKS	GC-17	1.014	B193048	EPA 3550B

DCN = Data Continuation Number

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Orange, CA 92868

Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Pace Sample ID: 2411098-01 | **Client Sample Name:** TB1-1, 7/11/2024 8:00:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Arsenic	**2.2**	**mg/kg**	**1.0**	**0.40**	**EPA-6010B**	**ND**		**1**

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-6010B	07/15/24 08:30	07/16/24 11:30	JEH	ICP5	1	B193015	EPA 3050B

DCN = Data Continuation Number

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1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2411098-02 | **Client Sample Name:** TB2-1, 7/11/2024 8:10:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.00050	0.000018	EPA-8081A	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.000038	EPA-8081A	ND		1
beta-BHC	ND	mg/kg	0.00050	0.000048	EPA-8081A	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000037	EPA-8081A	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.000018	EPA-8081A	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.0010	EPA-8081A	ND		1
4,4'-DDD	**0.00015**	**mg/kg**	**0.00050**	**0.000064**	**EPA-8081A**	**ND**	**J**	**1**
4,4'-DDE	**0.0095**	**mg/kg**	**0.00050**	**0.000095**	**EPA-8081A**	**ND**		**1**
4,4'-DDT	**0.0017**	**mg/kg**	**0.00050**	**0.000040**	**EPA-8081A**	**ND**		**1**
Dieldrin	**0.00019**	**mg/kg**	**0.00050**	**0.000036**	**EPA-8081A**	**ND**	**J**	**1**
Endosulfan I	ND	mg/kg	0.00050	0.000020	EPA-8081A	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000034	EPA-8081A	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.000026	EPA-8081A	ND		1
Endrin	ND	mg/kg	0.00050	0.000065	EPA-8081A	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000018	EPA-8081A	ND		1
Heptachlor	ND	mg/kg	0.00050	0.000086	EPA-8081A	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.000017	EPA-8081A	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.000094	EPA-8081A	ND		1
Toxaphene	ND	mg/kg	0.050	0.0014	EPA-8081A	ND		1
TCMX (Surrogate)	56.8	%	20 - 130 (LCL - UCL)		EPA-8081A			1
Decachlorobiphenyl (Surrogate)	35.0	%	40 - 130 (LCL - UCL)		EPA-8081A		S09	1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	07/16/24 20:20	07/17/24 23:35	HKS	GC-17	1.007	B193048	EPA 3550B

DCN = Data Continuation Number

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Orange, CA 92868

Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Pace Sample ID: 2411098-02 | **Client Sample Name:** TB2-1, 7/11/2024 8:10:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Arsenic	**2.8**	**mg/kg**	**1.0**	**0.40**	**EPA-6010B**	**ND**		**1**

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-6010B	07/15/24 08:30	07/16/24 11:42	JEH	ICP5	0.990	B193015	EPA 3050B

DCN = Data Continuation Number

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Orange, CA 92868

Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2411098-03 | **Client Sample Name:** TB3-1, 7/11/2024 8:20:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.00050	0.000018	EPA-8081A	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.000038	EPA-8081A	ND		1
beta-BHC	ND	mg/kg	0.00050	0.000048	EPA-8081A	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000037	EPA-8081A	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.000018	EPA-8081A	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.0010	EPA-8081A	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000064	EPA-8081A	ND		1
4,4'-DDE	**0.0049**	**mg/kg**	**0.00050**	**0.000095**	**EPA-8081A**	**ND**		**1**
4,4'-DDT	**0.00067**	**mg/kg**	**0.00050**	**0.000040**	**EPA-8081A**	**ND**		**1**
Dieldrin	ND	mg/kg	0.00050	0.000036	EPA-8081A	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000020	EPA-8081A	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000034	EPA-8081A	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.000026	EPA-8081A	ND		1
Endrin	ND	mg/kg	0.00050	0.000065	EPA-8081A	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000018	EPA-8081A	ND		1
Heptachlor	ND	mg/kg	0.00050	0.000086	EPA-8081A	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.000017	EPA-8081A	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.000094	EPA-8081A	ND		1
Toxaphene	ND	mg/kg	0.050	0.0014	EPA-8081A	ND		1
TCMX (Surrogate)	52.5	%	20 - 130 (LCL - UCL)		EPA-8081A			1
Decachlorobiphenyl (Surrogate)	36.1	%	40 - 130 (LCL - UCL)		EPA-8081A		S09	1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	07/16/24 20:20	07/17/24 23:52	HKS	GC-17	1.017	B193048	EPA 3550B

DCN = Data Continuation Number

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Pace Sample ID: 2411098-03 | **Client Sample Name:** TB3-1, 7/11/2024 8:20:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Arsenic	**1.9**	**mg/kg**	**1.0**	**0.40**	**EPA-6010B**	**ND**		**1**

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-6010B	07/15/24 08:30	07/16/24 11:44	JEH	ICP5	1	B193015	EPA 3050B

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2411098-04 | **Client Sample Name:** TB4-1, 7/11/2024 9:20:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.00050	0.000018	EPA-8081A	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.000038	EPA-8081A	ND		1
beta-BHC	ND	mg/kg	0.00050	0.000048	EPA-8081A	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000037	EPA-8081A	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.000018	EPA-8081A	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.0010	EPA-8081A	ND		1
4,4'-DDD	**0.00011**	**mg/kg**	**0.00050**	**0.000064**	**EPA-8081A**	**ND**	**J**	**1**
4,4'-DDE	**0.0054**	**mg/kg**	**0.00050**	**0.000095**	**EPA-8081A**	**ND**		**1**
4,4'-DDT	**0.0011**	**mg/kg**	**0.00050**	**0.000040**	**EPA-8081A**	**ND**		**1**
Dieldrin	ND	mg/kg	0.00050	0.000036	EPA-8081A	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000020	EPA-8081A	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000034	EPA-8081A	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.000026	EPA-8081A	ND		1
Endrin	ND	mg/kg	0.00050	0.000065	EPA-8081A	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000018	EPA-8081A	ND		1
Heptachlor	ND	mg/kg	0.00050	0.000086	EPA-8081A	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.000017	EPA-8081A	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.000094	EPA-8081A	ND		1
Toxaphene	ND	mg/kg	0.050	0.0014	EPA-8081A	ND		1
TCMX (Surrogate)	49.7	%	20 - 130 (LCL - UCL)		EPA-8081A			1
Decachlorobiphenyl (Surrogate)	36.5	%	40 - 130 (LCL - UCL)		EPA-8081A		S09	1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	07/16/24 20:20	07/18/24 00:08	HKS	GC-17	0.993	B193048	EPA 3550B

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Orange, CA 92868

Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Pace Sample ID: 2411098-04 | **Client Sample Name:** TB4-1, 7/11/2024 9:20:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Arsenic	**1.9**	**mg/kg**	**1.0**	**0.40**	**EPA-6010B**	**ND**		**1**

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-6010B	07/15/24 08:30	07/16/24 11:50	JEH	ICP5	0.952	B193015	EPA 3050B

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2411098-05 | **Client Sample Name:** TB5-1, 7/11/2024 9:30:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.00050	0.000018	EPA-8081A	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.000038	EPA-8081A	ND		1
beta-BHC	ND	mg/kg	0.00050	0.000048	EPA-8081A	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000037	EPA-8081A	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.000018	EPA-8081A	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.0010	EPA-8081A	ND		1
4,4'-DDD	**0.00024**	**mg/kg**	**0.00050**	**0.000064**	**EPA-8081A**	**ND**	**J**	**1**
4,4'-DDE	**0.0059**	**mg/kg**	**0.00050**	**0.000095**	**EPA-8081A**	**ND**		**1**
4,4'-DDT	**0.0014**	**mg/kg**	**0.00050**	**0.000040**	**EPA-8081A**	**ND**		**1**
Dieldrin	ND	mg/kg	0.00050	0.000036	EPA-8081A	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000020	EPA-8081A	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000034	EPA-8081A	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.000026	EPA-8081A	ND		1
Endrin	ND	mg/kg	0.00050	0.000065	EPA-8081A	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000018	EPA-8081A	ND		1
Heptachlor	ND	mg/kg	0.00050	0.000086	EPA-8081A	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.000017	EPA-8081A	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.000094	EPA-8081A	ND		1
Toxaphene	ND	mg/kg	0.050	0.0014	EPA-8081A	ND		1
TCMX (Surrogate)	61.5	%	20 - 130 (LCL - UCL)		EPA-8081A			1
Decachlorobiphenyl (Surrogate)	31.0	%	40 - 130 (LCL - UCL)		EPA-8081A		S09	1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	07/16/24 20:20	07/18/24 00:25	HKS	GC-17	1.003	B193048	EPA 3550B

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Pace Sample ID: 2411098-05 | **Client Sample Name:** TB5-1, 7/11/2024 9:30:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Arsenic	**1.8**	**mg/kg**	**1.0**	**0.40**	**EPA-6010B**	**ND**		**1**

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-6010B	07/15/24 08:30	07/16/24 11:52	JEH	ICP5	0.980	B193015	EPA 3050B

DCN = Data Continuation Number

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2411098-06 | **Client Sample Name:** TB6-1, 7/11/2024 9:10:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.0010	0.000036	EPA-8081A	ND	A10	1
alpha-BHC	ND	mg/kg	0.0010	0.000076	EPA-8081A	ND	A10	1
beta-BHC	ND	mg/kg	0.0010	0.000096	EPA-8081A	ND	A10	1
delta-BHC	ND	mg/kg	0.0010	0.000074	EPA-8081A	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0010	0.000036	EPA-8081A	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.10	0.0020	EPA-8081A	ND	A10	1
4,4'-DDD	**0.00035**	**mg/kg**	**0.0010**	**0.00013**	**EPA-8081A**	**ND**	**J,A10**	**1**
4,4'-DDE	**0.015**	**mg/kg**	**0.0010**	**0.00019**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDT	**0.0013**	**mg/kg**	**0.0010**	**0.000080**	**EPA-8081A**	**ND**	**A10**	**1**
Dieldrin	ND	mg/kg	0.0010	0.000072	EPA-8081A	ND	A10	1
Endosulfan I	ND	mg/kg	0.0010	0.000040	EPA-8081A	ND	A10	1
Endosulfan II	ND	mg/kg	0.0010	0.000068	EPA-8081A	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0010	0.000052	EPA-8081A	ND	A10	1
Endrin	ND	mg/kg	0.0010	0.00013	EPA-8081A	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0010	0.000036	EPA-8081A	ND	A10	1
Heptachlor	ND	mg/kg	0.0010	0.00017	EPA-8081A	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.0010	0.000034	EPA-8081A	ND	A10	1
Methoxychlor	ND	mg/kg	0.0010	0.00019	EPA-8081A	ND	A10	1
Toxaphene	ND	mg/kg	0.10	0.0028	EPA-8081A	ND	A10	1
TCMX (Surrogate)	67.6	%	20 - 130 (LCL - UCL)		EPA-8081A			1
Decachlorobiphenyl (Surrogate)	34.6	%	40 - 130 (LCL - UCL)		EPA-8081A		S09	1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	07/16/24 20:20	07/18/24 10:14	HKS	GC-17	2.020	B193048	EPA 3550B

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Pace Sample ID: 2411098-06 | **Client Sample Name:** TB6-1, 7/11/2024 9:10:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Arsenic	**2.2**	**mg/kg**	**1.0**	**0.40**	**EPA-6010B**	**ND**		**1**

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-6010B	07/15/24 08:30	07/16/24 11:54	JEH	ICP5	1	B193015	EPA 3050B

DCN = Data Continuation Number

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Orange, CA 92868

Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2411098-07 | **Client Sample Name:** TB7-1, 7/11/2024 9:00:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.00050	0.000018	EPA-8081A	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.000038	EPA-8081A	ND		1
beta-BHC	ND	mg/kg	0.00050	0.000048	EPA-8081A	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000037	EPA-8081A	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.000018	EPA-8081A	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.0010	EPA-8081A	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000064	EPA-8081A	ND		1
4,4'-DDE	**0.0031**	**mg/kg**	**0.00050**	**0.000095**	**EPA-8081A**	**ND**		**1**
4,4'-DDT	**0.00061**	**mg/kg**	**0.00050**	**0.000040**	**EPA-8081A**	**ND**		**1**
Dieldrin	ND	mg/kg	0.00050	0.000036	EPA-8081A	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000020	EPA-8081A	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000034	EPA-8081A	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.000026	EPA-8081A	ND		1
Endrin	ND	mg/kg	0.00050	0.000065	EPA-8081A	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000018	EPA-8081A	ND		1
Heptachlor	ND	mg/kg	0.00050	0.000086	EPA-8081A	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.000017	EPA-8081A	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.000094	EPA-8081A	ND		1
Toxaphene	ND	mg/kg	0.050	0.0014	EPA-8081A	ND		1
TCMX (Surrogate)	40.1	%	20 - 130 (LCL - UCL)		EPA-8081A			1
Decachlorobiphenyl (Surrogate)	36.8	%	40 - 130 (LCL - UCL)		EPA-8081A		S09	1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	07/16/24 20:20	07/18/24 09:06	HKS	GC-17	0.997	B193048	EPA 3550B

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Pace Sample ID: 2411098-07 | **Client Sample Name:** TB7-1, 7/11/2024 9:00:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Arsenic	**2.3**	**mg/kg**	**1.0**	**0.40**	**EPA-6010B**	**ND**		**1**

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-6010B	07/15/24 08:30	07/16/24 11:56	JEH	ICP5	0.971	B193015	EPA 3050B

DCN = Data Continuation Number

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2411098-08 | **Client Sample Name:** TB8-1, 7/11/2024 8:40:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.00050	0.000018	EPA-8081A	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.000038	EPA-8081A	ND		1
beta-BHC	ND	mg/kg	0.00050	0.000048	EPA-8081A	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000037	EPA-8081A	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.000018	EPA-8081A	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.0010	EPA-8081A	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000064	EPA-8081A	ND		1
4,4'-DDE	**0.0090**	**mg/kg**	**0.00050**	**0.000095**	**EPA-8081A**	**ND**		**1**
4,4'-DDT	**0.0012**	**mg/kg**	**0.00050**	**0.000040**	**EPA-8081A**	**ND**		**1**
Dieldrin	ND	mg/kg	0.00050	0.000036	EPA-8081A	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000020	EPA-8081A	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000034	EPA-8081A	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.000026	EPA-8081A	ND		1
Endrin	ND	mg/kg	0.00050	0.000065	EPA-8081A	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000018	EPA-8081A	ND		1
Heptachlor	ND	mg/kg	0.00050	0.000086	EPA-8081A	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.000017	EPA-8081A	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.000094	EPA-8081A	ND		1
Toxaphene	ND	mg/kg	0.050	0.0014	EPA-8081A	ND		1
TCMX (Surrogate)	63.4	%	20 - 130 (LCL - UCL)		EPA-8081A			1
Decachlorobiphenyl (Surrogate)	43.8	%	40 - 130 (LCL - UCL)		EPA-8081A			1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	07/16/24 20:20	07/18/24 02:23	HKS	GC-17	0.990	B193048	EPA 3550B

DCN = Data Continuation Number

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Pace Sample ID: 2411098-08 | **Client Sample Name:** TB8-1, 7/11/2024 8:40:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Arsenic	**2.9**	**mg/kg**	**1.0**	**0.40**	**EPA-6010B**	**ND**		**1**

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-6010B	07/15/24 08:30	07/16/24 11:58	JEH	ICP5	0.990	B193015	EPA 3050B

DCN = Data Continuation Number

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2411098-09 | **Client Sample Name:** TB9-1, 7/11/2024 8:50:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.00050	0.000018	EPA-8081A	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.000038	EPA-8081A	ND		1
beta-BHC	ND	mg/kg	0.00050	0.000048	EPA-8081A	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000037	EPA-8081A	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.000018	EPA-8081A	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.0010	EPA-8081A	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000064	EPA-8081A	ND		1
4,4'-DDE	**0.0092**	**mg/kg**	**0.00050**	**0.000095**	**EPA-8081A**	**ND**		**1**
4,4'-DDT	**0.0010**	**mg/kg**	**0.00050**	**0.000040**	**EPA-8081A**	**ND**		**1**
Dieldrin	ND	mg/kg	0.00050	0.000036	EPA-8081A	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000020	EPA-8081A	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000034	EPA-8081A	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.000026	EPA-8081A	ND		1
Endrin	ND	mg/kg	0.00050	0.000065	EPA-8081A	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000018	EPA-8081A	ND		1
Heptachlor	ND	mg/kg	0.00050	0.000086	EPA-8081A	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.000017	EPA-8081A	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.000094	EPA-8081A	ND		1
Toxaphene	ND	mg/kg	0.050	0.0014	EPA-8081A	ND		1
TCMX (Surrogate)	73.9	%	20 - 130 (LCL - UCL)		EPA-8081A			1
Decachlorobiphenyl (Surrogate)	48.1	%	40 - 130 (LCL - UCL)		EPA-8081A			1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	07/16/24 20:20	07/18/24 02:40	HKS	GC-17	1	B193048	EPA 3550B

DCN = Data Continuation Number

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Pace Sample ID: 2411098-09 | **Client Sample Name:** TB9-1, 7/11/2024 8:50:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Arsenic	**2.2**	**mg/kg**	**1.0**	**0.40**	**EPA-6010B**	**ND**		**1**

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-6010B	07/15/24 08:30	07/16/24 12:00	JEH	ICP5	1	B193015	EPA 3050B

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2411098-10 | **Client Sample Name:** TB10-1, 7/11/2024 7:20:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.010	0.00036	EPA-8081A	ND	A10	1
alpha-BHC	ND	mg/kg	0.010	0.00076	EPA-8081A	ND	A10	1
beta-BHC	ND	mg/kg	0.010	0.00096	EPA-8081A	ND	A10	1
delta-BHC	ND	mg/kg	0.010	0.00074	EPA-8081A	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.010	0.00036	EPA-8081A	ND	A10	1
Chlordane (Technical)	ND	mg/kg	1.0	0.020	EPA-8081A	ND	A10	1
4,4'-DDD	ND	mg/kg	0.010	0.0013	EPA-8081A	ND	A10	1
4,4'-DDE	**0.081**	**mg/kg**	**0.010**	**0.0019**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDT	**0.00099**	**mg/kg**	**0.010**	**0.00080**	**EPA-8081A**	**ND**	**J,A10**	**1**
Dieldrin	ND	mg/kg	0.010	0.00072	EPA-8081A	ND	A10	1
Endosulfan I	ND	mg/kg	0.010	0.00040	EPA-8081A	ND	A10	1
Endosulfan II	ND	mg/kg	0.010	0.00068	EPA-8081A	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.010	0.00052	EPA-8081A	ND	A10	1
Endrin	ND	mg/kg	0.010	0.0013	EPA-8081A	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.010	0.00036	EPA-8081A	ND	A10	1
Heptachlor	ND	mg/kg	0.010	0.0017	EPA-8081A	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.010	0.00034	EPA-8081A	ND	A10	1
Methoxychlor	ND	mg/kg	0.010	0.0019	EPA-8081A	ND	A10	1
Toxaphene	ND	mg/kg	1.0	0.028	EPA-8081A	ND	A10	1
TCMX (Surrogate)	84.5	%	20 - 130 (LCL - UCL)		EPA-8081A			1
Decachlorobiphenyl (Surrogate)	56.0	%	40 - 130 (LCL - UCL)		EPA-8081A			1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	07/16/24 20:20	07/18/24 10:30	HKS	GC-17	20.270	B193048	EPA 3550B

DCN = Data Continuation Number

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Orange, CA 92868

Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Pace Sample ID: 2411098-10 | **Client Sample Name:** TB10-1, 7/11/2024 7:20:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Arsenic	**1.7**	**mg/kg**	**1.0**	**0.40**	**EPA-6010B**	**ND**		**1**

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-6010B	07/15/24 08:30	07/16/24 12:02	JEH	ICP5	1	B193015	EPA 3050B

DCN = Data Continuation Number

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2411098-11 | **Client Sample Name:** TB11-1, 7/11/2024 7:30:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.00050	0.000018	EPA-8081A	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.000038	EPA-8081A	ND		1
beta-BHC	ND	mg/kg	0.00050	0.000048	EPA-8081A	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000037	EPA-8081A	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.000018	EPA-8081A	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.0010	EPA-8081A	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000064	EPA-8081A	ND		1
4,4'-DDE	**0.0064**	**mg/kg**	**0.00050**	**0.000095**	**EPA-8081A**	**ND**		**1**
4,4'-DDT	**0.00058**	**mg/kg**	**0.00050**	**0.000040**	**EPA-8081A**	**ND**		**1**
Dieldrin	ND	mg/kg	0.00050	0.000036	EPA-8081A	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000020	EPA-8081A	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000034	EPA-8081A	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.000026	EPA-8081A	ND		1
Endrin	ND	mg/kg	0.00050	0.000065	EPA-8081A	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000018	EPA-8081A	ND		1
Heptachlor	ND	mg/kg	0.00050	0.000086	EPA-8081A	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.000017	EPA-8081A	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.000094	EPA-8081A	ND		1
Toxaphene	ND	mg/kg	0.050	0.0014	EPA-8081A	ND		1
TCMX (Surrogate)	30.2	%	20 - 130 (LCL - UCL)		EPA-8081A			1
Decachlorobiphenyl (Surrogate)	28.2	%	40 - 130 (LCL - UCL)		EPA-8081A		S09	1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	07/16/24 20:20	07/18/24 03:13	HKS	GC-17	1.003	B193048	EPA 3550B

DCN = Data Continuation Number

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Orange, CA 92868

Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Pace Sample ID: 2411098-11 | **Client Sample Name:** TB11-1, 7/11/2024 7:30:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Arsenic	**1.5**	**mg/kg**	**1.0**	**0.40**	**EPA-6010B**	**ND**		**1**

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-6010B	07/15/24 08:30	07/16/24 12:04	JEH	ICP5	1	B193015	EPA 3050B

DCN = Data Continuation Number

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2411098-12 | **Client Sample Name:** TB12-1, 7/11/2024 7:40:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.0050	0.00018	EPA-8081A	ND	A10	1
alpha-BHC	ND	mg/kg	0.0050	0.00038	EPA-8081A	ND	A10	1
beta-BHC	ND	mg/kg	0.0050	0.00048	EPA-8081A	ND	A10	1
delta-BHC	ND	mg/kg	0.0050	0.00037	EPA-8081A	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0050	0.00018	EPA-8081A	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.50	0.010	EPA-8081A	ND	A10	1
4,4'-DDD	ND	mg/kg	0.0050	0.00064	EPA-8081A	ND	A10	1
4,4'-DDE	**0.066**	**mg/kg**	**0.0050**	**0.00095**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDT	**0.0019**	**mg/kg**	**0.0050**	**0.00040**	**EPA-8081A**	**ND**	**J,A10**	**1**
Dieldrin	**0.00067**	**mg/kg**	**0.0050**	**0.00036**	**EPA-8081A**	**ND**	**J,A10**	**1**
Endosulfan I	ND	mg/kg	0.0050	0.00020	EPA-8081A	ND	A10	1
Endosulfan II	ND	mg/kg	0.0050	0.00034	EPA-8081A	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0050	0.00026	EPA-8081A	ND	A10	1
Endrin	ND	mg/kg	0.0050	0.00065	EPA-8081A	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0050	0.00018	EPA-8081A	ND	A10	1
Heptachlor	ND	mg/kg	0.0050	0.00086	EPA-8081A	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.0050	0.00017	EPA-8081A	ND	A10	1
Methoxychlor	ND	mg/kg	0.0050	0.00094	EPA-8081A	ND	A10	1
Toxaphene	ND	mg/kg	0.50	0.014	EPA-8081A	ND	A10	1
TCMX (Surrogate)	93.9	%	20 - 130 (LCL - UCL)		EPA-8081A			1
Decachlorobiphenyl (Surrogate)	77.5	%	40 - 130 (LCL - UCL)		EPA-8081A			1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	07/16/24 20:20	07/18/24 12:28	HKS	GC-17	9.868	B193048	EPA 3550B

DCN = Data Continuation Number

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1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Pace Sample ID: 2411098-12 | **Client Sample Name:** TB12-1, 7/11/2024 7:40:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Arsenic	**1.7**	**mg/kg**	**1.0**	**0.40**	**EPA-6010B**	**ND**		**1**

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-6010B	07/15/24 08:30	07/16/24 12:06	JEH	ICP5	1	B193015	EPA 3050B

DCN = Data Continuation Number

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2411098-13 | **Client Sample Name:** TB13-1, 7/11/2024 6:40:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.0010	0.000036	EPA-8081A	ND	A10	1
alpha-BHC	ND	mg/kg	0.0010	0.000076	EPA-8081A	ND	A10	1
beta-BHC	ND	mg/kg	0.0010	0.000096	EPA-8081A	ND	A10	1
delta-BHC	ND	mg/kg	0.0010	0.000074	EPA-8081A	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0010	0.000036	EPA-8081A	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.10	0.0020	EPA-8081A	ND	A10	1
4,4'-DDD	ND	mg/kg	0.0010	0.00013	EPA-8081A	ND	A10	1
4,4'-DDE	**0.019**	**mg/kg**	**0.0010**	**0.00019**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDT	**0.00052**	**mg/kg**	**0.0010**	**0.000080**	**EPA-8081A**	**ND**	**J,A10**	**1**
Dieldrin	ND	mg/kg	0.0010	0.000072	EPA-8081A	ND	A10	1
Endosulfan I	ND	mg/kg	0.0010	0.000040	EPA-8081A	ND	A10	1
Endosulfan II	ND	mg/kg	0.0010	0.000068	EPA-8081A	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0010	0.000052	EPA-8081A	ND	A10	1
Endrin	ND	mg/kg	0.0010	0.00013	EPA-8081A	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0010	0.000036	EPA-8081A	ND	A10	1
Heptachlor	ND	mg/kg	0.0010	0.00017	EPA-8081A	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.0010	0.000034	EPA-8081A	ND	A10	1
Methoxychlor	ND	mg/kg	0.0010	0.00019	EPA-8081A	ND	A10	1
Toxaphene	ND	mg/kg	0.10	0.0028	EPA-8081A	ND	A10	1
TCMX (Surrogate)	38.4	%	20 - 130 (LCL - UCL)		EPA-8081A			1
Decachlorobiphenyl (Surrogate)	24.0	%	40 - 130 (LCL - UCL)		EPA-8081A		S09	1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	07/16/24 20:20	07/18/24 12:45	HKS	GC-17	2.013	B193048	EPA 3550B

DCN = Data Continuation Number

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Pace Sample ID: 2411098-13 | **Client Sample Name:** TB13-1, 7/11/2024 6:40:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Arsenic	**1.7**	**mg/kg**	**1.0**	**0.40**	**EPA-6010B**	**ND**		**1**

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-6010B	07/15/24 08:30	07/16/24 12:08	JEH	ICP5	0.952	B193015	EPA 3050B

DCN = Data Continuation Number

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2411098-14 | **Client Sample Name:** TB14-1, 7/11/2024 6:50:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.0050	0.00018	EPA-8081A	ND	A10	1
alpha-BHC	ND	mg/kg	0.0050	0.00038	EPA-8081A	ND	A10	1
beta-BHC	ND	mg/kg	0.0050	0.00048	EPA-8081A	ND	A10	1
delta-BHC	ND	mg/kg	0.0050	0.00037	EPA-8081A	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0050	0.00018	EPA-8081A	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.50	0.010	EPA-8081A	ND	A10	1
4,4'-DDD	ND	mg/kg	0.0050	0.00064	EPA-8081A	ND	A10	1
4,4'-DDE	**0.064**	**mg/kg**	**0.0050**	**0.00095**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDT	**0.0013**	**mg/kg**	**0.0050**	**0.00040**	**EPA-8081A**	**ND**	**J,A10**	**1**
Dieldrin	ND	mg/kg	0.0050	0.00036	EPA-8081A	ND	A10	1
Endosulfan I	ND	mg/kg	0.0050	0.00020	EPA-8081A	ND	A10	1
Endosulfan II	ND	mg/kg	0.0050	0.00034	EPA-8081A	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0050	0.00026	EPA-8081A	ND	A10	1
Endrin	ND	mg/kg	0.0050	0.00065	EPA-8081A	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0050	0.00018	EPA-8081A	ND	A10	1
Heptachlor	ND	mg/kg	0.0050	0.00086	EPA-8081A	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.0050	0.00017	EPA-8081A	ND	A10	1
Methoxychlor	ND	mg/kg	0.0050	0.00094	EPA-8081A	ND	A10	1
Toxaphene	ND	mg/kg	0.50	0.014	EPA-8081A	ND	A10	1
TCMX (Surrogate)	86.5	%	20 - 130 (LCL - UCL)		EPA-8081A			1
Decachlorobiphenyl (Surrogate)	64.3	%	40 - 130 (LCL - UCL)		EPA-8081A			1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	07/16/24 20:20	07/18/24 13:02	HKS	GC-17	9.967	B193048	EPA 3550B

DCN = Data Continuation Number

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Pace Sample ID: 2411098-14 | **Client Sample Name:** TB14-1, 7/11/2024 6:50:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Arsenic	**1.9**	**mg/kg**	**1.0**	**0.40**	**EPA-6010B**	**ND**		**1**

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-6010B	07/15/24 08:30	07/16/24 12:14	JEH	ICP5	0.990	B193015	EPA 3050B

DCN = Data Continuation Number

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2411098-15 | **Client Sample Name:** TB15-1, 7/11/2024 7:00:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.0050	0.00018	EPA-8081A	ND	A10	1
alpha-BHC	ND	mg/kg	0.0050	0.00038	EPA-8081A	ND	A10	1
beta-BHC	ND	mg/kg	0.0050	0.00048	EPA-8081A	ND	A10	1
delta-BHC	ND	mg/kg	0.0050	0.00037	EPA-8081A	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0050	0.00018	EPA-8081A	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.50	0.010	EPA-8081A	ND	A10	1
4,4'-DDD	ND	mg/kg	0.0050	0.00064	EPA-8081A	ND	A10	1
4,4'-DDE	**0.045**	**mg/kg**	**0.0050**	**0.00095**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDT	**0.00087**	**mg/kg**	**0.0050**	**0.00040**	**EPA-8081A**	**ND**	**J,A10**	**1**
Dieldrin	ND	mg/kg	0.0050	0.00036	EPA-8081A	ND	A10	1
Endosulfan I	ND	mg/kg	0.0050	0.00020	EPA-8081A	ND	A10	1
Endosulfan II	ND	mg/kg	0.0050	0.00034	EPA-8081A	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0050	0.00026	EPA-8081A	ND	A10	1
Endrin	ND	mg/kg	0.0050	0.00065	EPA-8081A	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0050	0.00018	EPA-8081A	ND	A10	1
Heptachlor	ND	mg/kg	0.0050	0.00086	EPA-8081A	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.0050	0.00017	EPA-8081A	ND	A10	1
Methoxychlor	ND	mg/kg	0.0050	0.00094	EPA-8081A	ND	A10	1
Toxaphene	ND	mg/kg	0.50	0.014	EPA-8081A	ND	A10	1
TCMX (Surrogate)	76.6	%	20 - 130 (LCL - UCL)		EPA-8081A			1
Decachlorobiphenyl (Surrogate)	49.8	%	40 - 130 (LCL - UCL)		EPA-8081A			1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	07/16/24 20:20	07/18/24 13:19	HKS	GC-17	9.901	B193048	EPA 3550B

DCN = Data Continuation Number

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1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Pace Sample ID: 2411098-15 | **Client Sample Name:** TB15-1, 7/11/2024 7:00:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Arsenic	**1.7**	**mg/kg**	**1.0**	**0.40**	**EPA-6010B**	**ND**		**1**

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-6010B	07/15/24 08:30	07/16/24 12:15	JEH	ICP5	1	B193015	EPA 3050B

DCN = Data Continuation Number

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Orange, CA 92868

Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2411098-16 | **Client Sample Name:** TB16-1, 7/11/2024 7:10:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.0050	0.00018	EPA-8081A	ND	A10	1
alpha-BHC	ND	mg/kg	0.0050	0.00038	EPA-8081A	ND	A10	1
beta-BHC	ND	mg/kg	0.0050	0.00048	EPA-8081A	ND	A10	1
delta-BHC	ND	mg/kg	0.0050	0.00037	EPA-8081A	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0050	0.00018	EPA-8081A	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.50	0.010	EPA-8081A	ND	A10	1
4,4'-DDD	ND	mg/kg	0.0050	0.00064	EPA-8081A	ND	A10	1
4,4'-DDE	**0.056**	**mg/kg**	**0.0050**	**0.00095**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDT	**0.0021**	**mg/kg**	**0.0050**	**0.00040**	**EPA-8081A**	**ND**	**J,A10**	**1**
Dieldrin	ND	mg/kg	0.0050	0.00036	EPA-8081A	ND	A10	1
Endosulfan I	ND	mg/kg	0.0050	0.00020	EPA-8081A	ND	A10	1
Endosulfan II	ND	mg/kg	0.0050	0.00034	EPA-8081A	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0050	0.00026	EPA-8081A	ND	A10	1
Endrin	ND	mg/kg	0.0050	0.00065	EPA-8081A	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0050	0.00018	EPA-8081A	ND	A10	1
Heptachlor	ND	mg/kg	0.0050	0.00086	EPA-8081A	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.0050	0.00017	EPA-8081A	ND	A10	1
Methoxychlor	ND	mg/kg	0.0050	0.00094	EPA-8081A	ND	A10	1
Toxaphene	ND	mg/kg	0.50	0.014	EPA-8081A	ND	A10	1
TCMX (Surrogate)	84.4	%	20 - 130 (LCL - UCL)		EPA-8081A			1
Decachlorobiphenyl (Surrogate)	62.8	%	40 - 130 (LCL - UCL)		EPA-8081A			1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	07/16/24 20:20	07/18/24 13:36	HKS	GC-17	10.169	B193048	EPA 3550B

DCN = Data Continuation Number

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Orange, CA 92868

Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Pace Sample ID: 2411098-16 | **Client Sample Name:** TB16-1, 7/11/2024 7:10:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Arsenic	**2.0**	**mg/kg**	**1.0**	**0.40**	**EPA-6010B**	**ND**		**1**

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-6010B	07/15/24 08:30	07/16/24 12:17	JEH	ICP5	1	B193015	EPA 3050B

DCN = Data Continuation Number

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Orange, CA 92868

Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2411098-17 | **Client Sample Name:** R1-1, 7/11/2024 11:00:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.0025	0.000090	EPA-8081A	ND	A10	1
alpha-BHC	ND	mg/kg	0.0025	0.00019	EPA-8081A	ND	A10	1
beta-BHC	ND	mg/kg	0.0025	0.00024	EPA-8081A	ND	A10	1
delta-BHC	ND	mg/kg	0.0025	0.00018	EPA-8081A	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0025	0.000090	EPA-8081A	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.25	0.0050	EPA-8081A	ND	A10	1
4,4'-DDD	**0.00099**	**mg/kg**	**0.0025**	**0.00032**	**EPA-8081A**	**ND**	**J,A10**	**1**
4,4'-DDE	**0.032**	**mg/kg**	**0.0025**	**0.00048**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDT	**0.0057**	**mg/kg**	**0.0025**	**0.00020**	**EPA-8081A**	**ND**	**A10**	**1**
Dieldrin	**0.00050**	**mg/kg**	**0.0025**	**0.00018**	**EPA-8081A**	**ND**	**J,A10**	**1**
Endosulfan I	ND	mg/kg	0.0025	0.00010	EPA-8081A	ND	A10	1
Endosulfan II	ND	mg/kg	0.0025	0.00017	EPA-8081A	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0025	0.00013	EPA-8081A	ND	A10	1
Endrin	ND	mg/kg	0.0025	0.00032	EPA-8081A	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0025	0.000090	EPA-8081A	ND	A10	1
Heptachlor	ND	mg/kg	0.0025	0.00043	EPA-8081A	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.0025	0.000085	EPA-8081A	ND	A10	1
Methoxychlor	ND	mg/kg	0.0025	0.00047	EPA-8081A	ND	A10	1
Toxaphene	ND	mg/kg	0.25	0.0070	EPA-8081A	ND	A10	1
TCMX (Surrogate)	88.1	%	20 - 130 (LCL - UCL)		EPA-8081A			1
Decachlorobiphenyl (Surrogate)	60.1	%	40 - 130 (LCL - UCL)		EPA-8081A			1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	07/16/24 20:20	07/18/24 13:52	HKS	GC-17	5.017	B193048	EPA 3550B

DCN = Data Continuation Number

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1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Petroleum Hydrocarbons

Pace Sample ID: 2411098-17 **Client Sample Name:** R1-1, 7/11/2024 11:00:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
TPH - Diesel Range Organics (C12 - C22)	**4.1**	**mg/kg**	**1.0**	**0.70**	**EPA-8015B/CC**	**ND**	**A52**	**1**
TPH - Oil Range Organics (C23 - C32)	**30**	**mg/kg**	**2.0**	**0.98**	**EPA-8015B/CC**	**ND**	**A57**	**1**
Tetracosane (Surrogate)	57.8	%	40 - 130 (LCL - UCL)		EPA-8015B/CC			1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8015B/CC	07/16/24 15:00	07/18/24 07:48	BUP	GC-19	1.003	B193050	EPA 3546

DCN = Data Continuation Number

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Orange, CA 92868

Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Petroleum Hydrocarbons (EPA 8015B/5035)

Pace Sample ID: 2411098-17 **Client Sample Name:** R1-1, 7/11/2024 11:00:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Gasoline Range Organics (C4 - C12)	ND	mg/kg	1.0	0.42	EPA-8015B	ND		1
a,a,a-Trifluorotoluene (FID Surrogate)	105	%	70 - 130 (LCL - UCL)		EPA-8015B			1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8015B	07/15/24 07:51	07/15/24 22:35	SR1	GC-V8	1	B192904	EPA 5035 Soil GC

DCN = Data Continuation Number

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1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Pace Sample ID: 2411098-17 | **Client Sample Name:** R1-1, 7/11/2024 11:00:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Arsenic	**1.3**	**mg/kg**	**1.0**	**0.40**	**EPA-6010B**	**ND**		**1**

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-6010B	07/15/24 08:30	07/16/24 12:19	JEH	ICP5	1	B193015	EPA 3050B

DCN = Data Continuation Number

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2411098-18 | **Client Sample Name:** R2-1, 7/11/2024 10:55:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.25	0.0090	EPA-8081A	ND	A10	1
alpha-BHC	ND	mg/kg	0.25	0.019	EPA-8081A	ND	A10	1
beta-BHC	ND	mg/kg	0.25	0.024	EPA-8081A	ND	A10	1
delta-BHC	ND	mg/kg	0.25	0.018	EPA-8081A	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.25	0.0090	EPA-8081A	ND	A10	1
Chlordane (Technical)	ND	mg/kg	25	0.50	EPA-8081A	ND	A10	1
4,4'-DDD	**0.050**	**mg/kg**	**0.25**	**0.032**	**EPA-8081A**	**ND**	**J,A10**	**1**
4,4'-DDE	**2.4**	**mg/kg**	**0.25**	**0.048**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDT	**0.20**	**mg/kg**	**0.25**	**0.020**	**EPA-8081A**	**ND**	**J,A10**	**1**
Dieldrin	**0.035**	**mg/kg**	**0.25**	**0.018**	**EPA-8081A**	**ND**	**J,A10**	**1**
Endosulfan I	ND	mg/kg	0.25	0.010	EPA-8081A	ND	A10	1
Endosulfan II	ND	mg/kg	0.25	0.017	EPA-8081A	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.25	0.013	EPA-8081A	ND	A10	1
Endrin	ND	mg/kg	0.25	0.032	EPA-8081A	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.25	0.0090	EPA-8081A	ND	A10	1
Heptachlor	ND	mg/kg	0.25	0.043	EPA-8081A	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.25	0.0085	EPA-8081A	ND	A10	1
Methoxychlor	ND	mg/kg	0.25	0.047	EPA-8081A	ND	A10	1
Toxaphene	ND	mg/kg	25	0.70	EPA-8081A	ND	A10	1
TCMX (Surrogate)	135	%	20 - 130 (LCL - UCL)		EPA-8081A		S09	1
Decachlorobiphenyl (Surrogate)	87.5	%	40 - 130 (LCL - UCL)		EPA-8081A			1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	07/16/24 20:20	07/19/24 14:21	HKS	GC-17	498.34	B193048	EPA 3550B

DCN = Data Continuation Number

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Petroleum Hydrocarbons

Pace Sample ID: 2411098-18 **Client Sample Name:** R2-1, 7/11/2024 10:55:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
TPH - Diesel Range Organics (C12 - C22)	**44**	**mg/kg**	**10**	**7.0**	**EPA-8015B/CC**	**ND**	**A10,A52**	**1**
TPH - Oil Range Organics (C23 - C32)	**870**	**mg/kg**	**20**	**9.8**	**EPA-8015B/CC**	**ND**	**A10,A57**	**1**
Tetracosane (Surrogate)	123	%	40 - 130 (LCL - UCL)		EPA-8015B/CC			1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8015B/CC	07/16/24 15:00	07/18/24 08:58	BUP	GC-19	9.868	B193050	EPA 3546

DCN = Data Continuation Number

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Petroleum Hydrocarbons (EPA 8015B/5035)

Pace Sample ID: 2411098-18 **Client Sample Name:** R2-1, 7/11/2024 10:55:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Gasoline Range Organics (C4 - C12)	ND	mg/kg	1.0	0.42	EPA-8015B	ND		1
a,a,a-Trifluorotoluene (FID Surrogate)	80.0	%	70 - 130 (LCL - UCL)		EPA-8015B			1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8015B	07/15/24 07:51	07/15/24 23:00	SR1	GC-V8	1	B192904	EPA 5035 Soil GC

DCN = Data Continuation Number

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Orange, CA 92868

Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Pace Sample ID: 2411098-18 | **Client Sample Name:** R2-1, 7/11/2024 10:55:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Arsenic	**3.8**	**mg/kg**	**1.0**	**0.40**	**EPA-6010B**	**ND**		**1**

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-6010B	07/15/24 08:30	07/16/24 12:21	JEH	ICP5	0.980	B193015	EPA 3050B

DCN = Data Continuation Number

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2411098-19 | **Client Sample Name:** R3-1, 7/11/2024 11:05:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.010	0.00036	EPA-8081A	ND	A10	1
alpha-BHC	ND	mg/kg	0.010	0.00076	EPA-8081A	ND	A10	1
beta-BHC	ND	mg/kg	0.010	0.00096	EPA-8081A	ND	A10	1
delta-BHC	ND	mg/kg	0.010	0.00074	EPA-8081A	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.010	0.00036	EPA-8081A	ND	A10	1
Chlordane (Technical)	ND	mg/kg	1.0	0.020	EPA-8081A	ND	A10	1
4,4'-DDD	**0.070**	**mg/kg**	**0.010**	**0.0013**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDE	**0.19**	**mg/kg**	**0.010**	**0.0019**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDT	**0.031**	**mg/kg**	**0.010**	**0.00080**	**EPA-8081A**	**ND**	**A10**	**1**
Dieldrin	**0.096**	**mg/kg**	**0.010**	**0.00072**	**EPA-8081A**	**ND**	**A10**	**1**
Endosulfan I	ND	mg/kg	0.010	0.00040	EPA-8081A	ND	A10	1
Endosulfan II	ND	mg/kg	0.010	0.00068	EPA-8081A	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.010	0.00052	EPA-8081A	ND	A10	1
Endrin	ND	mg/kg	0.010	0.0013	EPA-8081A	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.010	0.00036	EPA-8081A	ND	A10	1
Heptachlor	ND	mg/kg	0.010	0.0017	EPA-8081A	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.010	0.00034	EPA-8081A	ND	A10	1
Methoxychlor	ND	mg/kg	0.010	0.0019	EPA-8081A	ND	A10	1
Toxaphene	ND	mg/kg	1.0	0.028	EPA-8081A	ND	A10	1
TCMX (Surrogate)	101	%	20 - 130 (LCL - UCL)		EPA-8081A			1
Decachlorobiphenyl (Surrogate)	90.0	%	40 - 130 (LCL - UCL)		EPA-8081A			1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	07/16/24 20:20	07/18/24 14:43	HKS	GC-17	19.672	B193048	EPA 3550B

DCN = Data Continuation Number

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Petroleum Hydrocarbons

Pace Sample ID: 2411098-19 | **Client Sample Name:** R3-1, 7/11/2024 11:05:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
TPH - Diesel Range Organics (C12 - C22)	**3.8**	**mg/kg**	**1.0**	**0.70**	**EPA-8015B/CC**	**ND**	**A52**	**1**
TPH - Oil Range Organics (C23 - C32)	**21**	**mg/kg**	**2.0**	**0.98**	**EPA-8015B/CC**	**ND**	**A57**	**1**
Tetracosane (Surrogate)	78.7	%	40 - 130 (LCL - UCL)		EPA-8015B/CC			1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8015B/CC	07/16/24 15:00	07/18/24 08:41	BUP	GC-19	0.993	B193050	EPA 3546

DCN = Data Continuation Number

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Orange, CA 92868

Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Petroleum Hydrocarbons (EPA 8015B/5035)

Pace Sample ID: 2411098-19 **Client Sample Name:** R3-1, 7/11/2024 11:05:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Gasoline Range Organics (C4 - C12)	ND	mg/kg	1.0	0.42	EPA-8015B	ND		1
a,a,a-Trifluorotoluene (FID Surrogate)	95.0	%	70 - 130 (LCL - UCL)		EPA-8015B			1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8015B	07/15/24 07:51	07/15/24 23:24	SR1	GC-V8	1	B192904	EPA 5035 Soil GC

DCN = Data Continuation Number

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Orange, CA 92868

Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Pace Sample ID: 2411098-19 | **Client Sample Name:** R3-1, 7/11/2024 11:05:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Arsenic	**1.8**	**mg/kg**	**1.0**	**0.40**	**EPA-6010B**	**ND**		**1**

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-6010B	07/15/24 08:30	07/16/24 12:23	JEH	ICP5	0.962	B193015	EPA 3050B

DCN = Data Continuation Number

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2411098-20 | **Client Sample Name:** GB-1-1, 7/11/2024 9:40:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.010	0.00036	EPA-8081A	ND	A10	1
alpha-BHC	ND	mg/kg	0.010	0.00076	EPA-8081A	ND	A10	1
beta-BHC	ND	mg/kg	0.010	0.00096	EPA-8081A	ND	A10	1
delta-BHC	ND	mg/kg	0.010	0.00074	EPA-8081A	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.010	0.00036	EPA-8081A	ND	A10	1
Chlordane (Technical)	ND	mg/kg	1.0	0.020	EPA-8081A	ND	A10	1
4,4'-DDD	ND	mg/kg	0.010	0.0013	EPA-8081A	ND	A10	1
4,4'-DDE	**0.029**	**mg/kg**	**0.010**	**0.0019**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDT	**0.0033**	**mg/kg**	**0.010**	**0.00080**	**EPA-8081A**	**ND**	**J,A10**	**1**
Dieldrin	ND	mg/kg	0.010	0.00072	EPA-8081A	ND	A10	1
Endosulfan I	ND	mg/kg	0.010	0.00040	EPA-8081A	ND	A10	1
Endosulfan II	ND	mg/kg	0.010	0.00068	EPA-8081A	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.010	0.00052	EPA-8081A	ND	A10	1
Endrin	ND	mg/kg	0.010	0.0013	EPA-8081A	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.010	0.00036	EPA-8081A	ND	A10	1
Heptachlor	ND	mg/kg	0.010	0.0017	EPA-8081A	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.010	0.00034	EPA-8081A	ND	A10	1
Methoxychlor	ND	mg/kg	0.010	0.0019	EPA-8081A	ND	A10	1
Toxaphene	ND	mg/kg	1.0	0.028	EPA-8081A	ND	A10	1
TCMX (Surrogate)	51.5	%	20 - 130 (LCL - UCL)		EPA-8081A			1
Decachlorobiphenyl (Surrogate)	40.7	%	40 - 130 (LCL - UCL)		EPA-8081A			1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	07/16/24 20:20	07/18/24 15:00	HKS	GC-17	20.270	B193048	EPA 3550B

DCN = Data Continuation Number

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Pace Sample ID: 2411098-20 | **Client Sample Name:** GB-1-1, 7/11/2024 9:40:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Arsenic	**2.0**	**mg/kg**	**1.0**	**0.40**	**EPA-6010B**	**ND**		**1**

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-6010B	07/15/24 08:30	07/16/24 12:25	JEH	ICP5	0.943	B193015	EPA 3050B

DCN = Data Continuation Number

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2411098-21 | **Client Sample Name:** GB-2-1, 7/11/2024 9:40:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.00050	0.000018	EPA-8081A	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.000038	EPA-8081A	ND		1
beta-BHC	ND	mg/kg	0.00050	0.000048	EPA-8081A	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000037	EPA-8081A	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.000018	EPA-8081A	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.0010	EPA-8081A	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000064	EPA-8081A	ND		1
4,4'-DDE	**0.0062**	**mg/kg**	**0.00050**	**0.000095**	**EPA-8081A**	**ND**		**1**
4,4'-DDT	ND	mg/kg	0.00050	0.000040	EPA-8081A	ND		1
Dieldrin	ND	mg/kg	0.00050	0.000036	EPA-8081A	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000020	EPA-8081A	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000034	EPA-8081A	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.000026	EPA-8081A	ND		1
Endrin	ND	mg/kg	0.00050	0.000065	EPA-8081A	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000018	EPA-8081A	ND		1
Heptachlor	ND	mg/kg	0.00050	0.000086	EPA-8081A	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.000017	EPA-8081A	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.000094	EPA-8081A	ND		1
Toxaphene	ND	mg/kg	0.050	0.0014	EPA-8081A	ND		1
TCMX (Surrogate)	24.9	%	20 - 130 (LCL - UCL)		EPA-8081A			1
Decachlorobiphenyl (Surrogate)	11.3	%	40 - 130 (LCL - UCL)		EPA-8081A		S09	1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	07/17/24 14:00	07/18/24 17:31	HKS	GC-17	0.984	B193049	EPA 3550B

DCN = Data Continuation Number

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Pace Sample ID: 2411098-21 | **Client Sample Name:** GB-2-1, 7/11/2024 9:40:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Arsenic	**3.1**	**mg/kg**	**5.0**	**2.0**	**EPA-6010B**	**ND**	**J,A10**	**1**

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-6010B	07/16/24 07:50	07/18/24 16:20	JRG	PE-OP4	5	B193097	EPA 3050B

DCN = Data Continuation Number

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2411098-22 | **Client Sample Name:** GB-3-1, 7/11/2024 10:20:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.0025	0.000090	EPA-8081A	ND	A10	1
alpha-BHC	ND	mg/kg	0.0025	0.00019	EPA-8081A	ND	A10	1
beta-BHC	ND	mg/kg	0.0025	0.00024	EPA-8081A	ND	A10	1
delta-BHC	ND	mg/kg	0.0025	0.00018	EPA-8081A	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0025	0.000090	EPA-8081A	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.25	0.0050	EPA-8081A	ND	A10	1
4,4'-DDD	ND	mg/kg	0.0025	0.00032	EPA-8081A	ND	A10	1
4,4'-DDE	**0.023**	**mg/kg**	**0.0025**	**0.00048**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDT	**0.0066**	**mg/kg**	**0.0025**	**0.00020**	**EPA-8081A**	**ND**	**A10**	**1**
Dieldrin	ND	mg/kg	0.0025	0.00018	EPA-8081A	ND	A10	1
Endosulfan I	ND	mg/kg	0.0025	0.00010	EPA-8081A	ND	A10	1
Endosulfan II	ND	mg/kg	0.0025	0.00017	EPA-8081A	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0025	0.00013	EPA-8081A	ND	A10	1
Endrin	ND	mg/kg	0.0025	0.00032	EPA-8081A	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0025	0.000090	EPA-8081A	ND	A10	1
Heptachlor	ND	mg/kg	0.0025	0.00043	EPA-8081A	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.0025	0.000085	EPA-8081A	ND	A10	1
Methoxychlor	ND	mg/kg	0.0025	0.00047	EPA-8081A	ND	A10	1
Toxaphene	ND	mg/kg	0.25	0.0070	EPA-8081A	ND	A10	1
TCMX (Surrogate)	56.7	%	20 - 130 (LCL - UCL)		EPA-8081A			1
Decachlorobiphenyl (Surrogate)	33.1	%	40 - 130 (LCL - UCL)		EPA-8081A		S09	1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	07/17/24 14:00	07/19/24 14:37	HKS	GC-17	4.950	B193049	EPA 3550B

DCN = Data Continuation Number

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Pace Sample ID: 2411098-22 | **Client Sample Name:** GB-3-1, 7/11/2024 10:20:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Arsenic	**2.3**	**mg/kg**	**1.0**	**0.40**	**EPA-6010B**	**ND**		**1**

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-6010B	07/16/24 07:50	07/18/24 17:57	JRG	PE-OP4	0.952	B193097	EPA 3050B

DCN = Data Continuation Number

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2411098-23 | **Client Sample Name:** GB-4-1, 7/11/2024 10:10:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.0025	0.000090	EPA-8081A	ND	A10	1
alpha-BHC	ND	mg/kg	0.0025	0.00019	EPA-8081A	ND	A10	1
beta-BHC	ND	mg/kg	0.0025	0.00024	EPA-8081A	ND	A10	1
delta-BHC	ND	mg/kg	0.0025	0.00018	EPA-8081A	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0025	0.000090	EPA-8081A	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.25	0.0050	EPA-8081A	ND	A10	1
4,4'-DDD	ND	mg/kg	0.0025	0.00032	EPA-8081A	ND	A10	1
4,4'-DDE	**0.020**	**mg/kg**	**0.0025**	**0.00048**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDT	**0.0080**	**mg/kg**	**0.0025**	**0.00020**	**EPA-8081A**	**ND**	**A10**	**1**
Dieldrin	ND	mg/kg	0.0025	0.00018	EPA-8081A	ND	A10	1
Endosulfan I	ND	mg/kg	0.0025	0.00010	EPA-8081A	ND	A10	1
Endosulfan II	ND	mg/kg	0.0025	0.00017	EPA-8081A	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0025	0.00013	EPA-8081A	ND	A10	1
Endrin	ND	mg/kg	0.0025	0.00032	EPA-8081A	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0025	0.000090	EPA-8081A	ND	A10	1
Heptachlor	ND	mg/kg	0.0025	0.00043	EPA-8081A	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.0025	0.000085	EPA-8081A	ND	A10	1
Methoxychlor	ND	mg/kg	0.0025	0.00047	EPA-8081A	ND	A10	1
Toxaphene	ND	mg/kg	0.25	0.0070	EPA-8081A	ND	A10	1
TCMX (Surrogate)	54.1	%	20 - 130 (LCL - UCL)		EPA-8081A			1
Decachlorobiphenyl (Surrogate)	36.6	%	40 - 130 (LCL - UCL)		EPA-8081A		S09	1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	07/17/24 14:00	07/19/24 14:54	HKS	GC-17	5.051	B193049	EPA 3550B

DCN = Data Continuation Number

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Pace Sample ID: 2411098-23 | **Client Sample Name:** GB-4-1, 7/11/2024 10:10:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Arsenic	**2.3**	**mg/kg**	**1.0**	**0.40**	**EPA-6010B**	**ND**		**1**

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-6010B	07/16/24 07:50	07/18/24 17:58	JRG	PE-OP4	0.990	B193097	EPA 3050B

DCN = Data Continuation Number

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2411098-24 | **Client Sample Name:** GB-5-1, 7/11/2024 10:30:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.0050	0.00018	EPA-8081A	ND	A10	1
alpha-BHC	ND	mg/kg	0.0050	0.00038	EPA-8081A	ND	A10	1
beta-BHC	ND	mg/kg	0.0050	0.00048	EPA-8081A	ND	A10	1
delta-BHC	ND	mg/kg	0.0050	0.00037	EPA-8081A	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0050	0.00018	EPA-8081A	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.50	0.010	EPA-8081A	ND	A10	1
4,4'-DDD	ND	mg/kg	0.0050	0.00064	EPA-8081A	ND	A10	1
4,4'-DDE	**0.035**	**mg/kg**	**0.0050**	**0.00095**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDT	**0.0010**	**mg/kg**	**0.0050**	**0.00040**	**EPA-8081A**	**ND**	**J,A10**	**1**
Dieldrin	ND	mg/kg	0.0050	0.00036	EPA-8081A	ND	A10	1
Endosulfan I	ND	mg/kg	0.0050	0.00020	EPA-8081A	ND	A10	1
Endosulfan II	ND	mg/kg	0.0050	0.00034	EPA-8081A	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0050	0.00026	EPA-8081A	ND	A10	1
Endrin	ND	mg/kg	0.0050	0.00065	EPA-8081A	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0050	0.00018	EPA-8081A	ND	A10	1
Heptachlor	ND	mg/kg	0.0050	0.00086	EPA-8081A	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.0050	0.00017	EPA-8081A	ND	A10	1
Methoxychlor	ND	mg/kg	0.0050	0.00094	EPA-8081A	ND	A10	1
Toxaphene	ND	mg/kg	0.50	0.014	EPA-8081A	ND	A10	1
TCMX (Surrogate)	49.0	%	20 - 130 (LCL - UCL)		EPA-8081A			1
Decachlorobiphenyl (Surrogate)	37.4	%	40 - 130 (LCL - UCL)		EPA-8081A		S09	1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	07/17/24 14:00	07/19/24 15:11	HKS	GC-17	10.169	B193049	EPA 3550B

DCN = Data Continuation Number

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Pace Sample ID: 2411098-24 | **Client Sample Name:** GB-5-1, 7/11/2024 10:30:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Arsenic	**4.3**	**mg/kg**	**1.0**	**0.40**	**EPA-6010B**	**ND**		**1**

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-6010B	07/15/24 08:30	07/15/24 18:08	JRG	PE-OP4	0.990	B193014	EPA 3050B

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2411098-25 | **Client Sample Name:** GB-6-1, 7/11/2024 10:00:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.0050	0.00018	EPA-8081A	ND	A10	1
alpha-BHC	ND	mg/kg	0.0050	0.00038	EPA-8081A	ND	A10	1
beta-BHC	ND	mg/kg	0.0050	0.00048	EPA-8081A	ND	A10	1
delta-BHC	ND	mg/kg	0.0050	0.00037	EPA-8081A	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0050	0.00018	EPA-8081A	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.50	0.010	EPA-8081A	ND	A10	1
4,4'-DDD	ND	mg/kg	0.0050	0.00064	EPA-8081A	ND	A10	1
4,4'-DDE	**0.060**	**mg/kg**	**0.0050**	**0.00095**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDT	ND	mg/kg	0.0050	0.00040	EPA-8081A	ND	A10	1
Dieldrin	ND	mg/kg	0.0050	0.00036	EPA-8081A	ND	A10	1
Endosulfan I	ND	mg/kg	0.0050	0.00020	EPA-8081A	ND	A10	1
Endosulfan II	ND	mg/kg	0.0050	0.00034	EPA-8081A	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0050	0.00026	EPA-8081A	ND	A10	1
Endrin	ND	mg/kg	0.0050	0.00065	EPA-8081A	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0050	0.00018	EPA-8081A	ND	A10	1
Heptachlor	ND	mg/kg	0.0050	0.00086	EPA-8081A	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.0050	0.00017	EPA-8081A	ND	A10	1
Methoxychlor	ND	mg/kg	0.0050	0.00094	EPA-8081A	ND	A10	1
Toxaphene	ND	mg/kg	0.50	0.014	EPA-8081A	ND	A10	1
TCMX (Surrogate)	72.3	%	20 - 130 (LCL - UCL)		EPA-8081A			1
Decachlorobiphenyl (Surrogate)	52.8	%	40 - 130 (LCL - UCL)		EPA-8081A			1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	07/17/24 14:00	07/19/24 15:28	HKS	GC-17	10.169	B193049	EPA 3550B

DCN = Data Continuation Number

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Pace Sample ID: 2411098-25 | **Client Sample Name:** GB-6-1, 7/11/2024 10:00:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Arsenic	**2.7**	**mg/kg**	**0.91**	**0.36**	**EPA-6010B**	**ND**		**1**

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-6010B	07/15/24 08:30	07/15/24 18:09	JRG	PE-OP4	0.909	B193014	EPA 3050B

DCN = Data Continuation Number

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2411098-26 | **Client Sample Name:** GB-7-1, 7/11/2024 10:40:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.010	0.00036	EPA-8081A	ND	A10	1
alpha-BHC	ND	mg/kg	0.010	0.00076	EPA-8081A	ND	A10	1
beta-BHC	ND	mg/kg	0.010	0.00096	EPA-8081A	ND	A10	1
delta-BHC	ND	mg/kg	0.010	0.00074	EPA-8081A	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.010	0.00036	EPA-8081A	ND	A10	1
Chlordane (Technical)	ND	mg/kg	1.0	0.020	EPA-8081A	ND	A10	1
4,4'-DDD	ND	mg/kg	0.010	0.0013	EPA-8081A	ND	A10	1
4,4'-DDE	**0.11**	**mg/kg**	**0.010**	**0.0019**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDT	**0.017**	**mg/kg**	**0.010**	**0.00080**	**EPA-8081A**	**ND**	**A10**	**1**
Dieldrin	ND	mg/kg	0.010	0.00072	EPA-8081A	ND	A10	1
Endosulfan I	ND	mg/kg	0.010	0.00040	EPA-8081A	ND	A10	1
Endosulfan II	ND	mg/kg	0.010	0.00068	EPA-8081A	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.010	0.00052	EPA-8081A	ND	A10	1
Endrin	ND	mg/kg	0.010	0.0013	EPA-8081A	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.010	0.00036	EPA-8081A	ND	A10	1
Heptachlor	ND	mg/kg	0.010	0.0017	EPA-8081A	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.010	0.00034	EPA-8081A	ND	A10	1
Methoxychlor	ND	mg/kg	0.010	0.0019	EPA-8081A	ND	A10	1
Toxaphene	ND	mg/kg	1.0	0.028	EPA-8081A	ND	A10	1
TCMX (Surrogate)	95.1	%	20 - 130 (LCL - UCL)		EPA-8081A			1
Decachlorobiphenyl (Surrogate)	84.9	%	40 - 130 (LCL - UCL)		EPA-8081A			1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	07/17/24 14:00	07/19/24 15:45	HKS	GC-17	19.672	B193049	EPA 3550B

DCN = Data Continuation Number

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Orange, CA 92868

Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Pace Sample ID: 2411098-26 | **Client Sample Name:** GB-7-1, 7/11/2024 10:40:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Arsenic	**3.0**	**mg/kg**	**1.0**	**0.40**	**EPA-6010B**	**ND**		**1**

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-6010B	07/15/24 08:30	07/15/24 18:11	JRG	PE-OP4	0.917	B193014	EPA 3050B

DCN = Data Continuation Number

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2411098-27 | **Client Sample Name:** GB-8-1, 7/11/2024 10:20:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.0025	0.000090	EPA-8081A	ND	A10	1
alpha-BHC	ND	mg/kg	0.0025	0.00019	EPA-8081A	ND	A10	1
beta-BHC	ND	mg/kg	0.0025	0.00024	EPA-8081A	ND	A10	1
delta-BHC	ND	mg/kg	0.0025	0.00018	EPA-8081A	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0025	0.000090	EPA-8081A	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.25	0.0050	EPA-8081A	ND	A10	1
4,4'-DDD	ND	mg/kg	0.0025	0.00032	EPA-8081A	ND	A10	1
4,4'-DDE	**0.013**	**mg/kg**	**0.0025**	**0.00048**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDT	**0.0024**	**mg/kg**	**0.0025**	**0.00020**	**EPA-8081A**	**ND**	**J,A10**	**1**
Dieldrin	ND	mg/kg	0.0025	0.00018	EPA-8081A	ND	A10	1
Endosulfan I	ND	mg/kg	0.0025	0.00010	EPA-8081A	ND	A10	1
Endosulfan II	ND	mg/kg	0.0025	0.00017	EPA-8081A	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0025	0.00013	EPA-8081A	ND	A10	1
Endrin	ND	mg/kg	0.0025	0.00032	EPA-8081A	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0025	0.000090	EPA-8081A	ND	A10	1
Heptachlor	ND	mg/kg	0.0025	0.00043	EPA-8081A	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.0025	0.000085	EPA-8081A	ND	A10	1
Methoxychlor	ND	mg/kg	0.0025	0.00047	EPA-8081A	ND	A10	1
Toxaphene	ND	mg/kg	0.25	0.0070	EPA-8081A	ND	A10	1
TCMX (Surrogate)	21.3	%	20 - 130 (LCL - UCL)		EPA-8081A			1
Decachlorobiphenyl (Surrogate)	16.4	%	40 - 130 (LCL - UCL)		EPA-8081A		S09	1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	07/17/24 14:00	07/19/24 16:02	HKS	GC-17	4.950	B193049	EPA 3550B

DCN = Data Continuation Number

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Pace Sample ID: 2411098-27 | **Client Sample Name:** GB-8-1, 7/11/2024 10:20:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Arsenic	**3.2**	**mg/kg**	**1.0**	**0.40**	**EPA-6010B**	**ND**		**1**

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-6010B	07/15/24 08:30	07/15/24 18:12	JRG	PE-OP4	0.943	B193014	EPA 3050B

DCN = Data Continuation Number

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2411098-28 | **Client Sample Name:** GB-9-1, 7/11/2024 10:50:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.0050	0.00018	EPA-8081A	ND	A10	1
alpha-BHC	ND	mg/kg	0.0050	0.00038	EPA-8081A	ND	A10	1
beta-BHC	ND	mg/kg	0.0050	0.00048	EPA-8081A	ND	A10	1
delta-BHC	ND	mg/kg	0.0050	0.00037	EPA-8081A	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0050	0.00018	EPA-8081A	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.50	0.010	EPA-8081A	ND	A10	1
4,4'-DDD	ND	mg/kg	0.0050	0.00064	EPA-8081A	ND	A10	1
4,4'-DDE	**0.080**	**mg/kg**	**0.0050**	**0.00095**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDT	ND	mg/kg	0.0050	0.00040	EPA-8081A	ND	A10	1
Dieldrin	ND	mg/kg	0.0050	0.00036	EPA-8081A	ND	A10	1
Endosulfan I	ND	mg/kg	0.0050	0.00020	EPA-8081A	ND	A10	1
Endosulfan II	ND	mg/kg	0.0050	0.00034	EPA-8081A	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0050	0.00026	EPA-8081A	ND	A10	1
Endrin	ND	mg/kg	0.0050	0.00065	EPA-8081A	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0050	0.00018	EPA-8081A	ND	A10	1
Heptachlor	ND	mg/kg	0.0050	0.00086	EPA-8081A	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.0050	0.00017	EPA-8081A	ND	A10	1
Methoxychlor	ND	mg/kg	0.0050	0.00094	EPA-8081A	ND	A10	1
Toxaphene	ND	mg/kg	0.50	0.014	EPA-8081A	ND	A10	1
TCMX (Surrogate)	87.1	%	20 - 130 (LCL - UCL)		EPA-8081A			1
Decachlorobiphenyl (Surrogate)	71.6	%	40 - 130 (LCL - UCL)		EPA-8081A			1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	07/17/24 14:00	07/19/24 16:18	HKS	GC-17	10	B193049	EPA 3550B

DCN = Data Continuation Number

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Pace Sample ID: 2411098-28 | **Client Sample Name:** GB-9-1, 7/11/2024 10:50:00AM, Cassie B.

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Arsenic	**2.8**	**mg/kg**	**1.0**	**0.40**	**EPA-6010B**	**ND**		**1**

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-6010B	07/15/24 08:30	07/15/24 18:13	JRG	PE-OP4	0.990	B193014	EPA 3050B

DCN = Data Continuation Number

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals	Run #
QC Batch ID: B193048							
Aldrin	B193048-BLK1	ND	mg/kg	0.00050	0.000018		1
alpha-BHC	B193048-BLK1	ND	mg/kg	0.00050	0.000038		1
beta-BHC	B193048-BLK1	ND	mg/kg	0.00050	0.000048		1
delta-BHC	B193048-BLK1	ND	mg/kg	0.00050	0.000037		1
gamma-BHC (Lindane)	B193048-BLK1	ND	mg/kg	0.00050	0.000018		1
Chlordane (Technical)	B193048-BLK1	ND	mg/kg	0.050	0.0010		1
4,4'-DDD	B193048-BLK1	ND	mg/kg	0.00050	0.000064		1
4,4'-DDE	B193048-BLK1	ND	mg/kg	0.00050	0.000095		1
4,4'-DDT	B193048-BLK1	ND	mg/kg	0.00050	0.000040		1
Dieldrin	B193048-BLK1	ND	mg/kg	0.00050	0.000036		1
Endosulfan I	B193048-BLK1	ND	mg/kg	0.00050	0.000020		1
Endosulfan II	B193048-BLK1	ND	mg/kg	0.00050	0.000034		1
Endosulfan sulfate	B193048-BLK1	ND	mg/kg	0.00050	0.000026		1
Endrin	B193048-BLK1	ND	mg/kg	0.00050	0.000065		1
Endrin aldehyde	B193048-BLK1	ND	mg/kg	0.00050	0.000018		1
Heptachlor	B193048-BLK1	ND	mg/kg	0.00050	0.000086		1
Heptachlor epoxide	B193048-BLK1	ND	mg/kg	0.00050	0.000017		1
Methoxychlor	B193048-BLK1	ND	mg/kg	0.00050	0.000094		1
Toxaphene	B193048-BLK1	ND	mg/kg	0.050	0.0014		1
TCMX (Surrogate)	**B193048-BLK1**	**91.8**	%	**20 - 130 (LCL - UCL)**			1
Decachlorobiphenyl (Surrogate)	**B193048-BLK1**	**96.1**	%	**40 - 130 (LCL - UCL)**			1
QC Batch ID: B193049							
Aldrin	B193049-BLK1	ND	mg/kg	0.00050	0.000018		2
alpha-BHC	B193049-BLK1	ND	mg/kg	0.00050	0.000038		2
beta-BHC	B193049-BLK1	ND	mg/kg	0.00050	0.000048		2
delta-BHC	B193049-BLK1	ND	mg/kg	0.00050	0.000037		2
gamma-BHC (Lindane)	B193049-BLK1	ND	mg/kg	0.00050	0.000018		2
Chlordane (Technical)	B193049-BLK1	ND	mg/kg	0.050	0.0010		2
4,4'-DDD	B193049-BLK1	ND	mg/kg	0.00050	0.000064		2
4,4'-DDE	B193049-BLK1	ND	mg/kg	0.00050	0.000095		2
4,4'-DDT	B193049-BLK1	ND	mg/kg	0.00050	0.000040		2
Dieldrin	B193049-BLK1	ND	mg/kg	0.00050	0.000036		2
Endosulfan I	B193049-BLK1	ND	mg/kg	0.00050	0.000020		2

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals	Run #
QC Batch ID: B193049							
Endosulfan II	B193049-BLK1	ND	mg/kg	0.00050	0.000034		2
Endosulfan sulfate	B193049-BLK1	ND	mg/kg	0.00050	0.000026		2
Endrin	B193049-BLK1	ND	mg/kg	0.00050	0.000065		2
Endrin aldehyde	B193049-BLK1	ND	mg/kg	0.00050	0.000018		2
Heptachlor	B193049-BLK1	ND	mg/kg	0.00050	0.000086		2
Heptachlor epoxide	B193049-BLK1	ND	mg/kg	0.00050	0.000017		2
Methoxychlor	B193049-BLK1	ND	mg/kg	0.00050	0.000094		2
Toxaphene	B193049-BLK1	ND	mg/kg	0.050	0.0014		2
TCMX (Surrogate)	**B193049-BLK1**	**86.0**	%	**20 - 130 (LCL - UCL)**			2
Decachlorobiphenyl (Surrogate)	**B193049-BLK1**	**83.0**	%	**40 - 130 (LCL - UCL)**			2

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B193048-BLK1	PB	EPA-8081A	07/16/24	07/17/24 22:11	HKS	GC-17	1.017
2	B193049-BLK1	PB	EPA-8081A	07/17/23	07/18/24 16:24	HKS	GC-17	0.990

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals	Run #
QC Batch ID: B193048											
Aldrin	B193048-BS1	LCS	0.0043373	0.0050000	mg/kg	86.7		70 - 130			1
alpha-BHC	B193048-BS1	LCS	0.0042637	0.0050000	mg/kg	85.3		60 - 130			1
beta-BHC	B193048-BS1	LCS	0.0044740	0.0050000	mg/kg	89.5		30 - 130			1
delta-BHC	B193048-BS1	LCS	0.0047960	0.0050000	mg/kg	95.9		60 - 130			1
gamma-BHC (Lindane)	B193048-BS1	LCS	0.0042377	0.0050000	mg/kg	84.8		60 - 130			1
4,4'-DDD	B193048-BS1	LCS	0.0045270	0.0050000	mg/kg	90.5		60 - 130			1
4,4'-DDE	B193048-BS1	LCS	0.0045950	0.0050000	mg/kg	91.9		60 - 130			1
4,4'-DDT	B193048-BS1	LCS	0.0045780	0.0050000	mg/kg	91.6		60 - 130			1
Dieldrin	B193048-BS1	LCS	0.0046153	0.0050000	mg/kg	92.3		70 - 130			1
Endosulfan I	B193048-BS1	LCS	0.0041323	0.0050000	mg/kg	82.6		60 - 130			1
Endosulfan II	B193048-BS1	LCS	0.0042807	0.0050000	mg/kg	85.6		60 - 130			1
Endosulfan sulfate	B193048-BS1	LCS	0.0056030	0.0050000	mg/kg	112		60 - 130			1
Endrin	B193048-BS1	LCS	0.0047347	0.0050000	mg/kg	94.7		60 - 130			1
Endrin aldehyde	B193048-BS1	LCS	0.0038223	0.0050000	mg/kg	76.4		60 - 130			1
Heptachlor	B193048-BS1	LCS	0.0045350	0.0050000	mg/kg	90.7		60 - 130			1
Heptachlor epoxide	B193048-BS1	LCS	0.0043417	0.0050000	mg/kg	86.8		60 - 130			1
Methoxychlor	B193048-BS1	LCS	0.0046953	0.0050000	mg/kg	93.9		60 - 130			1
TCMX (Surrogate)	B193048-BS1	LCS	0.0089427	0.010000	mg/kg	89.4		20 - 130			1
Decachlorobiphenyl (Surrogate)	B193048-BS1	LCS	0.018126	0.020000	mg/kg	90.6		40 - 130			1
QC Batch ID: B193049											
Aldrin	B193049-BS1	LCS	0.0052315	0.0050847	mg/kg	103		70 - 130			2
alpha-BHC	B193049-BS1	LCS	0.0050681	0.0050847	mg/kg	99.7		60 - 130			2
beta-BHC	B193049-BS1	LCS	0.0050180	0.0050847	mg/kg	98.7		30 - 130			2
delta-BHC	B193049-BS1	LCS	0.0049359	0.0050847	mg/kg	97.1		60 - 130			2
gamma-BHC (Lindane)	B193049-BS1	LCS	0.0050261	0.0050847	mg/kg	98.8		60 - 130			2
4,4'-DDD	B193049-BS1	LCS	0.0052268	0.0050847	mg/kg	103		60 - 130			2
4,4'-DDE	B193049-BS1	LCS	0.0052620	0.0050847	mg/kg	103		60 - 130			2
4,4'-DDT	B193049-BS1	LCS	0.0047915	0.0050847	mg/kg	94.2		60 - 130			2
Dieldrin	B193049-BS1	LCS	0.0052034	0.0050847	mg/kg	102		70 - 130			2
Endosulfan I	B193049-BS1	LCS	0.0049288	0.0050847	mg/kg	96.9		60 - 130			2
Endosulfan II	B193049-BS1	LCS	0.0048814	0.0050847	mg/kg	96.0		60 - 130			2
Endosulfan sulfate	B193049-BS1	LCS	0.0055719	0.0050847	mg/kg	110		60 - 130			2
Endrin	B193049-BS1	LCS	0.0050844	0.0050847	mg/kg	100		60 - 130			2

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals	Run #
QC Batch ID: B193049											
Endrin aldehyde	B193049-BS1	LCS	0.0041044	0.0050847	mg/kg	80.7		60 - 130			2
Heptachlor	B193049-BS1	LCS	0.0053383	0.0050847	mg/kg	105		60 - 130			2
Heptachlor epoxide	B193049-BS1	LCS	0.0052488	0.0050847	mg/kg	103		60 - 130			2
Methoxychlor	B193049-BS1	LCS	0.0049058	0.0050847	mg/kg	96.5		60 - 130			2
TCMX (Surrogate)	B193049-BS1	LCS	0.0094095	0.010169	mg/kg	92.5		20 - 130			2
Decachlorobiphenyl (Surrogate)	B193049-BS1	LCS	0.016669	0.020339	mg/kg	82.0		40 - 130			2

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B193048-BS1	LCS	EPA-8081A	07/16/24	07/17/24 22:28	HKS	GC-17	1
2	B193049-BS1	LCS	EPA-8081A	07/17/23	07/18/24 16:41	HKS	GC-17	1.017

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals	R#
QC Batch ID: B193048	Used client sample: Y - Description: TB1-1, 07/11/2024 08:00											
Aldrin	MS	2411098-01	ND	0.0042179	0.0049834	mg/kg		84.6		50 - 140		1
	MSD	2411098-01	ND	0.0044578	0.0050676	mg/kg	5.5	88.0	30	50 - 140		2
alpha-BHC	MS	2411098-01	ND	0.0044548	0.0049834	mg/kg		89.4		50 - 140		1
	MSD	2411098-01	ND	0.0047091	0.0050676	mg/kg	5.6	92.9	30	50 - 140		2
beta-BHC	MS	2411098-01	ND	0.0050425	0.0049834	mg/kg		101		30 - 140		1
	MSD	2411098-01	ND	0.0051247	0.0050676	mg/kg	1.6	101	30	30 - 140		2
delta-BHC	MS	2411098-01	ND	0.0045355	0.0049834	mg/kg		91.0		50 - 140		1
	MSD	2411098-01	ND	0.0045345	0.0050676	mg/kg	0.0	89.5	30	50 - 140		2
gamma-BHC (Lindane)	MS	2411098-01	ND	0.0044159	0.0049834	mg/kg		88.6		50 - 140		1
	MSD	2411098-01	ND	0.0046760	0.0050676	mg/kg	5.7	92.3	30	50 - 140		2
4,4'-DDD	MS	2411098-01	0.00068885	0.0051113	0.0049834	mg/kg		88.7		50 - 140		1
	MSD	2411098-01	0.00068885	0.0054159	0.0050676	mg/kg	5.8	93.3	30	50 - 140		2
4,4'-DDE	MS	**2411098-01**	**0.0088399**	**0.017989**	**0.0049834**	**mg/kg**		**184**		**50 - 140**	**Q03**	1
	MSD	**2411098-01**	**0.0088399**	**0.019074**	**0.0050676**	**mg/kg**	**5.9**	**202**	**30**	**50 - 140**	**Q03**	2
4,4'-DDT	MS	2411098-01	0.0017622	0.0076093	0.0049834	mg/kg		117		50 - 140	Q03	1
	MSD	2411098-01	0.0017622	0.0082392	0.0050676	mg/kg	7.9	128	30	50 - 140		2
Dieldrin	MS	2411098-01	0.0010392	0.0059169	0.0049834	mg/kg		97.9		40 - 140		1
	MSD	2411098-01	0.0010392	0.0057338	0.0050676	mg/kg	3.1	92.6	30	40 - 140		2
Endosulfan I	MS	2411098-01	ND	0.0032166	0.0049834	mg/kg		64.5		50 - 140		1
	MSD	2411098-01	ND	0.0033084	0.0050676	mg/kg	2.8	65.3	30	50 - 140		2
Endosulfan II	MS	2411098-01	ND	0.0039917	0.0049834	mg/kg		80.1		50 - 140		1
	MSD	2411098-01	ND	0.0043645	0.0050676	mg/kg	8.9	86.1	30	50 - 140		2
Endosulfan sulfate	MS	2411098-01	ND	0.0051993	0.0049834	mg/kg		104		50 - 140		1
	MSD	2411098-01	ND	0.0058024	0.0050676	mg/kg	11.0	114	30	50 - 140		2
Endrin	MS	2411098-01	ND	0.0045452	0.0049834	mg/kg		91.2		50 - 140		1
	MSD	2411098-01	ND	0.0049514	0.0050676	mg/kg	8.6	97.7	30	50 - 140		2
Endrin aldehyde	MS	2411098-01	ND	0.0043860	0.0049834	mg/kg		88.0		50 - 140		1
	MSD	2411098-01	ND	0.0048051	0.0050676	mg/kg	9.1	94.8	30	50 - 140		2
Heptachlor	MS	2411098-01	ND	0.0040279	0.0049834	mg/kg		80.8		60 - 140		1
	MSD	2411098-01	ND	0.0048875	0.0050676	mg/kg	19.3	96.4	30	60 - 140		2
Heptachlor epoxide	MS	2411098-01	ND	0.0044425	0.0049834	mg/kg		89.1		50 - 140		1
	MSD	2411098-01	ND	0.0047497	0.0050676	mg/kg	6.7	93.7	30	50 - 140		2
Methoxychlor	MS	2411098-01	ND	0.0044302	0.0049834	mg/kg		88.9		50 - 140		1
	MSD	2411098-01	ND	0.0050253	0.0050676	mg/kg	12.6	99.2	30	50 - 140		2
TCMX (Surrogate)	MS	2411098-01	ND	0.0078615	0.0099668	mg/kg		78.9		20 - 130		1
	MSD	2411098-01	ND	0.0083716	0.010135	mg/kg	6.3	82.6		20 - 130		2

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1100 Town and Country Road, Suite 700
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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals	R#
QC Batch ID: B193048	Used client sample: Y - Description: TB1-1, 07/11/2024 08:00											
Decachlorobiphenyl (Surrogate)	MS	2411098-01	ND	0.013848	0.019934	mg/kg		69.5		40 - 130		1
	MSD	2411098-01	ND	0.015425	0.020270	mg/kg	10.8	76.1		40 - 130		2
QC Batch ID: B193049	Used client sample: Y - Description: GB-2-1, 07/11/2024 09:40											
Aldrin	MS	2411098-21	ND	0.0031950	0.0049505	mg/kg		64.5		50 - 140		3
	MSD	2411098-21	ND	0.0040694	0.0050505	mg/kg	24.1	80.6	30	50 - 140		4
alpha-BHC	MS	2411098-21	ND	0.0032693	0.0049505	mg/kg		66.0		50 - 140		3
	MSD	2411098-21	ND	0.0031219	0.0050505	mg/kg	4.6	61.8	30	50 - 140		4
beta-BHC	MS	2411098-21	ND	0.0043541	0.0049505	mg/kg		88.0		30 - 140		3
	MSD	2411098-21	ND	0.0040040	0.0050505	mg/kg	8.4	79.3	30	30 - 140		4
delta-BHC	MS	2411098-21	ND	0.0033957	0.0049505	mg/kg		68.6		50 - 140		3
	MSD	2411098-21	ND	0.0041074	0.0050505	mg/kg	19.0	81.3	30	50 - 140		4
gamma-BHC (Lindane)	MS	2411098-21	ND	0.0031733	0.0049505	mg/kg		64.1		50 - 140		3
	MSD	2411098-21	ND	0.0031667	0.0050505	mg/kg	0.2	62.7	30	50 - 140		4
4,4'-DDD	MS	2411098-21	ND	0.0031122	0.0049505	mg/kg		62.9		50 - 140		3
	MSD	2411098-21	ND	0.0039832	0.0050505	mg/kg	24.5	78.9	30	50 - 140		4
4,4'-DDE	MS	**2411098-21**	**0.0062177**	**0.013618**	**0.0049505**	**mg/kg**		**149**		**50 - 140**	**Q03**	3
	MSD	**2411098-21**	**0.0062177**	**0.016043**	**0.0050505**	**mg/kg**	**16.3**	**195**	**30**	**50 - 140**	**Q03**	4
4,4'-DDT	MS	2411098-21	ND	0.0035861	0.0049505	mg/kg		72.4		50 - 140		3
	MSD	2411098-21	ND	0.0044781	0.0050505	mg/kg	22.1	88.7	30	50 - 140		4
Dieldrin	MS	2411098-21	ND	0.0031129	0.0049505	mg/kg		62.9		40 - 140		3
	MSD	2411098-21	ND	0.0037889	0.0050505	mg/kg	19.6	75.0	30	40 - 140		4
Endosulfan I	MS	2411098-21	ND	0.0031366	0.0049505	mg/kg		63.4		50 - 140		3
	MSD	2411098-21	ND	0.0032929	0.0050505	mg/kg	4.9	65.2	30	50 - 140		4
Endosulfan II	MS	2411098-21	ND	0.0030399	0.0049505	mg/kg		61.4		50 - 140		3
	MSD	2411098-21	ND	0.0039653	0.0050505	mg/kg	26.4	78.5	30	50 - 140		4
Endosulfan sulfate	MS	2411098-21	ND	0.0034657	0.0049505	mg/kg		70.0		50 - 140		3
	MSD	2411098-21	ND	0.0044337	0.0050505	mg/kg	24.5	87.8	30	50 - 140		4
Endrin	MS	2411098-21	ND	0.0030505	0.0049505	mg/kg		61.6		50 - 140		3
	MSD	2411098-21	ND	0.0037074	0.0050505	mg/kg	19.4	73.4	30	50 - 140		4
Endrin aldehyde	MS	**2411098-21**	**ND**	**0.0027376**	**0.0049505**	**mg/kg**		**55.3**		**50 - 140**		3
	MSD	**2411098-21**	**ND**	**0.0038121**	**0.0050505**	**mg/kg**	**32.8**	**75.5**	**30**	**50 - 140**	**Q02**	4
Heptachlor	MS	2411098-21	ND	0.0033502	0.0049505	mg/kg		67.7		60 - 140		3
	MSD	2411098-21	ND	0.0040431	0.0050505	mg/kg	18.7	80.1	30	60 - 140		4
Heptachlor epoxide	MS	2411098-21	ND	0.0029023	0.0049505	mg/kg		58.6		50 - 140		3
	MSD	2411098-21	ND	0.0037199	0.0050505	mg/kg	24.7	73.7	30	50 - 140		4
Methoxychlor	MS	**2411098-21**	**ND**	**0.0030063**	**0.0049505**	**mg/kg**		**60.7**		**50 - 140**		3
	MSD	**2411098-21**	**ND**	**0.0046007**	**0.0050505**	**mg/kg**	**41.9**	**91.1**	**30**	**50 - 140**	**Q02**	4

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals	R#
QC Batch ID: B193049	Used client sample: Y - Description: GB-2-1, 07/11/2024 09:40											
TCMX (Surrogate)	MS	2411098-21	ND	0.0071158	0.0099010	mg/kg		71.9		20 - 130		3
	MSD	2411098-21	ND	0.0075434	0.010101	mg/kg	5.8	74.7		20 - 130		4
Decachlorobiphenyl (Surrogate)	MS	2411098-21	ND	0.011628	0.019802	mg/kg		58.7		40 - 130		3
	MSD	2411098-21	ND	0.015117	0.020202	mg/kg	26.1	74.8		40 - 130		4

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B193048-MS1	MS	EPA-8081A	07/16/24	07/17/24 22:45	HKS	GC-17	0.997
2	B193048-MSD1	MSD	EPA-8081A	07/16/24	07/17/24 23:01	HKS	GC-17	1.014
3	B193049-MS1	MS	EPA-8081A	07/17/23	07/18/24 16:57	HKS	GC-17	0.990
4	B193049-MSD1	MSD	EPA-8081A	07/17/23	07/18/24 17:14	HKS	GC-17	1.010

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Petroleum Hydrocarbons

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals	Run #
QC Batch ID: B193050							
TPH - Diesel Range Organics (C12 - C22)	B193050-BLK1	ND	mg/kg	1.0	0.70		1
TPH - Oil Range Organics (C23 - C32)	B193050-BLK1	ND	mg/kg	2.0	0.98		1
Tetracosane (Surrogate)	**B193050-BLK1**	**76.5**	%	**40 - 130 (LCL - UCL)**			1

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B193050-BLK1	PB	EPA-8015B/CC	07/16/24	07/18/24 07:12	BUP	GC-19	0.997

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Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Petroleum Hydrocarbons

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals	Run #
QC Batch ID: B193050											
TPH - Diesel Range Organics (C12 - C22)	B193050-BS1	LCS	15.706	16.556	mg/kg	94.9		58 - 120			1
TPH - Oil Range Organics (C23 - C32)	B193050-BS1	LCS	39.256	33.113	mg/kg	119		40 - 130			1
Tetracosane (Surrogate)	B193050-BS1	LCS	0.57947	0.66225	mg/kg	87.5		40 - 130			1

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B193050-BS1	LCS	EPA-8015B/CC	07/16/24	07/18/24 07:30	BUP	GC-19	0.993

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Petroleum Hydrocarbons

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals	R#
QC Batch ID: B193050	Used client sample: Y - Description: R1-1, 07/11/2024 11:00											
TPH - Diesel Range Organics (C12 - C22)	MS	2411098-17	4.0977	15.620	16.949	mg/kg		68.0		49 - 120		1
	MSD	2411098-17	4.0977	17.388	16.835	mg/kg	10.7	78.9	30	49 - 120		2
TPH - Oil Range Organics (C23 - C32)	MS	2411098-17	30.256	61.708	33.898	mg/kg		92.8		40 - 130		1
	MSD	2411098-17	30.256	67.678	33.670	mg/kg	9.2	111	30	40 - 130		2
Tetracosane (Surrogate)	MS	2411098-17	ND	0.43797	0.67797	mg/kg		64.6		40 - 130		1
	MSD	2411098-17	ND	0.47912	0.67340	mg/kg	9.0	71.1		40 - 130		2

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B193050-MS1	MS	EPA-8015B/CC	07/16/24	07/18/24 08:06	BUP	GC-19	1.017
2	B193050-MSD1	MSD	EPA-8015B/CC	07/16/24	07/18/24 08:23	BUP	GC-19	1.010

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Petroleum Hydrocarbons (EPA 8015B/5035)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals	Run #
QC Batch ID: B192904							
Gasoline Range Organics (C4 - C12)	B192904-BLK1	ND	mg/kg	1.0	0.42		1
a,a,a-Trifluorotoluene (FID Surrogate)	**B192904-BLK1**	**80.0**	%	**70 - 130 (LCL - UCL)**			1

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B192904-BLK1	PB	EPA-8015B	07/15/24	07/15/24 09:59	SR1	GC-V8	1

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Petroleum Hydrocarbons (EPA 8015B/5035)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals	Run #
QC Batch ID: B192904											
Gasoline Range Organics (C4 - C12)	B192904-BS1	LCS	5.2720	5.0000	mg/kg	105		85 - 115			1
a,a,a-Trifluorotoluene (FID Surrogate)	B192904-BS1	LCS	0.042000	0.040000	mg/kg	105		70 - 130			1

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B192904-BS1	LCS	EPA-8015B	07/15/24	07/15/24 10:48	SR1	GC-V8	1

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Petroleum Hydrocarbons (EPA 8015B/5035)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals	R#
QC Batch ID: B192904	Used client sample: N											
Gasoline Range Organics (C4 - C12)	MS	**2411038-02**	**ND**	**5.4350**	**5.0000**	**mg/kg**		**109**		**70 - 130**		1
	MSD	**2411038-02**	**ND**	**4.3370**	**5.0000**	**mg/kg**	**22.5**	**86.7**	**20**	**70 - 130**	**Q02**	2
a,a,a-Trifluorotoluene (FID Surrogate)	MS	2411038-02	ND	0.042000	0.040000	mg/kg		105		70 - 130		1
	MSD	2411038-02	ND	0.039000	0.040000	mg/kg	7.4	97.5		70 - 130		2

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B192904-MS1	MS	EPA-8015B	07/15/24	07/15/24 11:12	SR1	GC-V8	1
2	B192904-MSD1	MSD	EPA-8015B	07/15/24	07/15/24 11:37	SR1	GC-V8	1

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals	Run #
QC Batch ID: B193014							
Arsenic	B193014-BLK1	ND	mg/kg	1.0	0.40		1
QC Batch ID: B193015							
Arsenic	B193015-BLK1	ND	mg/kg	1.0	0.40		2
QC Batch ID: B193097							
Arsenic	B193097-BLK1	ND	mg/kg	1.0	0.40		3

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B193014-BLK1	PB	EPA-6010B	07/15/24	07/15/24 16:44	JRG	PE-OP4	1
2	B193015-BLK1	PB	EPA-6010B	07/15/24	07/16/24 11:26	JEH	ICP5	1
3	B193097-BLK1	PB	EPA-6010B	07/16/24	07/18/24 17:44	JRG	PE-OP4	1

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals	Run #
QC Batch ID: B193014											
Arsenic	B193014-BS1	LCS	20.229	20.000	mg/kg	101		75 - 125			1
QC Batch ID: B193015											
Arsenic	B193015-BS1	LCS	19.815	20.000	mg/kg	99.1		75 - 125			2
QC Batch ID: B193097											
Arsenic	B193097-BS1	LCS	20.537	20.000	mg/kg	103		75 - 125			3
	B193097-BSD1	LCSD	20.772	20.000	mg/kg	104	1.1	75 - 125	20		4

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B193014-BS1	LCS	EPA-6010B	07/15/24	07/15/24 16:45	JRG	PE-OP4	1
2	B193015-BS1	LCS	EPA-6010B	07/15/24	07/16/24 11:28	JEH	ICP5	1
3	B193097-BS1	LCS	EPA-6010B	07/16/24	07/18/24 17:46	JRG	PE-OP4	1
4	B193097-BSD1	LCSD	EPA-6010B	07/16/24	07/18/24 17:47	JRG	PE-OP4	1

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals	R#
QC Batch ID: B193014	Used client sample: N											
Arsenic	DUP	**2411038-01**	**0.50778**	**1.0194**		**mg/kg**	**67.0**		**20**		**A02**	1
	MS	**2411038-01**	**0.50778**	**20.431**	**20.000**	**mg/kg**		**99.6**		**75 - 125**		2
	MSD	**2411038-01**	**0.50778**	**19.844**	**20.000**	**mg/kg**	**2.9**	**96.7**	**20**	**75 - 125**		3
QC Batch ID: B193015	Used client sample: Y - Description: TB1-1, 07/11/2024 08:00											
Arsenic	DUP	2411098-01	2.2150	2.1500		mg/kg	3.0		20			4
	MS	2411098-01	2.2150	21.710	20.000	mg/kg		97.5		75 - 125		5
	MSD	2411098-01	2.2150	21.945	20.000	mg/kg	1.1	98.6	20	75 - 125		6
QC Batch ID: B193097	Used client sample: Y - Description: GB-2-1, 07/11/2024 09:40											
Arsenic	DUP	**2411098-21**	**3.1096**	**3.2564**		**mg/kg**	**4.6**		**20**		**J**	7
	MS	**2411098-21**	**3.1096**	**23.110**	**20.000**	**mg/kg**		**100**		**75 - 125**		8
	MSD	**2411098-21**	**3.1096**	**17.839**	**20.000**	**mg/kg**	**25.7**	**73.6**	**20**	**75 - 125**	**Q02,Q03**	9

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B193014-DUP1	DUP	EPA-6010B	07/15/24	07/15/24 16:48	JRG	PE-OP4	1
2	B193014-MS1	MS	EPA-6010B	07/15/24	07/15/24 16:51	JRG	PE-OP4	1
3	B193014-MSD1	MSD	EPA-6010B	07/15/24	07/15/24 16:53	JRG	PE-OP4	1
4	B193015-DUP1	DUP	EPA-6010B	07/15/24	07/16/24 11:32	JEH	ICP5	1
5	B193015-MS1	MS	EPA-6010B	07/15/24	07/16/24 11:36	JEH	ICP5	1
6	B193015-MSD1	MSD	EPA-6010B	07/15/24	07/16/24 11:38	JEH	ICP5	1
7	B193097-DUP1	DUP	EPA-6010B	07/16/24	07/18/24 16:25	JRG	PE-OP4	5
8	B193097-MS1	MS	EPA-6010B	07/16/24	07/18/24 16:27	JRG	PE-OP4	5
9	B193097-MSD1	MSD	EPA-6010B	07/16/24	07/18/24 19:55	JRG	PE-OP4	5

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 07/22/2024 14:46
Project: Coachella
Project Number: [none]
Project Manager: Cassie Bretschger

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected
PQL	Practical Quantitation Limit
A02	The difference between duplicate readings is less than the quantitation limit.
A10	Detection and quantitation limits were raised due to matrix interference.
A52	Chromatogram not typical of diesel.
A57	Chromatogram not typical of motor oil.
Q02	Matrix spike precision is not within the control limits.
Q03	Matrix spike recovery(s) was(were) not within the control limits.
S09	The surrogate recovery for this compound was not within the control limits.

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Date of Report: 09/19/2024

Cassie Bretschger

Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Client Project:	Coachella
Pace Project:	Coachella
Pace Work Order:	2414419
Invoice ID:	B503981

Enclosed are the results of analyses for samples received by the laboratory on 9/7/2024. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Ragen Williams
Client Service Rep

Stuart Buttram
Operations Manager

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ENVIRONMENTAL SCIENCES

Chain of Custody and Cooler Receipt Form for 2414419 Page 1 of 4

24-14419

Pace® Location Requested (City/State): Cookeville

CHAIN-OF-CUSTODY Analytical Request Document
Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder Label Here

2414419

Scan QR Code for instructions

Company Name: Kimley Horn
Street Address:
Contact/Report To: Cassie Bretschger
Phone #:
E-Mail:
Cc E-Mail: Cassie.Bretschger@kimley-horn.com
Customer Project #:
Project Name:
Invoice to:
Invoice E-mail:
Purchase Order # (if applicable):
Quote #:

Site Collection Info/Facility ID (as applicable): Cookeville
Time Zone Collected: [ ] AK [X] PT [ ] MT [ ] CT [ ] ET
County / State origin of sample(s):

Data Deliverables: [ ] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other
Regulatory Program (DW, RCRA, etc.) as applicable:
Reportable [ ] Yes [ ] No
Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day Other
Date Results Requested: Standard
DW PWSID # or WW Permit # as applicable:
Field Filtered (if applicable): [ ] Yes [ ] No
Analysis:

Specify Container Size **
Identify Container Preservative Type***
Analysis Requested

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 30mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW), Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Residual Chlorine Result	Residual Chlorine Units	Lab Use Only: Proj. Mgr: / AcctNum / Client ID: / Table #: / Profile / Template: / Prelog / Bottle Ord. ID:	Preservation non-conformance identified for sample.	Sample Comment
R2B1	S	G	9/6/24	715			1					-1
R2B2				720			4					-2
R2N-1				620			4					-3
R2N-2				630			4					-4
R2N-3				640			1					-5
R2E-1				645			4					-6
R2E-2				650			1					-7
R2E-3				655			1					-8

TPH 6/6/24 (Diesel) Nutrients (Diesel) DOC's

Additional Instructions from Pace®:

Collected By: Printed Name / Signature

Customer Remarks / Special Conditions / Possible Hazards:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
		Christopher Lenyk PACE CE	9/7/24 1110
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

Coolers: Thermometer ID: Correction Factor (°C): Obs. Temp. (°C): Corrected Temp. (°C): [ ] On Ice

Tracking Number:

Delivered by: [ ] In- Person [ ] Courier [ ] FedEX [ ] UPS [ ] Other

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24-14419

Pace® Location Requested (City/State):

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

Scan QR Code for instructions

Company Name:	Kimley»Horn
Street Address:	
Contact/Report To:	Cassie Bretschger
Phone #:	
E-Mail:	
Cc E-Mail:	
Customer Project #:	
Project Name:	
Invoice to:	
Invoice E-mail:	Same
Site Collection Info/Facility ID (as applicable):	Coachella
Purchase Order # (if applicable):	
Quote #:	
Time Zone Collected: [ ] AK [X] PT [ ] MT [ ] CT [ ] ET	
County / State origin of sample(s):	CA
Data Deliverables: [ ] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other	
Regulatory Program (DW, RCRA, etc.) as applicable:	Reportable [ ] Yes [ ] No
Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day Other	
Date Results Requested:	Standard
DW PWSID # or WW Permit # as applicable:	
Field Filtered (if applicable): [ ] Yes [ ] No	
Analysis:	

Specify Container Size **

Identify Container Preservative Type***

Analysis Requested

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Lab Use Only: Proj. Mgr: | AcctNum / Client ID: | Table #: | Profile / Template: | Prelog / Bottle Ord. ID:

Preservation non-conformance identified for sample.

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW), Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Residual Chlorine Result	Residual Chlorine Units	Analysis: 8081 Pesticides	Metals (CAM17)	TPH-GRO	Sample Comment
R2W-1	S	G	9/6/24	700	—	—	4	—		X	X	X	-9
R2W-2	↓	↓	↓	705	—	—	1	—		HOLD			-10
R2W-3	↓	↓	↓	710	—	—	1			HOLD			-11

CHK BY: CL2

DISTRIBUTION: JKR

SUB OUT

Additional Instructions from Pace® :

Collected By: Printed Name / Signature

Customer Remarks / Special Conditions / Possible Hazards:

Coolers: | Thermometer ID: | Correction Factor (°C): | Obs. Temp. (°C): | Corrected Temp. (°C): | [ ] On Ice

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
		Christopher Leyva PACE CL	9/7/24 1110
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

Tracking Number:

Delivered by: [ ] In-Person [ ] Courier [ ] FedEx [ ] UPS [ ] Other

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Chain of Custody and Cooler Receipt Form for 2414419 Page 3 of 4

PACE ANALYTICAL — COOLER RECEIPT FORM — Page 1 Of 2

Submission #: 24-14419

SHIPPING INFORMATION
Fed Ex ☒ UPS ☐ GSO / GLS ☐ Hand Delivery ☐
Pace Lab Field Service ☐ Other ☐ (Specify)

SHIPPING CONTAINER
Ice Chest ☒ None ☐ Box ☐
Other ☐ (Specify)

FREE LIQUID
YES ☒ NO ☐
(W) / S

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments:

All samples received? Yes ☒ No ☐ CL2 9/7/24 All samples containers intact? Yes ☐ No ☒ Description(s) match COC? Yes ☒ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.97 Container: N/A Thermometer ID: TH337 Date/Time 9/7/24 1110

Temperature: (A) 1.8 °C / (C) 1.6 °C Analyst Init CL2

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr^{+6}										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664B										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608.3/8081A										
QT EPA 515.1/8151A										
QT EPA 525.2										
QT EPA 525.2 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548.1										
QT EPA 549.2										
QT EPA 8015M										
QT EPA 8270C										
8oz / 16oz / 32oz AMBER										
(8oz) / 16oz / 32oz JAR	A	E	E	E	A	E	A	A	A	A
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT		A-D	A-D	A-D		A-D			A-D	
SUMMA CANISTER	CL2	9/7/24								

Comments: C-10A received a broken cap lid) Only received 3 Smart kits missing 1 for each)
Sample Numbering Completed By: CL2 Date/Time: 9/7/24 1451
A = Actual / C = Corrected

Rev 23 05/20/22
[S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC rev 20]

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Chain of Custody and Cooler Receipt Form for 2414419 Page 4 of 4

PACE ANALYTICAL — COOLER RECEIPT FORM — Page 2 Of 2

Submission #: 24-14419

SHIPPING INFORMATION
Fed Ex ☒ UPS ☐ GSO / GLS ☐ Hand Delivery ☐
Pace Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☒ None ☐ Box ☐
Other ☐ (Specify)_____

FREE LIQUID
YES ☒ NO ☐
(W) / S

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments:

All samples received? Yes ☐ No ☒ All samples containers intact? Yes ☐ No ☒ Description(s) match COC? Yes ☒ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.97 Container: N/A Thermometer ID: TH337

Temperature: (A) 1.8 °C / (C) 1.6 °C

Date/Time 9/7/24 1110

Analyst Init CL2

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr^{+6}										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664B										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608.3/8081A										
QT EPA 515.1/8151A										
QT EPA 525.2										
QT EPA 525.2 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548.1										
QT EPA 549.2										
QT EPA 8015M										
QT EPA 8270C										
8oz / 16oz / 32oz AMBER										
(8oz) / 16oz / 32oz JAR	A									
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments:
Sample Numbering Completed By: CL2 Date/Time: 9/7/24 1451
A = Actual / C = Corrected

Rev 23 05/20/22
[S:\WPDocWordPerfect\LAB_DOCS\FORMS\SAMREC rev 20]

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 09/19/2024 14:15
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
2414419-01	**COC Number:**	---	**Receive Date:**	09/07/2024 11:10
	Project Number:	---	**Sampling Date:**	09/06/2024 07:15
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	R2B-1	**Lab Matrix:**	Solids
	Sampled By:	Client	**Sample Type:**	Soil
2414419-02	**COC Number:**	---	**Receive Date:**	09/07/2024 11:10
	Project Number:	---	**Sampling Date:**	09/06/2024 07:20
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	R2B-2	**Lab Matrix:**	Solids
	Sampled By:	Client	**Sample Type:**	Soil
2414419-03	**COC Number:**	---	**Receive Date:**	09/07/2024 11:10
	Project Number:	---	**Sampling Date:**	09/06/2024 06:20
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	R2N-1	**Lab Matrix:**	Solids
	Sampled By:	Client	**Sample Type:**	Soil
2414419-04	**COC Number:**	---	**Receive Date:**	09/07/2024 11:10
	Project Number:	---	**Sampling Date:**	09/06/2024 06:30
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	R2N-2	**Lab Matrix:**	Solids
	Sampled By:	Client	**Sample Type:**	Soil
2414419-05	**COC Number:**	---	**Receive Date:**	09/07/2024 11:10
	Project Number:	---	**Sampling Date:**	09/06/2024 06:40
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	R2N-3	**Lab Matrix:**	Solids
	Sampled By:	Client	**Sample Type:**	Soil
2414419-06	**COC Number:**	---	**Receive Date:**	09/07/2024 11:10
	Project Number:	---	**Sampling Date:**	09/06/2024 06:45
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	R2E-1	**Lab Matrix:**	Solids
	Sampled By:	Client	**Sample Type:**	Soil
2414419-07	**COC Number:**	---	**Receive Date:**	09/07/2024 11:10
	Project Number:	---	**Sampling Date:**	09/06/2024 06:50
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	R2E-2	**Lab Matrix:**	Solids
	Sampled By:	Client	**Sample Type:**	Soil

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 09/19/2024 14:15
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
2414419-08	**COC Number:**	---	**Receive Date:**	09/07/2024 11:10
	Project Number:	---	**Sampling Date:**	09/06/2024 06:55
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	R2E-3	**Lab Matrix:**	Solids
	Sampled By:	Client	**Sample Type:**	Soil
2414419-09	**COC Number:**	---	**Receive Date:**	09/07/2024 11:10
	Project Number:	---	**Sampling Date:**	09/06/2024 07:00
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	R2W-1	**Lab Matrix:**	Solids
	Sampled By:	Client	**Sample Type:**	Soil
2414419-10	**COC Number:**	---	**Receive Date:**	09/07/2024 11:10
	Project Number:	---	**Sampling Date:**	09/06/2024 07:05
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	R2W-2	**Lab Matrix:**	Solids
	Sampled By:	Client	**Sample Type:**	Soil
2414419-11	**COC Number:**	---	**Receive Date:**	09/07/2024 11:10
	Project Number:	---	**Sampling Date:**	09/06/2024 07:10
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	R2W-3	**Lab Matrix:**	Solids
	Sampled By:	Client	**Sample Type:**	Soil

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 09/19/2024 14:15
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2414419-01 | **Client Sample Name:** R2B-1, 9/6/2024 7:15:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.0050	0.00041	EPA-8081A	ND	A10	1
alpha-BHC	ND	mg/kg	0.0050	0.00029	EPA-8081A	ND	A10	1
beta-BHC	ND	mg/kg	0.0050	0.0012	EPA-8081A	ND	A10	1
delta-BHC	ND	mg/kg	0.0050	0.00076	EPA-8081A	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0050	0.00061	EPA-8081A	ND	A10	1
Chlordane (Technical)	**0.14**	**mg/kg**	**0.050**	**0.033**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDD	**0.0080**	**mg/kg**	**0.0050**	**0.00073**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDE	**0.061**	**mg/kg**	**0.0050**	**0.00086**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDT	**0.075**	**mg/kg**	**0.0050**	**0.00060**	**EPA-8081A**	**ND**	**A10**	**1**
Dieldrin	**0.0011**	**mg/kg**	**0.0050**	**0.00069**	**EPA-8081A**	**ND**	**J,A10**	**1**
Endosulfan I	ND	mg/kg	0.0050	0.00074	EPA-8081A	ND	A10	1
Endosulfan II	ND	mg/kg	0.0050	0.00064	EPA-8081A	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0050	0.00087	EPA-8081A	ND	A10	1
Endrin	ND	mg/kg	0.0050	0.00029	EPA-8081A	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0050	0.00047	EPA-8081A	ND	A10	1
Heptachlor	ND	mg/kg	0.0050	0.00050	EPA-8081A	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.0050	0.00052	EPA-8081A	ND	A10	1
Methoxychlor	ND	mg/kg	0.0050	0.00060	EPA-8081A	ND	A10	1
Toxaphene	ND	mg/kg	0.10	0.038	EPA-8081A	ND	A10	1
TCMX (Surrogate)	97.5	%	20 - 130 (LCL - UCL)		EPA-8081A			1
Decachlorobiphenyl (Surrogate)	92.6	%	40 - 130 (LCL - UCL)		EPA-8081A			1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	09/13/24 10:00	09/17/24 10:56	HKS	GC-17	10	B196573	EPA 3546

DCN = Data Continuation Number

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1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 09/19/2024 14:15
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Pace Sample ID: 2414419-01 | **Client Sample Name:** R2B-1, 9/6/2024 7:15:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	**1.4**	**mg/kg**	**1.0**	**0.40**	**EPA-6010B**	**ND**		**1**
Barium	**110**	**mg/kg**	**0.50**	**0.18**	**EPA-6010B**	**ND**		**1**
Beryllium	**0.18**	**mg/kg**	**0.50**	**0.047**	**EPA-6010B**	**ND**	**J**	**1**
Cadmium	**0.56**	**mg/kg**	**0.50**	**0.052**	**EPA-6010B**	**ND**		**1**
Chromium	**17**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		**1**
Cobalt	**6.5**	**mg/kg**	**2.5**	**0.098**	**EPA-6010B**	**ND**		**1**
Copper	**12**	**mg/kg**	**1.0**	**0.050**	**EPA-6010B**	**ND**		**1**
Lead	**0.80**	**mg/kg**	**2.5**	**0.41**	**EPA-6010B**	**ND**	**J**	**1**
Mercury	ND	mg/kg	0.16	0.016	EPA-7471A	ND		2
Molybdenum	**0.26**	**mg/kg**	**2.5**	**0.050**	**EPA-6010B**	**ND**	**J**	**1**
Nickel	**9.5**	**mg/kg**	**0.50**	**0.15**	**EPA-6010B**	**ND**		**1**
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	**33**	**mg/kg**	**0.50**	**0.11**	**EPA-6010B**	**ND**		**1**
Zinc	**79**	**mg/kg**	**2.5**	**0.087**	**EPA-6010B**	**0.20**		**1**

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-6010B	09/11/24 09:25	09/11/24 23:33	JEH	ICP6	0.943	B196713	EPA 3050B
2	EPA-7471A	09/18/24 22:00	09/19/24 10:32	TMT	CETAC3	0.977	B197123	EPA 7471A

DCN = Data Continuation Number

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1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 09/19/2024 14:15
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2414419-02 | **Client Sample Name:** R2B-2, 9/6/2024 7:20:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.0010	0.000082	EPA-8081A	ND	A10	1
alpha-BHC	ND	mg/kg	0.0010	0.000058	EPA-8081A	ND	A10	1
beta-BHC	ND	mg/kg	0.0010	0.00024	EPA-8081A	ND	A10	1
delta-BHC	ND	mg/kg	0.0010	0.00015	EPA-8081A	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0010	0.00012	EPA-8081A	ND	A10	1
Chlordane (Technical)	**0.026**	**mg/kg**	**0.010**	**0.0066**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDD	**0.0016**	**mg/kg**	**0.0010**	**0.00015**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDE	**0.011**	**mg/kg**	**0.0010**	**0.00017**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDT	**0.014**	**mg/kg**	**0.0010**	**0.00012**	**EPA-8081A**	**ND**	**A10**	**1**
Dieldrin	**0.00016**	**mg/kg**	**0.0010**	**0.00014**	**EPA-8081A**	**ND**	**J,A10**	**1**
Endosulfan I	ND	mg/kg	0.0010	0.00015	EPA-8081A	ND	A10	1
Endosulfan II	ND	mg/kg	0.0010	0.00013	EPA-8081A	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0010	0.00017	EPA-8081A	ND	A10	1
Endrin	ND	mg/kg	0.0010	0.000058	EPA-8081A	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0010	0.000094	EPA-8081A	ND	A10	1
Heptachlor	ND	mg/kg	0.0010	0.00010	EPA-8081A	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.0010	0.00010	EPA-8081A	ND	A10	1
Methoxychlor	ND	mg/kg	0.0010	0.00012	EPA-8081A	ND	A10	1
Toxaphene	ND	mg/kg	0.020	0.0076	EPA-8081A	ND	A10	1
TCMX (Surrogate)	20.7	%	20 - 130 (LCL - UCL)		EPA-8081A			1
Decachlorobiphenyl (Surrogate)	16.8	%	40 - 130 (LCL - UCL)		EPA-8081A		S09	1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	09/13/24 10:00	09/17/24 11:13	HKS	GC-17	1.993	B196573	EPA 3546

DCN = Data Continuation Number

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 09/19/2024 14:15
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Total Petroleum Hydrocarbons

Pace Sample ID: 2414419-02 | **Client Sample Name:** R2B-2, 9/6/2024 7:20:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
TPH - Diesel Range Organics (C12 - C22)	**1.8**	**mg/kg**	**1.0**	**0.70**	**EPA-8015B**	**ND**	**A52**	**1**
TPH - Oil Range Organics (C23 - C32)	**10**	**mg/kg**	**2.0**	**0.98**	**EPA-8015B**	**ND**	**A57**	**1**
Tetracosane (Surrogate)	69.3	%	40 - 130 (LCL - UCL)		EPA-8015B			1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8015B	09/16/24 20:00	09/17/24 13:36	BUP	GC-2	0.987	B196581	EPA 3546

DCN = Data Continuation Number

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 09/19/2024 14:15
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Total Petroleum Hydrocarbons (EPA 8015B/5035)

Pace Sample ID: 2414419-02 | **Client Sample Name:** R2B-2, 9/6/2024 7:20:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Gasoline Range Organics (C4 - C12)	ND	mg/kg	1.0	0.42	EPA-8015B	ND		1
a,a,a-Trifluorotoluene (FID Surrogate)	82.5	%	70 - 130 (LCL - UCL)		EPA-8015B			1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8015B	09/09/24 07:37	09/09/24 13:38	JMH2	GC-V8	0.940	B196508	EPA 5035 Soil GC

DCN = Data Continuation Number

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 09/19/2024 14:15
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Pace Sample ID: 2414419-02 | **Client Sample Name:** R2B-2, 9/6/2024 7:20:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	**1.3**	**mg/kg**	**1.0**	**0.40**	**EPA-6010B**	**ND**		**1**
Barium	**110**	**mg/kg**	**0.50**	**0.18**	**EPA-6010B**	**ND**		**1**
Beryllium	**0.18**	**mg/kg**	**0.50**	**0.047**	**EPA-6010B**	**ND**	**J**	**1**
Cadmium	**0.57**	**mg/kg**	**0.50**	**0.052**	**EPA-6010B**	**ND**		**1**
Chromium	**17**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		**1**
Cobalt	**6.3**	**mg/kg**	**2.5**	**0.098**	**EPA-6010B**	**ND**		**1**
Copper	**14**	**mg/kg**	**1.0**	**0.050**	**EPA-6010B**	**ND**		**1**
Lead	**1.8**	**mg/kg**	**2.5**	**0.41**	**EPA-6010B**	**ND**	**J**	**1**
Mercury	ND	mg/kg	0.16	0.016	EPA-7471A	ND		2
Molybdenum	**0.36**	**mg/kg**	**2.5**	**0.050**	**EPA-6010B**	**ND**	**J**	**1**
Nickel	**9.5**	**mg/kg**	**0.50**	**0.15**	**EPA-6010B**	**ND**		**1**
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	**32**	**mg/kg**	**0.50**	**0.11**	**EPA-6010B**	**ND**		**1**
Zinc	**75**	**mg/kg**	**2.5**	**0.087**	**EPA-6010B**	**0.20**		**1**

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-6010B	09/11/24 09:25	09/11/24 23:35	JEH	ICP6	0.935	B196713	EPA 3050B
2	EPA-7471A	09/18/24 22:00	09/19/24 10:34	TMT	CETAC3	0.992	B197123	EPA 7471A

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 09/19/2024 14:15
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2414419-03 | **Client Sample Name:** R2N-1, 9/6/2024 6:20:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.010	0.00082	EPA-8081A	ND	A10	1
alpha-BHC	ND	mg/kg	0.010	0.00058	EPA-8081A	ND	A10	1
beta-BHC	ND	mg/kg	0.010	0.0024	EPA-8081A	ND	A10	1
delta-BHC	ND	mg/kg	0.010	0.0015	EPA-8081A	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.010	0.0012	EPA-8081A	ND	A10	1
Chlordane (Technical)	**0.26**	**mg/kg**	**0.10**	**0.066**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDD	**0.0076**	**mg/kg**	**0.010**	**0.0015**	**EPA-8081A**	**ND**	**J,A10**	**1**
4,4'-DDE	**0.20**	**mg/kg**	**0.010**	**0.0017**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDT	**0.048**	**mg/kg**	**0.010**	**0.0012**	**EPA-8081A**	**ND**	**A10**	**1**
Dieldrin	**0.0027**	**mg/kg**	**0.010**	**0.0014**	**EPA-8081A**	**ND**	**J,A10**	**1**
Endosulfan I	ND	mg/kg	0.010	0.0015	EPA-8081A	ND	A10	1
Endosulfan II	ND	mg/kg	0.010	0.0013	EPA-8081A	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.010	0.0017	EPA-8081A	ND	A10	1
Endrin	ND	mg/kg	0.010	0.00058	EPA-8081A	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.010	0.00094	EPA-8081A	ND	A10	1
Heptachlor	ND	mg/kg	0.010	0.0010	EPA-8081A	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.010	0.0010	EPA-8081A	ND	A10	1
Methoxychlor	ND	mg/kg	0.010	0.0012	EPA-8081A	ND	A10	1
Toxaphene	ND	mg/kg	0.20	0.076	EPA-8081A	ND	A10	1
TCMX (Surrogate)	104	%	20 - 130 (LCL - UCL)		EPA-8081A			1
Decachlorobiphenyl (Surrogate)	94.6	%	40 - 130 (LCL - UCL)		EPA-8081A			1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	09/13/24 10:00	09/17/24 11:30	HKS	GC-17	20.339	B196573	EPA 3546

DCN = Data Continuation Number

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1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 09/19/2024 14:15
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Total Petroleum Hydrocarbons

Pace Sample ID: 2414419-03 | **Client Sample Name:** R2N-1, 9/6/2024 6:20:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
TPH - Diesel Range Organics (C12 - C22)	**3.7**	**mg/kg**	**1.0**	**0.70**	**EPA-8015B**	**ND**	**A52**	**1**
TPH - Oil Range Organics (C23 - C32)	**46**	**mg/kg**	**2.0**	**0.98**	**EPA-8015B**	**ND**	**A57**	**1**
Tetracosane (Surrogate)	101	%	40 - 130 (LCL - UCL)		EPA-8015B			1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8015B	09/16/24 20:00	09/17/24 13:54	BUP	GC-2	1	B196581	EPA 3546

DCN = Data Continuation Number

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1100 Town and Country Road, Suite 700
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Reported: 09/19/2024 14:15
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Total Petroleum Hydrocarbons (EPA 8015B/5035)

Pace Sample ID: 2414419-03 | **Client Sample Name:** R2N-1, 9/6/2024 6:20:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Gasoline Range Organics (C4 - C12)	ND	mg/kg	1.3	0.53	EPA-8015B	ND		1
a,a,a-Trifluorotoluene (FID Surrogate)	75.0	%	70 - 130 (LCL - UCL)		EPA-8015B			1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8015B	09/09/24 07:37	09/09/24 15:17	JMH2	GC-V8	1.266	B196508	EPA 5035 Soil GC

DCN = Data Continuation Number

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Orange, CA 92868

Reported: 09/19/2024 14:15
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Pace Sample ID: 2414419-03 | **Client Sample Name:** R2N-1, 9/6/2024 6:20:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	**1.1**	**mg/kg**	**1.0**	**0.40**	**EPA-6010B**	**ND**		**1**
Barium	**70**	**mg/kg**	**0.50**	**0.18**	**EPA-6010B**	**ND**		**1**
Beryllium	**0.14**	**mg/kg**	**0.50**	**0.047**	**EPA-6010B**	**ND**	**J**	**1**
Cadmium	**0.70**	**mg/kg**	**0.50**	**0.052**	**EPA-6010B**	**ND**		**1**
Chromium	**12**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		**1**
Cobalt	**4.2**	**mg/kg**	**2.5**	**0.098**	**EPA-6010B**	**ND**		**1**
Copper	**12**	**mg/kg**	**1.0**	**0.050**	**EPA-6010B**	**ND**		**1**
Lead	**9.7**	**mg/kg**	**2.5**	**0.41**	**EPA-6010B**	**ND**		**1**
Mercury	ND	mg/kg	0.16	0.016	EPA-7471A	ND		2
Molybdenum	**0.38**	**mg/kg**	**2.5**	**0.050**	**EPA-6010B**	**ND**	**J**	**1**
Nickel	**6.4**	**mg/kg**	**0.50**	**0.15**	**EPA-6010B**	**ND**		**1**
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	**22**	**mg/kg**	**0.50**	**0.11**	**EPA-6010B**	**ND**		**1**
Zinc	**68**	**mg/kg**	**2.5**	**0.087**	**EPA-6010B**	**0.20**		**1**

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-6010B	09/11/24 09:25	09/11/24 23:37	JEH	ICP6	0.962	B196713	EPA 3050B
2	EPA-7471A	09/18/24 22:00	09/19/24 10:39	TMT	CETAC3	1.008	B197123	EPA 7471A

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Orange, CA 92868

Reported: 09/19/2024 14:15
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2414419-06 | **Client Sample Name:** R2E-1, 9/6/2024 6:45:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.0050	0.00041	EPA-8081A	ND	A10	1
alpha-BHC	ND	mg/kg	0.0050	0.00029	EPA-8081A	ND	A10	1
beta-BHC	ND	mg/kg	0.0050	0.0012	EPA-8081A	ND	A10	1
delta-BHC	ND	mg/kg	0.0050	0.00076	EPA-8081A	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0050	0.00061	EPA-8081A	ND	A10	1
Chlordane (Technical)	**0.36**	**mg/kg**	**0.050**	**0.033**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDD	**0.0096**	**mg/kg**	**0.0050**	**0.00073**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDE	**0.20**	**mg/kg**	**0.0050**	**0.00086**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDT	**0.080**	**mg/kg**	**0.0050**	**0.00060**	**EPA-8081A**	**ND**	**A10**	**1**
Dieldrin	ND	mg/kg	0.0050	0.00069	EPA-8081A	ND	A10	1
Endosulfan I	ND	mg/kg	0.0050	0.00074	EPA-8081A	ND	A10	1
Endosulfan II	ND	mg/kg	0.0050	0.00064	EPA-8081A	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0050	0.00087	EPA-8081A	ND	A10	1
Endrin	ND	mg/kg	0.0050	0.00029	EPA-8081A	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0050	0.00047	EPA-8081A	ND	A10	1
Heptachlor	ND	mg/kg	0.0050	0.00050	EPA-8081A	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.0050	0.00052	EPA-8081A	ND	A10	1
Methoxychlor	ND	mg/kg	0.0050	0.00060	EPA-8081A	ND	A10	1
Toxaphene	ND	mg/kg	0.10	0.038	EPA-8081A	ND	A10	1
TCMX (Surrogate)	92.3	%	20 - 130 (LCL - UCL)		EPA-8081A			1
Decachlorobiphenyl (Surrogate)	66.0	%	40 - 130 (LCL - UCL)		EPA-8081A			1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	09/13/24 10:00	09/17/24 03:55	HKS	GC-17	10.067	B196573	EPA 3546

DCN = Data Continuation Number

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1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 09/19/2024 14:15
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Total Petroleum Hydrocarbons

Pace Sample ID: 2414419-06 | **Client Sample Name:** R2E-1, 9/6/2024 6:45:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
TPH - Diesel Range Organics (C12 - C22)	**27**	**mg/kg**	**1.0**	**0.70**	**EPA-8015B**	**ND**	**A52**	**1**
TPH - Oil Range Organics (C23 - C32)	**34**	**mg/kg**	**2.0**	**0.98**	**EPA-8015B**	**ND**	**A57**	**1**
Tetracosane (Surrogate)	31.9	%	40 - 130 (LCL - UCL)		EPA-8015B		S09	1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8015B	09/16/24 20:00	09/17/24 14:11	BUP	GC-2	1	B196581	EPA 3546

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1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 09/19/2024 14:15
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Total Petroleum Hydrocarbons (EPA 8015B/5035)

Pace Sample ID: 2414419-06 | **Client Sample Name:** R2E-1, 9/6/2024 6:45:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Gasoline Range Organics (C4 - C12)	ND	mg/kg	1.2	0.49	EPA-8015B	ND		1
a,a,a-Trifluorotoluene (FID Surrogate)	75.0	%	70 - 130 (LCL - UCL)		EPA-8015B			1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8015B	09/09/24 07:37	09/09/24 15:42	JMH2	GC-V8	1.157	B196508	EPA 5035 Soil GC

DCN = Data Continuation Number

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 09/19/2024 14:15
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Pace Sample ID: 2414419-06 | **Client Sample Name:** R2E-1, 9/6/2024 6:45:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	**1.7**	**mg/kg**	**1.0**	**0.40**	**EPA-6010B**	**ND**		**1**
Barium	**120**	**mg/kg**	**0.50**	**0.18**	**EPA-6010B**	**ND**		**1**
Beryllium	**0.20**	**mg/kg**	**0.50**	**0.047**	**EPA-6010B**	**ND**	**J**	**1**
Cadmium	**0.48**	**mg/kg**	**0.50**	**0.052**	**EPA-6010B**	**ND**	**J**	**1**
Chromium	**18**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		**1**
Cobalt	**7.0**	**mg/kg**	**2.5**	**0.098**	**EPA-6010B**	**ND**		**1**
Copper	**9.9**	**mg/kg**	**1.0**	**0.050**	**EPA-6010B**	**ND**		**1**
Lead	**1.3**	**mg/kg**	**2.5**	**0.41**	**EPA-6010B**	**ND**	**J**	**1**
Mercury	ND	mg/kg	0.16	0.016	EPA-7471A	ND		2
Molybdenum	**0.47**	**mg/kg**	**2.5**	**0.050**	**EPA-6010B**	**ND**	**J**	**1**
Nickel	**10**	**mg/kg**	**0.50**	**0.15**	**EPA-6010B**	**ND**		**1**
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	**34**	**mg/kg**	**0.50**	**0.11**	**EPA-6010B**	**ND**		**1**
Zinc	**58**	**mg/kg**	**2.5**	**0.087**	**EPA-6010B**	**0.21**		**1**

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-6010B	09/11/24 09:25	09/11/24 23:39	JEH	ICP6	0.990	B196713	EPA 3050B
2	EPA-7471A	09/18/24 22:00	09/19/24 10:41	TMT	CETAC3	0.962	B197123	EPA 7471A

DCN = Data Continuation Number

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Reported: 09/19/2024 14:15
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2414419-09 | **Client Sample Name:** R2W-1, 9/6/2024 7:00:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.0050	0.00041	EPA-8081A	ND	A10	1
alpha-BHC	ND	mg/kg	0.0050	0.00029	EPA-8081A	ND	A10	1
beta-BHC	ND	mg/kg	0.0050	0.0012	EPA-8081A	ND	A10	1
delta-BHC	ND	mg/kg	0.0050	0.00076	EPA-8081A	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0050	0.00061	EPA-8081A	ND	A10	1
Chlordane (Technical)	**0.074**	**mg/kg**	**0.050**	**0.033**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDD	**0.0037**	**mg/kg**	**0.0050**	**0.00073**	**EPA-8081A**	**ND**	**J,A10**	**1**
4,4'-DDE	**0.019**	**mg/kg**	**0.0050**	**0.00086**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDT	**0.0034**	**mg/kg**	**0.0050**	**0.00060**	**EPA-8081A**	**ND**	**J,A10**	**1**
Dieldrin	**0.0039**	**mg/kg**	**0.0050**	**0.00069**	**EPA-8081A**	**ND**	**J,A10**	**1**
Endosulfan I	ND	mg/kg	0.0050	0.00074	EPA-8081A	ND	A10	1
Endosulfan II	ND	mg/kg	0.0050	0.00064	EPA-8081A	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0050	0.00087	EPA-8081A	ND	A10	1
Endrin	ND	mg/kg	0.0050	0.00029	EPA-8081A	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0050	0.00047	EPA-8081A	ND	A10	1
Heptachlor	ND	mg/kg	0.0050	0.00050	EPA-8081A	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.0050	0.00052	EPA-8081A	ND	A10	1
Methoxychlor	ND	mg/kg	0.0050	0.00060	EPA-8081A	ND	A10	1
Toxaphene	ND	mg/kg	0.10	0.038	EPA-8081A	ND	A10	1
TCMX (Surrogate)	62.8	%	20 - 130 (LCL - UCL)		EPA-8081A			1
Decachlorobiphenyl (Surrogate)	59.5	%	40 - 130 (LCL - UCL)		EPA-8081A			1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	09/13/24 10:00	09/17/24 04:12	HKS	GC-17	10.101	B196573	EPA 3546

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Orange, CA 92868

Reported: 09/19/2024 14:15
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Total Petroleum Hydrocarbons

Pace Sample ID: 2414419-09 | **Client Sample Name:** R2W-1, 9/6/2024 7:00:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
TPH - Diesel Range Organics (C12 - C22)	**27**	**mg/kg**	**1.0**	**0.70**	**EPA-8015B**	**ND**	**A52**	**1**
TPH - Oil Range Organics (C23 - C32)	**32**	**mg/kg**	**2.0**	**0.98**	**EPA-8015B**	**ND**	**A57**	**1**
Tetracosane (Surrogate)	52.7	%	40 - 130 (LCL - UCL)		EPA-8015B			1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8015B	09/16/24 20:00	09/17/24 14:28	BUP	GC-2	0.984	B196581	EPA 3546

DCN = Data Continuation Number

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 09/19/2024 14:15
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Total Petroleum Hydrocarbons (EPA 8015B/5035)

Pace Sample ID: 2414419-09 **Client Sample Name:** R2W-1, 9/6/2024 7:00:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Gasoline Range Organics (C4 - C12)	ND	mg/kg	1.2	0.48	EPA-8015B	ND		1
a,a,a-Trifluorotoluene (FID Surrogate)	70.0	%	70 - 130 (LCL - UCL)		EPA-8015B			1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8015B	09/09/24 07:37	09/09/24 16:07	JMH2	GC-V8	1.155	B196508	EPA 5035 Soil GC

DCN = Data Continuation Number

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1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 09/19/2024 14:15
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Pace Sample ID: 2414419-09 | **Client Sample Name:** R2W-1, 9/6/2024 7:00:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	**2.5**	**mg/kg**	**1.0**	**0.40**	**EPA-6010B**	**ND**		**1**
Barium	**87**	**mg/kg**	**0.50**	**0.18**	**EPA-6010B**	**ND**		**1**
Beryllium	**0.17**	**mg/kg**	**0.50**	**0.047**	**EPA-6010B**	**ND**	**J**	**1**
Cadmium	**0.57**	**mg/kg**	**0.50**	**0.052**	**EPA-6010B**	**ND**		**1**
Chromium	**17**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		**1**
Cobalt	**5.5**	**mg/kg**	**2.5**	**0.098**	**EPA-6010B**	**ND**		**1**
Copper	**25**	**mg/kg**	**1.0**	**0.050**	**EPA-6010B**	**ND**		**1**
Lead	**4.5**	**mg/kg**	**2.5**	**0.41**	**EPA-6010B**	**ND**		**1**
Mercury	ND	mg/kg	0.16	0.016	EPA-7471A	ND		2
Molybdenum	**1.0**	**mg/kg**	**2.5**	**0.050**	**EPA-6010B**	**ND**	**J**	**1**
Nickel	**11**	**mg/kg**	**0.50**	**0.15**	**EPA-6010B**	**ND**		**1**
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	**28**	**mg/kg**	**0.50**	**0.11**	**EPA-6010B**	**ND**		**1**
Zinc	**67**	**mg/kg**	**2.5**	**0.087**	**EPA-6010B**	**0.21**		**1**

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-6010B	09/11/24 09:25	09/11/24 23:05	JEH	ICP6	1	B196713	EPA 3050B
2	EPA-7471A	09/18/24 22:00	09/19/24 10:42	TMT	CETAC3	1.008	B197123	EPA 7471A

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Reported: 09/19/2024 14:15
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals	Run #
QC Batch ID: B196573							
Aldrin	B196573-BLK1	ND	mg/kg	0.00050	0.000041		1
alpha-BHC	B196573-BLK1	ND	mg/kg	0.00050	0.000029		1
beta-BHC	B196573-BLK1	ND	mg/kg	0.00050	0.00012		1
delta-BHC	B196573-BLK1	ND	mg/kg	0.00050	0.000076		1
gamma-BHC (Lindane)	B196573-BLK1	ND	mg/kg	0.00050	0.000061		1
Chlordane (Technical)	B196573-BLK1	ND	mg/kg	0.0050	0.0033		1
4,4'-DDD	B196573-BLK1	ND	mg/kg	0.00050	0.000073		1
4,4'-DDE	B196573-BLK1	ND	mg/kg	0.00050	0.000086		1
4,4'-DDT	B196573-BLK1	ND	mg/kg	0.00050	0.000060		1
Dieldrin	B196573-BLK1	ND	mg/kg	0.00050	0.000069		1
Endosulfan I	B196573-BLK1	ND	mg/kg	0.00050	0.000074		1
Endosulfan II	B196573-BLK1	ND	mg/kg	0.00050	0.000064		1
Endosulfan sulfate	B196573-BLK1	ND	mg/kg	0.00050	0.000087		1
Endrin	B196573-BLK1	ND	mg/kg	0.00050	0.000029		1
Endrin aldehyde	B196573-BLK1	ND	mg/kg	0.00050	0.000047		1
Heptachlor	B196573-BLK1	ND	mg/kg	0.00050	0.000050		1
Heptachlor epoxide	B196573-BLK1	ND	mg/kg	0.00050	0.000052		1
Methoxychlor	B196573-BLK1	ND	mg/kg	0.00050	0.000060		1
Toxaphene	B196573-BLK1	ND	mg/kg	0.010	0.0038		1
TCMX (Surrogate)	**B196573-BLK1**	**83.2**	%	**20 - 130 (LCL - UCL)**			1
Decachlorobiphenyl (Surrogate)	**B196573-BLK1**	**76.1**	%	**40 - 130 (LCL - UCL)**			1

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B196573-BLK1	PB	EPA-8081A	09/13/24	09/16/24 22:53	HKS	GC-17	1

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Reported: 09/19/2024 14:15
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals	Run #
QC Batch ID: B196573											
Aldrin	B196573-BS1	LCS	0.0042779	0.0050336	mg/kg	85.0		70 - 130			1
alpha-BHC	B196573-BS1	LCS	0.0041849	0.0050336	mg/kg	83.1		60 - 130			1
beta-BHC	B196573-BS1	LCS	0.0044597	0.0050336	mg/kg	88.6		30 - 130			1
delta-BHC	B196573-BS1	LCS	0.0048050	0.0050336	mg/kg	95.5		60 - 130			1
gamma-BHC (Lindane)	B196573-BS1	LCS	0.0043144	0.0050336	mg/kg	85.7		60 - 130			1
4,4'-DDD	B196573-BS1	LCS	0.0043054	0.0050336	mg/kg	85.5		60 - 130			1
4,4'-DDE	B196573-BS1	LCS	0.0043775	0.0050336	mg/kg	87.0		60 - 130			1
4,4'-DDT	B196573-BS1	LCS	0.0040493	0.0050336	mg/kg	80.4		60 - 130			1
Dieldrin	B196573-BS1	LCS	0.0042886	0.0050336	mg/kg	85.2		70 - 130			1
Endosulfan I	B196573-BS1	LCS	0.0043208	0.0050336	mg/kg	85.8		60 - 130			1
Endosulfan II	B196573-BS1	LCS	0.0044879	0.0050336	mg/kg	89.2		60 - 130			1
Endosulfan sulfate	B196573-BS1	LCS	0.0043658	0.0050336	mg/kg	86.7		60 - 130			1
Endrin	B196573-BS1	LCS	0.0039242	0.0050336	mg/kg	78.0		60 - 130			1
Endrin aldehyde	B196573-BS1	LCS	0.0031292	0.0050336	mg/kg	62.2		60 - 130			1
Heptachlor	B196573-BS1	LCS	0.0040131	0.0050336	mg/kg	79.7		60 - 130			1
Heptachlor epoxide	B196573-BS1	LCS	0.0043738	0.0050336	mg/kg	86.9		60 - 130			1
Methoxychlor	B196573-BS1	LCS	0.0038017	0.0050336	mg/kg	75.5		60 - 130			1
TCMX (Surrogate)	B196573-BS1	LCS	0.0084265	0.010067	mg/kg	83.7		20 - 130			1
Decachlorobiphenyl (Surrogate)	B196573-BS1	LCS	0.015405	0.020134	mg/kg	76.5		40 - 130			1

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B196573-BS1	LCS	EPA-8081A	09/13/24	09/16/24 23:10	HKS	GC-17	1.007

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Reported: 09/19/2024 14:15
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals	R#
QC Batch ID: B196573	Used client sample: N											
Aldrin	MS	2414416-01	ND	0.0040269	0.0050505	mg/kg		79.7		50 - 140	J	1
	MSD	2414416-01	ND	0.0041279	0.0050505	mg/kg	2.5	81.7	30	50 - 140	J	2
alpha-BHC	MS	2414416-01	ND	0.0037037	0.0050505	mg/kg		73.3		50 - 140	J	1
	MSD	2414416-01	ND	0.0037643	0.0050505	mg/kg	1.6	74.5	30	50 - 140	J	2
beta-BHC	MS	2414416-01	ND	0.0038788	0.0050505	mg/kg		76.8		30 - 140	J	1
	MSD	2414416-01	ND	0.0040539	0.0050505	mg/kg	4.4	80.3	30	30 - 140	J	2
delta-BHC	MS	2414416-01	ND	0.0042694	0.0050505	mg/kg		84.5		50 - 140	J	1
	MSD	2414416-01	ND	0.0042290	0.0050505	mg/kg	1.0	83.7	30	50 - 140	J	2
gamma-BHC (Lindane)	MS	2414416-01	ND	0.0039259	0.0050505	mg/kg		77.7		50 - 140	J	1
	MSD	2414416-01	ND	0.0039596	0.0050505	mg/kg	0.9	78.4	30	50 - 140	J	2
4,4'-DDD	MS	**2414416-01**	**0.0065135**	**0.0073939**	**0.0050505**	**mg/kg**		**17.4**		**50 - 140**	**J,Q03**	1
	MSD	**2414416-01**	**0.0065135**	**0.0063434**	**0.0050505**	**mg/kg**	**15.3**	**-3.4**	**30**	**50 - 140**	**J,Q03**	2
4,4'-DDE	MS	**2414416-01**	**0.11443**	**0.13861**	**0.0050505**	**mg/kg**		**479**		**50 - 140**	**Q03**	1
	MSD	**2414416-01**	**0.11443**	**0.13576**	**0.0050505**	**mg/kg**	**2.1**	**422**	**30**	**50 - 140**	**Q03**	2
4,4'-DDT	MS	**2414416-01**	**0.0099122**	**0.013798**	**0.0050505**	**mg/kg**		**76.9**		**50 - 140**		1
	MSD	**2414416-01**	**0.0099122**	**0.017152**	**0.0050505**	**mg/kg**	**21.7**	**143**	**30**	**50 - 140**	**Q03**	2
Dieldrin	MS	**2414416-01**	**0.039041**	**0.047508**	**0.0050505**	**mg/kg**		**168**		**40 - 140**	**Q03**	1
	MSD	**2414416-01**	**0.039041**	**0.046875**	**0.0050505**	**mg/kg**	**1.3**	**155**	**30**	**40 - 140**	**Q03**	2
Endosulfan I	MS	2414416-01	ND	0.0061953	0.0050505	mg/kg		123		50 - 140	J	1
	MSD	2414416-01	ND	0.0061145	0.0050505	mg/kg	1.3	121	30	50 - 140	J	2
Endosulfan II	MS	2414416-01	ND	0.0053872	0.0050505	mg/kg		107		50 - 140	J	1
	MSD	2414416-01	ND	0.0047003	0.0050505	mg/kg	13.6	93.1	30	50 - 140	J	2
Endosulfan sulfate	MS	2414416-01	ND	0.0063098	0.0050505	mg/kg		125		50 - 140	J	1
	MSD	2414416-01	ND	0.0050101	0.0050505	mg/kg	23.0	99.2	30	50 - 140	J	2
Endrin	MS	2414416-01	ND	0.0060067	0.0050505	mg/kg		119		50 - 140	J	1
	MSD	2414416-01	ND	0.0046801	0.0050505	mg/kg	24.8	92.7	30	50 - 140	J	2
Endrin aldehyde	MS	2414416-01	ND	0.0047003	0.0050505	mg/kg		93.1		50 - 140	J	1
	MSD	2414416-01	ND	0.0055556	0.0050505	mg/kg	16.7	110	30	50 - 140	J	2
Heptachlor	MS	2414416-01	ND	0.0038114	0.0050505	mg/kg		75.5		60 - 140	J	1
	MSD	2414416-01	ND	0.0038519	0.0050505	mg/kg	1.1	76.3	30	60 - 140	J	2
Heptachlor epoxide	MS	**2414416-01**	**ND**	**0.0078519**	**0.0050505**	**mg/kg**		**155**		**50 - 140**	**J,Q03**	1
	MSD	**2414416-01**	**ND**	**0.0078451**	**0.0050505**	**mg/kg**	**0.1**	**155**	**30**	**50 - 140**	**J,Q03**	2
Methoxychlor	MS	2414416-01	ND	0.0046195	0.0050505	mg/kg		91.5		50 - 140	J	1
	MSD	2414416-01	ND	0.0049697	0.0050505	mg/kg	7.3	98.4	30	50 - 140	J	2
TCMX (Surrogate)	MS	2414416-01	ND	0.0075354	0.010101	mg/kg		74.6		20 - 130		1
	MSD	2414416-01	ND	0.0078855	0.010101	mg/kg	4.5	78.1		20 - 130		2

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Reported: 09/19/2024 14:15
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals	R#
QC Batch ID: B196573	Used client sample: N											
Decachlorobiphenyl (Surrogate)	MS	2414416-01	ND	0.016586	0.020202	mg/kg		82.1		40 - 130		1
	MSD	2414416-01	ND	0.016424	0.020202	mg/kg	1.0	81.3		40 - 130		2

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B196573-MS1	MS	EPA-8081A	09/13/24	09/17/24 08:59	HKS	GC-17	20.202
2	B196573-MSD1	MSD	EPA-8081A	09/13/24	09/17/24 09:16	HKS	GC-17	20.202

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Reported: 09/19/2024 14:15
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Total Petroleum Hydrocarbons

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals	Run #
QC Batch ID: B196581							
TPH - Diesel Range Organics (C12 - C22)	B196581-BLK1	ND	mg/kg	1.0	0.70		1
TPH - Oil Range Organics (C23 - C32)	B196581-BLK1	ND	mg/kg	2.0	0.98		1
Tetracosane (Surrogate)	**B196581-BLK1**	**98.3**	%	**40 - 130 (LCL - UCL)**			1

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B196581-BLK1	PB	EPA-8015B	09/16/24	09/17/24 10:27	BUP	GC-2	1.010

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Reported: 09/19/2024 14:15
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Total Petroleum Hydrocarbons

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals	Run #
QC Batch ID: B196581											
TPH - Diesel Range Organics (C12 - C22)	B196581-BS1	LCS	11.672	16.779	mg/kg	69.6		58 - 120			1
TPH - Oil Range Organics (C23 - C32)	B196581-BS1	LCS	37.222	33.557	mg/kg	111		40 - 130			1
Tetracosane (Surrogate)	B196581-BS1	LCS	0.71191	0.67114	mg/kg	106		40 - 130			1

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B196581-BS1	LCS	EPA-8015B	09/16/24	09/17/24 10:44	BUP	GC-2	1.007

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Project: Coachella
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Total Petroleum Hydrocarbons

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals	R#
QC Batch ID: B196581	Used client sample: N											
TPH - Diesel Range Organics (C12 - C22)	MS	**2414417-14**	**ND**	**5.6446**	**16.502**	**mg/kg**		**34.2**		**49 - 120**	**Q03**	1
	MSD	**2414417-14**	**ND**	**3.5420**	**16.393**	**mg/kg**	**45.8**	**21.6**	**30**	**49 - 120**	**Q02,Q03**	2
TPH - Oil Range Organics (C23 - C32)	MS	**2414417-14**	**ND**	**21.802**	**33.003**	**mg/kg**		**66.1**		**40 - 130**		1
	MSD	**2414417-14**	**ND**	**14.552**	**32.787**	**mg/kg**	**39.9**	**44.4**	**30**	**40 - 130**	**Q02**	2
Tetracosane (Surrogate)	MS	**2414417-14**	**ND**	**0.36848**	**0.66007**	**mg/kg**		**55.8**		**40 - 130**		1
	MSD	**2414417-14**	**ND**	**0.19262**	**0.65574**	**mg/kg**	**62.7**	**29.4**		**40 - 130**	**S09**	2

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B196581-MS1	MS	EPA-8015B	09/16/24	09/17/24 11:02	BUP	GC-2	0.990
2	B196581-MSD1	MSD	EPA-8015B	09/16/24	09/17/24 11:19	BUP	GC-2	0.984

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Reported: 09/19/2024 14:15
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Project Manager: Cassie Bretschger

Total Petroleum Hydrocarbons (EPA 8015B/5035)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals	Run #
QC Batch ID: B196508							
Gasoline Range Organics (C4 - C12)	B196508-BLK1	ND	mg/kg	1.0	0.42		1
a,a,a-Trifluorotoluene (FID Surrogate)	**B196508-BLK1**	**80.0**	%	**70 - 130 (LCL - UCL)**			1

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B196508-BLK1	PB	EPA-8015B	09/09/24	09/09/24 09:30	JMH2	GC-V8	1

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 09/19/2024 14:15
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Total Petroleum Hydrocarbons (EPA 8015B/5035)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals	Run #
QC Batch ID: B196508											
Gasoline Range Organics (C4 - C12)	B196508-BS1	LCS	4.6210	5.0000	mg/kg	92.4		85 - 115			1
a,a,a-Trifluorotoluene (FID Surrogate)	B196508-BS1	LCS	0.038000	0.040000	mg/kg	95.0		70 - 130			1

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B196508-BS1	LCS	EPA-8015B	09/09/24	09/09/24 10:46	JMH2	GC-V8	1

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Reported: 09/19/2024 14:15
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Total Petroleum Hydrocarbons (EPA 8015B/5035)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals	R#
QC Batch ID: B196508	Used client sample: N											
Gasoline Range Organics (C4 - C12)	MS	2414278-05	ND	4.3134	5.0710	mg/kg		85.1		70 - 130		1
	MSD	2414278-05	ND	4.3685	5.0201	mg/kg	1.3	87.0	20	70 - 130		2
a,a,a-Trifluorotoluene (FID Surrogate)	MS	2414278-05	ND	0.036511	0.040568	mg/kg		90.0		70 - 130		1
	MSD	2414278-05	ND	0.036145	0.040161	mg/kg	1.0	90.0		70 - 130		2

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B196508-MS1	MS	EPA-8015B	09/09/24	09/09/24 17:46	JMH2	GC-V8	1.014
2	B196508-MSD1	MSD	EPA-8015B	09/09/24	09/09/24 18:10	JMH2	GC-V8	1.004

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Reported: 09/19/2024 14:15
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals	Run #
QC Batch ID: B196713							
Antimony	B196713-BLK1	ND	mg/kg	5.0	0.33		1
Arsenic	B196713-BLK1	ND	mg/kg	1.0	0.40		1
Barium	B196713-BLK1	ND	mg/kg	0.50	0.18		1
Beryllium	B196713-BLK1	ND	mg/kg	0.50	0.047		1
Cadmium	B196713-BLK1	ND	mg/kg	0.50	0.052		1
Chromium	B196713-BLK1	ND	mg/kg	0.50	0.050		1
Cobalt	B196713-BLK1	ND	mg/kg	2.5	0.098		1
Copper	B196713-BLK1	ND	mg/kg	1.0	0.050		1
Lead	B196713-BLK1	ND	mg/kg	2.5	0.41		1
Molybdenum	B196713-BLK1	ND	mg/kg	2.5	0.050		1
Nickel	B196713-BLK1	ND	mg/kg	0.50	0.15		1
Selenium	B196713-BLK1	ND	mg/kg	1.0	0.98		1
Silver	B196713-BLK1	ND	mg/kg	0.50	0.067		1
Thallium	B196713-BLK1	ND	mg/kg	5.0	0.64		1
Vanadium	B196713-BLK1	ND	mg/kg	0.50	0.11		1
Zinc	**B196713-BLK1**	**0.21000**	**mg/kg**	**2.5**	**0.087**	**J**	1
QC Batch ID: B197123							
Mercury	B197123-BLK1	ND	mg/kg	0.16	0.016		2

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Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Quality Control Report - Method Blank Analysis

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B196713-BLK1	PB	EPA-6010B	09/11/24	09/11/24 23:01	JEH	ICP6	1
1	B196713-BLK1	PB	EPA-6010B	09/11/24	09/11/24 23:01	JEH	ICP6	1
1	B196713-BLK1	PB	EPA-6010B	09/11/24	09/11/24 23:01	JEH	ICP6	1
1	B196713-BLK1	PB	EPA-6010B	09/11/24	09/11/24 23:01	JEH	ICP6	1
1	B196713-BLK1	PB	EPA-6010B	09/11/24	09/11/24 23:01	JEH	ICP6	1
1	B196713-BLK1	PB	EPA-6010B	09/11/24	09/11/24 23:01	JEH	ICP6	1
1	B196713-BLK1	PB	EPA-6010B	09/11/24	09/11/24 23:01	JEH	ICP6	1
1	B196713-BLK1	PB	EPA-6010B	09/11/24	09/11/24 23:01	JEH	ICP6	1
1	B196713-BLK1	PB	EPA-6010B	09/11/24	09/11/24 23:01	JEH	ICP6	1
1	B196713-BLK1	PB	EPA-6010B	09/11/24	09/11/24 23:01	JEH	ICP6	1
1	B196713-BLK1	PB	EPA-6010B	09/11/24	09/11/24 23:01	JEH	ICP6	1
1	B196713-BLK1	PB	EPA-6010B	09/11/24	09/11/24 23:01	JEH	ICP6	1
1	B196713-BLK1	PB	EPA-6010B	09/11/24	09/11/24 23:01	JEH	ICP6	1
1	B196713-BLK1	PB	EPA-6010B	09/11/24	09/11/24 23:01	JEH	ICP6	1
1	B196713-BLK1	PB	EPA-6010B	09/11/24	09/11/24 23:01	JEH	ICP6	1
1	B196713-BLK1	PB	EPA-6010B	09/11/24	09/11/24 23:01	JEH	ICP6	1
1	B196713-BLK1	PB	EPA-6010B	09/11/24	09/11/24 23:01	JEH	ICP6	1
2	B197123-BLK1	PB	EPA-7471A	09/18/24	09/19/24 10:11	TMT	CETAC3	1

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Reported: 09/19/2024 14:15
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals	Run #
QC Batch ID: B196713											
Antimony	B196713-BS1	LCS	35.490	40.000	mg/kg	88.7		75 - 125			1
Arsenic	B196713-BS1	LCS	18.400	20.000	mg/kg	92.0		75 - 125			1
Barium	B196713-BS1	LCS	39.750	40.000	mg/kg	99.4		75 - 125			1
Beryllium	B196713-BS1	LCS	19.114	20.000	mg/kg	95.6		75 - 125			1
Cadmium	B196713-BS1	LCS	19.285	20.000	mg/kg	96.4		75 - 125			1
Chromium	B196713-BS1	LCS	19.430	20.000	mg/kg	97.2		75 - 125			1
Cobalt	B196713-BS1	LCS	19.480	20.000	mg/kg	97.4		75 - 125			1
Copper	B196713-BS1	LCS	38.140	40.000	mg/kg	95.4		75 - 125			1
Lead	B196713-BS1	LCS	39.135	40.000	mg/kg	97.8		75 - 125			1
Molybdenum	B196713-BS1	LCS	19.465	20.000	mg/kg	97.3		75 - 125			1
Nickel	B196713-BS1	LCS	38.935	40.000	mg/kg	97.3		75 - 125			1
Selenium	B196713-BS1	LCS	17.760	20.000	mg/kg	88.8		75 - 125			1
Silver	B196713-BS1	LCS	9.3000	10.000	mg/kg	93.0		75 - 125			1
Thallium	B196713-BS1	LCS	38.995	40.000	mg/kg	97.5		75 - 125			1
Vanadium	B196713-BS1	LCS	19.630	20.000	mg/kg	98.2		75 - 125			1
Zinc	B196713-BS1	LCS	47.550	50.000	mg/kg	95.1		75 - 125			1
QC Batch ID: B197123											
Mercury	B197123-BS1	LCS	0.82560	0.80000	mg/kg	103		80 - 120			2

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Reported: 09/19/2024 14:15
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Quality Control Report - Laboratory Control Sample

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B196713-BS1	LCS	EPA-6010B	09/11/24	09/11/24 23:03	JEH	ICP6	1
1	B196713-BS1	LCS	EPA-6010B	09/11/24	09/11/24 23:03	JEH	ICP6	1
1	B196713-BS1	LCS	EPA-6010B	09/11/24	09/11/24 23:03	JEH	ICP6	1
1	B196713-BS1	LCS	EPA-6010B	09/11/24	09/11/24 23:03	JEH	ICP6	1
1	B196713-BS1	LCS	EPA-6010B	09/11/24	09/11/24 23:03	JEH	ICP6	1
1	B196713-BS1	LCS	EPA-6010B	09/11/24	09/11/24 23:03	JEH	ICP6	1
1	B196713-BS1	LCS	EPA-6010B	09/11/24	09/11/24 23:03	JEH	ICP6	1
1	B196713-BS1	LCS	EPA-6010B	09/11/24	09/11/24 23:03	JEH	ICP6	1
1	B196713-BS1	LCS	EPA-6010B	09/11/24	09/11/24 23:03	JEH	ICP6	1
1	B196713-BS1	LCS	EPA-6010B	09/11/24	09/11/24 23:03	JEH	ICP6	1
1	B196713-BS1	LCS	EPA-6010B	09/11/24	09/11/24 23:03	JEH	ICP6	1
1	B196713-BS1	LCS	EPA-6010B	09/11/24	09/11/24 23:03	JEH	ICP6	1
1	B196713-BS1	LCS	EPA-6010B	09/11/24	09/11/24 23:03	JEH	ICP6	1
1	B196713-BS1	LCS	EPA-6010B	09/11/24	09/11/24 23:03	JEH	ICP6	1
1	B196713-BS1	LCS	EPA-6010B	09/11/24	09/11/24 23:03	JEH	ICP6	1
1	B196713-BS1	LCS	EPA-6010B	09/11/24	09/11/24 23:03	JEH	ICP6	1
1	B196713-BS1	LCS	EPA-6010B	09/11/24	09/11/24 23:03	JEH	ICP6	1
2	B197123-BS1	LCS	EPA-7471A	09/18/24	09/19/24 10:13	TMT	CETAC3	1

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Reported: 09/19/2024 14:15
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals	R#
QC Batch ID: B196713	Used client sample: Y - Description: R2W-1, 09/06/2024 07:00											
Antimony	DUP	2414419-09	ND	ND		mg/kg			20			1
	MS	2414419-09	ND	16.095	40.000	mg/kg		40.2		16 - 119		2
	MSD	2414419-09	ND	15.745	40.000	mg/kg	2.2	39.4	20	16 - 119		3
Arsenic	DUP	**2414419-09**	**2.5150**	**2.0250**		**mg/kg**	**21.6**		**20**		**A02**	1
	MS	**2414419-09**	**2.5150**	**19.970**	**20.000**	**mg/kg**		**87.3**		**75 - 125**		2
	MSD	**2414419-09**	**2.5150**	**19.860**	**20.000**	**mg/kg**	**0.6**	**86.7**	**20**	**75 - 125**		3
Barium	DUP	2414419-09	87.165	95.650		mg/kg	9.3		20			1
	MS	2414419-09	87.165	129.64	40.000	mg/kg		106		75 - 125		2
	MSD	2414419-09	87.165	135.80	40.000	mg/kg	4.6	122	20	75 - 125		3
Beryllium	DUP	2414419-09	0.17140	0.16915		mg/kg	1.3		20		J	1
	MS	2414419-09	0.17140	18.598	20.000	mg/kg		92.1		75 - 125		2
	MSD	2414419-09	0.17140	18.566	20.000	mg/kg	0.2	92.0	20	75 - 125		3
Cadmium	DUP	2414419-09	0.57000	0.61000		mg/kg	6.8		20			1
	MS	2414419-09	0.57000	18.645	20.000	mg/kg		90.4		75 - 125		2
	MSD	2414419-09	0.57000	18.570	20.000	mg/kg	0.4	90.0	20	75 - 125		3
Chromium	DUP	2414419-09	16.650	14.750		mg/kg	12.1		20			1
	MS	2414419-09	16.650	34.625	20.000	mg/kg		89.9		75 - 125		2
	MSD	2414419-09	16.650	34.885	20.000	mg/kg	0.7	91.2	20	75 - 125		3
Cobalt	DUP	2414419-09	5.5350	5.4750		mg/kg	1.1		20			1
	MS	2414419-09	5.5350	24.015	20.000	mg/kg		92.4		75 - 125		2
	MSD	2414419-09	5.5350	24.030	20.000	mg/kg	0.1	92.5	20	75 - 125		3
Copper	DUP	**2414419-09**	**24.980**	**13.850**		**mg/kg**	**57.3**		**20**		**Q01**	1
	MS	**2414419-09**	**24.980**	**50.410**	**40.000**	**mg/kg**		**63.6**		**75 - 125**	**Q03**	2
	MSD	**2414419-09**	**24.980**	**51.660**	**40.000**	**mg/kg**	**2.4**	**66.7**	**20**	**75 - 125**	**Q03**	3
Lead	DUP	**2414419-09**	**4.5450**	**7.2350**		**mg/kg**	**45.7**		**20**		**Q01**	1
	MS	**2414419-09**	**4.5450**	**40.510**	**40.000**	**mg/kg**		**89.9**		**75 - 125**		2
	MSD	**2414419-09**	**4.5450**	**41.090**	**40.000**	**mg/kg**	**1.4**	**91.4**	**20**	**75 - 125**		3
Molybdenum	DUP	**2414419-09**	**1.0250**	**0.39000**		**mg/kg**	**89.8**		**20**		**J,A02**	1
	MS	**2414419-09**	**1.0250**	**18.750**	**20.000**	**mg/kg**		**88.6**		**75 - 125**		2
	MSD	**2414419-09**	**1.0250**	**18.675**	**20.000**	**mg/kg**	**0.4**	**88.2**	**20**	**75 - 125**		3
Nickel	DUP	**2414419-09**	**11.045**	**8.2700**		**mg/kg**	**28.7**		**20**		**Q01**	1
	MS	**2414419-09**	**11.045**	**45.195**	**40.000**	**mg/kg**		**85.4**		**75 - 125**		2
	MSD	**2414419-09**	**11.045**	**45.190**	**40.000**	**mg/kg**	**0.0**	**85.4**	**20**	**75 - 125**		3
Selenium	DUP	2414419-09	ND	ND		mg/kg			20			1
	MS	2414419-09	ND	17.075	20.000	mg/kg		85.4		75 - 125		2
	MSD	2414419-09	ND	16.880	20.000	mg/kg	1.1	84.4	20	75 - 125		3
Silver	DUP	2414419-09	ND	ND		mg/kg			20			1
	MS	2414419-09	ND	9.3300	10.000	mg/kg		93.3		75 - 125		2
	MSD	2414419-09	ND	9.3000	10.000	mg/kg	0.3	93.0	20	75 - 125		3

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Reported: 09/19/2024 14:15
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals	R#
QC Batch ID: B196713	Used client sample: Y - Description: R2W-1, 09/06/2024 07:00											
Thallium	DUP	2414419-09	ND	ND		mg/kg			20			1
	MS	2414419-09	ND	33.635	40.000	mg/kg		84.1		75 - 125		2
	MSD	2414419-09	ND	33.930	40.000	mg/kg	0.9	84.8	20	75 - 125		3
Vanadium	DUP	2414419-09	27.885	27.815		mg/kg	0.3		20			1
	MS	2414419-09	27.885	50.795	20.000	mg/kg		115		75 - 125		2
	MSD	2414419-09	27.885	50.885	20.000	mg/kg	0.2	115	20	75 - 125		3
Zinc	DUP	2414419-09	67.055	80.650		mg/kg	18.4		20			1
	MS	2414419-09	67.055	110.83	50.000	mg/kg		87.6		75 - 125		2
	MSD	2414419-09	67.055	119.74	50.000	mg/kg	7.7	105	20	75 - 125		3
QC Batch ID: B197123	Used client sample: N											
Mercury	DUP	2414617-01	0.046885	0.054590		mg/kg	15.2		20		J	4
	MS	2414617-01	0.046885	0.77705	0.81967	mg/kg		89.1		80 - 120		5
	MSD	2414617-01	0.046885	0.80328	0.81967	mg/kg	3.3	92.3	20	80 - 120		6

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Project Number: Coachella
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B196713-DUP1	DUP	EPA-6010B	09/11/24	09/11/24 23:06	JEH	ICP6	1
1	B196713-DUP1	DUP	EPA-6010B	09/11/24	09/11/24 23:06	JEH	ICP6	1
1	B196713-DUP1	DUP	EPA-6010B	09/11/24	09/11/24 23:06	JEH	ICP6	1
1	B196713-DUP1	DUP	EPA-6010B	09/11/24	09/11/24 23:06	JEH	ICP6	1
1	B196713-DUP1	DUP	EPA-6010B	09/11/24	09/11/24 23:06	JEH	ICP6	1
1	B196713-DUP1	DUP	EPA-6010B	09/11/24	09/11/24 23:06	JEH	ICP6	1
1	B196713-DUP1	DUP	EPA-6010B	09/11/24	09/11/24 23:06	JEH	ICP6	1
1	B196713-DUP1	DUP	EPA-6010B	09/11/24	09/11/24 23:06	JEH	ICP6	1
1	B196713-DUP1	DUP	EPA-6010B	09/11/24	09/11/24 23:06	JEH	ICP6	1
1	B196713-DUP1	DUP	EPA-6010B	09/11/24	09/11/24 23:06	JEH	ICP6	1
1	B196713-DUP1	DUP	EPA-6010B	09/11/24	09/11/24 23:06	JEH	ICP6	1
1	B196713-DUP1	DUP	EPA-6010B	09/11/24	09/11/24 23:06	JEH	ICP6	1
1	B196713-DUP1	DUP	EPA-6010B	09/11/24	09/11/24 23:06	JEH	ICP6	1
1	B196713-DUP1	DUP	EPA-6010B	09/11/24	09/11/24 23:06	JEH	ICP6	1
1	B196713-DUP1	DUP	EPA-6010B	09/11/24	09/11/24 23:06	JEH	ICP6	1
1	B196713-DUP1	DUP	EPA-6010B	09/11/24	09/11/24 23:06	JEH	ICP6	1
2	B196713-MS1	MS	EPA-6010B	09/11/24	09/11/24 23:10	JEH	ICP6	1
2	B196713-MS1	MS	EPA-6010B	09/11/24	09/11/24 23:10	JEH	ICP6	1
2	B196713-MS1	MS	EPA-6010B	09/11/24	09/11/24 23:10	JEH	ICP6	1
2	B196713-MS1	MS	EPA-6010B	09/11/24	09/11/24 23:10	JEH	ICP6	1
2	B196713-MS1	MS	EPA-6010B	09/11/24	09/11/24 23:10	JEH	ICP6	1
2	B196713-MS1	MS	EPA-6010B	09/11/24	09/11/24 23:10	JEH	ICP6	1
2	B196713-MS1	MS	EPA-6010B	09/11/24	09/11/24 23:10	JEH	ICP6	1
2	B196713-MS1	MS	EPA-6010B	09/11/24	09/11/24 23:10	JEH	ICP6	1
2	B196713-MS1	MS	EPA-6010B	09/11/24	09/11/24 23:10	JEH	ICP6	1
2	B196713-MS1	MS	EPA-6010B	09/11/24	09/11/24 23:10	JEH	ICP6	1
2	B196713-MS1	MS	EPA-6010B	09/11/24	09/11/24 23:10	JEH	ICP6	1
2	B196713-MS1	MS	EPA-6010B	09/11/24	09/11/24 23:10	JEH	ICP6	1
2	B196713-MS1	MS	EPA-6010B	09/11/24	09/11/24 23:10	JEH	ICP6	1
2	B196713-MS1	MS	EPA-6010B	09/11/24	09/11/24 23:10	JEH	ICP6	1
2	B196713-MS1	MS	EPA-6010B	09/11/24	09/11/24 23:10	JEH	ICP6	1
2	B196713-MS1	MS	EPA-6010B	09/11/24	09/11/24 23:10	JEH	ICP6	1
2	B196713-MS1	MS	EPA-6010B	09/11/24	09/11/24 23:10	JEH	ICP6	1

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 09/19/2024 14:15
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
3	B196713-MSD1	MSD	EPA-6010B	09/11/24	09/11/24 23:12	JEH	ICP6	1
3	B196713-MSD1	MSD	EPA-6010B	09/11/24	09/11/24 23:12	JEH	ICP6	1
3	B196713-MSD1	MSD	EPA-6010B	09/11/24	09/11/24 23:12	JEH	ICP6	1
3	B196713-MSD1	MSD	EPA-6010B	09/11/24	09/11/24 23:12	JEH	ICP6	1
3	B196713-MSD1	MSD	EPA-6010B	09/11/24	09/11/24 23:12	JEH	ICP6	1
3	B196713-MSD1	MSD	EPA-6010B	09/11/24	09/11/24 23:12	JEH	ICP6	1
3	B196713-MSD1	MSD	EPA-6010B	09/11/24	09/11/24 23:12	JEH	ICP6	1
3	B196713-MSD1	MSD	EPA-6010B	09/11/24	09/11/24 23:12	JEH	ICP6	1
3	B196713-MSD1	MSD	EPA-6010B	09/11/24	09/11/24 23:12	JEH	ICP6	1
3	B196713-MSD1	MSD	EPA-6010B	09/11/24	09/11/24 23:12	JEH	ICP6	1
3	B196713-MSD1	MSD	EPA-6010B	09/11/24	09/11/24 23:12	JEH	ICP6	1
3	B196713-MSD1	MSD	EPA-6010B	09/11/24	09/11/24 23:12	JEH	ICP6	1
3	B196713-MSD1	MSD	EPA-6010B	09/11/24	09/11/24 23:12	JEH	ICP6	1
3	B196713-MSD1	MSD	EPA-6010B	09/11/24	09/11/24 23:12	JEH	ICP6	1
3	B196713-MSD1	MSD	EPA-6010B	09/11/24	09/11/24 23:12	JEH	ICP6	1
3	B196713-MSD1	MSD	EPA-6010B	09/11/24	09/11/24 23:12	JEH	ICP6	1
4	B197123-DUP1	DUP	EPA-7471A	09/18/24	09/19/24 10:18	TMT	CETAC3	1.025
5	B197123-MS1	MS	EPA-7471A	09/18/24	09/19/24 10:20	TMT	CETAC3	1.025
6	B197123-MSD1	MSD	EPA-7471A	09/18/24	09/19/24 10:22	TMT	CETAC3	1.025

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 09/19/2024 14:15
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected
PQL	Practical Quantitation Limit
A02	The difference between duplicate readings is less than the quantitation limit.
A10	Detection and quantitation limits were raised due to matrix interference.
A52	Chromatogram not typical of diesel.
A57	Chromatogram not typical of motor oil.
Q01	Sample precision is not within the control limits.
Q02	Matrix spike precision is not within the control limits.
Q03	Matrix spike recovery(s) was(were) not within the control limits.
S09	The surrogate recovery for this compound was not within the control limits.

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Date of Report: 10/11/2024

Cassie Bretschger

Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Client Project:	Coachella
Pace Project:	Coachella
Pace Work Order:	2414416
Invoice ID:	B503977, B504998, B505944

Enclosed are the results of analyses for samples received by the laboratory on 9/7/2024. If you have any questions concerning this report, please feel free to contact me.

Revised Report: This report supersedes Report ID 1001540035

Sincerely,

Contact Person: Ragen Williams
Client Service Rep

Steve Bennett
Operations Manager

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24-14416

2414416

Pace® Location Requested (City/State):

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workord

Scan QR Code for instructions

Company Name: Kimley Horn	Contact/Report To: Cassie Bretschger
Street Address:	Phone #:
	E-Mail: Cassie.Bretschger@kimley-horn.com
	Cc E-Mail:
Customer Project #:	Invoice to:
Project Name:	Invoice E-mail: Same
Site Collection Info/Facility ID (as applicable): Coachella	Purchase Order # (if applicable):
	Quote #:
Time Zone Collected: [ ] AK [X] PT [ ] MT [ ] CT [ ] ET	County / State origin of sample(s): CA

Data Deliverables: [ ] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other

Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No

Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day Other

Date Results Requested: Standard

DW PWSID # or WW Permit # as applicable:

Field Filtered (if applicable): [ ] Yes [ ] No

Analysis:

Specify Container Size **

Identify Container Preservative Type***

Analysis Requested: OCPs; metals (Arm'd)

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Lab Use Only: Proj. Mgr: / AcctNum / Client ID: / Table #: / Profile / Template: / Prelog / Bottle Ord. ID:

Preservation non-conformance identified for sample.

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW), Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Residual Chlorine Result	Residual Chlorine Units	Sample Comment
R3B-1	S	G	9/6/24	830	—	—	1	—		-1
R3B-2				835	—	—	1	—		-2
R3B-3				840	—	—	1	—		-3
R3N-1				740	—	—	1	—		-4
R3N-2				745	—	—	1	—		-5
R3N-3				750	—	—	1	—		-6
R3NW-1				845	—	—	1	—		-7
R3W-2				850	—	—	1	—		-8
R3W-3				855	—	—	1	—		-9

OCPs	metals (Arm'd)
X	X
X	X
HOLD	
X	X
HOLD	
HOLD	
X	X
HOLD	
HOLD	

Additional Instructions from Pace® :

Collected By: Printed Name / Signature

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C):	Corrected Temp. (°C):	[ ] On Ice

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
	9/6/24	Christopher Leyva PACE CL	9/7/24 1110
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

Tracking Number:

Delivered by: [ ] In-Person [ ] Courier [ ] FedEX [ ] UPS [ ] Other

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JDD 9/2/24

~~24-14417~~ 24-14416

Pace® Location Requested (City/State):

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

Scan QR Code for instructions

Company Name: Kimley-Horn	Contact/Report To: Cassie Bretschger
Street Address:	Phone #:
	E-Mail: Cassie.Bretschger@kimley-horn.com
	Cc E-Mail:
Customer Project #:	Invoice to: Same
Project Name:	Invoice E-mail:
Site Collection Info/Facility ID (as applicable): Coachella	Purchase Order # (if applicable):
	Quote #:
Time Zone Collected: [ ] AK [X] PT [ ] MT [ ] CT [ ] ET	County / State origin of sample(s): CA
Data Deliverables: [ ] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other	Regulatory Program (DW, RCRA, etc.) as applicable: — Reportable [ ] Yes [ ] No
	Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day Other
	Date Results Requested: Standard
	DW PWSID # or WW Permit # as applicable:
	Field Filtered (if applicable): [ ] Yes [ ] No
	Analysis:

Specify Container Size ** : 80Z

Identify Container Preservative Type*** : X

Analysis Requested: 6 OPS Metals (CAM17)

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Lab Use Only: Proj. Mgr: / AcctNum / Client ID: / Table #: / Profile / Template: / Prelog / Bottle Ord. ID:

Preservation non-conformance identified for sample.

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW), Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Residual Chlorine Result	Residual Chlorine Units	Analysis	Sample Comment
R3E-1	S	G	9/6/24	815	—	—	1	—	—	X X	-10
R3E-2				820	—	—	1	—	—	HOLD	-11
R3E-3				825	—	—	1	—	—	HOLD	-12
R3S-1				800	—	—	1	—	—	X X	-13
R3S-2				805	—	—	1	—	—	HOLD	-14
R3S-3				810	—	—	1	—	—	HOLD	-15
							1				

CHK BY JDD DISTRIBUTION SUB-OUT

Additional Instructions from Pace® :

Collected By: Printed Name / Signature

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C):	Corrected Temp. (°C):	[ ] On Ice

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
	9/6/24	Christopher Leyva PACE CR	9/7/24 1110
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

Tracking Number:

Delivered by: [ ] In-Person [ ] Courier [ ] FedEx [ ] UPS [ ] Other

Page: of

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Chain of Custody and Cooler Receipt Form for 2414416 Page 3 of 4

PACE ANALYTICAL — COOLER RECEIPT FORM — Page 1 Of 2

Submission #: 24-14416

SHIPPING INFORMATION
Fed Ex ☒ UPS ☐ GSO / GLS ☐ Hand Delivery ☐
Pace Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☒ None ☐ Box ☐
Other ☐ (Specify)_____

FREE LIQUID
YES ☒ NO ☐
(W) / S

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☐ Comments:

All samples received? Yes ☒ No ☐ All samples containers Intact? Yes ☒ No ☐ Description(s) match COC? Yes ☐ No ☒

COC Received ☒ YES ☐ NO

Emissivity: 0.97 Container: N/A Thermometer ID: TH337
Temperature: (A) 2.4 °C / (C) 2.2 °C

Date/Time 9/7/24 1110
Analyst Init CL2

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr^{+6}										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664B										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608.3/8081A										
QT EPA 515.1/8151A										
QT EPA 525.2										
QT EPA 525.2 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548.1										
QT EPA 549.2										
QT EPA 8015M										
QT EPA 8270C										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR	A	A	A	A	A	A	A	A	A	A
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments: (-9A says R3E-3)
Sample Numbering Completed By: CL2 Date/Time: 9/7/24 14:14
A = Actual / C = Corrected

Rev 23 05/20/22
[S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC rev 20]

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Pace Analytical®
ENVIRONMENTAL SCIENCES

Chain of Custody and Cooler Receipt Form for 2414416 Page 4 of 4

PACE ANALYTICAL — COOLER RECEIPT FORM — Page 2 Of 2

Submission #: 24-14416

SHIPPING INFORMATION	SHIPPING CONTAINER	FREE LIQUID
Fed Ex ☒ UPS ☐ GSO / GLS ☐ Hand Delivery ☐	Ice Chest ☒ None ☐ Box ☐	YES ☒ NO ☐
Pace Lab Field Service ☐ Other ☐ (Specify)_____	Other ☐ (Specify)_____	(W) / S

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☐ Intact? Yes ☐ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☐ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☐ No ☒

COC Received ☒ YES ☐ NO

Emissivity: 0.97 Container: N/A Thermometer ID: T11337 Date/Time 9/7/24 1110

Temperature: (A) 2.4 °C / (C) 2.2 °C Analyst Init CL2

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr^{+6}										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664B										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608.3/8081A										
QT EPA 515.1/8151A										
QT EPA 525.2										
QT EPA 525.2 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548.1										
QT EPA 549.2										
QT EPA 8015M										
QT EPA 8270C										
8oz / 16oz / 32oz AMBER										
(8oz) / 16oz / 32oz JAR	A	A	A	A	A					
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments:_____

Sample Numbering Completed By: CL2 Date/Time: 9/7/24 1414

A = Actual / C = Corrected

Rev 23 05/20/22

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 10/11/2024 13:04
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
2414416-01	**COC Number:**	---	**Receive Date:**	09/07/2024 11:10
	Project Number:	---	**Sampling Date:**	09/06/2024 08:30
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	R3B-1	**Lab Matrix:**	Solids
	Sampled By:	Client	**Sample Type:**	Soil
2414416-02	**COC Number:**	---	**Receive Date:**	09/07/2024 11:10
	Project Number:	---	**Sampling Date:**	09/06/2024 08:35
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	R3B-2	**Lab Matrix:**	Solids
	Sampled By:	Client	**Sample Type:**	Soil
2414416-03	**COC Number:**	---	**Receive Date:**	09/07/2024 11:10
	Project Number:	---	**Sampling Date:**	09/06/2024 08:40
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	R3B-3	**Lab Matrix:**	Solids
	Sampled By:	Client	**Sample Type:**	Soil
2414416-04	**COC Number:**	---	**Receive Date:**	09/07/2024 11:10
	Project Number:	---	**Sampling Date:**	09/06/2024 07:40
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	R3N-1	**Lab Matrix:**	Solids
	Sampled By:	Client	**Sample Type:**	Soil
2414416-05	**COC Number:**	---	**Receive Date:**	09/07/2024 11:10
	Project Number:	---	**Sampling Date:**	09/06/2024 07:45
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	R3N-2	**Lab Matrix:**	Solids
	Sampled By:	Client	**Sample Type:**	Soil
2414416-06	**COC Number:**	---	**Receive Date:**	09/07/2024 11:10
	Project Number:	---	**Sampling Date:**	09/06/2024 07:50
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	R3N-3	**Lab Matrix:**	Solids
	Sampled By:	Client	**Sample Type:**	Soil
2414416-07	**COC Number:**	---	**Receive Date:**	09/07/2024 11:10
	Project Number:	---	**Sampling Date:**	09/06/2024 08:45
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	R3W-1	**Lab Matrix:**	Solids
	Sampled By:	Client	**Sample Type:**	Soil

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 10/11/2024 13:04
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
2414416-08	**COC Number:**	---	**Receive Date:**	09/07/2024 11:10
	Project Number:	---	**Sampling Date:**	09/06/2024 08:50
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	R3W-2	**Lab Matrix:**	Solids
	Sampled By:	Client	**Sample Type:**	Soil
2414416-09	**COC Number:**	---	**Receive Date:**	09/07/2024 11:10
	Project Number:	---	**Sampling Date:**	09/06/2024 08:55
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	R3W-3	**Lab Matrix:**	Solids
	Sampled By:	Client	**Sample Type:**	Soil
2414416-10	**COC Number:**	---	**Receive Date:**	09/07/2024 11:10
	Project Number:	---	**Sampling Date:**	09/06/2024 08:15
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	R3E-1	**Lab Matrix:**	Solids
	Sampled By:	Client	**Sample Type:**	Soil
2414416-11	**COC Number:**	---	**Receive Date:**	09/07/2024 11:10
	Project Number:	---	**Sampling Date:**	09/06/2024 08:20
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	R3E-2	**Lab Matrix:**	Solids
	Sampled By:	Client	**Sample Type:**	Soil
2414416-12	**COC Number:**	---	**Receive Date:**	09/07/2024 11:10
	Project Number:	---	**Sampling Date:**	09/06/2024 08:25
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	R3E-3	**Lab Matrix:**	Solids
	Sampled By:	Client	**Sample Type:**	Soil
2414416-13	**COC Number:**	---	**Receive Date:**	09/07/2024 11:10
	Project Number:	---	**Sampling Date:**	09/06/2024 08:00
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	R3S-1	**Lab Matrix:**	Solids
	Sampled By:	Client	**Sample Type:**	Soil
2414416-14	**COC Number:**	---	**Receive Date:**	09/07/2024 11:10
	Project Number:	---	**Sampling Date:**	09/06/2024 08:05
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	R3S-2	**Lab Matrix:**	Solids
	Sampled By:	Client	**Sample Type:**	Soil

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Orange, CA 92868

Reported: 10/11/2024 13:04
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
2414416-15	**COC Number:**	---	**Receive Date:**	09/07/2024 11:10
	Project Number:	---	**Sampling Date:**	09/06/2024 08:10
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	R3S-3	**Lab Matrix:**	Solids
	Sampled By:	Client	**Sample Type:**	Soil

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Reported: 10/11/2024 13:04
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2414416-01 | **Client Sample Name:** R3B-1, 9/6/2024 8:30:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.010	0.00082	EPA-8081A	ND	A10	1
alpha-BHC	ND	mg/kg	0.010	0.00058	EPA-8081A	ND	A10	1
beta-BHC	ND	mg/kg	0.010	0.0024	EPA-8081A	ND	A10	1
delta-BHC	ND	mg/kg	0.010	0.0015	EPA-8081A	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.010	0.0012	EPA-8081A	ND	A10	1
Chlordane (Technical)	**0.25**	**mg/kg**	**0.10**	**0.066**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDD	**0.0065**	**mg/kg**	**0.010**	**0.0015**	**EPA-8081A**	**ND**	**J,A10**	**1**
4,4'-DDE	**0.11**	**mg/kg**	**0.010**	**0.0017**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDT	**0.0099**	**mg/kg**	**0.010**	**0.0012**	**EPA-8081A**	**ND**	**J,A10**	**1**
Dieldrin	**0.039**	**mg/kg**	**0.010**	**0.0014**	**EPA-8081A**	**ND**	**A10**	**1**
Endosulfan I	ND	mg/kg	0.010	0.0015	EPA-8081A	ND	A10	1
Endosulfan II	ND	mg/kg	0.010	0.0013	EPA-8081A	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.010	0.0017	EPA-8081A	ND	A10	1
Endrin	ND	mg/kg	0.010	0.00058	EPA-8081A	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.010	0.00094	EPA-8081A	ND	A10	1
Heptachlor	ND	mg/kg	0.010	0.0010	EPA-8081A	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.010	0.0010	EPA-8081A	ND	A10	1
Methoxychlor	ND	mg/kg	0.010	0.0012	EPA-8081A	ND	A10	1
Toxaphene	ND	mg/kg	0.20	0.076	EPA-8081A	ND	A10	1
TCMX (Surrogate)	84.0	%	20 - 130 (LCL - UCL)		EPA-8081A			1
Decachlorobiphenyl (Surrogate)	76.5	%	40 - 130 (LCL - UCL)		EPA-8081A			1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	09/13/24 10:00	09/17/24 09:32	HKS	GC-17	20.270	B196573	EPA 3546

DCN = Data Continuation Number

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Orange, CA 92868

Reported: 10/11/2024 13:04
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Pace Sample ID: 2414416-01 | **Client Sample Name:** R3B-1, 9/6/2024 8:30:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	**1.5**	**mg/kg**	**1.0**	**0.40**	**EPA-6010B**	**ND**		**1**
Barium	**87**	**mg/kg**	**0.50**	**0.18**	**EPA-6010B**	**ND**		**1**
Beryllium	**0.18**	**mg/kg**	**0.50**	**0.047**	**EPA-6010B**	**ND**	**J**	**1**
Cadmium	**0.46**	**mg/kg**	**0.50**	**0.052**	**EPA-6010B**	**ND**	**J**	**1**
Chromium	**14**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		**1**
Cobalt	**5.2**	**mg/kg**	**2.5**	**0.098**	**EPA-6010B**	**ND**		**1**
Copper	**9.1**	**mg/kg**	**1.0**	**0.050**	**EPA-6010B**	**ND**		**1**
Lead	**2.5**	**mg/kg**	**2.5**	**0.41**	**EPA-6010B**	**ND**		**1**
Mercury	ND	mg/kg	0.16	0.016	EPA-7471A	ND		2
Molybdenum	**0.46**	**mg/kg**	**2.5**	**0.050**	**EPA-6010B**	**ND**	**J**	**1**
Nickel	**8.3**	**mg/kg**	**0.50**	**0.15**	**EPA-6010B**	**ND**		**1**
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	**27**	**mg/kg**	**0.50**	**0.11**	**EPA-6010B**	**ND**		**1**
Zinc	**52**	**mg/kg**	**2.5**	**0.087**	**EPA-6010B**	**ND**		**1**

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-6010B	09/10/24 14:10	09/12/24 00:29	SDA	ICP6	0.971	B196628	EPA 3050B
2	EPA-7471A	09/17/24 21:00	09/18/24 10:05	TMT	CETAC3	0.992	B197026	EPA 7471A

DCN = Data Continuation Number

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1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 10/11/2024 13:04
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2414416-02 | **Client Sample Name:** R3B-2, 9/6/2024 8:35:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.0050	0.00041	EPA-8081A	ND	A10	1
alpha-BHC	ND	mg/kg	0.0050	0.00029	EPA-8081A	ND	A10	1
beta-BHC	ND	mg/kg	0.0050	0.0012	EPA-8081A	ND	A10	1
delta-BHC	ND	mg/kg	0.0050	0.00076	EPA-8081A	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0050	0.00061	EPA-8081A	ND	A10	1
Chlordane (Technical)	**0.086**	**mg/kg**	**0.050**	**0.033**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDD	**0.0018**	**mg/kg**	**0.0050**	**0.00073**	**EPA-8081A**	**ND**	**J,A10**	**1**
4,4'-DDE	**0.033**	**mg/kg**	**0.0050**	**0.00086**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDT	**0.0014**	**mg/kg**	**0.0050**	**0.00060**	**EPA-8081A**	**ND**	**J,A10**	**1**
Dieldrin	**0.016**	**mg/kg**	**0.0050**	**0.00069**	**EPA-8081A**	**ND**	**A10**	**1**
Endosulfan I	ND	mg/kg	0.0050	0.00074	EPA-8081A	ND	A10	1
Endosulfan II	ND	mg/kg	0.0050	0.00064	EPA-8081A	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0050	0.00087	EPA-8081A	ND	A10	1
Endrin	ND	mg/kg	0.0050	0.00029	EPA-8081A	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0050	0.00047	EPA-8081A	ND	A10	1
Heptachlor	ND	mg/kg	0.0050	0.00050	EPA-8081A	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.0050	0.00052	EPA-8081A	ND	A10	1
Methoxychlor	ND	mg/kg	0.0050	0.00060	EPA-8081A	ND	A10	1
Toxaphene	ND	mg/kg	0.10	0.038	EPA-8081A	ND	A10	1
TCMX (Surrogate)	61.9	%	20 - 130 (LCL - UCL)		EPA-8081A			1
Decachlorobiphenyl (Surrogate)	55.0	%	40 - 130 (LCL - UCL)		EPA-8081A			1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	09/13/24 10:00	09/17/24 09:49	HKS	GC-17	9.934	B196573	EPA 3546

DCN = Data Continuation Number

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1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 10/11/2024 13:04
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Pace Sample ID: 2414416-02 | **Client Sample Name:** R3B-2, 9/6/2024 8:35:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	**1.4**	**mg/kg**	**1.0**	**0.40**	**EPA-6010B**	**ND**		**1**
Barium	**92**	**mg/kg**	**0.50**	**0.18**	**EPA-6010B**	**ND**		**1**
Beryllium	**0.18**	**mg/kg**	**0.50**	**0.047**	**EPA-6010B**	**ND**	**J**	**1**
Cadmium	**0.39**	**mg/kg**	**0.50**	**0.052**	**EPA-6010B**	**ND**	**J**	**1**
Chromium	**15**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		**1**
Cobalt	**5.8**	**mg/kg**	**2.5**	**0.098**	**EPA-6010B**	**ND**		**1**
Copper	**8.7**	**mg/kg**	**1.0**	**0.050**	**EPA-6010B**	**ND**		**1**
Lead	**1.0**	**mg/kg**	**2.5**	**0.41**	**EPA-6010B**	**ND**	**J**	**1**
Mercury	ND	mg/kg	0.16	0.016	EPA-7471A	ND		2
Molybdenum	**0.37**	**mg/kg**	**2.5**	**0.050**	**EPA-6010B**	**ND**	**J**	**1**
Nickel	**8.7**	**mg/kg**	**0.50**	**0.15**	**EPA-6010B**	**ND**		**1**
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	**30**	**mg/kg**	**0.50**	**0.11**	**EPA-6010B**	**ND**		**1**
Zinc	**43**	**mg/kg**	**2.5**	**0.087**	**EPA-6010B**	**ND**		**1**

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-6010B	09/10/24 14:10	09/12/24 00:31	SDA	ICP6	0.935	B196628	EPA 3050B
2	EPA-7471A	09/17/24 21:00	09/18/24 10:18	TMT	CETAC3	1.025	B197026	EPA 7471A

DCN = Data Continuation Number

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Orange, CA 92868

Reported: 10/11/2024 13:04
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2414416-04 | **Client Sample Name:** R3N-1, 9/6/2024 7:40:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.010	0.00082	EPA-8081A	ND	A10	1
alpha-BHC	ND	mg/kg	0.010	0.00058	EPA-8081A	ND	A10	1
beta-BHC	ND	mg/kg	0.010	0.0024	EPA-8081A	ND	A10	1
delta-BHC	ND	mg/kg	0.010	0.0015	EPA-8081A	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.010	0.0012	EPA-8081A	ND	A10	1
Chlordane (Technical)	**0.62**	**mg/kg**	**0.10**	**0.066**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDD	**0.025**	**mg/kg**	**0.010**	**0.0015**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDE	**0.14**	**mg/kg**	**0.010**	**0.0017**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDT	**0.025**	**mg/kg**	**0.010**	**0.0012**	**EPA-8081A**	**ND**	**A10**	**1**
Dieldrin	**0.091**	**mg/kg**	**0.010**	**0.0014**	**EPA-8081A**	**ND**	**A10**	**1**
Endosulfan I	ND	mg/kg	0.010	0.0015	EPA-8081A	ND	A10	1
Endosulfan II	ND	mg/kg	0.010	0.0013	EPA-8081A	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.010	0.0017	EPA-8081A	ND	A10	1
Endrin	ND	mg/kg	0.010	0.00058	EPA-8081A	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.010	0.00094	EPA-8081A	ND	A10	1
Heptachlor	ND	mg/kg	0.010	0.0010	EPA-8081A	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.010	0.0010	EPA-8081A	ND	A10	1
Methoxychlor	ND	mg/kg	0.010	0.0012	EPA-8081A	ND	A10	1
Toxaphene	ND	mg/kg	0.20	0.076	EPA-8081A	ND	A10	1
TCMX (Surrogate)	83.8	%	20 - 130 (LCL - UCL)		EPA-8081A			1
Decachlorobiphenyl (Surrogate)	77.5	%	40 - 130 (LCL - UCL)		EPA-8081A			1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	09/13/24 10:00	09/17/24 10:06	HKS	GC-17	19.672	B196573	EPA 3546

DCN = Data Continuation Number

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Orange, CA 92868

Reported: 10/11/2024 13:04
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Pace Sample ID: 2414416-04 | **Client Sample Name:** R3N-1, 9/6/2024 7:40:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	**1.9**	**mg/kg**	**1.0**	**0.40**	**EPA-6010B**	**ND**		**1**
Barium	**87**	**mg/kg**	**0.50**	**0.18**	**EPA-6010B**	**ND**		**1**
Beryllium	**0.16**	**mg/kg**	**0.50**	**0.047**	**EPA-6010B**	**ND**	**J**	**1**
Cadmium	**0.47**	**mg/kg**	**0.50**	**0.052**	**EPA-6010B**	**ND**	**J**	**1**
Chromium	**15**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		**1**
Cobalt	**5.2**	**mg/kg**	**2.5**	**0.098**	**EPA-6010B**	**ND**		**1**
Copper	**9.2**	**mg/kg**	**1.0**	**0.050**	**EPA-6010B**	**ND**		**1**
Lead	**2.0**	**mg/kg**	**2.5**	**0.41**	**EPA-6010B**	**ND**	**J**	**1**
Mercury	ND	mg/kg	0.16	0.016	EPA-7471A	ND		2
Molybdenum	**0.51**	**mg/kg**	**2.5**	**0.050**	**EPA-6010B**	**ND**	**J**	**1**
Nickel	**7.8**	**mg/kg**	**0.50**	**0.15**	**EPA-6010B**	**ND**		**1**
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	**26**	**mg/kg**	**0.50**	**0.11**	**EPA-6010B**	**ND**		**1**
Zinc	**51**	**mg/kg**	**2.5**	**0.087**	**EPA-6010B**	**ND**		**1**

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-6010B	09/10/24 14:10	09/12/24 00:04	SDA	ICP6	1	B196628	EPA 3050B
2	EPA-7471A	09/17/24 21:00	09/18/24 10:20	TMT	CETAC3	0.977	B197026	EPA 7471A

DCN = Data Continuation Number

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 10/11/2024 13:04
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2414416-05 | **Client Sample Name:** R3N-2, 9/6/2024 7:45:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.00050	0.000041	EPA-8081A	ND	S05	1
alpha-BHC	ND	mg/kg	0.00050	0.000029	EPA-8081A	ND	S05	1
beta-BHC	ND	mg/kg	0.00050	0.00012	EPA-8081A	ND	S05	1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081A	ND	S05	1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.000061	EPA-8081A	ND	S05	1
Chlordane (Technical)	**0.16**	**mg/kg**	**0.0050**	**0.0033**	**EPA-8081A**	**ND**	**S05**	**1**
4,4'-DDD	**0.0041**	**mg/kg**	**0.00050**	**0.000073**	**EPA-8081A**	**ND**	**S05**	**1**
4,4'-DDE	**0.023**	**mg/kg**	**0.0050**	**0.00086**	**EPA-8081A**	**ND**	**A10,S05**	**2**
4,4'-DDT	**0.0039**	**mg/kg**	**0.00050**	**0.000060**	**EPA-8081A**	**ND**	**S05**	**1**
Dieldrin	**0.016**	**mg/kg**	**0.0050**	**0.00069**	**EPA-8081A**	**ND**	**A10,S05**	**2**
Endosulfan I	ND	mg/kg	0.00050	0.000074	EPA-8081A	ND	S05	1
Endosulfan II	ND	mg/kg	0.00050	0.000064	EPA-8081A	ND	S05	1
Endosulfan sulfate	ND	mg/kg	0.00050	0.000087	EPA-8081A	ND	S05	1
Endrin	ND	mg/kg	0.00050	0.000029	EPA-8081A	ND	S05	1
Endrin aldehyde	ND	mg/kg	0.00050	0.000047	EPA-8081A	ND	S05	1
Heptachlor	ND	mg/kg	0.00050	0.000050	EPA-8081A	ND	S05	1
Heptachlor epoxide	ND	mg/kg	0.00050	0.000052	EPA-8081A	ND	S05	1
Methoxychlor	ND	mg/kg	0.00050	0.000060	EPA-8081A	ND	S05	1
Toxaphene	ND	mg/kg	0.010	0.0038	EPA-8081A	ND	S05	1
TCMX (Surrogate)	47.4	%	20 - 130 (LCL - UCL)		EPA-8081A		S05	1
Decachlorobiphenyl (Surrogate)	55.8	%	40 - 130 (LCL - UCL)		EPA-8081A		S05	1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	09/23/24 18:00	09/24/24 22:28	HKS	GC-17	0.997	B197407	EPA 3546
2	EPA-8081A	09/23/24 18:00	09/26/24 09:18	HKS	GC-17	9.967	B197407	EPA 3546

DCN = Data Continuation Number

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1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 10/11/2024 13:04
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2414416-07 | **Client Sample Name:** R3W-1, 9/6/2024 8:45:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.0025	0.00020	EPA-8081A	ND	A10	1
alpha-BHC	ND	mg/kg	0.0025	0.00014	EPA-8081A	ND	A10	1
beta-BHC	ND	mg/kg	0.0025	0.00060	EPA-8081A	ND	A10	1
delta-BHC	ND	mg/kg	0.0025	0.00038	EPA-8081A	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0025	0.00030	EPA-8081A	ND	A10	1
Chlordane (Technical)	**0.23**	**mg/kg**	**0.025**	**0.016**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDD	**0.0071**	**mg/kg**	**0.0025**	**0.00036**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDE	**0.048**	**mg/kg**	**0.0025**	**0.00043**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDT	**0.0088**	**mg/kg**	**0.0025**	**0.00030**	**EPA-8081A**	**ND**	**A10**	**1**
Dieldrin	**0.042**	**mg/kg**	**0.0025**	**0.00034**	**EPA-8081A**	**ND**	**A10**	**1**
Endosulfan I	ND	mg/kg	0.0025	0.00037	EPA-8081A	ND	A10	1
Endosulfan II	ND	mg/kg	0.0025	0.00032	EPA-8081A	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0025	0.00044	EPA-8081A	ND	A10	1
Endrin	ND	mg/kg	0.0025	0.00014	EPA-8081A	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0025	0.00024	EPA-8081A	ND	A10	1
Heptachlor	ND	mg/kg	0.0025	0.00025	EPA-8081A	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.0025	0.00026	EPA-8081A	ND	A10	1
Methoxychlor	ND	mg/kg	0.0025	0.00030	EPA-8081A	ND	A10	1
Toxaphene	ND	mg/kg	0.050	0.019	EPA-8081A	ND	A10	1
TCMX (Surrogate)	67.2	%	20 - 130 (LCL - UCL)		EPA-8081A			1
Decachlorobiphenyl (Surrogate)	68.1	%	40 - 130 (LCL - UCL)		EPA-8081A			1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	09/13/24 10:00	09/17/24 01:07	HKS	GC-17	4.983	B196573	EPA 3546

DCN = Data Continuation Number

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 10/11/2024 13:04
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Pace Sample ID: 2414416-07 | **Client Sample Name:** R3W-1, 9/6/2024 8:45:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Antimony	ND	mg/kg	4.5	0.30	EPA-6010B	ND		1
Arsenic	**1.4**	**mg/kg**	**0.91**	**0.36**	**EPA-6010B**	**ND**		**1**
Barium	**76**	**mg/kg**	**0.45**	**0.16**	**EPA-6010B**	**ND**		**1**
Beryllium	**0.15**	**mg/kg**	**0.45**	**0.043**	**EPA-6010B**	**ND**	**J**	**1**
Cadmium	**0.40**	**mg/kg**	**0.45**	**0.047**	**EPA-6010B**	**ND**	**J**	**1**
Chromium	**12**	**mg/kg**	**0.45**	**0.045**	**EPA-6010B**	**ND**		**1**
Cobalt	**4.5**	**mg/kg**	**2.3**	**0.089**	**EPA-6010B**	**ND**		**1**
Copper	**8.4**	**mg/kg**	**0.91**	**0.045**	**EPA-6010B**	**ND**		**1**
Lead	**1.9**	**mg/kg**	**2.3**	**0.37**	**EPA-6010B**	**ND**	**J**	**1**
Mercury	ND	mg/kg	0.16	0.016	EPA-7471A	ND		2
Molybdenum	**0.35**	**mg/kg**	**2.3**	**0.045**	**EPA-6010B**	**ND**	**J**	**1**
Nickel	**6.9**	**mg/kg**	**0.45**	**0.14**	**EPA-6010B**	**ND**		**1**
Selenium	ND	mg/kg	0.91	0.89	EPA-6010B	ND		1
Silver	ND	mg/kg	0.45	0.061	EPA-6010B	ND		1
Thallium	ND	mg/kg	4.5	0.58	EPA-6010B	ND		1
Vanadium	**23**	**mg/kg**	**0.45**	**0.10**	**EPA-6010B**	**ND**		**1**
Zinc	**47**	**mg/kg**	**2.3**	**0.079**	**EPA-6010B**	**ND**		**1**

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-6010B	09/10/24 14:10	09/12/24 00:33	SDA	ICP6	0.909	B196628	EPA 3050B
2	EPA-7471A	09/17/24 21:00	09/18/24 10:22	TMT	CETAC3	0.992	B197026	EPA 7471A

DCN = Data Continuation Number

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 10/11/2024 13:04
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2414416-08 | **Client Sample Name:** R3W-2, 9/6/2024 8:50:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.00050	0.000041	EPA-8081A	ND	S05	1
alpha-BHC	ND	mg/kg	0.00050	0.000029	EPA-8081A	ND	S05	1
beta-BHC	ND	mg/kg	0.00050	0.00012	EPA-8081A	ND	S05	1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081A	ND	S05	1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.000061	EPA-8081A	ND	S05	1
Chlordane (Technical)	**0.041**	**mg/kg**	**0.0050**	**0.0033**	**EPA-8081A**	**ND**	**S05**	**1**
4,4'-DDD	**0.00085**	**mg/kg**	**0.00050**	**0.000073**	**EPA-8081A**	**ND**	**S05**	**1**
4,4'-DDE	**0.0064**	**mg/kg**	**0.00050**	**0.000086**	**EPA-8081A**	**ND**	**S05**	**1**
4,4'-DDT	**0.00097**	**mg/kg**	**0.00050**	**0.000060**	**EPA-8081A**	**ND**	**S05**	**1**
Dieldrin	**0.0075**	**mg/kg**	**0.00050**	**0.000069**	**EPA-8081A**	**ND**	**S05**	**1**
Endosulfan I	ND	mg/kg	0.00050	0.000074	EPA-8081A	ND	S05	1
Endosulfan II	ND	mg/kg	0.00050	0.000064	EPA-8081A	ND	S05	1
Endosulfan sulfate	ND	mg/kg	0.00050	0.000087	EPA-8081A	ND	S05	1
Endrin	ND	mg/kg	0.00050	0.000029	EPA-8081A	ND	S05	1
Endrin aldehyde	ND	mg/kg	0.00050	0.000047	EPA-8081A	ND	S05	1
Heptachlor	ND	mg/kg	0.00050	0.000050	EPA-8081A	ND	S05	1
Heptachlor epoxide	ND	mg/kg	0.00050	0.000052	EPA-8081A	ND	S05	1
Methoxychlor	ND	mg/kg	0.00050	0.000060	EPA-8081A	ND	S05	1
Toxaphene	ND	mg/kg	0.010	0.0038	EPA-8081A	ND	S05	1
TCMX (Surrogate)	67.1	%	20 - 130 (LCL - UCL)		EPA-8081A		S05	1
Decachlorobiphenyl (Surrogate)	70.8	%	40 - 130 (LCL - UCL)		EPA-8081A		S05	1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	09/23/24 18:00	09/24/24 22:45	HKS	GC-17	1	B197407	EPA 3546

DCN = Data Continuation Number

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1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 10/11/2024 13:04
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2414416-10 | **Client Sample Name:** R3E-1, 9/6/2024 8:15:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.010	0.00082	EPA-8081A	ND	A10	1
alpha-BHC	ND	mg/kg	0.010	0.00058	EPA-8081A	ND	A10	1
beta-BHC	ND	mg/kg	0.010	0.0024	EPA-8081A	ND	A10	1
delta-BHC	ND	mg/kg	0.010	0.0015	EPA-8081A	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.010	0.0012	EPA-8081A	ND	A10	1
Chlordane (Technical)	**0.37**	**mg/kg**	**0.10**	**0.066**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDD	**0.010**	**mg/kg**	**0.010**	**0.0015**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDE	**0.16**	**mg/kg**	**0.010**	**0.0017**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDT	**0.012**	**mg/kg**	**0.010**	**0.0012**	**EPA-8081A**	**ND**	**A10**	**1**
Dieldrin	**0.10**	**mg/kg**	**0.010**	**0.0014**	**EPA-8081A**	**ND**	**A10**	**1**
Endosulfan I	ND	mg/kg	0.010	0.0015	EPA-8081A	ND	A10	1
Endosulfan II	ND	mg/kg	0.010	0.0013	EPA-8081A	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.010	0.0017	EPA-8081A	ND	A10	1
Endrin	ND	mg/kg	0.010	0.00058	EPA-8081A	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.010	0.00094	EPA-8081A	ND	A10	1
Heptachlor	ND	mg/kg	0.010	0.0010	EPA-8081A	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.010	0.0010	EPA-8081A	ND	A10	1
Methoxychlor	ND	mg/kg	0.010	0.0012	EPA-8081A	ND	A10	1
Toxaphene	ND	mg/kg	0.20	0.076	EPA-8081A	ND	A10	1
TCMX (Surrogate)	71.5	%	20 - 130 (LCL - UCL)		EPA-8081A			1
Decachlorobiphenyl (Surrogate)	78.2	%	40 - 130 (LCL - UCL)		EPA-8081A			1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	09/13/24 10:00	09/17/24 10:23	HKS	GC-17	19.672	B196573	EPA 3546

DCN = Data Continuation Number

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Orange, CA 92868

Reported: 10/11/2024 13:04
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Pace Sample ID: 2414416-10 | **Client Sample Name:** R3E-1, 9/6/2024 8:15:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	**1.5**	**mg/kg**	**1.0**	**0.40**	**EPA-6010B**	**ND**		**1**
Barium	**88**	**mg/kg**	**0.50**	**0.18**	**EPA-6010B**	**ND**		**1**
Beryllium	**0.16**	**mg/kg**	**0.50**	**0.047**	**EPA-6010B**	**ND**	**J**	**1**
Cadmium	**0.50**	**mg/kg**	**0.50**	**0.052**	**EPA-6010B**	**ND**		**1**
Chromium	**14**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		**1**
Cobalt	**5.0**	**mg/kg**	**2.5**	**0.098**	**EPA-6010B**	**ND**		**1**
Copper	**9.8**	**mg/kg**	**1.0**	**0.050**	**EPA-6010B**	**ND**		**1**
Lead	**2.3**	**mg/kg**	**2.5**	**0.41**	**EPA-6010B**	**ND**	**J**	**1**
Mercury	ND	mg/kg	0.16	0.016	EPA-7471A	ND		2
Molybdenum	**0.24**	**mg/kg**	**2.5**	**0.050**	**EPA-6010B**	**ND**	**J**	**1**
Nickel	**7.6**	**mg/kg**	**0.50**	**0.15**	**EPA-6010B**	**ND**		**1**
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	**26**	**mg/kg**	**0.50**	**0.11**	**EPA-6010B**	**ND**		**1**
Zinc	**52**	**mg/kg**	**2.5**	**0.087**	**EPA-6010B**	**ND**		**1**

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-6010B	09/10/24 14:10	09/12/24 00:34	SDA	ICP6	1	B196628	EPA 3050B
2	EPA-7471A	09/17/24 21:00	09/18/24 10:24	TMT	CETAC3	0.962	B197026	EPA 7471A

DCN = Data Continuation Number

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1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 10/11/2024 13:04
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2414416-11 | **Client Sample Name:** R3E-2, 9/6/2024 8:20:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.010	0.00082	EPA-8081A	ND	A10,S05	1
alpha-BHC	ND	mg/kg	0.010	0.00058	EPA-8081A	ND	A10,S05	1
beta-BHC	ND	mg/kg	0.010	0.0024	EPA-8081A	ND	A10,S05	1
delta-BHC	ND	mg/kg	0.010	0.0015	EPA-8081A	ND	A10,S05	1
gamma-BHC (Lindane)	ND	mg/kg	0.010	0.0012	EPA-8081A	ND	A10,S05	1
Chlordane (Technical)	**0.39**	**mg/kg**	**0.10**	**0.066**	**EPA-8081A**	**ND**	**A10,S05**	**1**
4,4'-DDD	**0.0059**	**mg/kg**	**0.010**	**0.0015**	**EPA-8081A**	**ND**	**J,A10,S05**	**1**
4,4'-DDE	**0.11**	**mg/kg**	**0.010**	**0.0017**	**EPA-8081A**	**ND**	**A10,S05**	**1**
4,4'-DDT	**0.0064**	**mg/kg**	**0.010**	**0.0012**	**EPA-8081A**	**ND**	**J,A10,S05**	**1**
Dieldrin	**0.073**	**mg/kg**	**0.010**	**0.0014**	**EPA-8081A**	**ND**	**A10,S05**	**1**
Endosulfan I	ND	mg/kg	0.010	0.0015	EPA-8081A	ND	A10,S05	1
Endosulfan II	ND	mg/kg	0.010	0.0013	EPA-8081A	ND	A10,S05	1
Endosulfan sulfate	ND	mg/kg	0.010	0.0017	EPA-8081A	ND	A10,S05	1
Endrin	ND	mg/kg	0.010	0.00058	EPA-8081A	ND	A10,S05	1
Endrin aldehyde	ND	mg/kg	0.010	0.00094	EPA-8081A	ND	A10,S05	1
Heptachlor	ND	mg/kg	0.010	0.0010	EPA-8081A	ND	A10,S05	1
Heptachlor epoxide	ND	mg/kg	0.010	0.0010	EPA-8081A	ND	A10,S05	1
Methoxychlor	ND	mg/kg	0.010	0.0012	EPA-8081A	ND	A10,S05	1
Toxaphene	ND	mg/kg	0.20	0.076	EPA-8081A	ND	A10,S05	1
TCMX (Surrogate)	39.9	%	20 - 130 (LCL - UCL)		EPA-8081A		S05	1
Decachlorobiphenyl (Surrogate)	58.3	%	40 - 130 (LCL - UCL)		EPA-8081A		S05	1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	09/23/24 18:00	09/26/24 09:35	HKS	GC-17	20.067	B197407	EPA 3546

DCN = Data Continuation Number

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 10/11/2024 13:04
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2414416-12 | **Client Sample Name:** R3E-3, 9/6/2024 8:25:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.0050	0.00041	EPA-8081A	ND	A10,S05	1
alpha-BHC	ND	mg/kg	0.0050	0.00029	EPA-8081A	ND	A10,S05	1
beta-BHC	ND	mg/kg	0.0050	0.0012	EPA-8081A	ND	A10,S05	1
delta-BHC	ND	mg/kg	0.0050	0.00076	EPA-8081A	ND	A10,S05	1
gamma-BHC (Lindane)	ND	mg/kg	0.0050	0.00061	EPA-8081A	ND	A10,S05	1
Chlordane (Technical)	**0.19**	**mg/kg**	**0.050**	**0.033**	**EPA-8081A**	**ND**	**A10,S05**	**1**
4,4'-DDD	**0.0021**	**mg/kg**	**0.0050**	**0.00073**	**EPA-8081A**	**ND**	**J,A10,S05**	**1**
4,4'-DDE	**0.063**	**mg/kg**	**0.0050**	**0.00086**	**EPA-8081A**	**ND**	**A10,S05**	**1**
4,4'-DDT	**0.0023**	**mg/kg**	**0.0050**	**0.00060**	**EPA-8081A**	**ND**	**J,A10,S05**	**1**
Dieldrin	**0.042**	**mg/kg**	**0.0050**	**0.00069**	**EPA-8081A**	**ND**	**A10,S05**	**1**
Endosulfan I	ND	mg/kg	0.0050	0.00074	EPA-8081A	ND	A10,S05	1
Endosulfan II	ND	mg/kg	0.0050	0.00064	EPA-8081A	ND	A10,S05	1
Endosulfan sulfate	ND	mg/kg	0.0050	0.00087	EPA-8081A	ND	A10,S05	1
Endrin	ND	mg/kg	0.0050	0.00029	EPA-8081A	ND	A10,S05	1
Endrin aldehyde	ND	mg/kg	0.0050	0.00047	EPA-8081A	ND	A10,S05	1
Heptachlor	ND	mg/kg	0.0050	0.00050	EPA-8081A	ND	A10,S05	1
Heptachlor epoxide	ND	mg/kg	0.0050	0.00052	EPA-8081A	ND	A10,S05	1
Methoxychlor	ND	mg/kg	0.0050	0.00060	EPA-8081A	ND	A10,S05	1
Toxaphene	ND	mg/kg	0.10	0.038	EPA-8081A	ND	A10,S05	1
TCMX (Surrogate)	89.0	%	20 - 130 (LCL - UCL)		EPA-8081A		S05	1
Decachlorobiphenyl (Surrogate)	67.3	%	40 - 130 (LCL - UCL)		EPA-8081A		S05	1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	10/02/24 20:10	10/09/24 03:13	HKS	GC-17	9.934	B197948	EPA 3546

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Orange, CA 92868

Reported: 10/11/2024 13:04
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Pace Sample ID: 2414416-13 | **Client Sample Name:** R3S-1, 9/6/2024 8:00:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Aldrin	ND	mg/kg	0.0050	0.00041	EPA-8081A	ND	A10	1
alpha-BHC	ND	mg/kg	0.0050	0.00029	EPA-8081A	ND	A10	1
beta-BHC	ND	mg/kg	0.0050	0.0012	EPA-8081A	ND	A10	1
delta-BHC	ND	mg/kg	0.0050	0.00076	EPA-8081A	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0050	0.00061	EPA-8081A	ND	A10	1
Chlordane (Technical)	**0.20**	**mg/kg**	**0.050**	**0.033**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDD	**0.0043**	**mg/kg**	**0.0050**	**0.00073**	**EPA-8081A**	**ND**	**J,A10**	**1**
4,4'-DDE	**0.10**	**mg/kg**	**0.0050**	**0.00086**	**EPA-8081A**	**ND**	**A10**	**1**
4,4'-DDT	**0.0053**	**mg/kg**	**0.0050**	**0.00060**	**EPA-8081A**	**ND**	**A10**	**1**
Dieldrin	**0.026**	**mg/kg**	**0.0050**	**0.00069**	**EPA-8081A**	**ND**	**A10**	**1**
Endosulfan I	ND	mg/kg	0.0050	0.00074	EPA-8081A	ND	A10	1
Endosulfan II	ND	mg/kg	0.0050	0.00064	EPA-8081A	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0050	0.00087	EPA-8081A	ND	A10	1
Endrin	ND	mg/kg	0.0050	0.00029	EPA-8081A	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0050	0.00047	EPA-8081A	ND	A10	1
Heptachlor	ND	mg/kg	0.0050	0.00050	EPA-8081A	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.0050	0.00052	EPA-8081A	ND	A10	1
Methoxychlor	ND	mg/kg	0.0050	0.00060	EPA-8081A	ND	A10	1
Toxaphene	ND	mg/kg	0.10	0.038	EPA-8081A	ND	A10	1
TCMX (Surrogate)	95.9	%	20 - 130 (LCL - UCL)		EPA-8081A			1
Decachlorobiphenyl (Surrogate)	85.3	%	40 - 130 (LCL - UCL)		EPA-8081A			1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-8081A	09/13/24 10:00	09/17/24 10:40	HKS	GC-17	10	B196573	EPA 3546

DCN = Data Continuation Number

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Orange, CA 92868

Reported: 10/11/2024 13:04
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Pace Sample ID: 2414416-13 | **Client Sample Name:** R3S-1, 9/6/2024 8:00:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	**1.7**	**mg/kg**	**1.0**	**0.40**	**EPA-6010B**	**ND**		**1**
Barium	**84**	**mg/kg**	**0.50**	**0.18**	**EPA-6010B**	**ND**		**1**
Beryllium	**0.17**	**mg/kg**	**0.50**	**0.047**	**EPA-6010B**	**ND**	**J**	**1**
Cadmium	**0.36**	**mg/kg**	**0.50**	**0.052**	**EPA-6010B**	**ND**	**J**	**1**
Chromium	**14**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		**1**
Cobalt	**5.0**	**mg/kg**	**2.5**	**0.098**	**EPA-6010B**	**ND**		**1**
Copper	**9.8**	**mg/kg**	**1.0**	**0.050**	**EPA-6010B**	**ND**		**1**
Lead	**2.0**	**mg/kg**	**2.5**	**0.41**	**EPA-6010B**	**ND**	**J**	**1**
Mercury	ND	mg/kg	0.16	0.016	EPA-7471A	ND		2
Molybdenum	**0.50**	**mg/kg**	**2.5**	**0.050**	**EPA-6010B**	**ND**	**J**	**1**
Nickel	**7.6**	**mg/kg**	**0.50**	**0.15**	**EPA-6010B**	**ND**		**1**
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	**26**	**mg/kg**	**0.50**	**0.11**	**EPA-6010B**	**ND**		**1**
Zinc	**42**	**mg/kg**	**2.5**	**0.087**	**EPA-6010B**	**ND**		**1**

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-6010B	09/10/24 14:10	09/12/24 00:36	SDA	ICP6	0.935	B196628	EPA 3050B
2	EPA-7471A	09/17/24 21:00	09/18/24 10:25	TMT	CETAC3	1.008	B197026	EPA 7471A

DCN = Data Continuation Number

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 10/11/2024 13:04
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals	Run #
QC Batch ID: B196573							
Aldrin	B196573-BLK1	ND	mg/kg	0.00050	0.000041		1
alpha-BHC	B196573-BLK1	ND	mg/kg	0.00050	0.000029		1
beta-BHC	B196573-BLK1	ND	mg/kg	0.00050	0.00012		1
delta-BHC	B196573-BLK1	ND	mg/kg	0.00050	0.000076		1
gamma-BHC (Lindane)	B196573-BLK1	ND	mg/kg	0.00050	0.000061		1
Chlordane (Technical)	B196573-BLK1	ND	mg/kg	0.0050	0.0033		1
4,4'-DDD	B196573-BLK1	ND	mg/kg	0.00050	0.000073		1
4,4'-DDE	B196573-BLK1	ND	mg/kg	0.00050	0.000086		1
4,4'-DDT	B196573-BLK1	ND	mg/kg	0.00050	0.000060		1
Dieldrin	B196573-BLK1	ND	mg/kg	0.00050	0.000069		1
Endosulfan I	B196573-BLK1	ND	mg/kg	0.00050	0.000074		1
Endosulfan II	B196573-BLK1	ND	mg/kg	0.00050	0.000064		1
Endosulfan sulfate	B196573-BLK1	ND	mg/kg	0.00050	0.000087		1
Endrin	B196573-BLK1	ND	mg/kg	0.00050	0.000029		1
Endrin aldehyde	B196573-BLK1	ND	mg/kg	0.00050	0.000047		1
Heptachlor	B196573-BLK1	ND	mg/kg	0.00050	0.000050		1
Heptachlor epoxide	B196573-BLK1	ND	mg/kg	0.00050	0.000052		1
Methoxychlor	B196573-BLK1	ND	mg/kg	0.00050	0.000060		1
Toxaphene	B196573-BLK1	ND	mg/kg	0.010	0.0038		1
TCMX (Surrogate)	**B196573-BLK1**	**83.2**	%	**20 - 130 (LCL - UCL)**			1
Decachlorobiphenyl (Surrogate)	**B196573-BLK1**	**76.1**	%	**40 - 130 (LCL - UCL)**			1
QC Batch ID: B197407							
Aldrin	B197407-BLK1	ND	mg/kg	0.00050	0.000041		2
alpha-BHC	B197407-BLK1	ND	mg/kg	0.00050	0.000029		2
beta-BHC	B197407-BLK1	ND	mg/kg	0.00050	0.00012		2
delta-BHC	B197407-BLK1	ND	mg/kg	0.00050	0.000076		2
gamma-BHC (Lindane)	B197407-BLK1	ND	mg/kg	0.00050	0.000061		2
Chlordane (Technical)	B197407-BLK1	ND	mg/kg	0.0050	0.0033		2
4,4'-DDD	B197407-BLK1	ND	mg/kg	0.00050	0.000073		2
4,4'-DDE	B197407-BLK1	ND	mg/kg	0.00050	0.000086		2
4,4'-DDT	B197407-BLK1	ND	mg/kg	0.00050	0.000060		2
Dieldrin	B197407-BLK1	ND	mg/kg	0.00050	0.000069		2
Endosulfan I	B197407-BLK1	ND	mg/kg	0.00050	0.000074		2

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Reported: 10/11/2024 13:04
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals	Run #
QC Batch ID: B197407							
Endosulfan II	B197407-BLK1	ND	mg/kg	0.00050	0.000064		2
Endosulfan sulfate	B197407-BLK1	ND	mg/kg	0.00050	0.000087		2
Endrin	B197407-BLK1	ND	mg/kg	0.00050	0.000029		2
Endrin aldehyde	B197407-BLK1	ND	mg/kg	0.00050	0.000047		2
Heptachlor	B197407-BLK1	ND	mg/kg	0.00050	0.000050		2
Heptachlor epoxide	B197407-BLK1	ND	mg/kg	0.00050	0.000052		2
Methoxychlor	B197407-BLK1	ND	mg/kg	0.00050	0.000060		2
Toxaphene	B197407-BLK1	ND	mg/kg	0.010	0.0038		2
TCMX (Surrogate)	**B197407-BLK1**	**49.6**	%	**20 - 130 (LCL - UCL)**			2
Decachlorobiphenyl (Surrogate)	**B197407-BLK1**	**68.2**	%	**40 - 130 (LCL - UCL)**			2
QC Batch ID: B197948							
Aldrin	B197948-BLK1	ND	mg/kg	0.00050	0.000041		3
alpha-BHC	B197948-BLK1	ND	mg/kg	0.00050	0.000029		3
beta-BHC	B197948-BLK1	ND	mg/kg	0.00050	0.00012		3
delta-BHC	B197948-BLK1	ND	mg/kg	0.00050	0.000076		3
gamma-BHC (Lindane)	B197948-BLK1	ND	mg/kg	0.00050	0.000061		3
Chlordane (Technical)	B197948-BLK1	ND	mg/kg	0.0050	0.0033		3
4,4'-DDD	B197948-BLK1	ND	mg/kg	0.00050	0.000073		3
4,4'-DDE	B197948-BLK1	ND	mg/kg	0.00050	0.000086		3
4,4'-DDT	B197948-BLK1	ND	mg/kg	0.00050	0.000060		3
Dieldrin	B197948-BLK1	ND	mg/kg	0.00050	0.000069		3
Endosulfan I	B197948-BLK1	ND	mg/kg	0.00050	0.000074		3
Endosulfan II	B197948-BLK1	ND	mg/kg	0.00050	0.000064		3
Endosulfan sulfate	B197948-BLK1	ND	mg/kg	0.00050	0.000087		3
Endrin	B197948-BLK1	ND	mg/kg	0.00050	0.000029		3
Endrin aldehyde	B197948-BLK1	ND	mg/kg	0.00050	0.000047		3
Heptachlor	B197948-BLK1	ND	mg/kg	0.00050	0.000050		3
Heptachlor epoxide	B197948-BLK1	ND	mg/kg	0.00050	0.000052		3
Methoxychlor	B197948-BLK1	ND	mg/kg	0.00050	0.000060		3
Toxaphene	B197948-BLK1	ND	mg/kg	0.010	0.0038		3
TCMX (Surrogate)	**B197948-BLK1**	**92.3**	%	**20 - 130 (LCL - UCL)**			3
Decachlorobiphenyl (Surrogate)	**B197948-BLK1**	**96.6**	%	**40 - 130 (LCL - UCL)**			3

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1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 10/11/2024 13:04
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Quality Control Report - Method Blank Analysis

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B196573-BLK1	PB	EPA-8081A	09/13/24	09/16/24 22:53	HKS	GC-17	1
2	B197407-BLK1	PB	EPA-8081A	09/23/24	09/24/24 21:20	HKS	GC-17	1.010
3	B197948-BLK1	PB	EPA-8081A	10/02/24	10/08/24 20:13	HKS	GC-17	1

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Orange, CA 92868

Reported: 10/11/2024 13:04
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals	Run #
QC Batch ID: B196573											
Aldrin	B196573-BS1	LCS	0.0042779	0.0050336	mg/kg	85.0		70 - 130			1
alpha-BHC	B196573-BS1	LCS	0.0041849	0.0050336	mg/kg	83.1		60 - 130			1
beta-BHC	B196573-BS1	LCS	0.0044597	0.0050336	mg/kg	88.6		30 - 130			1
delta-BHC	B196573-BS1	LCS	0.0048050	0.0050336	mg/kg	95.5		60 - 130			1
gamma-BHC (Lindane)	B196573-BS1	LCS	0.0043144	0.0050336	mg/kg	85.7		60 - 130			1
4,4'-DDD	B196573-BS1	LCS	0.0043054	0.0050336	mg/kg	85.5		60 - 130			1
4,4'-DDE	B196573-BS1	LCS	0.0043775	0.0050336	mg/kg	87.0		60 - 130			1
4,4'-DDT	B196573-BS1	LCS	0.0040493	0.0050336	mg/kg	80.4		60 - 130			1
Dieldrin	B196573-BS1	LCS	0.0042886	0.0050336	mg/kg	85.2		70 - 130			1
Endosulfan I	B196573-BS1	LCS	0.0043208	0.0050336	mg/kg	85.8		60 - 130			1
Endosulfan II	B196573-BS1	LCS	0.0044879	0.0050336	mg/kg	89.2		60 - 130			1
Endosulfan sulfate	B196573-BS1	LCS	0.0043658	0.0050336	mg/kg	86.7		60 - 130			1
Endrin	B196573-BS1	LCS	0.0039242	0.0050336	mg/kg	78.0		60 - 130			1
Endrin aldehyde	B196573-BS1	LCS	0.0031292	0.0050336	mg/kg	62.2		60 - 130			1
Heptachlor	B196573-BS1	LCS	0.0040131	0.0050336	mg/kg	79.7		60 - 130			1
Heptachlor epoxide	B196573-BS1	LCS	0.0043738	0.0050336	mg/kg	86.9		60 - 130			1
Methoxychlor	B196573-BS1	LCS	0.0038017	0.0050336	mg/kg	75.5		60 - 130			1
TCMX (Surrogate)	B196573-BS1	LCS	0.0084265	0.010067	mg/kg	83.7		20 - 130			1
Decachlorobiphenyl (Surrogate)	B196573-BS1	LCS	0.015405	0.020134	mg/kg	76.5		40 - 130			1
QC Batch ID: B197407											
Aldrin	B197407-BS1	LCS	0.0034074	0.0050336	mg/kg	67.7		70 - 130		L01	2
alpha-BHC	B197407-BS1	LCS	0.0035044	0.0050336	mg/kg	69.6		60 - 130			2
beta-BHC	B197407-BS1	LCS	0.0036913	0.0050336	mg/kg	73.3		30 - 130			2
delta-BHC	B197407-BS1	LCS	0.0036144	0.0050336	mg/kg	71.8		60 - 130			2
gamma-BHC (Lindane)	B197407-BS1	LCS	0.0036315	0.0050336	mg/kg	72.1		60 - 130			2
4,4'-DDD	B197407-BS1	LCS	0.0036067	0.0050336	mg/kg	71.7		60 - 130			2
4,4'-DDE	B197407-BS1	LCS	0.0037728	0.0050336	mg/kg	75.0		60 - 130			2
4,4'-DDT	B197407-BS1	LCS	0.0037087	0.0050336	mg/kg	73.7		60 - 130			2
Dieldrin	B197407-BS1	LCS	0.0037698	0.0050336	mg/kg	74.9		70 - 130			2
Endosulfan I	B197407-BS1	LCS	0.0036020	0.0050336	mg/kg	71.6		60 - 130			2
Endosulfan II	B197407-BS1	LCS	0.0038268	0.0050336	mg/kg	76.0		60 - 130			2
Endosulfan sulfate	B197407-BS1	LCS	0.0036829	0.0050336	mg/kg	73.2		60 - 130			2
Endrin	B197407-BS1	LCS	0.0037705	0.0050336	mg/kg	74.9		60 - 130			2

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 10/11/2024 13:04
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals	Run #
QC Batch ID: B197407											
Endrin aldehyde	B197407-BS1	LCS	0.0033413	0.0050336	mg/kg	66.4		60 - 130			2
Heptachlor	B197407-BS1	LCS	0.0036144	0.0050336	mg/kg	71.8		60 - 130			2
Heptachlor epoxide	B197407-BS1	LCS	0.0037168	0.0050336	mg/kg	73.8		60 - 130			2
Methoxychlor	B197407-BS1	LCS	0.0038839	0.0050336	mg/kg	77.2		60 - 130			2
TCMX (Surrogate)	B197407-BS1	LCS	0.0063728	0.010067	mg/kg	63.3		20 - 130			2
Decachlorobiphenyl (Surrogate)	B197407-BS1	LCS	0.016647	0.020134	mg/kg	82.7		40 - 130			2
QC Batch ID: B197948											
Aldrin	B197948-BS1	LCS	0.0042280	0.0050676	mg/kg	83.4		70 - 130			3
alpha-BHC	B197948-BS1	LCS	0.0040608	0.0050676	mg/kg	80.1		60 - 130			3
beta-BHC	B197948-BS1	LCS	0.0043419	0.0050676	mg/kg	85.7		30 - 130			3
delta-BHC	B197948-BS1	LCS	0.0041912	0.0050676	mg/kg	82.7		60 - 130			3
gamma-BHC (Lindane)	B197948-BS1	LCS	0.0041243	0.0050676	mg/kg	81.4		60 - 130			3
4,4'-DDD	B197948-BS1	LCS	0.0039372	0.0050676	mg/kg	77.7		60 - 130			3
4,4'-DDE	B197948-BS1	LCS	0.0040574	0.0050676	mg/kg	80.1		60 - 130			3
4,4'-DDT	B197948-BS1	LCS	0.0036338	0.0050676	mg/kg	71.7		60 - 130			3
Dieldrin	B197948-BS1	LCS	0.0041095	0.0050676	mg/kg	81.1		70 - 130			3
Endosulfan I	B197948-BS1	LCS	0.0041858	0.0050676	mg/kg	82.6		60 - 130			3
Endosulfan II	B197948-BS1	LCS	0.0041679	0.0050676	mg/kg	82.2		60 - 130			3
Endosulfan sulfate	B197948-BS1	LCS	0.0039598	0.0050676	mg/kg	78.1		60 - 130			3
Endrin	B197948-BS1	LCS	0.0037054	0.0050676	mg/kg	73.1		60 - 130			3
Endrin aldehyde	B197948-BS1	LCS	0.0034399	0.0050676	mg/kg	67.9		60 - 130			3
Heptachlor	B197948-BS1	LCS	0.0042253	0.0050676	mg/kg	83.4		60 - 130			3
Heptachlor epoxide	B197948-BS1	LCS	0.0040291	0.0050676	mg/kg	79.5		60 - 130			3
Methoxychlor	B197948-BS1	LCS	0.0036321	0.0050676	mg/kg	71.7		60 - 130			3
TCMX (Surrogate)	B197948-BS1	LCS	0.0093176	0.010135	mg/kg	91.9		20 - 130			3
Decachlorobiphenyl (Surrogate)	B197948-BS1	LCS	0.016550	0.020270	mg/kg	81.6		40 - 130			3

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B196573-BS1	LCS	EPA-8081A	09/13/24	09/16/24 23:10	HKS	GC-17	1.007
2	B197407-BS1	LCS	EPA-8081A	09/23/24	09/24/24 21:37	HKS	GC-17	1.007
3	B197948-BS1	LCS	EPA-8081A	10/02/24	10/09/24 03:30	HKS	GC-17	1.014

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 10/11/2024 13:04
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals	R#
QC Batch ID: B196573	Used client sample: Y - Description: R3B-1, 09/06/2024 08:30											
Aldrin	MS	2414416-01	ND	0.0040269	0.0050505	mg/kg		79.7		50 - 140	J	1
	MSD	2414416-01	ND	0.0041279	0.0050505	mg/kg	2.5	81.7	30	50 - 140	J	2
alpha-BHC	MS	2414416-01	ND	0.0037037	0.0050505	mg/kg		73.3		50 - 140	J	1
	MSD	2414416-01	ND	0.0037643	0.0050505	mg/kg	1.6	74.5	30	50 - 140	J	2
beta-BHC	MS	2414416-01	ND	0.0038788	0.0050505	mg/kg		76.8		30 - 140	J	1
	MSD	2414416-01	ND	0.0040539	0.0050505	mg/kg	4.4	80.3	30	30 - 140	J	2
delta-BHC	MS	2414416-01	ND	0.0042694	0.0050505	mg/kg		84.5		50 - 140	J	1
	MSD	2414416-01	ND	0.0042290	0.0050505	mg/kg	1.0	83.7	30	50 - 140	J	2
gamma-BHC (Lindane)	MS	2414416-01	ND	0.0039259	0.0050505	mg/kg		77.7		50 - 140	J	1
	MSD	2414416-01	ND	0.0039596	0.0050505	mg/kg	0.9	78.4	30	50 - 140	J	2
4,4'-DDD	MS	**2414416-01**	**0.0065135**	**0.0073939**	**0.0050505**	**mg/kg**		**17.4**		**50 - 140**	**J,Q03**	1
	MSD	**2414416-01**	**0.0065135**	**0.0063434**	**0.0050505**	**mg/kg**	**15.3**	**-3.4**	**30**	**50 - 140**	**J,Q03**	2
4,4'-DDE	MS	**2414416-01**	**0.11443**	**0.13861**	**0.0050505**	**mg/kg**		**479**		**50 - 140**	**Q03**	1
	MSD	**2414416-01**	**0.11443**	**0.13576**	**0.0050505**	**mg/kg**	**2.1**	**422**	**30**	**50 - 140**	**Q03**	2
4,4'-DDT	MS	**2414416-01**	**0.0099122**	**0.013798**	**0.0050505**	**mg/kg**		**76.9**		**50 - 140**		1
	MSD	**2414416-01**	**0.0099122**	**0.017152**	**0.0050505**	**mg/kg**	**21.7**	**143**	**30**	**50 - 140**	**Q03**	2
Dieldrin	MS	**2414416-01**	**0.039041**	**0.047508**	**0.0050505**	**mg/kg**		**168**		**40 - 140**	**Q03**	1
	MSD	**2414416-01**	**0.039041**	**0.046875**	**0.0050505**	**mg/kg**	**1.3**	**155**	**30**	**40 - 140**	**Q03**	2
Endosulfan I	MS	2414416-01	ND	0.0061953	0.0050505	mg/kg		123		50 - 140	J	1
	MSD	2414416-01	ND	0.0061145	0.0050505	mg/kg	1.3	121	30	50 - 140	J	2
Endosulfan II	MS	2414416-01	ND	0.0053872	0.0050505	mg/kg		107		50 - 140	J	1
	MSD	2414416-01	ND	0.0047003	0.0050505	mg/kg	13.6	93.1	30	50 - 140	J	2
Endosulfan sulfate	MS	2414416-01	ND	0.0063098	0.0050505	mg/kg		125		50 - 140	J	1
	MSD	2414416-01	ND	0.0050101	0.0050505	mg/kg	23.0	99.2	30	50 - 140	J	2
Endrin	MS	2414416-01	ND	0.0060067	0.0050505	mg/kg		119		50 - 140	J	1
	MSD	2414416-01	ND	0.0046801	0.0050505	mg/kg	24.8	92.7	30	50 - 140	J	2
Endrin aldehyde	MS	2414416-01	ND	0.0047003	0.0050505	mg/kg		93.1		50 - 140	J	1
	MSD	2414416-01	ND	0.0055556	0.0050505	mg/kg	16.7	110	30	50 - 140	J	2
Heptachlor	MS	2414416-01	ND	0.0038114	0.0050505	mg/kg		75.5		60 - 140	J	1
	MSD	2414416-01	ND	0.0038519	0.0050505	mg/kg	1.1	76.3	30	60 - 140	J	2
Heptachlor epoxide	MS	**2414416-01**	**ND**	**0.0078519**	**0.0050505**	**mg/kg**		**155**		**50 - 140**	**J,Q03**	1
	MSD	**2414416-01**	**ND**	**0.0078451**	**0.0050505**	**mg/kg**	**0.1**	**155**	**30**	**50 - 140**	**J,Q03**	2
Methoxychlor	MS	2414416-01	ND	0.0046195	0.0050505	mg/kg		91.5		50 - 140	J	1
	MSD	2414416-01	ND	0.0049697	0.0050505	mg/kg	7.3	98.4	30	50 - 140	J	2
TCMX (Surrogate)	MS	2414416-01	ND	0.0075354	0.010101	mg/kg		74.6		20 - 130		1
	MSD	2414416-01	ND	0.0078855	0.010101	mg/kg	4.5	78.1		20 - 130		2

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 10/11/2024 13:04
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals	R#
QC Batch ID: B196573	Used client sample: Y - Description: R3B-1, 09/06/2024 08:30											
Decachlorobiphenyl (Surrogate)	MS	2414416-01	ND	0.016586	0.020202	mg/kg		82.1		40 - 130		1
	MSD	2414416-01	ND	0.016424	0.020202	mg/kg	1.0	81.3		40 - 130		2
QC Batch ID: B197407	Used client sample: Y - Description: R3E-2, 09/06/2024 08:20											
Aldrin	MS	**2414416-11**	**ND**	**0.0023455**	**0.0049834**	**mg/kg**		**47.1**		**50 - 140**	**J,Q03**	3
	MSD	**2414416-11**	**ND**	**0.0022914**	**0.0049669**	**mg/kg**	**2.3**	**46.1**	**30**	**50 - 140**	**J,Q03**	4
alpha-BHC	MS	**2414416-11**	**ND**	**0.0020199**	**0.0049834**	**mg/kg**		**40.5**		**50 - 140**	**J,Q03**	3
	MSD	**2414416-11**	**ND**	**0.0020397**	**0.0049669**	**mg/kg**	**1.0**	**41.1**	**30**	**50 - 140**	**J,Q03**	4
beta-BHC	MS	2414416-11	ND	ND	0.0049834	mg/kg		30.9		30 - 140	Q03	3
	MSD	2414416-11	ND	ND	0.0049669	mg/kg	1.4	31.5	30	30 - 140	Q03	4
delta-BHC	MS	**2414416-11**	**ND**	**0.0019535**	**0.0049834**	**mg/kg**		**39.2**		**50 - 140**	**J,Q03**	3
	MSD	**2414416-11**	**ND**	**0.0018940**	**0.0049669**	**mg/kg**	**3.1**	**38.1**	**30**	**50 - 140**	**J,Q03**	4
gamma-BHC (Lindane)	MS	**2414416-11**	**ND**	**0.0018538**	**0.0049834**	**mg/kg**		**37.2**		**50 - 140**	**J,Q03**	3
	MSD	**2414416-11**	**ND**	**0.0018212**	**0.0049669**	**mg/kg**	**1.8**	**36.7**	**30**	**50 - 140**	**J,Q03**	4
4,4'-DDD	MS	**2414416-11**	**0.0058796**	**0.0063455**	**0.0049834**	**mg/kg**		**9.3**		**50 - 140**	**J,Q03**	3
	MSD	**2414416-11**	**0.0058796**	**0.0063046**	**0.0049669**	**mg/kg**	**0.6**	**8.6**	**30**	**50 - 140**	**J,Q03**	4
4,4'-DDE	MS	**2414416-11**	**0.11106**	**0.090306**	**0.0049834**	**mg/kg**		**-417**		**50 - 140**	**Q03**	3
	MSD	**2414416-11**	**0.11106**	**0.090126**	**0.0049669**	**mg/kg**	**0.2**	**-422**	**30**	**50 - 140**	**Q03**	4
4,4'-DDT	MS	**2414416-11**	**0.0064080**	**0.0072558**	**0.0049834**	**mg/kg**		**17.0**		**50 - 140**	**J,Q03**	3
	MSD	**2414416-11**	**0.0064080**	**0.0077417**	**0.0049669**	**mg/kg**	**6.5**	**26.9**	**30**	**50 - 140**	**J,Q03**	4
Dieldrin	MS	**2414416-11**	**0.072856**	**0.061415**	**0.0049834**	**mg/kg**		**-230**		**40 - 140**	**Q03**	3
	MSD	**2414416-11**	**0.072856**	**0.059656**	**0.0049669**	**mg/kg**	**2.9**	**-266**	**30**	**40 - 140**	**Q03**	4
Endosulfan I	MS	**2414416-11**	**ND**	**0.0029369**	**0.0049834**	**mg/kg**		**58.9**		**50 - 140**	**J**	3
	MSD	**2414416-11**	**ND**	**0.0024437**	**0.0049669**	**mg/kg**	**18.3**	**49.2**	**30**	**50 - 140**	**J,Q03**	4
Endosulfan II	MS	2414416-11	ND	0.0055880	0.0049834	mg/kg		112		50 - 140	J	3
	MSD	2414416-11	ND	0.0060861	0.0049669	mg/kg	8.5	123	30	50 - 140	J	4
Endosulfan sulfate	MS	**2414416-11**	**ND**	**ND**	**0.0049834**	**mg/kg**		**30.5**		**50 - 140**	**Q03**	3
	MSD	**2414416-11**	**ND**	**ND**	**0.0049669**	**mg/kg**	**1.0**	**30.9**	**30**	**50 - 140**	**Q03**	4
Endrin	MS	**2414416-11**	**ND**	**0.0030432**	**0.0049834**	**mg/kg**		**61.1**		**50 - 140**	**J**	3
	MSD	**2414416-11**	**ND**	**0.0018212**	**0.0049669**	**mg/kg**	**50.2**	**36.7**	**30**	**50 - 140**	**J,Q03**	4
Endrin aldehyde	MS	**2414416-11**	**ND**	**0.0029037**	**0.0049834**	**mg/kg**		**58.3**		**50 - 140**	**J**	3
	MSD	**2414416-11**	**ND**	**0.0039868**	**0.0049669**	**mg/kg**	**31.4**	**80.3**	**30**	**50 - 140**	**J,Q02**	4
Heptachlor	MS	**2414416-11**	**ND**	**0.0019601**	**0.0049834**	**mg/kg**		**39.3**		**60 - 140**	**J,Q03**	3
	MSD	**2414416-11**	**ND**	**0.0019205**	**0.0049669**	**mg/kg**	**2.0**	**38.7**	**30**	**60 - 140**	**J,Q03**	4
Heptachlor epoxide	MS	2414416-11	ND	0.0049502	0.0049834	mg/kg		99.3		50 - 140	J	3
	MSD	2414416-11	ND	0.0049669	0.0049669	mg/kg	0.3	100	30	50 - 140	J	4
Methoxychlor	MS	**2414416-11**	**ND**	**ND**	**0.0049834**	**mg/kg**		**5.3**		**50 - 140**	**Q03**	3
	MSD	**2414416-11**	**ND**	**ND**	**0.0049669**	**mg/kg**	**111**	**18.8**	**30**	**50 - 140**	**Q03**	4

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Reported: 10/11/2024 13:04
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals	R#
QC Batch ID: B197407	Used client sample: Y - Description: R3E-2, 09/06/2024 08:20											
TCMX (Surrogate)	MS	2414416-11	ND	0.0038073	0.0099668	mg/kg		38.2		20 - 130		3
	MSD	2414416-11	ND	0.0037483	0.0099338	mg/kg	1.6	37.7		20 - 130		4
Decachlorobiphenyl (Surrogate)	MS	2414416-11	ND	0.010053	0.019934	mg/kg		50.4		40 - 130		3
	MSD	2414416-11	ND	0.0097815	0.019868	mg/kg	2.7	49.2		40 - 130		4
QC Batch ID: B197948	Used client sample: Y - Description: R3E-3, 09/06/2024 08:25											
Aldrin	MS	2414416-12	ND	0.0048956	0.0050505	mg/kg		96.9		50 - 140	J	5
	MSD	2414416-12	ND	0.0044020	0.0049834	mg/kg	10.6	88.3	30	50 - 140	J	6
alpha-BHC	MS	2414416-12	ND	0.0034714	0.0050505	mg/kg		68.7		50 - 140	J	5
	MSD	2414416-12	ND	0.0032126	0.0049834	mg/kg	7.7	64.5	30	50 - 140	J	6
beta-BHC	MS	2414416-12	ND	0.0039226	0.0050505	mg/kg		77.7		30 - 140	J	5
	MSD	2414416-12	ND	0.0034850	0.0049834	mg/kg	11.8	69.9	30	30 - 140	J	6
delta-BHC	MS	**2414416-12**	**ND**	**0.0025522**	**0.0050505**	**mg/kg**		**50.5**		**50 - 140**	**J**	5
	MSD	**2414416-12**	**ND**	**0.0021794**	**0.0049834**	**mg/kg**	**15.8**	**43.7**	**30**	**50 - 140**	**J,Q03**	6
gamma-BHC (Lindane)	MS	2414416-12	ND	0.0031684	0.0050505	mg/kg		62.7		50 - 140	J	5
	MSD	2414416-12	ND	0.0028505	0.0049834	mg/kg	10.6	57.2	30	50 - 140	J	6
4,4'-DDD	MS	2414416-12	0.0021424	0.0061279	0.0050505	mg/kg		78.9		50 - 140		5
	MSD	2414416-12	0.0021424	0.0055150	0.0049834	mg/kg	10.5	67.7	30	50 - 140		6
4,4'-DDE	MS	**2414416-12**	**0.063129**	**0.073081**	**0.0050505**	**mg/kg**		**197**		**50 - 140**	**Q03**	5
	MSD	**2414416-12**	**0.063129**	**0.064203**	**0.0049834**	**mg/kg**	**12.9**	**21.5**	**30**	**50 - 140**	**Q03**	6
4,4'-DDT	MS	2414416-12	0.0023146	0.0074983	0.0050505	mg/kg		103		50 - 140		5
	MSD	2414416-12	0.0023146	0.0062292	0.0049834	mg/kg	18.5	78.6	30	50 - 140		6
Dieldrin	MS	**2414416-12**	**0.042007**	**0.054118**	**0.0050505**	**mg/kg**		**240**		**40 - 140**	**Q03**	5
	MSD	**2414416-12**	**0.042007**	**0.047774**	**0.0049834**	**mg/kg**	**12.5**	**116**	**30**	**40 - 140**		6
Endosulfan I	MS	**2414416-12**	**ND**	**0.0032458**	**0.0050505**	**mg/kg**		**64.3**		**50 - 140**	**J**	5
	MSD	**2414416-12**	**ND**	**0.0022957**	**0.0049834**	**mg/kg**	**34.3**	**46.1**	**30**	**50 - 140**	**J,Q03, V11**	6
Endosulfan II	MS	**2414416-12**	**ND**	**0.0043569**	**0.0050505**	**mg/kg**		**86.3**		**50 - 140**	**J**	5
	MSD	**2414416-12**	**ND**	**0.0031993**	**0.0049834**	**mg/kg**	**30.6**	**64.2**	**30**	**50 - 140**	**J,Q02**	6
Endosulfan sulfate	MS	**2414416-12**	**ND**	**0.0026869**	**0.0050505**	**mg/kg**		**53.2**		**50 - 140**	**J**	5
	MSD	**2414416-12**	**ND**	**0.0021894**	**0.0049834**	**mg/kg**	**20.4**	**43.9**	**30**	**50 - 140**	**J,Q03**	6
Endrin	MS	2414416-12	ND	0.0053434	0.0050505	mg/kg		106		50 - 140		5
	MSD	2414416-12	ND	0.0045482	0.0049834	mg/kg	16.1	91.3	30	50 - 140	J	6
Endrin aldehyde	MS	2414416-12	ND	0.0052694	0.0050505	mg/kg		104		50 - 140		5
	MSD	2414416-12	ND	0.0042193	0.0049834	mg/kg	22.1	84.7	30	50 - 140	J	6
Heptachlor	MS	2414416-12	ND	0.0040505	0.0050505	mg/kg		80.2		60 - 140	J	5
	MSD	2414416-12	ND	0.0036047	0.0049834	mg/kg	11.6	72.3	30	60 - 140	J	6
Heptachlor epoxide	MS	**2414416-12**	**ND**	**0.0088249**	**0.0050505**	**mg/kg**		**175**		**50 - 140**	**Q03**	5
	MSD	**2414416-12**	**ND**	**0.0054352**	**0.0049834**	**mg/kg**	**47.5**	**109**	**30**	**50 - 140**	**Q02**	6

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 10/11/2024 13:04
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Organochlorine Pesticides (EPA Method 8081A)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals	R#
QC Batch ID: B197948	Used client sample: Y - Description: R3E-3, 09/06/2024 08:25											
Methoxychlor	MS	**2414416-12**	**ND**	**0.0013064**	**0.0050505**	**mg/kg**		**25.9**		**50 - 140**	**J,Q03**	5
	MSD	**2414416-12**	**ND**	**0.0028405**	**0.0049834**	**mg/kg**	**74.0**	**57.0**	**30**	**50 - 140**	**J,Q02**	6
TCMX (Surrogate)	MS	2414416-12	ND	0.0098013	0.010101	mg/kg		97.0		20 - 130		5
	MSD	2414416-12	ND	0.0090365	0.0099668	mg/kg	8.1	90.7		20 - 130		6
Decachlorobiphenyl (Surrogate)	MS	2414416-12	ND	0.022424	0.020202	mg/kg		111		40 - 130		5
	MSD	2414416-12	ND	0.018236	0.019934	mg/kg	20.6	91.5		40 - 130		6

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B196573-MS1	MS	EPA-8081A	09/13/24	09/17/24 08:59	HKS	GC-17	20.202
2	B196573-MSD1	MSD	EPA-8081A	09/13/24	09/17/24 09:16	HKS	GC-17	20.202
3	B197407-MS1	MS	EPA-8081A	09/23/24	09/26/24 09:52	HKS	GC-17	19.934
4	B197407-MSD1	MSD	EPA-8081A	09/23/24	09/26/24 10:09	HKS	GC-17	19.868
5	B197948-MS1	MS	EPA-8081A	10/02/24	10/09/24 02:40	HKS	GC-17	10.101
6	B197948-MSD1	MSD	EPA-8081A	10/02/24	10/09/24 02:56	HKS	GC-17	9.967

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1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 10/11/2024 13:04
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals	Run #
QC Batch ID: B196628							
Antimony	B196628-BLK1	ND	mg/kg	5.0	0.33		1
Arsenic	B196628-BLK1	ND	mg/kg	1.0	0.40		1
Barium	B196628-BLK1	ND	mg/kg	0.50	0.18		1
Beryllium	B196628-BLK1	ND	mg/kg	0.50	0.047		1
Cadmium	B196628-BLK1	ND	mg/kg	0.50	0.052		1
Chromium	B196628-BLK1	ND	mg/kg	0.50	0.050		1
Cobalt	B196628-BLK1	ND	mg/kg	2.5	0.098		1
Copper	B196628-BLK1	ND	mg/kg	1.0	0.050		1
Lead	B196628-BLK1	ND	mg/kg	2.5	0.41		1
Molybdenum	B196628-BLK1	ND	mg/kg	2.5	0.050		1
Nickel	B196628-BLK1	ND	mg/kg	0.50	0.15		1
Selenium	B196628-BLK1	ND	mg/kg	1.0	0.98		1
Silver	B196628-BLK1	ND	mg/kg	0.50	0.067		1
Thallium	B196628-BLK1	ND	mg/kg	5.0	0.64		1
Vanadium	B196628-BLK1	ND	mg/kg	0.50	0.11		1
Zinc	B196628-BLK1	ND	mg/kg	2.5	0.087		1
QC Batch ID: B197026							
Mercury	B197026-BLK1	ND	mg/kg	0.16	0.016		2

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B196628-BLK1	PB	EPA-6010B	09/10/24	09/12/24 00:00	SDA	ICP6	1
2	B197026-BLK1	PB	EPA-7471A	09/17/24	09/18/24 10:01	TMT	CETAC3	1

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Orange, CA 92868

Reported: 10/11/2024 13:04
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals	Run #
QC Batch ID: B196628											
Antimony	B196628-BS1	LCS	35.500	40.000	mg/kg	88.8		75 - 125			1
Arsenic	B196628-BS1	LCS	18.345	20.000	mg/kg	91.7		75 - 125			1
Barium	B196628-BS1	LCS	39.615	40.000	mg/kg	99.0		75 - 125			1
Beryllium	B196628-BS1	LCS	19.179	20.000	mg/kg	95.9		75 - 125			1
Cadmium	B196628-BS1	LCS	19.300	20.000	mg/kg	96.5		75 - 125			1
Chromium	B196628-BS1	LCS	19.510	20.000	mg/kg	97.6		75 - 125			1
Cobalt	B196628-BS1	LCS	19.480	20.000	mg/kg	97.4		75 - 125			1
Copper	B196628-BS1	LCS	38.230	40.000	mg/kg	95.6		75 - 125			1
Lead	B196628-BS1	LCS	39.210	40.000	mg/kg	98.0		75 - 125			1
Molybdenum	B196628-BS1	LCS	19.545	20.000	mg/kg	97.7		75 - 125			1
Nickel	B196628-BS1	LCS	38.915	40.000	mg/kg	97.3		75 - 125			1
Selenium	B196628-BS1	LCS	17.770	20.000	mg/kg	88.8		75 - 125			1
Silver	B196628-BS1	LCS	9.3300	10.000	mg/kg	93.3		75 - 125			1
Thallium	B196628-BS1	LCS	39.020	40.000	mg/kg	97.6		75 - 125			1
Vanadium	B196628-BS1	LCS	19.675	20.000	mg/kg	98.4		75 - 125			1
Zinc	B196628-BS1	LCS	47.405	50.000	mg/kg	94.8		75 - 125			1
QC Batch ID: B197026											
Mercury	B197026-BS1	LCS	0.80320	0.80000	mg/kg	100		80 - 120			2

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B196628-BS1	LCS	EPA-6010B	09/10/24	09/12/24 00:02	SDA	ICP6	1
2	B197026-BS1	LCS	EPA-7471A	09/17/24	09/18/24 10:03	TMT	CETAC3	1

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Kimley-Horn and Associates, Inc
1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 10/11/2024 13:04
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals	R#
QC Batch ID: B196628	Used client sample: Y - Description: R3N-1, 09/06/2024 07:40											
Antimony	DUP	2414416-04	ND	ND		mg/kg			20			1
	MS	2414416-04	ND	16.590	40.000	mg/kg		41.5		16 - 119		2
	MSD	2414416-04	ND	16.195	40.000	mg/kg	2.4	40.5	20	16 - 119		3
Arsenic	DUP	**2414416-04**	**1.8700**	**1.3750**		**mg/kg**	**30.5**		**20**		**A02**	1
	MS	**2414416-04**	**1.8700**	**19.535**	**20.000**	**mg/kg**		**88.3**		**75 - 125**		2
	MSD	**2414416-04**	**1.8700**	**19.650**	**20.000**	**mg/kg**	**0.6**	**88.9**	**20**	**75 - 125**		3
Barium	DUP	2414416-04	87.465	83.980		mg/kg	4.1		20			1
	MS	2414416-04	87.465	129.82	40.000	mg/kg		106		75 - 125		2
	MSD	2414416-04	87.465	131.78	40.000	mg/kg	1.5	111	20	75 - 125		3
Beryllium	DUP	2414416-04	0.16405	0.16025		mg/kg	2.3		20		J	1
	MS	2414416-04	0.16405	18.115	20.000	mg/kg		89.8		75 - 125		2
	MSD	2414416-04	0.16405	18.115	20.000	mg/kg	0.0	89.8	20	75 - 125		3
Cadmium	DUP	2414416-04	0.47000	0.46500		mg/kg	1.1		20		J	1
	MS	2414416-04	0.47000	18.110	20.000	mg/kg		88.2		75 - 125		2
	MSD	2414416-04	0.47000	18.120	20.000	mg/kg	0.1	88.2	20	75 - 125		3
Chromium	DUP	2414416-04	14.635	13.560		mg/kg	7.6		20			1
	MS	2414416-04	14.635	34.225	20.000	mg/kg		98.0		75 - 125		2
	MSD	2414416-04	14.635	34.235	20.000	mg/kg	0.0	98.0	20	75 - 125		3
Cobalt	DUP	2414416-04	5.1500	5.0350		mg/kg	2.3		20			1
	MS	2414416-04	5.1500	23.470	20.000	mg/kg		91.6		75 - 125		2
	MSD	2414416-04	5.1500	23.475	20.000	mg/kg	0.0	91.6	20	75 - 125		3
Copper	DUP	2414416-04	9.2500	9.2650		mg/kg	0.2		20			1
	MS	2414416-04	9.2500	47.405	40.000	mg/kg		95.4		75 - 125		2
	MSD	2414416-04	9.2500	47.790	40.000	mg/kg	0.8	96.4	20	75 - 125		3
Lead	DUP	2414416-04	2.0200	1.9400		mg/kg	4.0		20		J	1
	MS	2414416-04	2.0200	37.610	40.000	mg/kg		89.0		75 - 125		2
	MSD	2414416-04	2.0200	37.380	40.000	mg/kg	0.6	88.4	20	75 - 125		3
Molybdenum	DUP	2414416-04	0.51000	0.49500		mg/kg	3.0		20		J	1
	MS	2414416-04	0.51000	18.365	20.000	mg/kg		89.3		75 - 125		2
	MSD	2414416-04	0.51000	18.450	20.000	mg/kg	0.5	89.7	20	75 - 125		3
Nickel	DUP	2414416-04	7.7650	7.6600		mg/kg	1.4		20			1
	MS	2414416-04	7.7650	44.020	40.000	mg/kg		90.6		75 - 125		2
	MSD	2414416-04	7.7650	44.230	40.000	mg/kg	0.5	91.2	20	75 - 125		3
Selenium	DUP	2414416-04	ND	ND		mg/kg			20			1
	MS	2414416-04	ND	16.370	20.000	mg/kg		81.8		75 - 125		2
	MSD	2414416-04	ND	16.825	20.000	mg/kg	2.7	84.1	20	75 - 125		3
Silver	DUP	2414416-04	ND	ND		mg/kg			20			1
	MS	2414416-04	ND	9.0300	10.000	mg/kg		90.3		75 - 125		2
	MSD	2414416-04	ND	9.0400	10.000	mg/kg	0.1	90.4	20	75 - 125		3

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1100 Town and Country Road, Suite 700
Orange, CA 92868

Reported: 10/11/2024 13:04
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals	R#
QC Batch ID: B196628	Used client sample: Y - Description: R3N-1, 09/06/2024 07:40											
Thallium	DUP	2414416-04	ND	ND		mg/kg			20			1
	MS	2414416-04	ND	33.015	40.000	mg/kg		82.5		75 - 125		2
	MSD	2414416-04	ND	32.705	40.000	mg/kg	0.9	81.8	20	75 - 125		3
Vanadium	DUP	2414416-04	26.335	25.525		mg/kg	3.1		20			1
	MS	2414416-04	26.335	49.660	20.000	mg/kg		117		75 - 125		2
	MSD	2414416-04	26.335	50.270	20.000	mg/kg	1.2	120	20	75 - 125		3
Zinc	DUP	2414416-04	51.045	50.225		mg/kg	1.6		20			1
	MS	2414416-04	51.045	95.850	50.000	mg/kg		89.6		75 - 125		2
	MSD	2414416-04	51.045	96.135	50.000	mg/kg	0.3	90.2	20	75 - 125		3
QC Batch ID: B197026	Used client sample: Y - Description: R3B-1, 09/06/2024 08:30											
Mercury	DUP	2414416-01	ND	ND		mg/kg			20			4
	MS	2414416-01	ND	0.79524	0.79365	mg/kg		100		80 - 120		5
	MSD	2414416-01	ND	0.81587	0.79365	mg/kg	2.6	103	20	80 - 120		6

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B196628-DUP1	DUP	EPA-6010B	09/10/24	09/12/24 00:06	SDA	ICP6	1
2	B196628-MS1	MS	EPA-6010B	09/10/24	09/12/24 00:09	SDA	ICP6	1
3	B196628-MSD1	MSD	EPA-6010B	09/10/24	09/12/24 00:11	SDA	ICP6	1
4	B197026-DUP1	DUP	EPA-7471A	09/17/24	09/18/24 10:06	TMT	CETAC3	0.992
5	B197026-MS1	MS	EPA-7471A	09/17/24	09/18/24 10:08	TMT	CETAC3	0.992
6	B197026-MSD1	MSD	EPA-7471A	09/17/24	09/18/24 10:10	TMT	CETAC3	0.992

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Orange, CA 92868

Reported: 10/11/2024 13:04
Project: Coachella
Project Number: Coachella
Project Manager: Cassie Bretschger

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected
PQL	Practical Quantitation Limit
A02	The difference between duplicate readings is less than the quantitation limit.
A10	Detection and quantitation limits were raised due to matrix interference.
L01	The Laboratory Control Sample Water (LCSW) recovery is not within laboratory established control limits.
Q02	Matrix spike precision is not within the control limits.
Q03	Matrix spike recovery(s) was(were) not within the control limits.
S05	The sample holding time was exceeded.
V11	The Continuing Calibration Verification (CCV) recovery was not within established control limits.

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COVA

NOISE AND VIBRATION ANALYSIS

Prepared By:

Bill Maddux, INCE | bmaddux@urbanxroads.com

Reference Number
16552-02

Agency
City of Coachella

Date
September 17, 2025

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LIST OF ABBREVIATED TERMS

(1)	Reference
ANSI	American National Standards Institute
Calveno	California Vehicle Noise
CEQA	California Environmental Quality Act
CNEL	Community Noise Equivalent Level
dBA	A-weighted decibels
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
INCE	Institute of Noise Control Engineering
L_{eq}	Equivalent continuous (average) sound level
L_{max}	Maximum level measured over the time interval
Lw	Sound power level
mph	Miles per hour
PPV	Peak Particle Velocity
Project	COVA
REMEL	Reference Energy Mean Emission Level
RMS	Root-mean-square
VdB	Vibration Decibels

EXECUTIVE SUMMARY

Urban Crossroads, Inc. has prepared this noise study to determine the noise exposure and identify any necessary noise mitigation measures for the COVA development (Project) in the City of Coachella. The Project consists of 276 units and other residential amenities. This noise study has been prepared to satisfy applicable City of Coachella noise standards and significance criteria based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines. (1)

The results of this Noise and Vibration Analysis are summarized below based on the significance criteria in Section 4 of this report, consistent with Appendix G of the California Environmental Quality Act (CEQA) Guidelines. (1) Table ES-1 shows the findings of significance for each potential noise and/or vibration impact under CEQA before and after any required mitigation measures.

TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS

Analysis	Report Section	Significance Findings	
		Unmitigated	Mitigated
Off-Site Traffic Noise	6	Less Than Significant	-
Operational Noise	8	Less Than Significant	-
Construction Noise	9	Less Than Significant	-
Construction Vibration	9	Less Than Significant	-

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1 INTRODUCTION

This Noise and Vibration Analysis has been completed to determine the noise impacts associated with the development of the proposed COVA ("Project"). This noise and vibration analysis briefly describes the Project, provides information regarding noise fundamentals, sets out the local regulatory setting, presents the study methods and procedures for noise analysis, evaluates the future exterior noise environment, potential off-site traffic impacts, the Project-related long-term stationary-source operational noise, and Project-related short-term construction noise and vibration impacts.

1.1 SITE LOCATION

The Project is located at the southwest corner of the Van Buren Street and Avenue 52 intersection in the City of Coachella. The Project is surrounded by agricultural uses to the north, east, south, and west, as shown in Exhibit 1-1.

1.2 PROJECT DESCRIPTION

The proposed Project consists of 276 units: 76 two-story single-family residences (SFR) with 4 to 6 bedrooms, 100 stacked flat units at three stories with 3 to 4 bedrooms, and 100 hotel casitas and cottages for short-term accommodations. The development includes a crystal lagoon and other residential amenities, including restaurants, a beach club, event space, pop-up shops, outdoor amphitheater, pools, recreation areas, and kids' play spaces. A preliminary site plan for the Project is shown in Exhibit 1-2.

EXHIBIT 1-1: PROJECT LOCATION

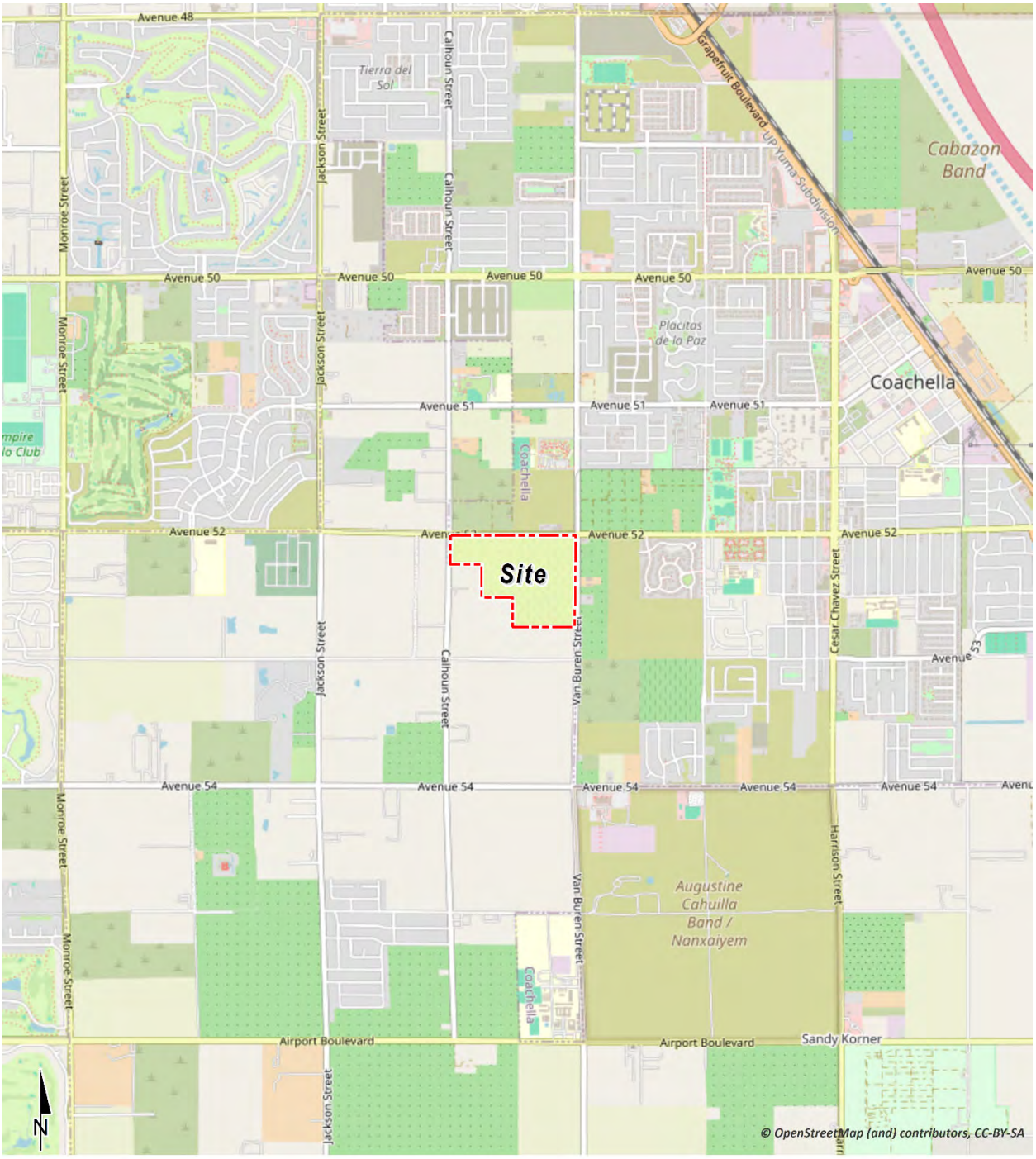
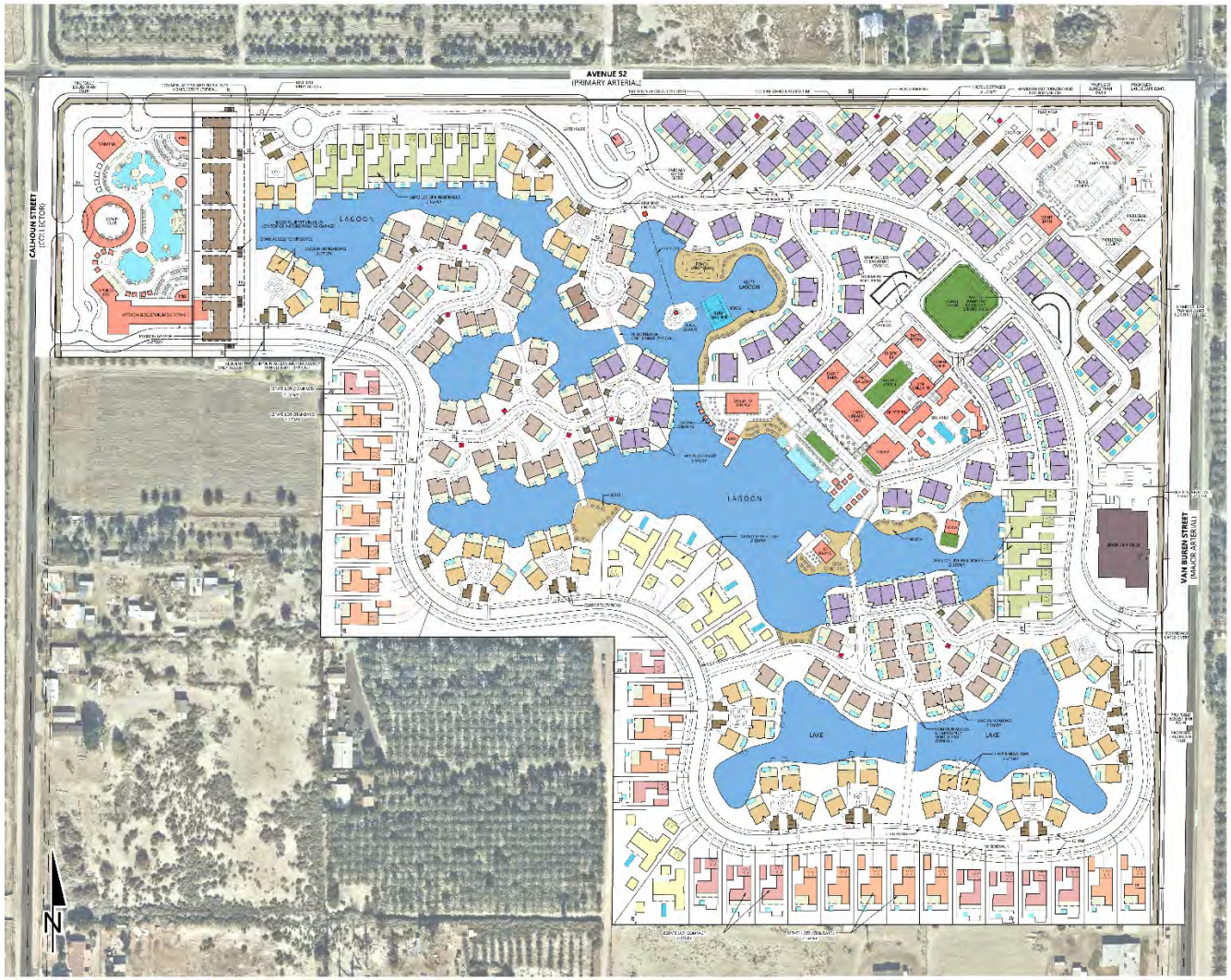


EXHIBIT 1-2: SITE PLAN



THE CITY OF COACHELLA OF THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

TECHNICAL SITE PLAN

EXHIBIT DATE: JULY 3, 2025

REVISIONS

NO.	DATE	DESCRIPTION

DATA TABLE

APPLICANT / LAND OWNER	RELEVANT COACHELLA OWNER, LLC		
ADDRESS	6417 SELMA AVENUE HOLLYWOOD, CALIFORNIA 90028		
CONTACT	GRANT KING		
EXHIBIT PREPARER	MSA CONSULTING, INC.		
ADDRESS	34700 BOB HOPE DRIVE RANCHO MIRAGE, CALIFORNIA 92270		
CONTACT	PAUL DEPALATIS, AICP	TELEPHONE	(760) 320-9811
SOURCE OF TOPOGRAPHY	INLAND AERIAL SURVEYS, INC.		
ADDRESS	7117 ARLINGTON AVENUE, SUITE A RIVERSIDE, CALIFORNIA 92503		
DATE OF TOPOGRAPHY	DECEMBER 22, 2021	TELEPHONE	(951) 687-4252
ASSESSOR'S PARCEL NUMBERS	780-040-001, 780-040-003, 780-060-001 & 780-060-002		

LEGAL DESCRIPTION

BEING A PORTION OF NE 1/4 OF SECTION 12, TOWNSHIP 6 SOUTH, RANGE 7 EAST, SAN BERNARDINO MERIDIAN.

LAND USE DESCRIPTION	ACREAGE
EXISTING GROSS AREA	87.16 AC.
PROPOSED PUBLIC RIGHT OF WAY DEDICATION (CALHOUN STREET, AVENUE 52 & VAN BUREN STREET)	6.02 AC.
PROPOSED NET AREA	81.14 AC.

PROJECT STATISTICS

SINGLE-FAMILY RESIDENTIAL	LOT SIZE	# BEDS	# STORIES	# UNITS	FLOOR AREA (SF)
GRAND ESTATE LOT	100' X 160'	6	2	6	8,665 SF/UNIT [1]
ESTATE LOT (STANDARD)+ADU [4]	75' X 150	4-5	2	17	4,721 SF/UNIT [1]
ESTATE LOT (COMPACT)	75' X 150	4-5	2	10	4,403 SF/UNIT [1]
ZERO LOT LINE RESIDENCE	50' X 150	4-5	2	12	4,585 SF/UNIT [1]
LAGOON BUNGALOW	NA	3-4	2	61	2,600 SF/UNIT [1]
LAKE BUNGALOW	NA	3-4	2	51	2,600 SF/UNIT [1]
TOTAL				157	613,932 SF [3]
CONDO HOTEL					
HOTEL COTTAGES (1ST FLR.)	NA	1	1	120	1,248 SF/UNIT
HOTEL COTTAGES (2ND F.R.) LOCKOFF	NA	1	1	120	1,149 SF/UNIT
TOTAL				240	287,640 SF
BEACH CLUB					
BEACH CLUB VIP VILLAS	NA	1	1	5	4,629 SF/UNIT [1]
TOTAL					32,245 SF [2]
MAIN CLUB AMENITIES					266,511 SF [3]
PUBLIC BEACH AREA					16,173 SF [3]
SPORTS CENTER					5,100 SF [2]

PARKING PROVIDED	CAR SPACES	PARKING RATIO	CART SPACES
HOTEL (2-LEVEL BASEMENT PARKING GARAGE)	360		-
BEACH CLUB (2 LEVEL PARKING GARAGE)	148		-
HOTEL COTTAGES	47	0.2 SPACES/UNIT	50
BUNGALOWS	56	0.5 SPACES/UNIT	104
ZERO LOT LINE LOTS	24	2.0 SPACES/UNIT	-
ESTATE LOTS	54	2.0 SPACES/UNIT	27
GRAND ESTATE LOTS	12	2.0 SPACES/UNIT	12
TOTAL	696		193

NOTES :

1. INTERIOR FLOOR AREA ONLY, DOESN'T INCLUDE EXT. COVERED AREA AND ADU AREA
2. INCLUDES EXT. COVERED AREA AND ADU AREA
3. PLEASE REFER TO LANDSCAPE PACKAGE FOR COMPLETE BLDG. PROGRAMMING
4. ADU FLOOR AREA, 518 SF

WATER AMENITIES	AREA
HOTEL LAGOON	9.4 ACRES
LAKE	2.5 ACRES
BEACH CLUB LAGOON	0.4 ACRES
TOTAL	12.0 ACRES

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2 FUNDAMENTALS

Noise is simply defined as "unwanted sound." Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm, or when it has adverse effects on health. Noise is measured on a logarithmic scale of sound pressure level known as a decibel (dB). A-weighted decibels (dBA) approximate the subjective response of the human ear to a broad frequency noise source by discriminating against very low and very high frequencies of the audible spectrum. They are adjusted to reflect only those frequencies that are audible to the human ear. Exhibit 2-1 presents a summary of the typical noise levels and their subjective loudness and effects that are described in more detail below.

EXHIBIT 2-1: TYPICAL NOISE LEVELS

COMMON OUTDOOR ACTIVITIES	COMMON INDOOR ACTIVITIES	A - WEIGHTED SOUND LEVEL dBA	SUBJECTIVE LOUDNESS	EFFECTS OF NOISE
THRESHOLD OF PAIN		140	INTOLERABLE OR DEAFENING	HEARING LOSS
NEAR JET ENGINE		130		
		120		
JET FLY-OVER AT 300m (1000 ft)	ROCK BAND	110		
LOUD AUTO HORN		100	VERY NOISY	
GAS LAWN MOWER AT 1m (3 ft)		90		
DIESEL TRUCK AT 15m (50 ft), at 80 km/hr (50 mph)	FOOD BLENDER AT 1m (3 ft)	80		SPEECH INTERFERENCE
NOISY URBAN AREA, DAYTIME	VACUUM CLEANER AT 3m (10 ft)	70	LOUD	
HEAVY TRAFFIC AT 90m (300 ft)	NORMAL SPEECH AT 1m (3 ft)	60		
QUIET URBAN DAYTIME	LARGE BUSINESS OFFICE	50	MODERATE	SLEEP DISTURBANCE
QUIET URBAN NIGHTTIME	THEATER, LARGE CONFERENCE ROOM (BACKGROUND)	40		
QUIET SUBURBAN NIGHTTIME	LIBRARY	30	FAINT	NO EFFECT
QUIET RURAL NIGHTTIME	BEDROOM AT NIGHT, CONCERT HALL (BACKGROUND)	20		
	BROADCAST/RECORDING STUDIO	10	VERY FAINT	
LOWEST THRESHOLD OF HUMAN HEARING	LOWEST THRESHOLD OF HUMAN HEARING	0		

Source: Environmental Protection Agency Office of Noise Abatement and Control, Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety (EPA/ONAC 550/9-74-004) March 1974.

2.1 RANGE OF NOISE

Since the range of intensities that the human ear can detect is so large, the scale frequently used to measure intensity is a scale based on multiples of 10, the logarithmic scale. The scale for measuring intensity is the decibel scale. Each interval of 10 decibels indicates a sound energy ten times greater than before, which is perceived by the human ear as being roughly twice as loud. (2) The most common sounds vary between 40 dBA (very quiet) to 100 dBA (very loud). Normal conversation at three feet is roughly at 60 dBA, while loud jet engine noises equate to 110 dBA at approximately 1,000 feet, which can cause serious discomfort. (3) Another important aspect of noise is the duration of the sound and the way it is described and distributed in time.

2.2 NOISE DESCRIPTORS

Environmental noise descriptors are generally based on averages, rather than instantaneous noise levels. The most used metric is the equivalent level (Leq). Equivalent sound levels are not measured directly but are calculated from sound pressure levels typically measured in A-weighted decibels (dBA). The equivalent sound level (Leq) represents a steady state sound level containing the same total energy as a time-varying signal over a given sample period and is commonly used to describe the "average" noise levels within the environment.

Peak hour or average noise levels, while useful, do not completely describe a given noise environment. Noise levels lower than peak hour may be disturbing if they occur during times when quiet is most desirable, namely evening and nighttime (sleeping) hours. To account for this, the Community Noise Equivalent Level (CNEL), representing a composite 24-hour noise level, is utilized. The CNEL is the weighted average of the intensity of a sound, with corrections for time of day, and averaged over 24 hours. The time-of-day corrections require the addition of 5 decibels to dBA Leq sound levels in the evening from 7:00 p.m. to 10:00 p.m., and the addition of 10 decibels to dBA Leq sound levels at night between 10:00 p.m. and 7:00 a.m. These additions are made to account for the noise-sensitive time periods during the evening and night hours when noise can become more intrusive. CNEL does not represent the actual sound level heard at any time, but rather represents the total sound exposure. The City of Coachella relies on the 24-hour CNEL level to assess land use compatibility with transportation-related noise sources.

2.3 SOUND PROPAGATION

When sound propagates over a distance, it changes in level and frequency content. The way noise reduces with distance depends on the following factors.

2.3.1 Geometric Spreading

Sound from a localized source (i.e., a stationary point source) propagates uniformly outward in a spherical pattern. The sound level attenuates (or decreases) at a rate of 6 dB for each doubling of distance from a point source. Highways consist of several localized noise sources on a defined path and hence can be treated as a line source, which approximates the effect of several point sources. Noise from a line source propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of 3 dB for each doubling of distance from a line source. (2)

2.3.2 Ground Absorption

The propagation path of noise from a highway to a receiver is usually very close to the ground. Noise attenuation from ground absorption and reflective wave canceling adds to the attenuation associated with geometric spreading. Traditionally, the excess attenuation has also been expressed in terms of attenuation per doubling of distance. This approximation is usually sufficiently accurate for distances of less than 200 ft. For acoustically hard sites (i.e., sites with a reflective surface between the source and the receiver, such as a parking lot or body of water), no excess ground attenuation is assumed. For acoustically absorptive or soft sites (i.e., those sites with an absorptive ground surface between the source and the receiver such as soft dirt, grass, or scattered bushes and trees), an excess ground attenuation value of 1.5 dB per doubling of distance is normally assumed.

When added to the cylindrical spreading, the excess ground attenuation results in an overall drop-off rate of 4.5 dB per doubling of distance from a line source. (4)

2.3.3 Atmospheric Effects

Receivers located downwind from a source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lowered noise levels. Sound levels can be increased at large distances (e.g., more than 500 feet) due to atmospheric temperature inversion (i.e., increasing temperature with elevation). Other factors such as air temperature, humidity, and turbulence can also have significant effects. (2)

2.3.4 Shielding

A large object or barrier in the path between a noise source and a receiver can substantially attenuate noise levels at the receiver. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Shielding by trees and other such vegetation typically only has an "out of sight, out of mind" effect. That is, the perception of noise impact tends to decrease when vegetation blocks the line-of-sight to nearby residents. However, for vegetation to provide a substantial, or even noticeable, noise reduction, the vegetation area must be at least 15 feet in height, 100 feet wide and dense enough to completely obstruct the line-of-sight between the source and the receiver. This size of vegetation may provide up to 5 dBA of noise reduction. The Federal Highway Administration (FHWA) does not consider the planting of vegetation to be a noise abatement measure. (5)

2.4 Noise Control

Noise control is the process of obtaining an acceptable noise environment for an observation point or receiver by controlling the noise source, transmission path, receiver, or all three. This concept is known as the source-path-receiver concept. In general, noise control measures can be applied to these three elements.

2.5 Noise Barrier Attenuation

Effective noise barriers can reduce noise levels by 10 to 15 dBA, cutting the loudness of traffic noise in half. A noise barrier is most effective when placed close to the noise source or receiver. Noise barriers, however, do have limitations. For a noise barrier to work, it must block the line-of-sight path of sound from the noise source.

2.6 Land Use Compatibility With Noise

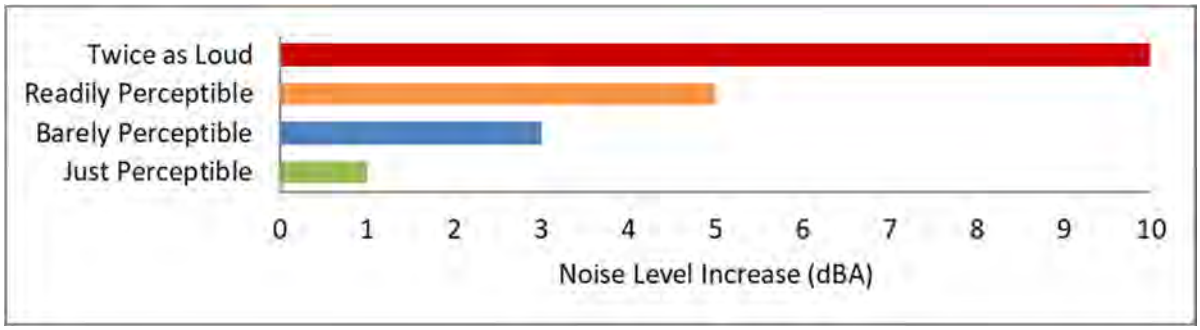
Some land uses are more tolerant of noise than others. For example, schools, hospitals, churches, and residences are more sensitive to noise intrusion than commercial or industrial developments and related activities. As ambient noise levels affect the perceived amenity or livability of a development, so too can the mismanagement of noise impacts impair the economic health and growth potential of a community by reducing the area's desirability as a place to live, shop and work. For this reason, land use compatibility with the noise environment is an important consideration in the planning and design process. The FHWA encourages State and Local government to regulate land development in such a way that noise-sensitive land uses are either prohibited from being located adjacent to a highway, or that the developments are planned, designed, and constructed in such a way that noise impacts are minimized. (6)

2.7 Community Response to Noise

Approximately sixteen percent of the population has a very low tolerance for noise and will object to any noise not of their making. Consequently, even in the quietest environment, some complaints may occur. Twenty to thirty percent of the population will not complain even in very severe noise environments. (7 pp. 8-6) Thus, a variety of reactions can be expected from people exposed to any given noise environment.

Surveys have shown that community response to noise varies from no reaction to vigorous action for newly introduced noises averaging from 10 dB below existing to 25 dB above existing. (8) According to research originally published in the Noise Effects Handbook (7), the percentage of high annoyance ranges from approximately 0 percent at 45 dB or less, 10 percent are highly annoyed around 60 dB, and increases rapidly to approximately 70 percent being highly annoyed at approximately 85 dB or greater. Despite this variability in behavior on an individual level, the population can be expected to exhibit the following responses to changes in noise levels as shown on Exhibit 2-2. A change of 3 dBA is considered barely perceptible, and changes of 5 dBA are considered readily perceptible. (4)

Exhibit 2-2: Noise Level Increase Perception



2.8 Vibration

Per the Federal Transit Administration (FTA) *Transit Noise and Vibration Impact Assessment Manual*, vibration is the periodic oscillation of a medium or object. The rumbling sound caused by the vibration of room surfaces is called structure-borne noise. Sources of ground-borne vibrations

include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or human-made causes (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, such as factory machinery, or transient, such as explosions. As is the case with airborne sound, ground-borne vibrations may be described by amplitude and frequency.

Additionally, in contrast to airborne noise, ground-borne vibration outdoors is not a common environmental problem, and annoyance from ground-borne vibration is almost exclusively an indoor phenomenon (8). Therefore, the effects of vibrations should only be evaluated at a structure, and the effects of the building structure on the vibration should be considered. Wood-frame buildings, such as typical residential structures, are more easily excited by ground vibration than heavier buildings. In contrast, large masonry buildings with spread footings have a low response to ground vibration (8). In general, the heavier a building is, the lower the response will be to the incident vibration energy. However, all structures reduce vibration levels due to the coupling of the building to the soil.

There are several methods used to quantify vibration levels. Peak Particle Velocity (PPV) is defined as the maximum instantaneous peak of a vibration signal and is most commonly used to evaluate the impact of vibration on buildings (9) (8). However, PPV is not always suitable for assessing human response (e.g., annoyance), as the human body does not respond instantly to vibration signals. Instead, it responds to the average amplitude, more accurately represented by the Root Mean Square (RMS) value of the vibration (8).

RMS is defined as the square root of the average of the squared signal amplitude and is commonly used to evaluate human exposure to vibration. RMS and PPV are mathematically related—RMS is typically about 70% of the PPV for certain waveforms (10) (11). However, deriving RMS from PPV requires knowing the full waveform or making assumptions (e.g., sinusoidal or steady-state signals). Without this information, converting PPV to RMS introduces uncertainty and provides limited insight, especially in cases involving transient or impact vibrations (12).

This distinction is important because human annoyance to vibration is often triggered by abrupt, intermittent events, rather than sustained energy levels. Construction-related vibrations are typically impulsive and broadband, in contrast to the continuous, tonal vibrations associated with transit systems. The FTA's RMS-based criteria were developed with train activity in mind and are not well-suited for construction vibration, where perception is driven by factors like suddenness, impact, and repetition (8).

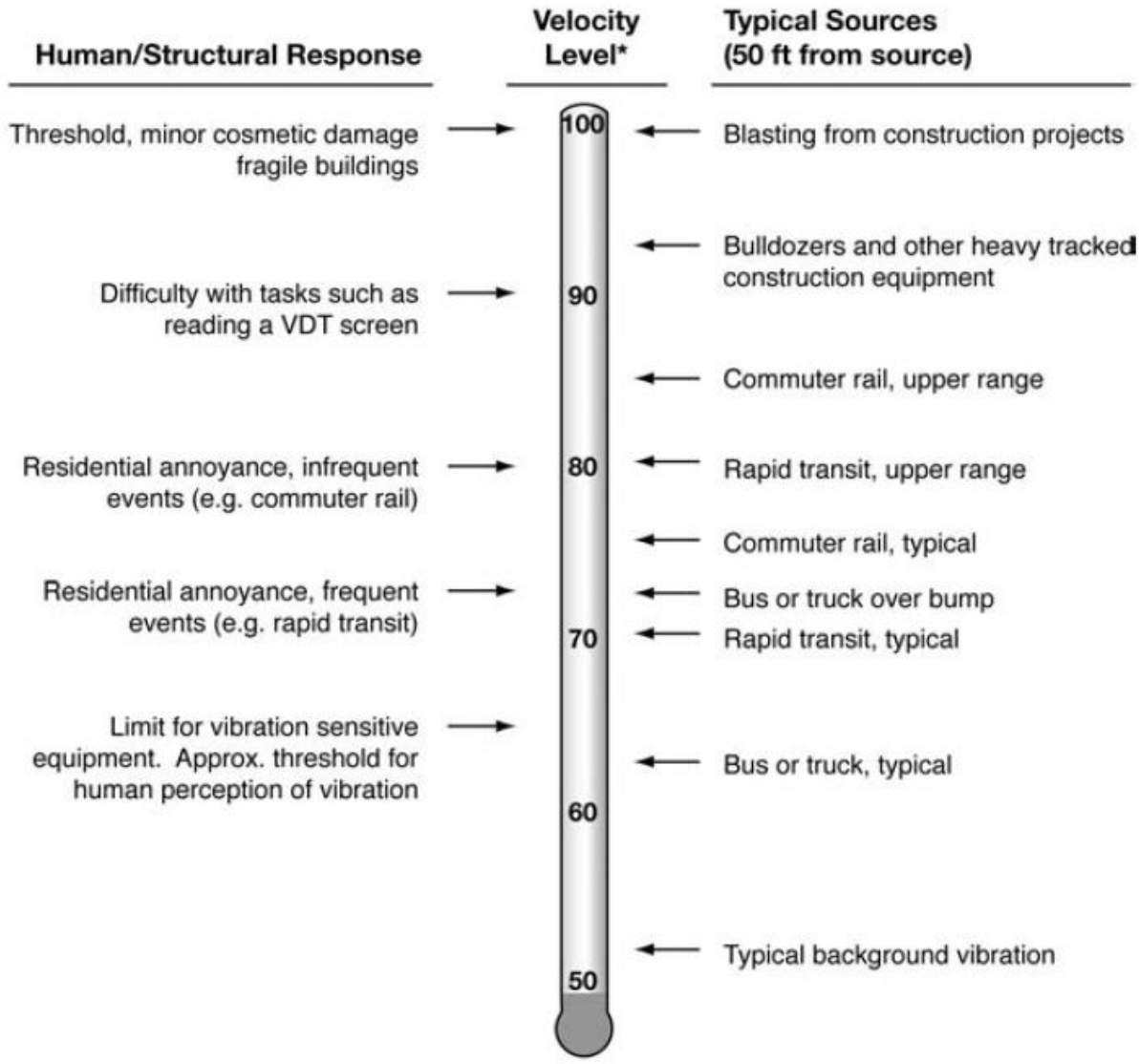
In essence, RMS tends to average out short-duration, high-intensity events—the very events that people find most disturbing. Therefore, for construction activities, PPV-based thresholds, such as those recommended by Caltrans, are more appropriate for assessing potential human annoyance and structural impact (11).

While not universally accepted, vibration decibel notation (VdB) is another RMS-based vibration notation developed and used by the FTA in their guidance manual to describe vibration levels and provide a background of common vibration levels and set vibration limits (8). Decibel notation (VdB) serves to reduce the range of numbers used to describe vibration levels and is used in this report to describe vibration levels.

As stated in the FTA guidance manual, the background vibration-velocity level in residential areas is generally 50 VdB. Ground-borne vibration is normally perceptible to humans at approximately 65 VdB. For most people, a vibration-velocity level of 75 VdB is the approximate dividing line between

barely perceptible and distinctly perceptible levels. Typical outdoor sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the ground-borne vibration is rarely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration-velocity level, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings. Exhibit 2-C illustrates common vibration sources and the human and structural response to ground-borne vibration.

EXHIBIT 2-3: TYPICAL LEVELS OF GROUND-BORNE VIBRATION



** RMS Vibration Velocity Level in VdB relative to 10^{-6} inches/second*

Source: Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual.

3 REGULATORY SETTING

To limit population exposure to physically and/or psychologically damaging as well as intrusive noise levels, the federal government, the State of California, various county governments, and most municipalities in the state have established standards and ordinances to control noise. In most areas, automobile and truck traffic is the major source of environmental noise. Traffic activity generally produces an average sound level that remains constant with time. Air and rail traffic, and commercial and industrial activities are also major sources of noise in some areas. Federal, state, and local agencies regulate different aspects of environmental noise. Federal and state agencies generally set noise standards for mobile sources such as aircraft and motor vehicles, while regulation of stationary sources is left to local agencies.

3.1 STATE OF CALIFORNIA NOISE REQUIREMENTS

The State of California regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards, and provides guidance for local land use compatibility. State law requires that each county and city adopt a General Plan that includes a Noise Element which is to be prepared according to guidelines adopted by the Governor's Office of Planning and Research. (13) The purpose of the Noise Element is to *limit the exposure of the community to excessive noise levels*. In addition, the California Environmental Quality Act (CEQA) requires that all known environmental effects of a project be analyzed, including environmental noise impacts.

3.2 STATE OF CALIFORNIA BUILDING STANDARDS CODE

The State of California's Green Building Standards Code contains mandatory measures for non-residential building construction in Section 5.507 on Environmental Comfort. (14) These noise standards are applied to new construction in California to control interior noise levels resulting from exterior noise sources. The regulations specify that acoustical studies must be prepared when non-residential structures are developed in areas where a general plan or airport plan provides contours that show exterior noise levels exceed 65 dBA CNEL, such as within a noise level contour of an airport, freeway, or railroad; or if contours are unavailable, buildings exposed to a noise level of 65 dBA $L_{eq\text{-}1\text{-}hr}$ during any hour of operation; shall be constructed to provide an interior noise level environment attributable to exterior sources that does not exceed an hourly equivalent level of 50 dBA L_{eq} in occupied areas during any hour of operation.

3.3 CITY OF COACHELLA GENERAL PLAN NOISE ELEMENT

The City of Coachella has adopted a Noise Element of the General Plan as *a tool for local planners to use in achieving and maintaining land uses that are compatible with environmental noise levels*. (15) The Noise Element identifies noise goals and policies to protect City of Coachella residents from excessive noise. The goals of the Noise Element are as follows:

Goal 1 Land Use Planning and Design. A community where noise compatibility between differing types of land uses is ensured through land use planning and design strategies.

Goal 2 Stationary Source Noise. A community where excessive noise from stationary sources is minimized.

Goal 3 Mobile Source Noise. A community where excessive noise from mobile sources is minimized.

To ensure noise-sensitive land uses are protected from high levels of noise (Goal 1), Exhibit 3-1 identifies exterior noise level guidelines for new developments impacted by transportation noise sources such as arterial roads, freeways, airports, and railroads. In addition, Table 1 of the Noise Technical Appendix provides an exterior noise level standard of 65 dBA CNEL and an interior noise level standard of 45 dBA CNEL for new residential developments impacted by transportation noise. The Noise Element also requires the analysis of new developments, as necessary, to identify mitigation measures to reduce noise levels to those found in Exhibit 3-1.

The noise criteria identified in the City of Coachella Noise Element are guidelines to evaluate the land use compatibility of transportation-related noise. The compatibility criteria, shown on Exhibit 3-A, provide the City with a planning tool to gauge the compatibility of land uses relative to existing and future exterior noise levels.

Exhibit 3-A provides guidelines to evaluate the acceptability of the transportation-related noise level impacts. These guidelines are based on the Governor's Office of Planning and Research and are used to assess the long-term traffic noise impacts on land uses. According to the land use compatibility guidelines of the General Plan, the utility/institutional land use of the Project is considered *clearly compatible* with exterior noise levels approaching 70 dBA CNEL. For comparison, noise-sensitive residential land uses are considered *clearly compatible* with exterior noise levels of 60 dBA CNEL. (15)

3.3 Operational Noise Standards

To analyze noise impacts originating from a designated fixed location or private property, such as the Project, operational source noise is typically evaluated against standards established under a City's Municipal Code. For noise-sensitive residential properties, the City of Coachella Municipal Code, Section 7.04.030 (A), identifies exterior operational noise level limits for the daytime (6:00 a.m. to 10:00 p.m.) hours of 55 dBA Leq and 45 dBA Leq during the nighttime (10:00 p.m. to 6:00 a.m.) hours. The City of Coachella Municipal Code noise level standards are shown in Table 3-1 and provided in Appendix 3.1.

Table 3-1: Operational Noise Standards

Jurisdiction	Land Use	Time Period	Exterior Noise Level Standards (dBA L_{eq})[2]
Coachella[1]	Residential	Daytime (6:00 a.m. to 10:00 p.m.)	55
		Nighttime (10:00 p.m. to 6:00 a.m.)	45

[1] Source: City of Coachella Municipal Code, Section 7.04.030 (A).
[2] Leq represents a steady state sound level containing the same total energy as a time-varying signal over a given sample period.

EXHIBIT 3-1: LAND USE/NOISE COMPATIBILITY MATRIX

LAND USE CATEGORIES		CNEL						
CATEGORIES	USES	55	60	65	70	75	80	
RESIDENTIAL	Single Family, Duplex, Multiple Family							
RESIDENTIAL	Mobile Homes							
COMMERCIAL - Regional, District	Hotel, Motel, Transient Lodging							
COMMERCIAL - Regional, Village District, Special	Commercial Retail, Bank, Restaurant, Movie Theater							
COMMERCIAL INDUSTRIAL	Office Building, Research and Development, Professional Offices, City Office Building							
COMMERCIAL - Recreation INSTITUTIONAL - Civic Center	Amphitheater, Concert Hall Auditorium, Meeting Hall							
COMMERCIAL - Recreation	Children's Amusement Park, Miniature Golf Course, Go-cart Track, Equestrian Center, Sports Club							
COMMERCIAL - General, Special INDUSTRIAL, INSTITUTIONAL	Automobile Service Station, Auto Dealership, Manufacturing, Warehousing, Wholesale, Utilities							
INSTITUTIONAL - General	Hospital, Church, Library, School Classroom							
OPEN SPACE	Parks							
OPEN SPACE	Golf Couse, Cemeteries, Nature Centers, Wildlife Reserves, Wildlife Habitat							
AGRICULTURE	Agriculture							

INTERPRETATION

ZONE A (GREEN) CLEARLY COMPATIBLE	Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal construction, without any special noise insulation requirements.
ZONE B (YELLOW) NORMALLY COMPATIBLE	New construction or development should be undertaken only after an analysis of the noise reduction requirements is made and needed noise insulation features included in the design are determined. Conventional construction, with closed windows and fresh air supply systems or air conditioning will normally suffice.
ZONE C (ORANGE) NORMALLY INCOMPATIBLE	New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
ZONE D (RED) CLEARLY INCOMPATIBLE	New construction or development should generally not be undertaken.

* Construction of new residential uses will not be allowed within the 65 dBA CNEL contour for airport noise.

Source: City of Coachella General Plan Noise Element, Figure 10-1.

3.4 CONSTRUCTION NOISE STANDARDS

To control noise impacts associated with the construction of the Project, the City has established limits to the hours of operation. Section 7.04.070 of the City's Municipal Code, provided in Appendix 3.1, indicates that construction activities shall be limited from October 1st through April 30th, Monday to Friday, between the hours of 6:00 a.m. and 5:30 p.m., and between 8:00 a.m. and 5:00 p.m. on Saturdays, Sundays, and holidays. From May 1st through September 30th, construction is limited to between 5:00 a.m. and 7:00 p.m. Monday to Friday, and between 8:00 a.m. and 5:00 p.m. on

Saturdays, Sundays, and holidays. (16) However, neither the City of Coachella Neither the General Plan nor the Municipal Code establishes numeric maximum acceptable construction source noise levels at potentially affected receivers. Therefore, a numerical construction threshold based on the Federal Transit Administration (FTA) *Transit Noise and Vibration Impact Assessment Manual* is used for analysis of daytime construction impacts, as discussed below.

According to the FTA, local noise ordinances are typically not very useful in evaluating construction noise. They usually relate to nuisance and hours of allowed activity, and sometimes specify limits in terms of maximum levels, but are generally not practical for assessing the impact of a construction project. Project construction noise criteria should account for the existing noise environment, the absolute noise levels during construction activities, the duration of the construction, and the adjacent land use. Due to the lack of standardized construction noise thresholds, the FTA provides guidelines that can be considered reasonable criteria for construction noise assessment. The FTA considers a daytime exterior construction noise level of 80 dBA L_{eq} as a reasonable threshold for noise-sensitive residential land use (17 p. 179).

3.5 Construction Vibration Standards

Construction activity can result in varying degrees of ground-borne vibration, depending on the equipment and methods used, distance to the affected structures, and soil type. Construction vibration is generally associated with pile driving and rock blasting. Other construction equipment, such as air compressors, light trucks, hydraulic loaders, etc., generates little or no ground vibration (17).

To analyze vibration impacts associated with the Project, vibration-generating activities are appropriately evaluated against standards established under a City's Municipal Code if such standards exist. The City of Coachella does not identify specific construction vibration level limits. Therefore, for analysis purposes, the Caltrans *Transportation and Construction Vibration Guidance Manual*, (11 p. 38) Table 19, vibration damage is used in this noise study to assess potential temporary construction-related impacts at adjacent building locations. The nearest noise-sensitive buildings adjacent to the Project site can best be described as "older residential structures" with a maximum acceptable continuous vibration threshold of 0.30 PPV (in/sec).

3.6 Aircraft Noise

The County of Riverside is responsible for the management and development of the Airport Land Use Compatibility Plan (ALUCP) for each public use and military airport in Riverside County. Each ALUCP identifies land use and noise level compatibility due to operations at airports, as well as forecasted noise level contours based on future operations at each airport. These noise level contours and land use compatibility noise levels are used in determining whether a proposed land use is consistent with forecasted noise levels. The ALUCP for the Project site is the Jacqueline Cochran Regional Airport (JCRA) ALUCP. Exhibits 3-2 and 3-3 present the JCRA Compatibility Zones and the JCRA Compatibility Criteria, respectively. The Project is located beyond Zone E as shown on Exhibit 3-2

EXHIBIT 3-2: JCRA COMPATIBILITY ZONES

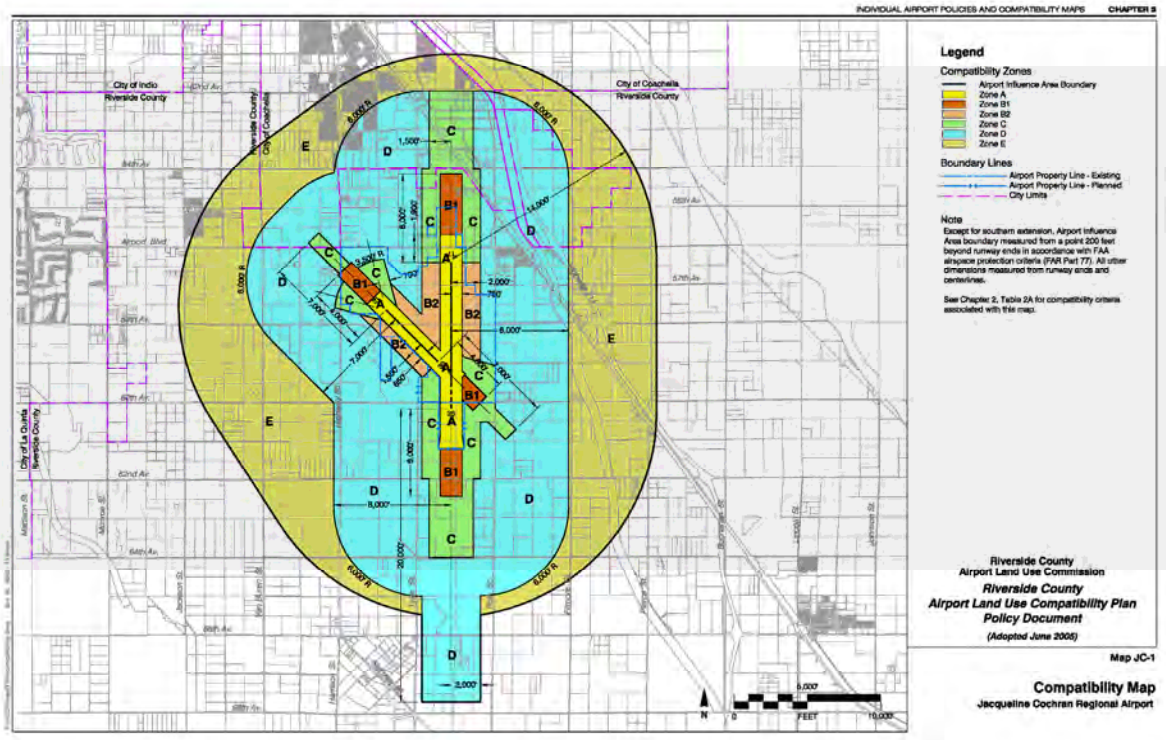


EXHIBIT 3-3: JCRA COMPATIBILITY CRITERIA

CITY OF COACHELLA: GENERAL PLAN (1998), AND ZONING CODES

Residential Land Use

- *Compatibility Zone D*
  - Residential land use designations with densities ranging from 5.1 to 8.0 dwelling units per acre north of the airport [C1] potentially conflict with the high- and- low options for *Zone D*
- *Compatibility Zone E*
  - No inconsistencies noted

Other Policies

- *General Plan*
  - The Circulation Element "encourages implementation of the *Thermal Airport Master Plan* as it relates to safety, land use, and noise."
  - No acknowledgment of ALUC coordination
  - The General Plan should be amended to incorporate the current *ALUC Compatibility Plan* with respect to Jacqueline Cochran Regional Airport
  - Noise policy conditionally allows residential development up to 70 dB CNEL conflicts with *Compatibility Plan* limit of 60 dB CNEL
- Zoning Codes
  - Airport height limit zoning not established

Non-Residential Land Use

- *Compatibility Zone C*
  - Potential Conflict: *Zone C* intensity limits (75 people/acre) apply to area designated as Light Industrial/Warehousing north of airport [C2]
- *Compatibility Zone D*
  - Potential Conflict: *Zone D* intensity limits (100 people/acre) apply to areas designated as Light Industrial/Warehousing and Low-Intensity Commercial/Office northwest and northeast of airport [C3]
- *Compatibility Zone E*
  - No inconsistencies noted

Note: This is an initial land use consistency review prepared for the purpose of identifying areas where a conflict exists or potentially exists with ALUC compatibility zone criteria. This review is based upon available general plan documents and does not take into account existing land use. When a conflict between the general plan and compatibility criteria exists, it is not deemed inconsistent when the general plan is merely representing existing development. A more comprehensive analysis is necessary at the time a general plan land modification is presented to the ALUC for review.

Exhibit JC–10, continued

4 SIGNIFICANCE CRITERIA

The following significance criteria are based on currently adopted guidance provided by Appendix G of the California Environmental Quality Act (CEQA) Guidelines. (1) For the purposes of this report, impacts would be potentially significant if the Project results in or causes:

A. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

B. Generation of excessive ground-borne vibration or ground-borne noise levels?

C. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

4.1 NOISE LEVEL INCREASES (THRESHOLD A)

Noise level increases resulting from the Project are evaluated based on the Appendix G CEQA Guidelines. Under CEQA, consideration must be given to the magnitude of the increase, the existing baseline ambient noise levels, and the location of receivers to determine if a noise increase represents a significant adverse environmental impact. This approach recognizes that there is no single noise increase that renders the noise impact significant. (18) This is primarily because of the wide variation in individual thresholds of annoyance and differing individual experiences with noise. Thus, an important way of determining a person's subjective reaction to a new noise is the comparison of it to the existing environment to which one has adapted—the so-called ambient environment.

4.1.1 Noise Sensitive Receivers (Substantial Permanent Noise Level Increase)

The Federal Interagency Committee on Noise (FICON) (19) developed guidance to be used for the assessment of project-generated increases in noise levels that consider the ambient noise level. The FICON recommendations are based on studies that relate aircraft noise levels to the percentage of persons highly annoyed by aircraft noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, these recommendations are often used in environmental noise impact assessments involving the use of cumulative noise exposure metrics, such as the average-daily noise level (CNEL) and equivalent continuous noise level (L_{eq}). In general, the more a new noise level exceeds the previously existing ambient noise level, the less acceptable the new noise level will typically be judged.

As previously stated, the approach used in this noise study recognizes that there is no single noise increase that renders a noise impact significant, based on a 2008 California Court of Appeal ruling on Gray v. County of Madera. (18) For example, if the ambient noise environment is quiet (<60 dBA) and the new noise source greatly increases the noise levels, an impact may occur if the noise criteria may be exceeded. Therefore, for this analysis, a readily perceptible 5 dBA or greater project-related noise level increase is considered a significant impact when the without project noise levels are below 60 dBA. Per the FICON, in areas where the without project noise levels range from 60 to 65 dBA, a 3 dBA barely perceptible noise level increase appears to be appropriate for most people. When the without project noise levels already exceed 65 dBA, any increase in community noise

louder than 1.5 dBA or greater is considered a significant impact if the noise criteria for a given land use is exceeded, since it likely contributes to an existing noise exposure exceedance.

The FICON guidance provides an established source of criteria to assess the impacts of substantial temporary or permanent increase in baseline ambient noise levels. Based on the FICON criteria, the amount to which a given noise level increase is considered acceptable is reduced when the without Project (baseline) noise levels are already shown to exceed certain land-use specific exterior noise level criteria. The specific levels are based on typical responses to noise level increases of 5 dBA or readily perceptible, 3 dBA or barely perceptible, and 1.5 dBA depending on the underlying without Project noise levels for noise-sensitive uses. These levels of increases and their perceived acceptance are consistent with guidance provided by both the Federal Highway Administration (4 p. 9) and Caltrans (20 p. 2_48).

4.1.2 Non-Transportation Noise (Substantial Permanent Noise Level Increase)

The FICON criteria are also used to determine if Project-related stationary source (operational) noise level increases are significant at off-site receiver locations. For non-transportation noise source activities, a substantial permanent noise level increase consists of increases of 5 dBA or *readily perceptible*, 3 dBA or *barely perceptible*, and 1.5 dBA, depending on the underlying ambient noise levels.

4.1.3 Construction Noise (Substantial Temporary Noise Level Increase)

To control the noise-generating construction activities, the temporary noise level increases over the existing ambient conditions must be considered under CEQA Significance Threshold A. Although noise ordinances vary across jurisdictions, many cities and counties in California, including Los Angeles, San Diego, and San Francisco, set construction noise limits between 75 and 80 dBA L_{eq} and typically restrict construction activities to the daytime hours. In contrast, everyday noise regulations are more stringent because they apply to continuous, long-term noise sources that can significantly impact the quality of life. As a result, many jurisdictions establish daytime residential noise limits around 55 dBA L_{eq}. This suggests that a reasonable 20 dBA increase over the daytime noise limit can be tolerated without significant adverse effects. This is also illustrated in the adoption of many CEQA documents statewide that use an 80 dBA L_{eq} limit for assessing construction impacts while using everyday noise level limits of local noise ordinances in assessing on-site operational impacts.

Therefore, if the Project-related construction noise levels generate a temporary noise level increase over the existing daytime ambient noise levels more than 20 dBA L_{eq} then the Project construction noise increases will be considered a *significant* impact.

4.2 VIBRATION (THRESHOLD B)

As described in Section 3.4, the vibration impacts originating from the construction of the Project, vibration-generating activities are appropriately evaluated using standards established by the Caltrans *Transportation and Construction Vibration Guidance Manual*, Table 19. The Caltrans' vibration thresholds for building damage are used in this noise study to assess potential operational and temporary construction-related impacts at adjacent building locations. A maximum acceptable continuous vibration threshold of 0.30 PPV (in/sec) is used to describe the nearest residential buildings adjacent to the Project site.

4.3 CEQA Guidelines Not Further Analyzed (Threshold C)

CEQA Noise Threshold C applies when there are nearby public and private airports and/or airstrips and focuses on land use compatibility of the Project to nearby airports and airstrips. The closest major airport is the San Gabriel Valley Airport (SGVA), located 1.5 miles northeast of the Project site. As shown in section 3, the Project site is beyond the 65 dBA CNEL noise level contour and would not be exposed to excessive noise levels from airport operations. Therefore, impacts are considered less than significant, and no further noise analysis is conducted in relation to Appendix G to the CEQA Guidelines, Noise Threshold C.

4.4 Significance Criteria Summary

Noise impacts shall be considered significant if any of the following occur as a direct result of the proposed development. Table 4-1 shows the significance criteria summary matrix that includes the allowable criteria used to identify potentially significant incremental noise level increases.

Table 4-1: Significance Criteria Summary

Analysis	Receiving Land Use	Condition(s)	Significance Criteria	
			Daytime	Nighttime
Off-Site Traffic	Noise-Sensitive[1]	If ambient is < 60 dBA CNEL	≥ 5 dBA CNEL Project increase	
		If ambient is 60 - 65 dBA CNEL	≥ 3 dBA CNEL Project increase	
		If ambient is > 65 dBA CNEL	≥ 1.5 dBA CNEL Project increase	
Off-Site Traffic	Non-Noise-Sensitive[2]	If ambient is > 70 dBA CNEL	≥ 3 dBA CNEL Project increase	
On-Site	Noise Sensitive	Exterior Noise Level Criteria	See Exhibit 3-1	
		Interior Noise Level Standard[3]	45 dBA CNEL	
Operational	Noise-Sensitive	Residential Exterior Noise Level[4]	55 dBA Leq	45 dBA Leq
		If ambient is < 60 dBA Leq[1]	≥ 5 dBA Leq Project increase	
		If ambient is 60 - 65 dBA Leq[1]	≥ 3 dBA Leq Project increase	
		If ambient is > 65 dBA Leq[1]	≥ 1.5 dBA Leq Project increase	
Construction	Noise-Sensitive	Noise Level Threshold[5]	80 dBA L_{eq}	
		Exterior Noise Level Increase[6]	20 dBA L_{eq}	
		Vibration Level Threshold[7]	0.30 PPV (in/sec)	

[1] FICON, 1992.
[2] Figure 10- 1 of the City of Coachella General Plan Noise Element
3 Caliᶠornia Code of Regulations, Title 24, Building Standards Administrative Code, Part 2
4 City of Coachella Municipal Code section 7.04.030(A).
5 Fedeʳal Transit Administration, Transit Noise and Vibration Impact Assessment Manual.
6 Caltʳans Traffic Noise Analysis Protocol, April 2020.
7 Caltʳans Transportation and Construction Vibration Manual, April 2020 Table 19
"Daytime" = 6:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 6:00 a.m.

5 EXISTING NOISE LEVEL MEASUREMENTS

To assess the existing noise level environment, 24-hour noise level measurements were taken at five locations in the Project study area. The receiver locations were selected to describe and document the existing noise environment within the Project study area. Exhibit 5-1 provides the boundaries of the Project study area and the noise level measurement locations. To fully describe the existing noise conditions, long-term noise level measurements were collected by Urban Crossroads, Inc. on Friday, July 25, 2025. Appendix 5.1 includes study area photos.

5.1 MEASUREMENT PROCEDURE AND CRITERIA

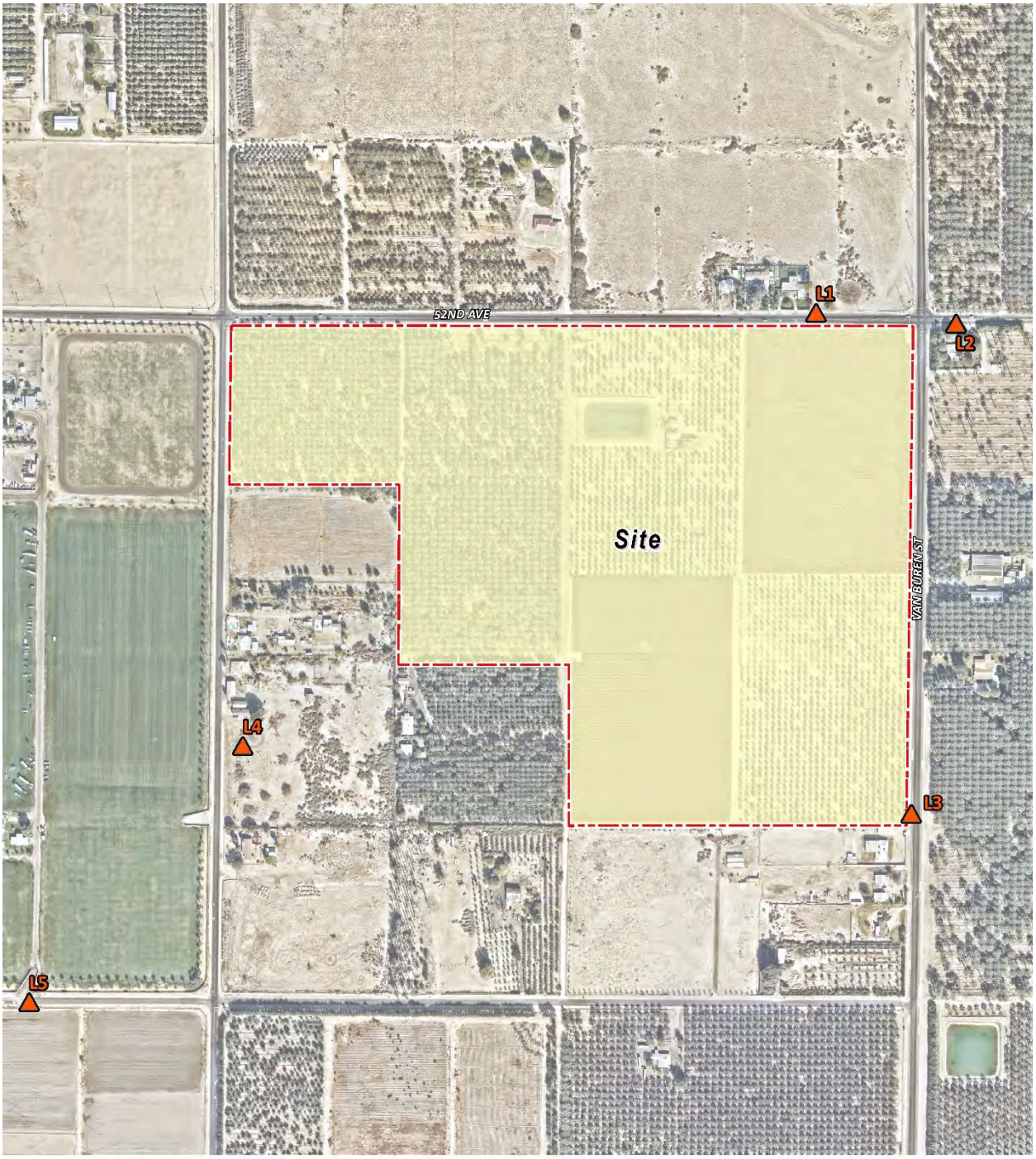
To describe the existing noise environment, the hourly noise levels were measured during typical weekday conditions over a 24-hour period. By collecting individual hourly noise level measurements, it is possible to describe the equivalent daytime and nighttime hourly noise levels. The long-term noise readings were recorded using Piccolo Type 2 integrating sound level meter and dataloggers. The Piccolo sound level meters were calibrated using a Larson-Davis calibrator, Model CAL 150. All noise meters were programmed in "slow" mode to record noise levels in "A" weighted form. The sound level meters and microphones were equipped with a windscreen during all measurements. All noise level measurement equipment satisfies the American National Standards Institute (ANSI) standard specifications for sound level meters ANSI S1.4-2014/IEC 61672-1:2013. (21)

5.2 NOISE MEASUREMENT LOCATIONS

The long-term noise level measurements were positioned as close to the nearest sensitive receiver locations as possible to assess the existing equivalent hourly noise levels surrounding the Project site. Both Caltrans and the FTA recognize that it is not reasonable to collect noise level measurements that can fully represent every part of a private yard, patio, deck, or balcony normally used for human activity when estimating impacts for new development projects. This is demonstrated in the Caltrans general site location guidelines, which indicate that sites must be free of noise contamination by sources other than sources of interest. Avoid sites located near sources such as barking dogs, lawnmowers, pool pumps, and air conditioners unless it is the express intent of the analyst to measure these sources. (2) Further, FTA guidance states, that it is not necessary nor recommended that existing noise exposure be determined by measuring at every noise-sensitive location in the project area. Rather, the recommended approach is to characterize the noise environment for clusters of sites based on measurements or estimates at representative locations in the community. (8)

Based on recommendations of Caltrans and the FTA, it is not necessary to collect measurements at each individual building or residence because each receiver measurement represents a group of buildings that share acoustical equivalence. (8) In other words, the area represented by the receiver shares similar shielding, terrain, and geometric relationship to the reference noise source. Receivers represent a location of noise sensitive areas and are used to estimate the future noise level impacts.

EXHIBIT 5-1: NOISE MEASUREMENT LOCATIONS



Collecting noise level measurements at the nearby sensitive receiver locations allows for a comparison of the before-and-after Project noise levels and is necessary to assess potential noise increase due to the Project's contribution to ambient noise levels. This approach is necessary to calculate the temporary or permanent increase in ambient noise levels as required by the CEQA Guidelines Environmental Checklist.

5.3 Noise Measurement Results

The noise measurements presented below focus on the equivalent or the hourly energy average sound levels (Leq) to describe the existing ambient conditions. Table 5-1 provides the (energy average) noise levels used to describe the hourly daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) noise levels at each noise level measurement location. The equivalent sound level (Leq) represents a steady-state sound level containing the same total energy as a time-varying signal over a given sample period. The daytime and nighttime equivalent noise levels represent the average of all hourly noise levels observed during these time periods expressed as a single number.

Table 5-1: Ambient Noise Level Measurements

Location[1]	Description	Energy Average Noise Level (dBA L_{eq})[2]	
		Daytime	Nighttime
L1	Located north of the site near the residence at 83876 52nd Ave.	66.2	60.5
L2	Located east of the site near the residence at 84045 52nd Ave.	67.5	61.8
L3	Located south of the site near the residence at 52815 Van Buren St.	66.4	59.1
L4	Located south of the site near the residence at 52480 Calhoun St.	56.4	49.2
L5	Located west of the site near the residence at 83465 52nd Ave.	61.4	52.5

[1] See Exhibit 5-1 for the noise level measurement locations.
[2] Energy (logarithmic) average levels. The long-term 24-hour measurement worksheets are included in Appendix 5.2.
"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

Table 5-1 provides the equivalent noise levels used to describe the daytime and nighttime ambient conditions for each of the measurements. Appendix 5.2 provides summary worksheets of the noise levels for each hour as well as the minimum, maximum, L1, L2, L5, L8, L25, L50, L90, L95, and L99 percentile noise levels observed during the daytime and nighttime periods.

6 OFF-SITE TRANSPORTATION NOISE ANALYSIS

The Project is anticipated to generate a maximum of 2,144 weekday trips per day. The Project would access Calhoun Street, Van Buren Street, and Avenue 52. Approximately 30 percent of the traffic is expected on Van Buren Street and Avenue 52, with the remaining 40 percent using Calhoun Street. Based on the City of Coachella traffic counts on these roads: Calhoun Street has an average daily traffic (ADT) volume of 3,893, Van Buren Street has an ADT volume of 3,799, and Avenue 52 has an ADT volume of 8,316. To generate a 3 dBA increase in traffic noise would generally require a substantial increase in truck traffic relative to the overall mix of vehicles, or a doubling of traffic volumes. The Project would not result in the generation of substantial truck trips, and the increase in daily traffic volumes is not expected to generate a perceptible noise level increase (i.e., less than 3 dBA CNEL) at sensitive land uses along affected roadways. Therefore, due to the low traffic volumes generated by the Project, the off-site traffic noise levels generated by the Project are considered *less than significant*.

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7 RECEIVER LOCATIONS

To assess the potential for long-term operational and short-term construction noise impacts, the following receiver locations, as shown in Exhibit 7-1, were identified as representative locations for analysis. The selection of receiver locations is based on FHWA guidelines and is consistent with additional guidance provided by Caltrans and the FTA, as previously described in Section 5.2. Sensitive receivers are generally defined as locations where people reside or where the presence of unwanted sound could otherwise adversely affect the use of the land. Noise-sensitive land uses are generally considered to include schools, hospitals, single-family dwellings, mobile home parks, churches, libraries, and recreation areas. Moderately noise-sensitive land uses typically include multi-family dwellings, hotels, motels, dormitories, outpatient clinics, cemeteries, golf courses, country clubs, athletic/tennis clubs, and equestrian clubs. Land uses that are considered relatively insensitive to noise include business, commercial, and professional developments. Land uses that are typically not affected by noise include: industrial, manufacturing, utilities, agriculture, undeveloped land, parking lots, warehousing, liquid and solid waste facilities, salvage yards, and transit terminals.

To describe the potential off-site Project noise levels, five receiver locations in the vicinity of the Project site were identified. Other sensitive land uses in the Project study area that are located at greater distances than those identified in this noise study will experience lower noise levels than those presented in this report due to the additional attenuation from distance and the shielding of intervening structures. Distance is measured in a straight line from the Project boundary to each receiver location.

R1: Location R1 represents the existing residence at 83890 52nd Avenue, approximately 104 feet north of the Project site. Receiver R1 is placed at the building façade facing the Project site. A 24-hour noise measurement was taken near this location, L1, to describe the existing ambient noise environment.

R2: Location R2 represents the existing residence at 84045 52nd Avenue, approximately 130 feet east of the Project site. Receiver R2 is placed in the private outdoor living area (backyard) facing the Project site.. A 24-hour noise measurement was taken near this location, L1, to describe the existing ambient noise environment.

R3: Location R3 represents the existing residence at 52815 Van Buren Street, approximately 59 feet south of the Project site. Receiver R3 is placed in the private outdoor living area (backyard) facing the Project site. A 24-hour noise measurement was taken near this location, L2, to describe the existing ambient noise environment.

R4: Location R4 represents the existing residence, approximately 56 feet southwest of the Project site. Receiver R4 is placed at the building façade facing the Project site. A 24-hour noise measurement was taken near this location, L3, to describe the existing ambient noise environment.

R5: Location R6 represents the existing residence at 53465 52nd Avenue, approximately 834 feet west of the Project site. Receiver R6 is placed at the building façade facing the Project site. A 24-hour noise measurement was taken near this location, L6, to describe the existing ambient noise environment.

EXHIBIT 7-1: RECEIVER LOCATIONS



8 OPERATIONAL NOISE ANALYSIS

This section analyzes the potential operational noise impacts at the nearby receiver locations, identified in Section 7, resulting from the Project's operation. Exhibit 8-1 identifies the noise source locations used to assess the equivalent L_{eq} operational noise levels

8.1 OPERATIONAL NOISE SOURCES

This operational noise analysis is intended to describe noise level impacts associated with the expected typical residential activities at the Project site. The operational noise sources of concern would be the ground mounted air conditioning units associated with each dwelling unit are evaluated against standards established in the City of Coachella Municipal Code, Section 7.04.070, and the relative increase in noise levels at each existing sensitive receiver.

8.2 REFERENCE NOISE LEVELS

To estimate the Project operational noise impacts, reference noise level measurements were collected from similar types of activities or equipment to represent the noise levels expected with the development of the Project. This section provides a detailed description of the reference noise level measurements shown in Table 8-1 used to estimate the Project operational noise impacts.

8.2.1 Air Conditioning Units

Individual Units

To assess the noise levels created by the air conditioning units, reference noise levels were taken from equipment specifications for a 2- to 5-ton residential packaged air conditioning unit (Carrier 50VR-A). The manufacturer's specifications are included in Appendix 8.1. At a uniform reference distance of 50 feet, the units would generate a reference noise level of 44.4 dBA L_{eq}. The air conditioning units were modeled 3 feet above the ground level, operating 45 minutes per hour during the daytime and nighttime, which represents the typical maximum operating time for properly sized AC systems.

Commercial Units

The noise level measurements describe a single mechanical rooftop air conditioning unit. The reference noise level represents a Lennox SCA120 series 10-ton model packaged air conditioning unit. At the uniform reference distance of 50 feet, the reference noise level is 59.2 dBA Leq. The air conditioning units were modeled 5 feet above the ground level, operating 45 minutes per hour during the daytime and nighttime, which represents the typical maximum operating time for properly sized AC systems.

EXHIBIT 8-1: OPERATIONAL NOISE SOURCE LOCATIONS

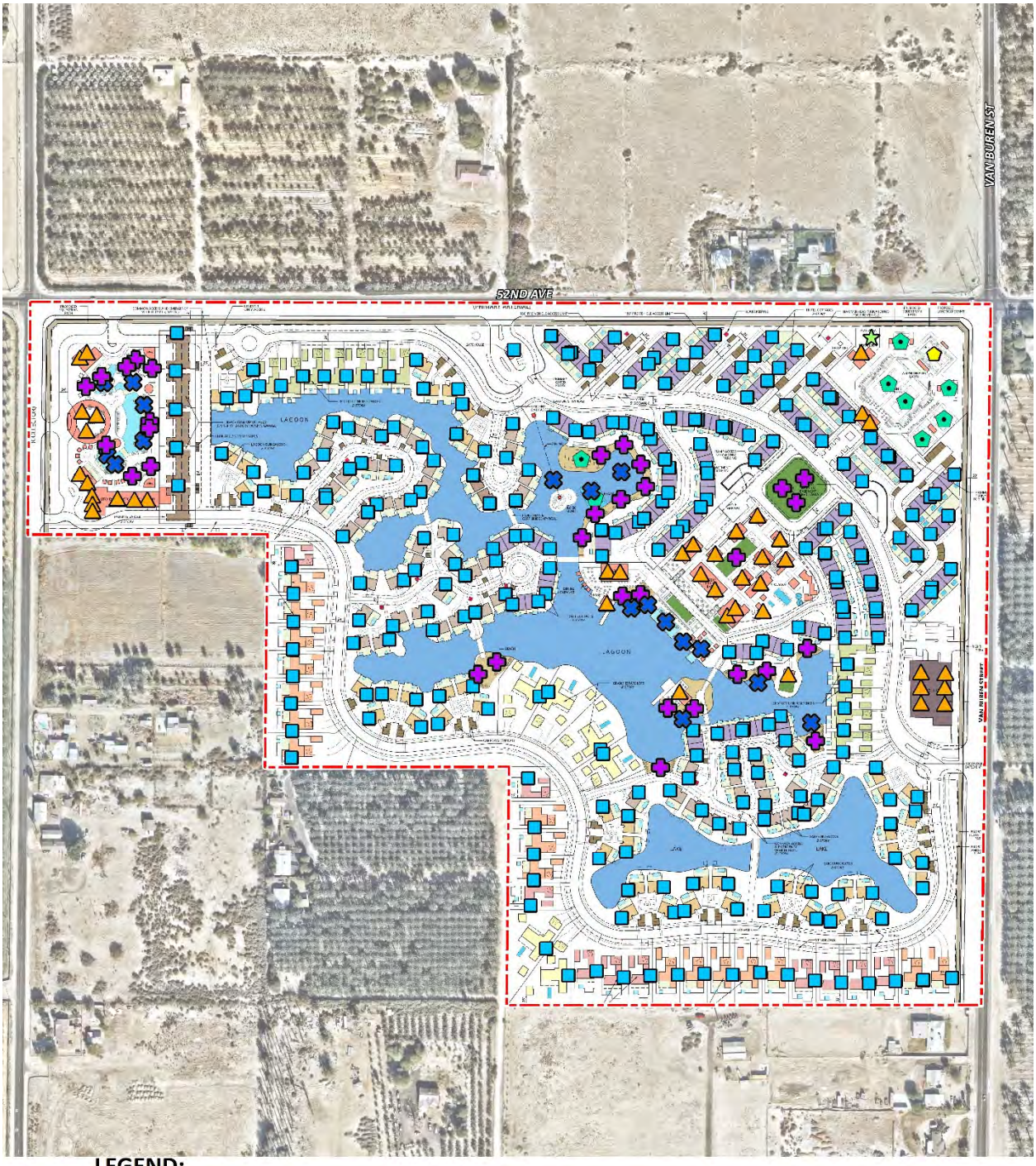


TABLE 10-1: REFERENCE NOISE LEVEL MEASUREMENTS

Reference Noise Source	Noise Source Height (Feet)	Min./ Hour[1]		Reference Noise Level (dBA L_{eq}) @ 50 Feet	Sound Power Level (dBA)[2]
		Day	Night		
Residential Air Conditioning Units	3'	45	30	44.4	76.0
Commercial Air Conditioning Unit	5'	45	30	57.3	88.9
Basketball/Volleyball Activities	5'	60	0	52.1	83.7
Outdoor Activity Area	6'	60	0	59.9	91.5
Children's Play Area	5'	60	0	57.8	89.4
Pool/Spa Activities	5'	60	0	63.0	94.6
Pickleball Court Activities	5'	60	0	64.8	96.4
Tennis Court Activities	5'	60	0	55.4	87.0

[1] Anticipated duration (minutes within the hour) of noise activity during typical hourly conditions expected at the Project site. "Daytime" = 7:00 a.m. - 10:00 p.m.; "Nighttime" = 10:00 p.m. - 7:00 a.m.

[2] Sound power level represents the total amount of acoustical energy (noise level) produced by a sound source independent of distance or surroundings. Sound power levels calculated using the CadnaA noise model at the reference distance to the noise source. Numbers may vary due to size differences between point and area noise sources.

8.2.2 Basketball/Volleyball Activity

To describe the noise levels associated with tennis court activities, Urban Crossroads collected a reference noise level measurement. The measured reference noise level at the uniform 50-foot reference distance is 52.1 dBA L_{50} for basketball and volleyball court activity. The basketball and volleyball court activity noise levels include eight people playing basketball, the sound of the ball hitting the ground, gates closing, and background park noise sources including people talking. Noise associated with basketball and volleyball court activities is expected to occur for the entire hour (60 minutes).

8.2.3 Outdoor Activity

To describe the outdoor common area, courtyards, and activity areas, a reference noise level was found by modeling an outdoor event with 500 people present, averaging 66 dBA L_{eq} over the outdoor area. At 50 feet, the reference noise level is 59.9 dBA L_{eq} at a noise source height of 5 feet. The reference noise level measurement includes music and speaking. Outdoor common area activities are limited to daytime hours only.

8.2.4 Children's Play Area Activity

To describe the noise levels associated with children's play area activities, Urban Crossroads collected a reference noise level measurement. The measured reference noise level at the uniform 50-foot reference distance is 57.8 dBA L_{50} for children's play area activity. The children's play area activity noise levels include children playing on swing sets and play structures with background park noise sources, such as parents talking on phones and with other parents. Noise associated with children's play area activities is expected to occur for the entire hour (60 minutes).

8.2.5 Pool/Spa Activity

To describe the noise levels associated with pool and spa activities, Urban Crossroads collected a reference noise level measurement. The measured reference noise level at the uniform 50-foot reference distance is 63.0 dBA L_{50} for pool and spa activity. The pool activity noise levels include kids playing, running, screaming, splashing, playing with a ball, and parents talking. Noise associated with pool and spa activities is expected to occur for the entire hour (60 minutes).

8.2.6 Pickleball Court Activity

To describe the noise levels associated with pickleball court activities, Urban Crossroads collected a reference noise level measurement. The measured reference noise level at the uniform 50-foot reference distance is 64.8 dBA L_{50} for pickleball court activity. Pickleball court activity noise levels include the constant talk of the players, the "pop" sound of rackets hitting pickle balls, metal gates closing, and background park noise sources, including people talking. Noise associated with pickleball court activities is expected to occur for the entire hour (60 minutes).

8.2.7 Tennis Court Activity

To describe the noise levels associated with tennis court activities, Urban Crossroads collected a reference noise level measurement. The measured reference noise level at the uniform 50-foot reference distance is 49.6 dBA L_{50} for tennis court activity. The tennis court activity noise levels include an instructor and student playing tennis, the instructor giving constant verbal feedback, the sound of rackets hitting tennis balls, metal tennis court gates closing, and background park noise sources, including people talking. Noise associated with tennis court activities is expected to occur for the entire hour (60 minutes).

8.3 CadnaA Noise Prediction Model

To fully describe the exterior operational noise levels from the Project, Urban Crossroads, Inc. developed a noise prediction model using the CadnaA (Computer Aided Noise Abatement) computer program. CadnaA can analyze multiple types of noise sources using the spatially accurate Project site plan, georeferenced Nearmap aerial imagery, topography, buildings, and barriers in its calculations to predict outdoor noise levels. Using the ISO 9613-2 protocol, CadnaA will calculate the distance from each noise source to the noise receiver locations, using the ground absorption, distance, and barrier/building attenuation inputs to provide a summary of the noise level at each receiver and the partial noise level contributions by noise source.

Consistent with the ISO 9613-2 protocol, the CadnaA noise prediction model relies on the reference sound power level (L_w) to describe individual noise sources. While sound pressure levels (e.g., Leq) quantify in decibels the intensity of given sound sources at a reference distance, sound power levels (Lw) are connected to the sound source and are independent of distance. Sound pressure levels vary substantially with distance from the source and diminish because of intervening obstacles and barriers, air absorption, wind, and other factors. Sound power is the acoustical energy emitted by the sound source and is an absolute value that is not affected by the environment. The operational noise level calculations provided in this noise study account for the distance attenuation provided due to geometric spreading, when sound from a localized stationary source (i.e., a point source) propagates uniformly outward in a spherical pattern. A default ground attenuation factor of 0.5 was

used in the noise analysis to account for mixed ground representing a combination of hard and soft surfaces. Appendix 8.2 includes the detailed noise dBA L_{eq} model inputs used to estimate the Project operational noise levels presented in this section.

8.4 PROJECT OPERATIONAL NOISE LEVELS

Using the reference noise levels to represent the Project operations that include ground mounted air conditioning units, Urban Crossroads, Inc. calculated the operational source noise levels that are expected to be generated at the Project site and the Project-related noise level increases that would be experienced at each of the sensitive receiver locations. Table 8-2 shows the Project operational noise levels during the daytime hours of 7:00 a.m. to 10:00 p.m. The daytime hourly noise levels at the off-site receiver locations are expected to range from 44.4 to 49.9 dBA L_{eq}.

TABLE 10-2: DAYTIME PROJECT OPERATIONAL NOISE LEVELS

Noise Source[1]	Operational Noise Levels by Receiver Location (dBA Leq)				
	R1	R2	R3	R4	R5
Residential Air Conditioning Units	44.5	42.4	41.8	41.7	38.4
Commercial Air Conditioning Unit	35.1	38.8	20.9	19.2	15.0
Basketball/Volleyball Activities	43.9	41.8	40.4	42.9	39.7
Outdoor Activity Area	41.0	34.4	21.0	20.1	16.0
Children's Play Area	42.9	41.2	40.9	43.1	40.5
Pool/Spa Activities	39.6	43.5	29.6	27.2	22.5
Total (All Noise Sources)	49.9	48.9	46.0	47.4	44.4

[1] See Exhibit 8-1 for the noise source locations. CadnaA noise model calculations are included in Appendix 8.2.

Table 8-3 shows the Project operational noise levels during the nighttime hours of 10:00 p.m. to 7:00 a.m. The nighttime hourly noise levels at the existing off-site receiver locations are expected to range from 16.5 to 39.2 dBA Leq. The differences between the daytime and nighttime noise levels are largely related to the estimated duration of noise activity, as outlined in Table 8-1. Appendix 8.2 includes the detailed noise model inputs.

TABLE 10-3: NIGHTTIME PROJECT OPERATIONAL NOISE LEVELS

Noise Source[1]	Operational Noise Levels by Receiver Location (dBA Leq)				
	R1	R2	R3	R4	R5
Residential Air Conditioning Units	43.6	41.4	40.8	40.7	37.5
Commercial Air Conditioning Unit	0.0	0.0	0.0	0.0	0.0
Basketball/Volleyball Activities	0.0	0.0	0.0	0.0	0.0
Outdoor Activity Area	0.0	0.0	0.0	0.0	0.0
Children's Play Area	0.0	0.0	0.0	0.0	0.0
Pool/Spa Activities	0.0	0.0	0.0	0.0	0.0
Total (All Noise Sources)	43.6	41.4	40.8	40.7	37.5

[1] See Exhibit 8-1 for the noise source locations. CadnaA noise model calculations are included in Appendix 8.2.

8.5 PROJECT OPERATIONAL NOISE LEVEL COMPLIANCE

To demonstrate compliance with local noise regulations, the unmitigated Project-only operational noise levels are evaluated against exterior noise level thresholds based on the City of Coachella exterior noise level standards at nearby receiver locations. Table 8-4 shows that the mitigated operational noise levels associated with the Project will not exceed the City of Coachella daytime and nighttime exterior noise level standards at the existing nearby noise-sensitive receiver locations. Therefore, the mitigated operational noise impacts are considered *less than significant* at the nearby noise-sensitive receiver locations.

TABLE 8-4: OPERATIONAL NOISE LEVEL COMPLIANCE

Receiver Location[1]	Project Operational Noise Levels (dBA Leq)[2]		Noise Level Standards (dBA Leq)[3]		Noise Level Standards Exceeded?[4]	
	Daytime	Nighttime	Daytime	Nighttime	Daytime	Nighttime
R1	49.9	43.6	50.0	45.0	No	No
R2	48.9	41.4	50.0	45.0	No	No
R3	46.0	40.8	50.0	45.0	No	No
R4	47.4	40.7	50.0	45.0	No	No
R5	44.4	37.5	50.0	45.0	No	No

[1] See Exhibit 7-1 for the receiver locations.
[2] Proposed Project unmitigated operational noise levels as shown on Tables 8-2 and 8-3.
[3] Exterior noise level standards, as shown in Table 4-1.
[4] Do the estimated Project operational noise source activities exceed the noise level standards?
"Daytime" = 7:00 a.m. - 10:00 p.m.; "Nighttime" = 10:00 p.m. - 7:00 a.m.

8.6 PROJECT OPERATIONAL NOISE LEVEL INCREASES

To describe the Project operational noise level increases, the Project operational noise levels are combined with the existing ambient noise level measurements for the nearby receiver locations that may be potentially impacted by Project operational noise sources. Since the units used to measure noise, decibels (dB), are logarithmic units, the Project-operational and existing ambient noise levels cannot be combined using standard arithmetic equations. (2) Instead, they must be logarithmically added using the following base equation:

$$SPL_{Total} = 10\log_{10}[10^{SPL1/10} + 10^{SPL2/10} + \ldots 10^{SPLn/10}]$$

where "SPL1," "SPL2," etc. are equal to the sound pressure levels being combined, or in this case, the Project-operational and existing ambient noise levels. The difference between the combined Project and ambient noise levels describes the Project noise level increases over the existing ambient noise environment. Noise levels that would be experienced at receiver locations when Project-source noise is added to the daytime and nighttime ambient conditions are presented in Tables 8-5 and 8-6, respectively. As indicated in Table 8-5, the Project will generate daytime operational noise increases ranging from 0.0 to 0.7 dBA L_{eq} at the nearest receiver locations. Table 8-6 shows that the Project will generate nighttime operational noise level increases ranging from 0.0 to 2.4 dBA L_{eq} at the nearest receiver locations. Project-related operational noise level increases would not exceed the operational noise level increase significance criteria presented in Table 4-1. Therefore, Project-

related operational noise level increases at the sensitive receiver locations will be *less than significant.*

TABLE 8-5: DAYTIME PROJECT OPERATIONAL NOISE LEVEL INCREASES

Receiver Location[1]	Total Project Operational Noise Level[2]	Measurement Location[3]	Reference Ambient Noise Levels[4]	Combined Project and Ambient[5]	Project Increase[6]	Increase Criteria[7]	Increase Criteria Exceeded?
R1	49.9	L1	66.2	66.3	0.1	1.5	No
R2	48.9	L2	67.5	67.6	0.1	1.5	No
R3	46.0	L3	66.4	66.4	0.0	1.5	No
R4	47.4	L4	56.4	56.9	0.5	5.0	No
R5	44.4	L5	61.4	61.5	0.1	5.0	No

[1] See Exhibit 7-1 for the receiver locations.
[2] Total Project daytime operational noise levels as shown in Table 8-2.
[3] Reference noise level measurement locations as shown in Exhibit 5-A.
[4] Observed daytime ambient noise levels as shown in Table 5-1.
[5] Represents the combined ambient conditions plus the Project activities.
[6] The noise level increase expected with the addition of the proposed Project activities.
[7] Significance increase criteria as shown in Table 4-1.

TABLE 8-6: NIGHTTIME OPERATIONAL NOISE LEVEL INCREASES

Receiver Location[1]	Total Project Operational Noise Level[2]	Measurement Location[3]	Reference Ambient Noise Levels[4]	Combined Project and Ambient[5]	Project Increase[6]	Increase Criteria[7]	Increase Criteria Exceeded?
R1	43.6	L1	60.5	60.6	0.1	5.0	No
R2	41.4	L2	61.8	61.8	0.0	5.0	No
R3	40.8	L3	59.1	59.2	0.1	5.0	No
R4	40.7	L4	49.2	49.8	0.6	5.0	No
R5	37.5	L5	52.5	52.6	0.1	5.0	No

[1] See Exhibit 7-1 for the receiver locations.
[2] Total Project nighttime operational noise levels as shown in Table 8-3.
[3] Reference noise level measurement locations as shown in Exhibit 5-A.
[4] Observed daytime ambient noise levels as shown in Table 5-1.
[5] Represents the combined ambient conditions plus the Project activities.
[6] The noise level increase expected with the addition of the proposed Project activities.
[7] Significance increase criteria as shown in Table 4-1.

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9 CONSTRUCTION IMPACTS

This section analyzes potential impacts resulting from the short-term construction activities associated with the development of the Project. Exhibit 9-1 shows the on-site construction noise source activity in relation to the nearest sensitive receiver locations previously described in Section 7. According to Section 7.04.070 of the Municipal Code, between October 1st and April 30th, construction, erection, demolition, alteration, repair, addition to or improvement of any building, structure, road, or improvement to realty is prohibited Monday through Friday, 6:00 a.m. to 5:30 p.m., Saturday, 8:00 a.m. to 5:00 p.m., Sunday, 8:00 a.m. to 5:00 p.m., and on Holidays, 8:00 a.m. to 5:00 p.m. Also, construction, erection, demolition, alteration, repair, addition to or improvement of any building, structure, road, or improvement to realty is prohibited between May 1st and September 30th, Monday through Friday: 5:00 a.m. to 7:00 p.m., Saturday: 8:00 a.m. to 5:00 p.m., Sunday: 8:00 a.m. to 5:00 p.m., and Holidays: 8:00 a.m. to 5:00 p.m. (22)

9.1 CONSTRUCTION NOISE LEVELS

The FTA *Transit Noise and Vibration Impact Assessment Manual* recognizes that construction projects are accomplished in several different stages and outlines the procedures for assessing noise impacts during construction. Each stage has a specific equipment mix, depending on the work to be completed during that stage. As a result of the equipment mix, each stage has its own noise characteristics; some stages have higher continuous noise levels than others, and some have higher impact noise levels than others. The Project construction activities are expected to occur in the following stages:

- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating

9.2 CONSTRUCTION REFERENCE NOISE LEVELS

To describe construction noise activities, this construction noise analysis was prepared using reference construction equipment noise levels from the Federal Highway Administration (FHWA) published the Roadway Construction Noise Model (RCNM), which includes a national database of construction equipment reference noise emission levels. (23) The RCNM equipment database provides a comprehensive list of the noise-generating characteristics of specific types of construction equipment. In addition, the database provides an acoustical usage factor to estimate the fraction of time each piece of construction equipment is operating at full power (i.e., its loudest condition) during a construction operation. According to the EPA, FTA, and FHWA, the overall construction noise level is governed primarily by the noisiest pieces of equipment. The quieter pieces do not affect the overall level, but they do reduce the magnitude of the fluctuations in the noise level. Therefore, a rough estimate of the noise level need only include the noisiest pieces of equipment expected at the site. (24) (8) (25) Consistent with FHWA and FTA guidance for detailed construction noise assessment, Table 9-1 presents the combined noise levels for the loudest construction activities expected for each stage, assuming all equipment operates simultaneously.

EXHIBIT 9-1: CONSTRUCTION NOISE SOURCE LOCATIONS

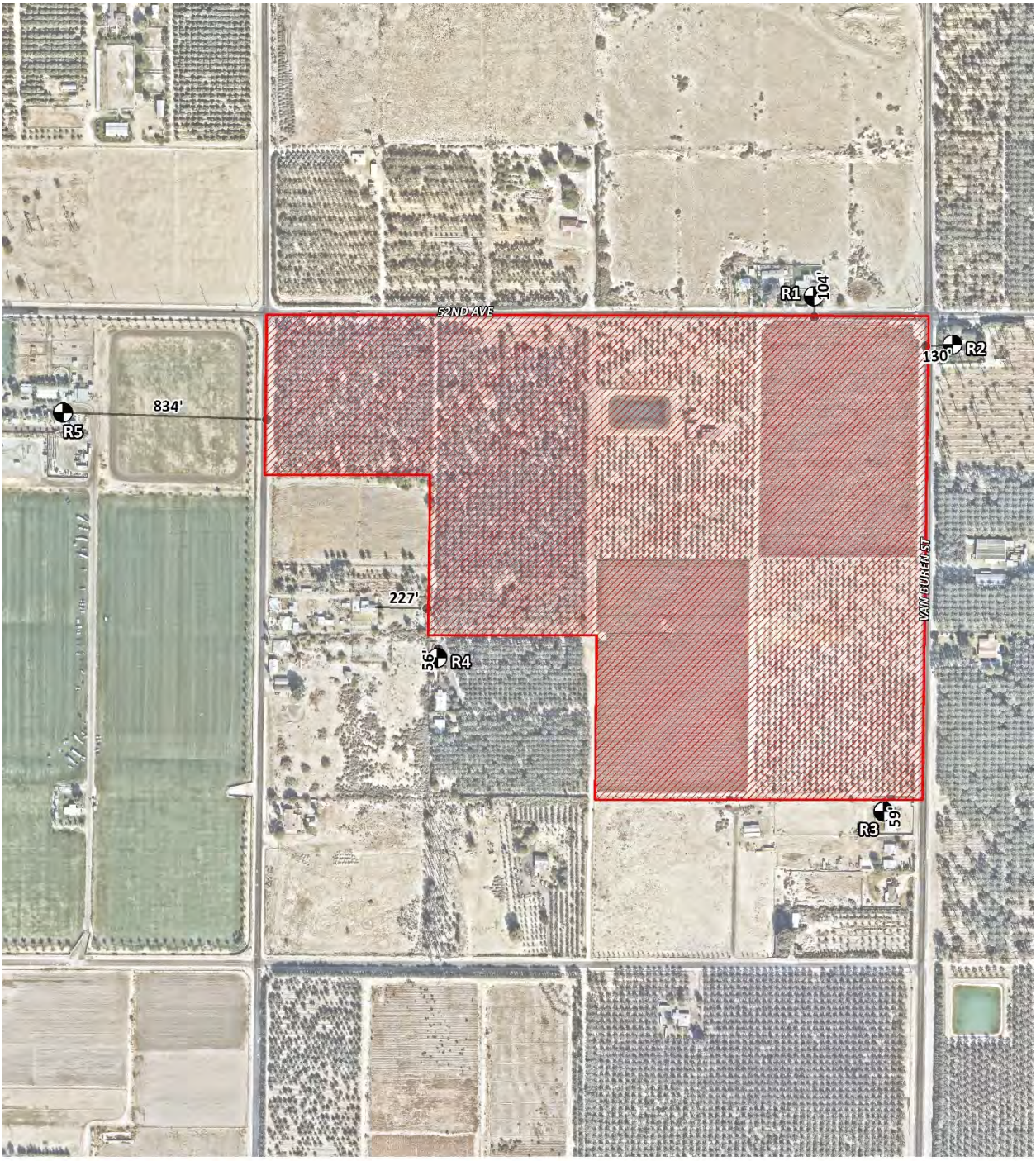


TABLE 9-1: CONSTRUCTION REFERENCE NOISE LEVELS

Construction Stage	Reference Construction Equipmnet[1]	Reference Noise Level @ 50 Feet (dBA L_{eq})	Composite Reference Noise Level (dBA L_{eq})	Reference Power Level (dBA L_w)
Site Preparation	Tractor	80.0	82.9	114.5
	Front End Loader	75.0		
	Dozer	78.0		
Grading	Tractor	80.0	84.2	115.9
	Grader	81.0		
	Compactor (ground)	76.0		
Building Construction	Crane	73.0	82.1	113.7
	Generator	78.0		
	Gradall	79.0		
Paving	Paver	74.0	77.8	109.5
	Dump Truck	72.0		
	Roller	73.0		
Architectural Coating	Man Lift	68.0	76.2	107.8
	Compressor (air)	74.0		
	Generator (<25kVA)	70.0		

[1] FHWA Road Construction Noise Model.

9.3 CONSTRUCTION NOISE ANALYSIS

Construction projects involve various stages, and activities frequently shift from one location to another. For example, during site preparation and grading, noise-generating activities may concentrate in an area for a short period to remove an obstruction, while the majority of the grading involves the equipment moving back and forth in a predictable pattern throughout the site; building construction and foundation work generally concentrate near the building footprint, while paving generally involves a predictable pattern of movement throughout the site. Therefore, construction activities are best evaluated as multiple moving point sources within the construction area since the speed and power of the equipment vary, and the equipment constantly changes position in terms of its distance and direction relative to the receivers. (8) (26) Using the reference construction equipment noise levels and the CadnaA noise prediction model, calculations of the Project construction noise level impacts by phase at the nearby sensitive receiver locations were completed. To account for the dynamic nature of construction activities, the CadnaA construction noise analysis evaluates the noise source activities as multiple moving point sources, or construction crews, within the limits of construction. Construction impacts are based on the loudest activity and the highest noise level calculated at each receiver location. As shown in Table 9-2, the highest construction noise levels are expected to range from 54.6 to 63.6 dBA L_{eq} at the nearby receiver locations. Appendix 9.1 includes the detailed CadnaA construction noise model inputs.

TABLE 9-2: CONSTRUCTION EQUIPMENT NOISE LEVEL SUMMARY

Receiver Location[1]	Site Preparation	Grading	Building Construction	Paving	Architectural Coating	Highest Levels[2]
R1	61.9	63.2	61.1	56.8	55.1	63.2
R2	60.2	61.5	59.4	55.1	53.4	61.5
R3	62.3	63.6	61.5	57.2	55.5	63.6
R4	62.0	63.3	61.2	56.9	55.2	63.3
R5	53.3	54.6	52.5	48.2	46.5	54.6

[1] Construction noise source and receiver locations are shown in Exhibit 9-1.
[2] Construction noise level calculations based on distance from the project site boundaries (construction activity area) to nearby receiver locations. CadnaA construction noise model inputs are included in Appendix 9.1.

9.4 PROJECT SITE CONSTRUCTION NOISE LEVEL COMPLIANCE

To evaluate whether the Project will generate potentially significant short-term noise levels at the nearest receiver locations, a construction-related daytime noise level threshold of 80 dBA L_{eq} is used as a reasonable threshold to assess the daytime construction noise level impacts. The construction noise analysis shows that the nearest receiver locations will not exceed the reasonable daytime 80 dBA L_{eq} significance threshold during Project construction activities at any receiver shown in Exhibit 7-1. Therefore, the noise impacts due to Project construction noise are considered *less than significant*.

TABLE 9-3: CONSTRUCTION NOISE LEVEL COMPLIANCE

Receiver Location[1]	Construction Noise Levels (dBA L_{eq})		
	Highest Construction Noise Levels[2]	Threshold[3]	Threshold Exceeded?[4]
R1	55.1	80	No
R2	53.4	80	No
R3	55.5	80	No
R4	55.2	80	No
R5	46.5	80	No

[1] Construction noise source and receiver locations are shown in Exhibit 9-1.
[2] Highest construction noise level calculations based on distance from the construction noise source activity to the nearest receiver locations, as shown in Table 9-2.
[3] Construction noise level thresholds as shown in Table 4-1.
[4] Do the estimated Project construction noise levels exceed the construction noise level threshold?

9.5 TEMPORARY CONSTRUCTION NOISE LEVEL INCREASES

To describe the temporary Project construction noise level contributions to the existing ambient noise environment, the Project construction noise levels were combined with the existing ambient noise level measurements at the nearest off-site receiver locations. The difference between the combined Project-construction and ambient noise levels is used to describe the construction noise level contributions. Temporary noise level increases that would be experienced at sensitive receiver

locations when Project construction-source noise is added to the ambient daytime conditions are presented in Table 9-4. A temporary noise level increase of 20 dBA is considered a *significant* impact based on the substantial noise level increase criteria, which is used to assess the Project-construction noise level increases.

As indicated in Table 9-4, the Project construction will contribute to noise level increases ranging from 0.1 to 2.5 dBA L_{eq} during the daytime hours at the nearest receiver locations. The unmitigated construction noise analysis shows that the nearest receiver locations will not exceed the 20 dBA L_{eq} noise level increase significance threshold during Project construction activities. The temporary construction noise level increase analysis shows that the noise impacts due to the Project construction noise are considered *less than significant*.

TABLE 9-4: DAYTIME CONSTRUCTION NOISE LEVEL INCREASES

Receiver Location[1]	Typical Project Construction Noise Level[2]	Measurement Location[3]	Reference Ambient Noise Levels[4]	Combined Project and Ambient[5]	Project Increase[6]	Increase Criteria[7]	Increase Criteria Exceeded?
R1	55.1	L1	66.2	66.5	0.3	20	No
R2	53.4	L2	67.5	67.7	0.2	20	No
R3	55.5	L3	66.4	66.7	0.3	20	No
R4	55.2	L4	56.4	58.9	2.5	20	No
R5	46.5	L5	61.4	61.5	0.1	20	No

[1] Construction noise source and receiver locations are shown in Exhibit 9-1.
[2] Typical Project daytime construction noise levels as shown in Table 9-3.
[3] Reference noise level measurement locations as shown in Exhibit 5-A.
[4] Observed daytime ambient noise levels as shown in Table 5-1.
[5] Represents the combined ambient conditions plus the Project construction activities.
[6] The noise level increase expected with the addition of the proposed Project construction activities.
[7] Caltrans Traffic Noise Analysis Protocol.

9.6 CONSTRUCTION VIBRATION ANALYSIS

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods employed. The operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Ground vibration levels associated with various types of construction equipment are summarized in Table 9-5. Based on the representative vibration levels presented for various construction equipment types, it is possible to estimate the potential for human response (annoyance) and building damage using the following vibration assessment methods defined by Caltrans. To describe the vibration impacts, Caltrans provides the following equation: $PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$

TABLE 9-5: VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT

Equipment	PPV (in/sec) at 25 feet
Small bulldozer	0.003
Jackhammer	0.035
Loaded Trucks	0.076
Large bulldozer	0.089
Vibratory Roller	0.210

Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual

Using the vibration source level of construction equipment provided in Table 9-5 and the construction vibration assessment methodology published by the FTA, it is possible to estimate the Project vibration impacts. Table 9-6 presents the expected Project-related vibration levels at the nearby receiver locations. At distances ranging from 3 to 207 feet from Project construction activities, construction vibration velocity levels are estimated to range from less than 0.01 to 5.05 PPV in/sec. Based on the maximum acceptable continuous vibration threshold of 0.30 PPV (in/sec), the typical Project construction vibration levels will not exceed the vibration thresholds at any receivers. Therefore, the Project-related vibration impacts are considered *less than significant* during typical construction activities at the Project site.

It should be noted that vibration levels at the site of the closest sensitive receiver are unlikely to be sustained during the entire construction period, but will occur only during the times that heavy construction equipment is operating adjacent to the Project site perimeter. Moreover, construction at the Project site will be restricted to the daytime hours, consistent with City of Coachella requirements, eliminating potential vibration impacts during the sensitive evening and nighttime hours.

TABLE 9-6: PROJECT CONSTRUCTION VIBRATION LEVELS

Location[1]	Distance to Const. Activity (Feet)[2]	Typical Construction Vibration Levels PPV (in/sec)[3]						Thresholds PPV (in/sec)[4]	Thresholds Exceeded?[5]
		Small bulldozer	Jack-hammer	Loaded Trucks	Large bulldozer	Vibratory Roller	Highest Vibration Level		
R1	104'	0.00	0.00	0.01	0.01	0.02	0.02	0.30	No
R2	130'	0.00	0.00	0.01	0.01	0.02	0.02	0.30	No
R3	59'	0.00	0.01	0.02	0.02	0.06	0.06	0.30	No
R4	56'	0.00	0.01	0.02	0.03	0.06	0.06	0.30	No
R5	834'	0.00	0.00	0.00	0.00	0.00	0.00	0.30	No

[1] Construction noise source and receiver locations are shown in Exhibit 9-1.
[2] Distance from receiver building facade to Project construction boundary (Project site boundary).
[3] Based on the Vibration Source Levels of Construction Equipment (Table 9-5).
[4] Caltrans Transportation and Construction Vibration Guidance Manual, April 2020, Table 19, p. 38.
[5] Does the peak vibration exceed the acceptable vibration thresholds?
"PPV" = Peak Particle Velocity

12 REFERENCES

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23. **U.S. Department of Transportation, Federal Highway Administration, Office of Environment and Planning.** *FHWA Roadway Construction Noise Model.* January, 2006.

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26. —. *FHWA Highway Construction Noise Handbook.* Final Report August 2006.

13 CERTIFICATION

The contents of this noise study report represent an accurate depiction of the noise environment and impacts associated with the Project. The information contained in this noise study report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at (619) 788-1971.

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EDUCATION

Bachelor of Science in Urban and Regional Planning
California Polytechnic State University, Pomona • June 2000

PROFESSIONAL AFFILIATIONS

ASA – Acoustical Society of America
AEP – Association of Environmental Planners
AWMA – Air and Waste Management Association
INCE – Institute of Noise Control Engineers

PROFESSIONAL CERTIFICATIONS

Approved Acoustical Consultant • County of San Diego
FHWA Traffic Noise Model of Training • November 2004
CadnaA Basic and Advanced Training Certificate • October 2008.

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APPENDIX 3.1:

CITY OF COACHELLA MUNICIPAL CODE

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Title 7 - NOISE CONTROL

Chapters:

Chapter 7.04 - NOISE CONTROL

Sections:

Footnotes:
*--- (**1**) ---*
***Editor's note—** Ord. No. 1022, adopted Nov. 17, 2010, amended ch. 7.04 in its entirety to read as herein set out. Former ch. 7.04 pertained to similar subject matter, consisted of §§ 7.04.010—7.04.140, and derived from Ord. 940.*

7.24.010 - Purpose.

The city council finds and declares that:

A. Inadequately controlled noise presents a growing danger to the health and welfare of the residents of the city of Coachella;

B. The making and creation of excessive, unnecessary or unusually loud noises within the limits of the city of Coachella is a condition that has existed for some time, however, the extent and volume of such noises is increasing;

C. The making, creation or maintenance of such excessive, unnecessary, unnatural or unusually loud noises that are prolonged, unusual and unnatural in their time, place and use affect and are a detriment to public health, comfort, convenience, safety, welfare and prosperity of the residents of the city of Coachella;

D. Every person is entitled to an environment in which the noise is not detrimental to his life, health, or enjoyment of property; and

E. The necessity in the public interest for the provisions and prohibitions hereinafter contained and enacted, is declared as a matter of legislative determination and public policy, and it is further declared that the provisions and prohibitions hereinafter contained and enacted are in pursuance of and for the purpose of securing and promoting the public health, comfort, convenience, safety, welfare and prosperity and the peace and quiet of the residents of the city of Coachella.

(Ord. No. 1022, § 1, 11-17-10; Ord. No. 1024, 11-17-10)

7.04.020 - Definitions.

[As used in this chapter, the following terms have the meanings given:]

"A-weighted sound level" means the sound pressure level in decibels as measured on a sound level meter using the A-weighting network. The level to read is designated db(A) or dBA.

"Ambient noise level" means the all-encompassing noise level associated with a given environment, being a composite of sounds from all sources, excluding the alleged offensive noise, at the location and approximate time at which a comparison with the alleged offensive noise is to be made.

"Amplified music" means instrumental and/or vocal music amplified through electronic means.

"Average sound level" means a sound level typical of the sound levels at a certain place during a given period of time; also, means an equivalent continuous sound level.

"Commercial establishments" includes, but is not limited to, any nightclub, restaurant, sports bar, industrial, retail or business establishment or combination thereof.

"Construction equipment" means any tools, machinery or equipment used in connection with construction operations, including all types of "special construction" equipment as defined in the pertinent sections of the California Vehicle Code when used in the construction process on any construction site, home improvement site or property maintenance site, regardless of whether such site be located on-highway or off-highway.

"Cumulative period" means an additive period of time composed of individual time segments which may be continuous or interrupted.

"Decibel" means a unit measure of sound level noise.

"Disturbance" means any disturbance of the peace as defined by California Penal Code Section 415 or as otherwise defined herein.

"Disturbing, excessive or offensive noise" means any sound or noise from any source in excess of the sound level or noise level set forth in Section 7.04.030.

"Emergency machinery," "vehicle" or "work" means any machinery, vehicle or work used, employed or performed in an effort to protect, provide or restore safe conditions in the community or for the citizenry, or work by private or public utilities when restoring utility service.

"Fixed noise source" means a stationary device which creates sounds which are fixed or motionless including, but not limited to, industrial and commercial machinery and equipment, pumps, fans, compressors, generators, air conditioners and refrigeration equipment.

"Gathering" means any convergence of five or more persons.

"Impact noise" means the noise produced by the collision of one mass in motion with a second mass which may be either in motion or in rest.

"Noise level" means the same as "sound level." The terms may be used interchangeably herein.

"Peace officer" means a duly appointed officer of the city, as defined in California Penal Code, Sectio 830, et seq.

"Person" means a person, firm, association, copartnership, joint venture, corporation or any entity, public or private in nature.

"Portable powered blower" means any mechanically powered device, regardless of the source of power, which is not stationary, and used for the purpose of blowing leaves, dirt or other debris off sidewalks, lawns or other surfaces.

"Premises" means any real property or location at which a gathering may be held.

"Sound level" (noise level) in decibels is the quantity measured using the frequency weighting of A of a sound level meter as defined herein.

"Sound level meter" means an instrument meeting American National Standard Institute's Standard SL. 4-1974 for type 1 or type 2 sound level meters or an instrument and the associated recording and analyzing equipment which will provide equivalent data.

(Ord. No. 1022, § 1, 11-17-10; Ord. No. 1024, 11-17-10)

7.04.030 - Sound level limits as related to fixed noise sources.

A. Regardless of whether an objective measurement by sound level meter is involved, it shall be unlawful for any person to make, continue, or cause to be made or continued, within the city limits any disturbing excessive or offensive noise or vibration which causes discomfort or annoyance to any reasonable person of normal sensitivity residing in the area or that is plainly audible at a distance greater than fifty (50) feet from the sources point for any purpose. The following ten-minute average sound level limits, unless otherwise specifically indicated, shall apply as indicated in the following table as it relates to a fixed noise source or leaf blowers pursuant to Section 7.04.075.

Zone	Time	Applicable Ten-Minute Average Decibel Limit (A-weighted)
Residential—All zones	6:00 a.m. to 10:00 p.m. 10:00 p.m. to 6:00 a.m.	55 45
Commercial—All zones	6:00 a.m. to 10:00 p.m. 10:00 p.m. to 6:00 a.m.	65 55

B. If the measured ambient noise level exceeds the applicable limit as noted in the table in subsection (A) of this section, the allowable average sound level shall be the ambient noise level. The ambient noise level shall be measured when the alleged noise violation sources are not

operating.

C. The sound level limit between two zoning districts shall be measured at the higher allowable district.

(Ord. No. 1022, § 1, 11-17-10; Ord. No. 1024, 11-17-10)

7.04.040 - Prohibited noise generally.

A. It is unlawful for any person or property owner within the city of Coachella to make, cause, or continue to make or cause, loud, excessive, impulsive or intrusive sound or noise that annoys or disturbs persons of ordinary sensibilities.

B. The factors, standards, and conditions that may be considered in determining whether a violation of the provisions of this section has been committed, include, but are not limited to, the following:

1. The level of the noise;
2. The level and intensity of the background (ambient) noise, if any;
3. The proximity of the noise to residential or commercial sleeping areas;
4. The nature, density and zoning of the area within which the noise emanates;
5. The density of inhabitation of the area within which the noise emanates;
6. The time of day and night the noise occurs;
7. The duration of the noise;
8. Whether the nature of the noise is natural or unnatural;
9. Whether the noise is constant, recurrent or intermittent; and
10. Whether the noise is produced by a commercial or noncommercial activity.

(Ord. No. 1022, § 1, 11-17-10; Ord. No. 1024, 11-17-10)

7.04.050 - Disturbing, excessive, offensive noises—Declaration of certain acts constituting.

The following activities, are declared to be deemed disturbing, excessive or offensive noises and any of the following shall constitute prima facie evidence of a violation:

A. Horns, Signaling Devices, Muffler Systems, Car Alarms, Etc. Unnecessary use or operation of horns, signaling devices, uncontrolled muffler noises, car alarms on vehicles of all types, including motorcycles, and other equipment.

1. The operation of any such sound production or reproduction device, radio receiving set, musical instrument, drum, phonograph, television set, machine, loudspeaker and sound amplifier or similar machine or device in such a manner as to be plainly audible at a distance of fifty (50) feet or more from the building, structure or vehicle in which located, or from the source point.

2. The operation of any sound amplifier, which is part of, or connected to, any radio, stereo receiver, compact disc player, cassette tape player, or other similar device when operated in such a manner as to be plainly audible at a distance of fifty (50) feet from the source point or when operated in such a manner as to cause a person to be aware of vibration at a distance of fifty (50) feet or more from the source point.

B. Uses Restricted. The use, operation, or permitting to be played, used or operated, any sound production or reproduction device, radio receiving set, musical instrument, drums, phonograph, television set, loudspeakers and sound amplifiers or other machine or device for the producing or reproducing of sound in such a manner as to disturb the peace, quiet, and comfort of any reasonable person of normal sensitiveness.

C. Prima Facie Violations. Any of the following shall constitute evidence of a prima facie violation of this section:

1. The operation of any such sound production or reproduction device, radio receiving set, musical instrument, drum, phonograph, television set, machine, loudspeaker and sound amplifier or similar machine or device in such a manner as to be plainly audible at a distance of fifty (50) feet from the building, structure or vehicle in which located, or from the source point.

2. The operation of any sound amplifier, which is part of, or connected to, any radio, stereo receiver, compact disc player, cassette tape player, or other similar device when operated in such a manner as to be plainly audible at a distance of fifty (50) feet from the source point or when operated in such a manner as to cause a person to be aware of vibration at a distance of fifty (50) feet from the source point.

D. Enforcement of Prima Facie Violations. Any peace office, as defined in California Penal Code, Sections 830, et seq., and/or the city manager or his or her designees, who are authorized to enforce the provisions of this chapter and who encounters evidence of a prima facie violation of this section whereby the component(s) amplifying or transmitting the sound in such a manner as to disturb the peace, quiet, or comfort of any reasonable person of normal sensitivity in any area of the city shall be empowered to issue a citation and/or to confiscate and impound as evidence, any or all of the components amplifying or transmitting the sound.

(Ord. No. 1022, § 1, 11-17-10; Ord. No. 1024, 11-17-10)

7.04.060 - Special provisions—Exemptions.

The following activities shall be exempted from the provisions of this chapter:

A. School bands, school athletic and school entertainment events;

B. Outdoor gatherings, public dances, shows and sporting and entertainment events; provided, the events are authorized by the city;

C. Activities conducted in public parks and public playgrounds;

D. Any mechanical device, apparatus or equipment used, related to or connected with emergency machinery, vehicle or work;

E. All mechanical devices, apparatus or equipment which are utilized for the protection or salvage of agricultural crops during periods of potential or actual frost damage or other adverse weather conditions;

F. Mobile noise sounds associated with agricultural operations provided such operations do not take place between the hours of 8:00 p.m. and 7:00 a.m. on weekdays, including Saturdays, or at any time on Sunday or a federal holiday;

G. Mobile noise sources associated with agricultural pest control through pesticide application;

H. Carillon chimes between the hours of 8:00 a.m. to 7:00 p.m.;

I. For noise sources associated with property maintenance, refer to Section 7.04.075, "property maintenance activities";

J. For noise sources associated with construction activities, refer to Section 7.04.070, "construction activities"; and

K. The provisions of this regulation shall not preclude the construction, operation, maintenance and repairs of equipment, apparatus or facilities of park and recreation departments, public work projects or essential public services and facilities, including those of public utilities subject to the regulatory jurisdiction of the California Public Utilities Commission.

(Ord. No. 1022, § 1, 11-17-10; Ord. No. 1024, 11-17-10)

7.04.070 - Construction activities.

No person shall perform, nor shall any person be employed, nor shall any person cause any other person to be employed to work for which a building permit is required by the city in any work of construction, erection, demolition, alteration, repair, addition to or improvement of any building, structure, road or improvement to realty except between the hours as set forth as follows:

October 1st through April 30th

Monday—Friday: 6:00 a.m. to 5:30 p.m.

Saturday: 8:00 a.m. to 5:00 p.m.

Sunday: 8:00 a.m. to 5:00 p.m.

Holidays: 8:00 a.m. to 5:00 p.m.

May 1st through September 30th

Monday—Friday: 5:00 a.m. to 7:00 p.m.

Saturday: 8:00 a.m. to 5:00 p.m.

Sunday: 8:00 a.m. to 5:00 p.m.

Holidays: 8:00 a.m. to 5:00 p.m.

Emergency work and/or unusual conditions may cause work to be permitted with the consent of the city manager, or his or her designee, upon recommendation of the building director or the city engineer.

(Ord. No. 1022, § 1, 11-17-10; Ord. No. 1024, 11-17-10)

7.04.075 - Property maintenance activities.

A. Noise sources associated with property maintenance activity and all portable blowers, lawnmowers, edgers or similar devices shall be prohibited except during the following hours:

October 1st through April 30th

Monday—Sunday: 9:00 a.m. to 5:30 p.m.

Holidays: Not allowed.

May 1st through September 30th

Monday—Friday: 8:00 a.m. to 5:30 p.m.

Saturday and Sunday: 9:00 a.m. to 5:30 p.m.

Holidays: Not allowed.

Notwithstanding the hours of permitted operations, such equipment that constitutes a public nuisance may be abated as otherwise provided in this Code.

B. No person shall willfully make or continue, or willfully cause to be made or continued, any noise from any portable powered blower at a level which exceeds seventy (70) decibels dBA measured at the midpoint of a wall area twenty (20) feet long and ten (10) feet high and at the horizontal distance fifty (50) feet away from the midpoint of the wall, or not more than seventy-six (76) decibels dBA at a horizontal distance of twenty-four (24) feet using a sound level meter.

C. No portable powered blower shall be operated in a manner which will permit dirt, dust, debris, leaves, grass clippings, cuttings, or trimmings from trees or shrubs to be blown or deposited onto neighboring property or public right-of-way. All waste shall be removed and disposed of in a sanitary manner by the use or property occupant.

D. Leaf blowers shall not be operated within a horizontal distance of ten (10) feet of any operable window, door, or mechanical air intake opening or duct.

(Ord. No. 1022, § 1, 11-17-10; Ord. No. 1024, 11-17-10)

7.04.080 - Schools, hospitals and churches—Special provisions.

It is unlawful for any person to create any noise which causes the noise level at any school, hospital or church while the same is in use, to exceed the noise limits, as specified in subsection (A) of Section 7.04.030, prescribed for the assigned noise zone in which the school, hospital or church is located, or which noise level unreasonably disturbs or annoys patients in the hospital.

(Ord. No. 1022, § 1, 11-17-10; Ord. No. 1024, 11-17-10)

7.04.090 - Air conditioning, refrigeration and pool equipment.

The noise standards enumerated in Section 7.04.030 shall be increased by eight dBA when the alleged offensive noise source is an air conditioning or refrigeration system or associated equipment which was installed prior to the effective date of the ordinance codified in this chapter. Installation of new equipment must be certified to be within the provisions of this chapter. Installation of new equipment must be certified to be within the provisions of this chapter for night and day operation noise level.

(Ord. No. 1022, § 1, 11-17-10; Ord. No. 1024, 11-17-10)

7.04.100 - Noise level measurement.

A. The location selected for measuring exterior noise levels between residential properties shall be at the property line of the affected residential property. Affected residential property shall be the address from which the complaint was received. Interior noise measurement shall be made within the affected residential unit. The measurement shall be made at a point at least four feet from the wall, ceiling or floor nearest the noise source.

The location selected for measuring exterior noise levels between nonresidential properties shall be at the property line of the affected property.

B. The location selected for measuring exterior noise levels between two zoning districts shall be at the boundary of the two districts.

(Ord. No. 1022, § 1, 11-17-10; Ord. No. 1024, 11-17-10)

7.04.110 - Interference with authorized personnel is prohibited.

No person shall interfere with, oppose or resist any authorized person charged with enforcement of this chapter while such person is engaged in the performance of his duty.

(Ord. No. 1022, § 1, 11-17-10; Ord. No. 1024, 11-17-10)

7.04.120 - Pre-existing noise source—Time extension.

Those commercial and/or industrial noise sources in existence prior to the date of adoption of the ordinance codified in this chapter, which noise sources are an integral part of a building, structure or similar fixed and permanent installation if in compliance with local zoning structures, shall be granted a three-year period from the date of adoption with which to comply with the provisions of the chapter. If, at the end of the three-year period, it can be shown that compliance with the provisions herein constitutes a hardship in terms of technical and economic feasibility, the time to comply may be extended on an annual basis until such time as compliance may be affected.

(Ord. No. 1022, § 1, 11-17-10; Ord. No. 1024, 11-17-10)

7.04.130 - Violation—Infractions.

Any person violating any of the provisions of this chapter shall be deemed guilty of an infraction.

(Ord. No. 1022, § 1, 11-17-10; Ord. No. 1024, 11-17-10)

7.04.140 - Continuing or subsequent violations—Misdemeanor.

Any person having been convicted of a violation of any provisions of this chapter who thereafter commits a violation of the same provisions of this chapter shall be guilty of a misdemeanor.

(Ord. No. 1022, § 1, 11-17-10; Ord. No. 1024, 11-17-10)

7.04.150 - Severability.

If any provision of this chapter is held to be unconstitutional or otherwise invalid by any court of competent jurisdiction, the remaining provisions of this chapter shall not be invalidated.

(Ord. No. 1022, § 1, 11-17-10; Ord. No. 1024, 11-17-10)

Chapter 7.05 - MULTIPLE RESPONSES TO LOUD OR UNRULY PARTIES, GATHERINGS OR OTHER SIMILAR EVENTS

7.05.010 - Declaration of findings and policy.

It is hereby found and declared that:

A. Due to inadequate supervision, some large gatherings of people, such as parties, frequently become loud and unruly to the point that they constitute a threat to the peace, health, safety, or general welfare of the public as a result of conduct such as one or more of the following:

excessive noise, excessive traffic, obstruction of public streets or crowds who have spilled over into pu streets, public drunkenness, the service of alcohol to minors, fights, disturbances of the peace, and litter.

B. The city of Coachella is required to make multiple responses to such unruly gatherings in order to restore and maintain the peace and protect public safety. Such gatherings are a burden on scarce city resources and can result in police responses to regular and emergency calls being delayed and police protection to the rest of the city being reduced.

C. In order to discourage the occurrence of repeated loud and unruly gatherings, the persons responsible for the public nuisance created by these gatherings should be fined.

(Ord. No. 1023, § 1, 11-17-10; Ord. No. 1025, 11-17-10)

7.05.020 - Loud or unruly gatherings—Public nuisance.

It shall be unlawful and a public nuisance to conduct a gathering of ten (10) or more persons on any private property in a manner which constitutes a substantial disturbance of the quiet enjoyment of private or public property in a significant segment of a neighborhood, as a result of conduct constituting a violation of law. Illustrative of such unlawful conduct is excessive noise or traffic, obstruction of public streets by crowds or vehicles, public drunkenness, the service of alcohol to minors, fights, disturbances of the peace, litter. A gathering constituting a public nuisance may be abated by the city by all reasonable means including, but not limited to, an order requiring the gathering to be disbanded and citation and/or arrest of any law violators under any applicable local laws and state statutes.

(Ord. No. 1023, § 1, 11-17-10; Ord. No. 1025, 11-17-10)

7.05.030 - Notice of unruly gatherings—Posting, mail.

A. When the city intervenes at a gathering which constitutes a public nuisance under this chapter, the premises at which such nuisance occurred shall be posted with a notice substantially in the form attached hereto as Exhibit "A" stating that a public nuisance under this chapter was caused by a gathering at the premises, the date and time of the police intervention, and that any subsequent or second police intervention with respect to a nuisance under this chapter at said premises, including a second intervention that same day or night, within sixty (60) days of the first intervention, shall result in the joint and several liability of any guests causing the public nuisance, persons who are residents or in control of the property at which the public nuisance occurred, persons who sponsored the gathering constituting the public nuisance, and owners of the premises as more fully set forth in Sections 7.05.040—7.05.060, below. The residents and persons in control of such property, and the sponsors of the event, shall be responsible for ensuring that such notice is not removed or defaced and shall be liable for a civil penalty of one hundred dollars ($100.00) in addition to any other penalties which may be due under this chapter, if such notice is removed or defaced, provided, however, that the residents of the premises or sponsor

of the event, if present, shall be consulted as to the location in which such notice is posted in order to achieve both the security of the notice and its prominent display. The notice shall remain posted for the entire 60-day period.

B. Notice of the police intervention shall also be mailed to any property owner at the address shown on the city's property tax assessment records and shall advise the property owner that any subsequent gathering resulting in a public nuisance within sixty (60) days on the same premises necessitating city intervention shall result in liability of the property owner for all penalties associated with such intervention as more particularly set forth below.

EXHIBIT A

IMPORTANT NOTICE REGARDING

PUBLIC NUISANCE

NOTICE IS HEREBY GIVEN THAT, pursuant to Coachella Municipal Code (CMC) Chapter 7.05, on:

Date: _____, 20___, at _____ a.m./p.m.

The Coachella Police Department found that a gathering, at the below-listed premises caused a public nuisance as defined by CMC Chapter 7.05 (e.g., disturbance of the peace, threat to public safety, etc.):

Address: _____, Coachella, California.

WARNING

IF THE POLICE RESPOND TO ANOTHER DISTURBANCE CONSTITUTING A NUISANCE (AS DEFINED BY CMC CHAPTER 7.05) AT THE ABOVE PREMISES WITHIN 60 DAYS OF THIS NOTICE, INCLUDING BUT NOT LIMITED TO A DISTURBANCE LATER TODAY OR TONIGHT, A SUBSEQUENT RESPONSE FEE WILL BE IMPOSED UPON:

1. ALL GUESTS CAUSING THE NUISANCE;
2. ALL SPONSORS OF THE GATHERING;
3. ALL RESIDENTS OF THE PREMISES;
4. ALL PERSONS IN CONTROL OF THE PREMISES; AND
5. ALL OWNERS OF THE PREMISES THAT RESIDE ON OR ADJACENT TO THE PREMISES, OR ARE PRESENT AT THE PREMISES WHEN THIS NOTICE IS FIRST POSTED.

Property owners who do not reside on or adjacent to the above premises, and who are not present when this Notice is first posted, are also jointly and severally liable for said fee, if the next disturbance occurs after two weeks after this Notice is mailed to said owner.

THIS NOTICE MUST REMAIN POSTED ON THE PREMISES FOR 60 DAYS

$100 FINE FOR UNAUTHORIZED REMOVAL OF THIS NOTICE

_____

(Name and Signature of the Officer Issuing This Notice)

_____

(Officer's Phone Number)

Date: _____

Case Number: _____

(Ord. No. 1023, § 1, 11-17-10; Ord. No. 1025, 11-17-10)

7.05.040 - Persons liable for subsequent response to a gathering constituting a public nuisance.

If the city is required to intervene as to a gathering constituting a public nuisance on the same premises more than once in any 60-day period, including a second intervention during the same day or night as the first intervention, the following persons shall be jointly and severally liable for civil penalties as set forth in Section 7.05.050, below, in addition to liability for any injuries to city personnel or damage to city property.

A. The person or persons who own the premises where the gathering constituting a public nuisance took place if any of the following are the case:
   (1) Said owner resides on or adjacent to the premises;
   (2) Said owner was present when the notice described in Exhibit "A" was first posted; or
   (3) The notice described in Exhibit "A" was mailed to said owner and fourteen (14) days have elapsed since the date of said mailing.

For purposes of this subsection, where a gathering takes place within the confines of a single unit in a building owned by a housing cooperative, the owner of the property shall be deemed to be the owner of the single unit and not the members of the housing cooperative in general. Where the gathering took place in the common area of a building owned by a housing cooperative, only the members of the cooperative owning units in the building where the gathering took place shall be deemed the owners of the property for purposes of this subsection. Other members of the housing cooperative may still be liable if they fall within the categories of person made liable by Section 7.05.040, subsections (B), (C), or (D), below.

B. The person or persons residing on or otherwise in control of the property where such gathering took place.
C. The person or persons who organized or sponsored such gathering.
D.

All persons attending such gathering who engaged in any activity resulting in the public nuisance.

E. Nothing in this section shall be construed to impose liability on the resident or owners of the premises or sponsor of the gathering, for the conduct of persons who are present without the express or implied consent of the resident or sponsor, as long as the resident and sponsor have taken all steps reasonably necessary to exclude such uninvited participants from the premises. Where an invited guest engages in conduct which the sponsor or resident could not reasonably foresee and the conduct is an isolated instance of a guest at the event violating the law which the sponsor is unable to reasonably control without the intervention of the police, the unlawful conduct of the individual guest shall not be attributable to the sponsor, owner, or resident for the purposes of determining whether the event constitutes a public nuisance under this section.

F. There shall be no liability for civil penalties under this chapter for a subsequent intervention during the same day or night as the prior intervention, unless a reasonable time has been provided to abate the public nuisance, taking into account the size of the gathering, the time of day, and other relevant factors.

G. There shall be no liability for civil penalties under this chapter for a second response during the same day or night as the first response when a person who would otherwise be liable under subsection (A) seeks assistance from the police department to abate a public nuisance under this chapter, and the person cooperates fully with the police while taking reasonable action to abate the public nuisance.

H. If the city is required to intervene at a gathering constituting a public nuisance on the same premises more than once in any 60-day period, excluding a second intervention during the same day or night as the first intervention, the 60-day period shall be extended by another sixty (60) days from the date of the second intervention.

(Ord. No. 1023, § 1, 11-17-10; Ord. No. 1025, 11-17-10)

7.05.050 - Recovery of subsequent response fee.

A. After given proper notice pursuant to Section 7.05.030 and a reasonable opportunity to abate a gathering constituting a public nuisance, a subsequent response fee shall be assessed against all persons liable for the city's intervention. The subsequent response fee shall include:

1. The actual cost to the city of law enforcement services incurred as a result of a subsequent response;
2. The actual cost of any medical treatment required by a police officer for injuries sustained during a subsequent response; and
3. The cost of repairing or replacing any city equipment or property damaged or destroyed during a subsequent response.

B. Except as provided in subsection (A) of this section, the subsequent response fee shall not ex one thousand dollars ($1,000.00) for any subsequent response.

C. The remedies set forth in this chapter shall be in addition to any other penalties imposed by law for particular violations of law committed during the course of an event which is a public nuisance under this chapter, provided however, that if the only violation of law which constituted the public nuisance under this chapter is excessive noise, the remedies provided under this chapter shall be exclusive of any other remedies provided by law to the city for such excessive noise.

D. The city shall bill all persons liable for subsequent response fees by mail by sending a letter in substantially the form attached hereto as Exhibit "B." Payment of the fees shall be due within thirty (30) days of the date the bill is deposited in the mail. If full payment is not received within the required time for payment, the bill will be delinquent, and all persons liable for the fees shall be charged interest at the maximum legal rate from the date the payment period expires and a further civil penalty in the amount of one hundred dollars ($100.00).

EXHIBIT B

Date:

To:

Dear:

The City of Coachella was required to abate the public nuisance caused by a gathering of 10 or more persons at (location of property), which substantially disrupted the quiet enjoyment of property in a significant segment of the adjacent neighborhood. This is the (second/third/fourth, etc.) such public nuisance at this property within the last 60 days, and thus, a fee of _____ is imposed on you. If you fail to remit this fine to the City of Coachella by (30 days from the date of this notification) you will be liable for an additional $100 penalty, plus interest. The payment should be remitted to the address listed below. Your liability is based on the fact that you were:

[ ] An owner of the property to whom was sent prior notice of a public nuisance at the property within the previous 60 days; and/or

[ ] An owner of the property who resided on or adjacent to the property when the public nuisance took place; and/or

[ ] An owner of the property who was present when a Notice of a public nuisance was first posted at the property; and/or

[ ] A person who resided on or was otherwise in control of the property when the public nuisance took place there; and/or

[ ] A person who organized or sponsored the event that created the public nuisance at such property; and/or

[ ] A person who attended the event constituting the public nuisance at such property and engaged in the conduct which resulted in the public nuisance.

If you believe that you are not liable you may defend this claim in the civil action which the City of Coachella will file against you upon your failure to remit the fee. You should be aware, however, that if you fail to prevail in that action you will be liable for the additional penalty of $100 and interest on the total fee.

Sincerely yours,

(Name, title, address and phone number of signatory)

(Ord. No. 1023, § 1, 11-17-10; Ord. No. 1025, 11-17-10)

7.05.060 - Collection of delinquent costs for a subsequent city response.

The penalties assessed as a result of a subsequent city response to a loud or unruly gathering shall constitute a debt of all persons liable for the penalties in favor of the city and may be collected in any manner authorized by law and are recoverable in a civil action filed by the city in a court of competent jurisdiction. The remedies provided by this chapter are in addition to all other civil and criminal remedies available to the city with respect to the unlawful conduct constituting the public nuisance which gave rise to the need for the city response under this chapter.

(Ord. No. 1023, § 1, 11-17-10; Ord. No. 1025, 11-17-10)

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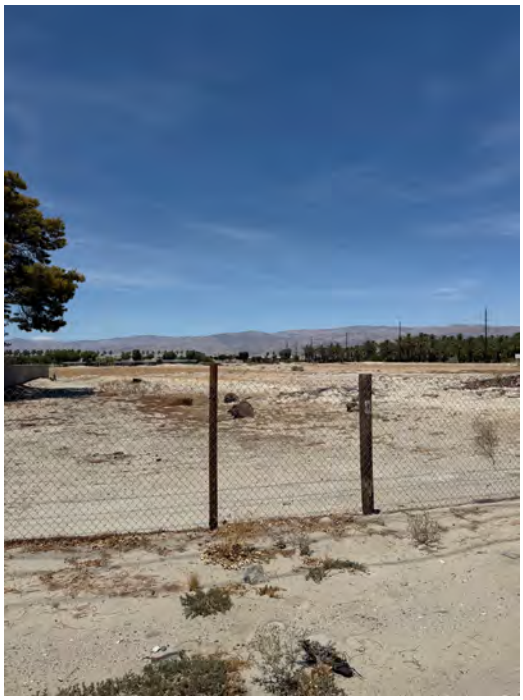
APPENDIX 5.1:

STUDY AREA PHOTOS

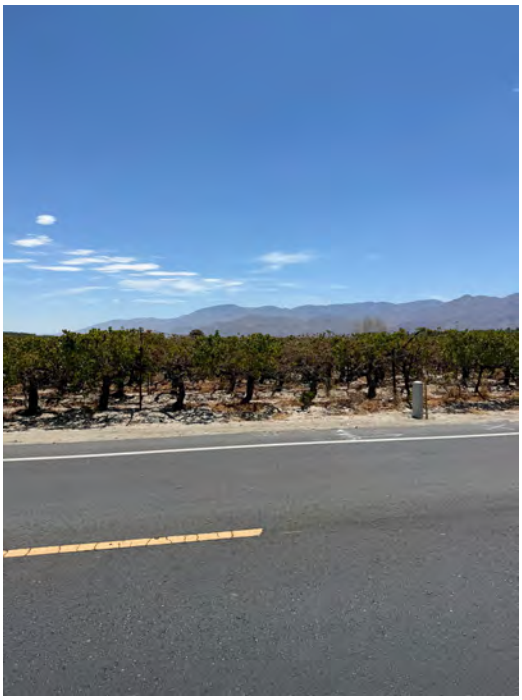
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16552 - Relevant Coachella

16552_L1_D 1.North
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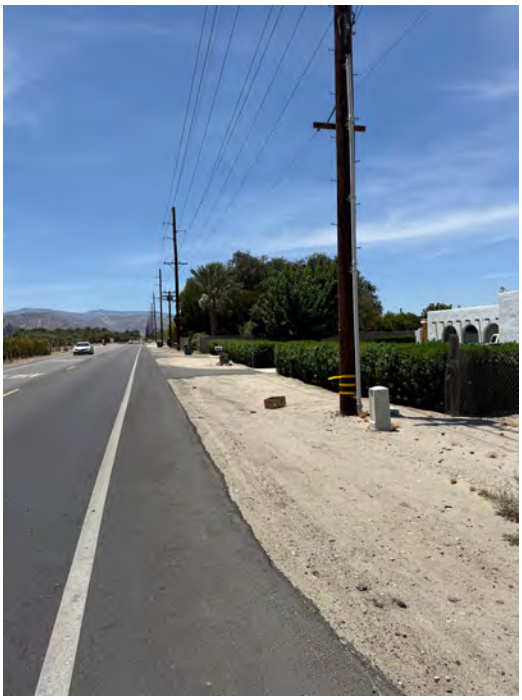
16552_L1_D 2.South
33, 40' 15.300000"116, 12' 1.280000"



16552_L1_D 3.East
33, 40' 15.290000"116, 12' 1.010000"



16552_L1_D 4.West
33, 40' 15.290000"116, 12' 1.250000"

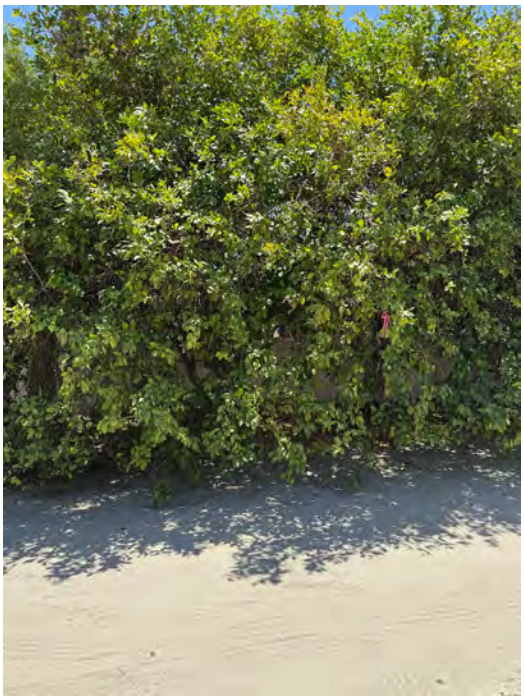


16552 - Relevant Coachella

16552_L2_E 1.North
33, 40' 14.970000"116, 11' 54.720000"



16552_L2_E 2.South
33, 40' 14.970000"116, 11' 54.690000"



16552_L2_E 3.East
33, 40' 14.970000"116, 11' 54.630000"



16552_L2_E 4.West
33, 40' 14.930000"116, 11' 55.020000"



16552 - Relevant Coachella

16552_L3_F 1.North
33, 39' 56.850000"116, 11' 57.000000"



16552_L3_F 2.South
33, 39' 56.610000"116, 11' 57.050000"



16552_L3_F 3.East
33, 39' 56.600000"116, 11' 57.020000"



16552_L3_F 4.West
33, 39' 56.640000"116, 11' 57.050000"



16552 - Relevant Coachella

16552_L4_G 1.North
33, 39' 59.150000"116, 12' 26.930000"



16552_L4_G 2.South
33, 39' 59.170000"116, 12' 26.910000"



16552_L4_G 3.East
33, 39' 59.150000"116, 12' 26.930000"



16552_L4_G 4.West
33, 39' 59.100000"116, 12' 27.020000"

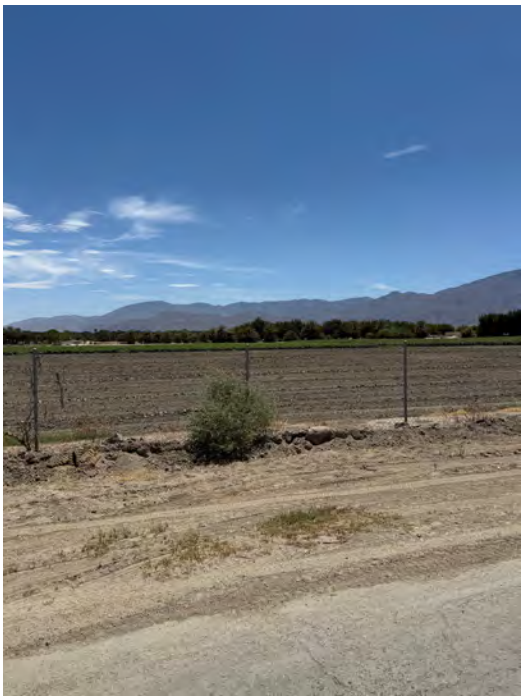


16552 - Relevant Coachella

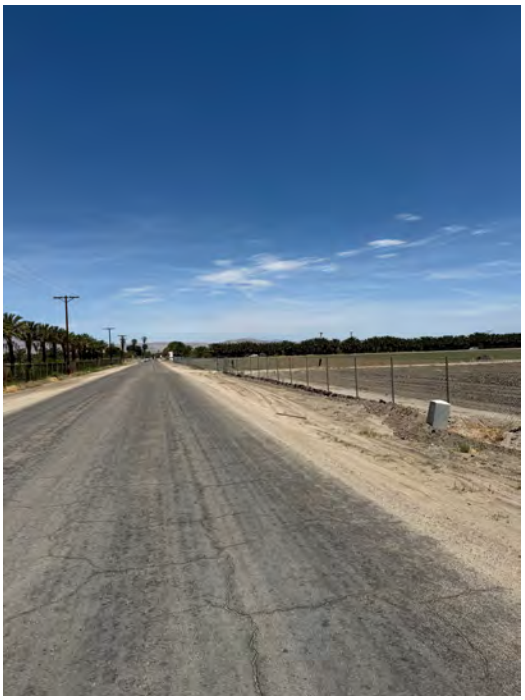
16552_L5_I 1.North
33, 39' 49.950000"116, 12' 36.880000"



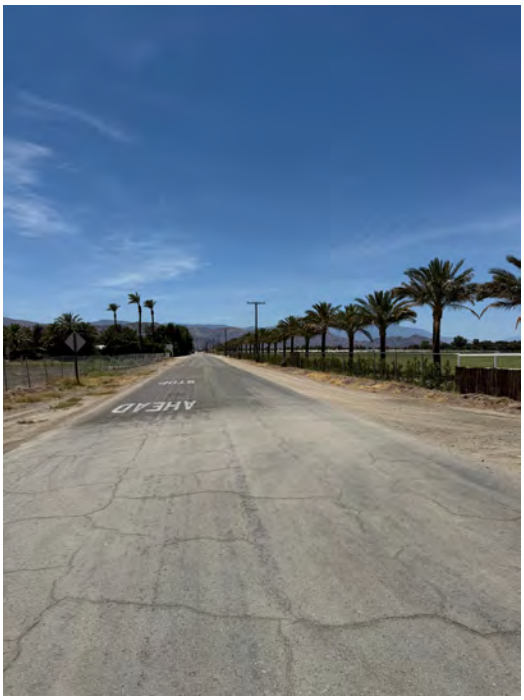
16552_L5_I 2.South



16552_L5_I 3.East
33, 39' 49.550000"116, 12' 36.490000"



16552_L5_I 4.West
33, 39' 49.660000"116, 12' 36.600000"



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APPENDIX 5.2:

NOISE LEVEL MEASUREMENT WORKSHEETS

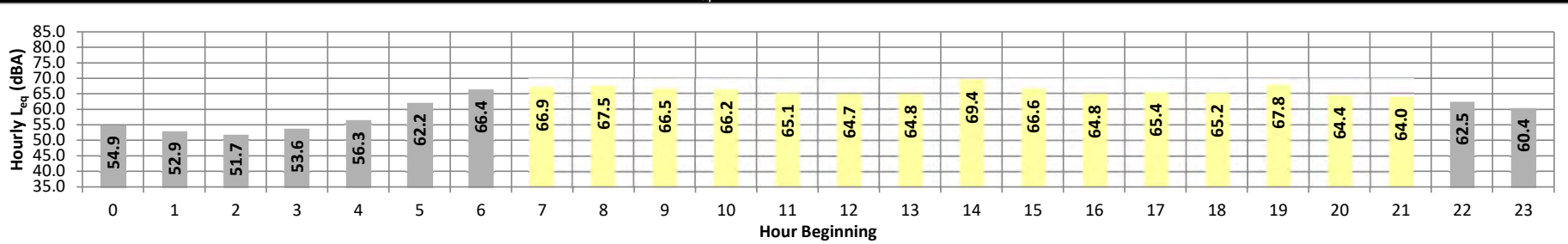
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24-Hour Noise Level Measurement Summary

Date: Friday, July 25, 2025 *Location:* L1 - Located north of the site near the residence at 83876 52nd *Meter:* Piccolo II *JN:* 16552

Project: *Source:* Ave. *Analyst:* Z. Ibrahim

Hourly L_{eq} dBA Readings (unadjusted)



Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L_{eq}	Adj.	Adj. L_{eq}
Night	0	54.9	65.3	43.0	65.1	64.7	63.0	60.8	52.7	47.5	44.3	43.7	43.2	54.9	10.0	64.9
	1	52.9	63.8	42.4	63.6	63.2	60.9	58.3	49.3	46.6	44.2	43.3	42.6	52.9	10.0	62.9
	2	51.7	62.0	44.2	61.8	61.4	59.3	56.7	48.7	47.4	46.0	45.4	44.4	51.7	10.0	61.7
	3	53.6	63.7	45.2	63.4	63.1	61.4	59.4	51.3	48.4	46.4	46.1	45.4	53.6	10.0	63.6
	4	56.3	66.8	46.6	66.5	66.1	64.0	61.8	53.6	50.2	48.1	47.5	46.9	56.3	10.0	66.3
	5	62.2	72.2	45.1	71.9	71.4	69.6	67.9	61.8	55.4	47.2	46.2	45.3	62.2	10.0	72.2
	6	66.4	75.1	50.2	74.9	74.4	73.0	71.6	67.2	62.0	52.9	51.7	50.5	66.4	10.0	76.4
Day	7	66.9	74.7	53.8	74.4	74.0	72.6	71.4	68.1	64.5	56.6	55.1	53.9	66.9	0.0	66.9
	8	67.5	77.1	53.6	76.5	75.8	73.3	71.4	68.3	64.9	56.4	54.8	53.7	67.5	0.0	67.5
	9	66.5	73.9	51.9	73.7	73.4	72.1	71.2	67.8	63.8	55.1	53.3	52.1	66.5	0.0	66.5
	10	66.2	73.9	50.7	73.6	73.2	71.8	70.9	67.5	63.5	54.6	52.3	50.9	66.2	0.0	66.2
	11	65.1	73.6	48.2	73.3	72.8	71.0	70.0	66.1	61.8	51.6	49.8	48.5	65.1	0.0	65.1
	12	64.7	73.8	49.2	73.4	72.7	70.7	69.5	65.7	61.1	52.5	51.0	49.4	64.7	0.0	64.7
	13	64.8	73.2	50.6	72.8	72.3	70.5	69.3	66.0	61.9	54.0	52.4	50.9	64.8	0.0	64.8
	14	69.4	80.4	50.8	80.2	79.7	78.0	76.7	65.8	61.4	53.6	52.5	51.1	69.4	0.0	69.4
	15	66.6	77.3	51.5	77.0	76.1	72.9	70.7	66.3	62.9	54.4	52.9	51.7	66.6	0.0	66.6
	16	64.8	72.9	50.0	72.6	72.2	70.5	69.3	66.1	62.0	53.9	51.9	50.3	64.8	0.0	64.8
	17	65.4	74.9	48.7	74.5	73.8	71.5	69.8	66.4	61.9	52.7	50.5	49.0	65.4	0.0	65.4
	18	65.2	74.3	49.1	73.9	73.4	71.5	70.2	66.0	61.6	52.8	51.0	49.3	65.2	0.0	65.2
	19	67.8	78.9	46.3	78.5	77.9	75.8	72.6	66.2	59.8	48.7	47.4	46.5	67.8	5.0	72.8
	20	64.4	72.8	52.1	72.4	71.9	70.6	69.5	65.4	60.6	53.6	52.7	52.2	64.4	5.0	69.4
	21	64.0	72.3	52.8	72.0	71.6	70.1	69.2	64.8	59.8	53.8	53.3	52.9	64.0	5.0	69.0
Night	22	62.5	71.8	50.6	71.5	71.1	69.4	67.8	62.7	57.1	51.7	51.2	50.7	62.5	10.0	72.5
	23	60.4	71.1	49.1	70.7	70.2	67.9	66.3	58.8	52.7	50.0	49.6	49.2	60.4	10.0	70.4

Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%
Day	Min	64.0	72.3	46.3	72.0	71.6	70.1	69.2	64.8	59.8	48.7	47.4	46.5
	Max	69.4	80.4	53.8	80.2	79.7	78.0	76.7	68.3	64.9	56.6	55.1	53.9
Energy Average		66.2	Average:		74.6	74.1	72.2	70.8	66.4	62.1	53.6	52.1	50.8
Night	Min	51.7	62.0	42.4	61.8	61.4	59.3	56.7	48.7	46.6	44.2	43.3	42.6
	Max	66.4	75.1	50.6	74.9	74.4	73.0	71.6	67.2	62.0	52.9	51.7	50.7
Energy Average		60.5	Average:		67.7	67.3	65.4	63.4	56.2	51.9	47.9	47.2	46.5

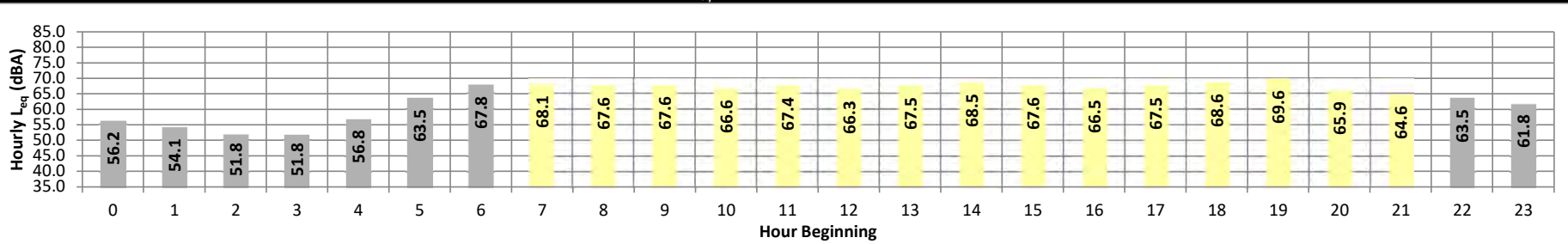
24-Hour CNEL	Leq (dBA) Daytime (7am-10pm)	Leq (dBA) Nighttime (10pm-7am)
69.0	**66.2**	**60.5**

24-Hour Noise Level Measurement Summary

Date: Friday, July 25, 2025 *Location:* L2 - Located east of the site near the residence at 84045 52nd *Meter:* Piccolo II *JN:* 16552

Project: *Source:* Ave. *Analyst:* Z. Ibrahim

Hourly L_{eq} dBA Readings (unadjusted)



Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L_{eq}	Adj.	Adj. L_{eq}
Night	0	56.2	67.3	39.9	66.8	66.1	63.6	61.5	55.3	49.4	41.4	40.7	40.1	56.2	10.0	66.2
	1	54.1	64.9	40.3	64.5	63.6	61.0	59.0	54.1	47.6	41.1	40.7	40.4	54.1	10.0	64.1
	2	51.8	62.4	39.1	62.0	61.1	58.5	57.0	52.0	46.0	39.4	39.3	39.1	51.8	10.0	61.8
	3	51.8	63.6	38.1	63.2	62.2	58.9	56.4	50.6	44.6	38.7	38.5	38.2	51.8	10.0	61.8
	4	56.8	68.3	40.4	67.9	67.1	64.2	61.9	55.3	49.9	41.9	41.1	40.5	56.8	10.0	66.8
	5	63.5	73.1	50.7	72.7	72.0	70.2	68.5	63.7	59.6	53.0	51.8	50.9	63.5	10.0	73.5
	6	67.8	76.5	57.0	76.2	75.5	73.5	72.2	68.4	65.1	59.2	58.2	57.1	67.8	10.0	77.8
Day	7	68.1	76.3	57.9	75.9	75.3	73.4	72.4	69.0	65.5	60.1	59.0	58.1	68.1	0.0	68.1
	8	67.6	75.7	58.1	75.3	74.7	73.0	72.0	68.4	65.1	60.2	59.3	58.3	67.6	0.0	67.6
	9	67.6	77.6	56.2	77.0	76.1	73.3	71.8	68.0	64.4	58.7	57.6	56.5	67.6	0.0	67.6
	10	66.6	74.6	55.7	74.2	73.6	72.0	71.0	67.6	64.1	58.3	57.1	55.9	66.6	0.0	66.6
	11	67.4	75.6	56.1	75.2	74.6	72.8	71.8	68.4	64.9	58.7	57.4	56.3	67.4	0.0	67.4
	12	66.3	74.6	54.8	74.2	73.6	72.0	70.8	67.4	63.6	57.4	56.3	55.2	66.3	0.0	66.3
	13	67.5	75.5	57.0	75.2	74.6	72.7	71.5	68.6	65.3	59.5	58.3	57.2	67.5	0.0	67.5
	14	68.5	79.5	55.1	79.0	78.1	75.2	73.0	68.0	64.3	57.9	56.7	55.4	68.5	0.0	68.5
	15	67.6	76.4	55.6	76.1	75.5	74.0	72.3	67.9	64.6	58.3	57.3	56.0	67.6	0.0	67.6
	16	66.5	74.3	54.6	73.8	73.1	71.5	70.7	67.8	64.5	57.7	56.3	54.9	66.5	0.0	66.5
	17	67.5	75.4	55.8	75.0	74.5	72.9	71.8	68.5	65.2	58.4	57.2	56.1	67.5	0.0	67.5
	18	68.6	79.1	55.0	78.7	78.1	75.2	73.1	68.3	64.6	57.6	56.3	55.2	68.6	0.0	68.6
	19	69.6	80.2	53.1	79.8	79.0	77.4	74.4	68.2	63.9	56.5	54.6	53.3	69.6	5.0	74.6
	20	65.9	74.2	53.9	73.9	73.4	71.6	70.4	66.8	63.2	56.9	55.5	54.2	65.9	5.0	70.9
	21	64.6	72.6	53.1	72.2	71.6	69.9	69.0	65.7	62.2	55.4	54.3	53.3	64.6	5.0	69.6
Night	22	63.5	72.6	51.0	72.2	71.5	69.3	68.0	64.2	60.6	53.9	52.4	51.3	63.5	10.0	73.5
	23	61.8	71.9	47.4	71.6	70.8	68.3	66.8	62.0	56.8	49.3	48.5	47.6	61.8	10.0	71.8

Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%
Day	Min	64.6	72.6	53.1	72.2	71.6	69.9	69.0	65.7	62.2	55.4	54.3	53.3
	Max	69.6	80.2	58.1	79.8	79.0	77.4	74.4	69.0	65.5	60.2	59.3	58.3
Energy Average		67.5	Average:		75.7	75.0	73.1	71.7	67.9	64.4	58.1	56.9	55.7
Night	Min	51.8	62.4	38.1	62.0	61.1	58.5	56.4	50.6	44.6	38.7	38.5	38.2
	Max	67.8	76.5	57.0	76.2	75.5	73.5	72.2	68.4	65.1	59.2	58.2	57.1
Energy Average		61.8	Average:		68.6	67.8	65.3	63.5	58.4	53.3	46.4	45.7	45.0

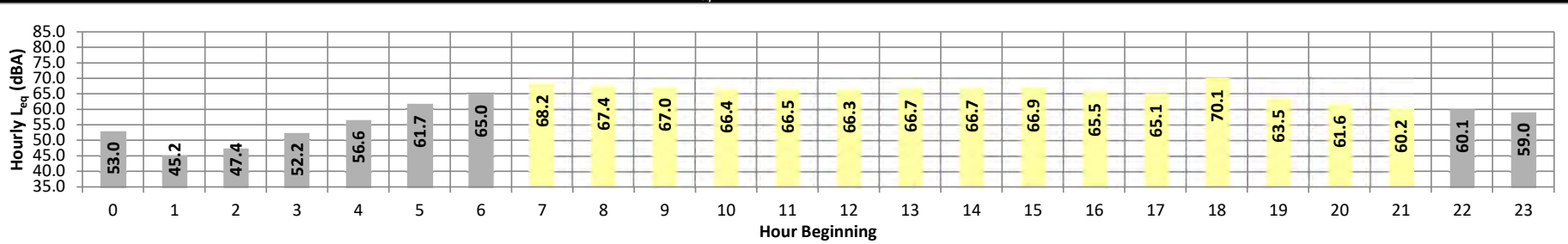
24-Hour CNEL	Leq (dBA) Daytime (7am-10pm)	Leq (dBA) Nighttime (10pm-7am)
70.2	**67.5**	**61.8**

24-Hour Noise Level Measurement Summary

Date: Friday, July 25, 2025 *Location:* L3 - Located south of the site near the residence at 52815 Van *Meter:* Piccolo II *JN:* 16552

Project: *Source:* Buren St. *Analyst:* Z. Ibrahim

Hourly L_{eq} dBA Readings (unadjusted)



Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L_{eq}	Adj.	Adj. L_{eq}
Night	0	53.0	64.9	39.1	64.6	64.1	61.8	58.9	47.2	41.9	39.6	39.5	39.2	53.0	10.0	63.0
	1	45.2	55.6	39.1	55.4	55.1	52.9	49.9	42.3	40.4	39.6	39.4	39.3	45.2	10.0	55.2
	2	47.4	59.9	38.5	59.5	58.8	55.6	51.7	41.5	39.9	39.1	39.0	38.7	47.4	10.0	57.4
	3	52.2	65.5	40.2	65.1	64.3	60.6	56.0	44.0	41.8	40.9	40.7	40.5	52.2	10.0	62.2
	4	56.6	69.4	39.8	69.1	68.4	64.9	61.7	50.3	42.8	40.6	40.4	40.1	56.6	10.0	66.6
	5	61.7	74.0	38.2	73.6	72.9	69.7	66.8	58.5	50.5	40.7	39.5	38.4	61.7	10.0	71.7
	6	65.0	75.6	44.1	75.3	74.6	72.4	70.7	64.1	57.4	47.3	45.7	44.3	65.0	10.0	75.0
Day	7	68.2	78.2	48.9	77.8	77.1	74.9	73.7	68.6	62.3	52.7	51.1	49.2	68.2	0.0	68.2
	8	67.4	77.2	48.0	76.8	76.1	74.1	73.1	67.8	60.7	50.7	49.3	48.1	67.4	0.0	67.4
	9	67.0	77.0	47.5	76.7	75.9	73.7	72.2	67.4	61.4	50.5	48.9	47.8	67.0	0.0	67.0
	10	66.4	75.8	47.5	75.5	74.9	73.3	71.9	67.1	60.4	50.6	49.0	47.8	66.4	0.0	66.4
	11	66.5	76.8	46.9	76.5	75.7	73.2	71.8	66.6	60.5	50.3	48.6	47.2	66.5	0.0	66.5
	12	66.3	77.5	45.9	77.1	76.2	73.1	71.3	65.9	59.0	48.7	47.2	46.1	66.3	0.0	66.3
	13	66.7	76.3	52.3	75.9	75.3	73.3	71.9	67.2	61.4	54.5	53.4	52.4	66.7	0.0	66.7
	14	66.7	77.0	50.3	76.5	75.7	73.7	72.3	66.6	60.0	52.8	51.7	50.6	66.7	0.0	66.7
	15	66.9	77.3	49.7	76.9	76.1	73.7	72.1	66.7	60.5	52.3	51.0	49.9	66.9	0.0	66.9
	16	65.5	75.2	48.3	74.9	74.2	72.1	70.8	65.8	59.8	51.5	49.7	48.5	65.5	0.0	65.5
	17	65.1	75.2	46.8	74.8	74.2	72.0	70.5	65.2	59.4	49.7	48.2	47.1	65.1	0.0	65.1
	18	70.1	83.2	47.1	82.7	82.0	78.3	75.1	63.9	58.0	50.0	48.5	47.3	70.1	0.0	70.1
	19	63.5	74.0	47.8	73.8	73.1	70.7	68.9	62.7	57.1	50.3	49.1	48.1	63.5	5.0	68.5
	20	61.6	72.5	46.5	72.2	71.6	69.1	67.1	60.1	54.7	48.4	47.5	46.7	61.6	5.0	66.6
	21	60.2	71.4	48.1	71.1	70.5	67.5	65.4	58.3	53.5	49.2	48.7	48.3	60.2	5.0	65.2
Night	22	60.1	71.6	48.9	71.2	70.5	67.7	65.3	57.3	53.0	50.0	49.6	49.2	60.1	10.0	70.1
	23	59.0	70.9	48.6	70.5	69.9	66.6	63.9	55.3	51.5	49.5	49.3	48.9	59.0	10.0	69.0

Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%
Day	Min	60.2	71.4	45.9	71.1	70.5	67.5	65.4	58.3	53.5	48.4	47.2	46.1
	Max	70.1	83.2	52.3	82.7	82.0	78.3	75.1	68.6	62.3	54.5	53.4	52.4
Energy Average		66.4	Average:		75.9	75.2	72.8	71.2	65.3	59.3	50.8	49.5	48.3
Night	Min	45.2	55.6	38.2	55.4	55.1	52.9	49.9	41.5	39.9	39.1	39.0	38.4
	Max	65.0	75.6	48.9	75.3	74.6	72.4	70.7	64.1	57.4	50.0	49.6	49.2
Energy Average		59.1	Average:		67.2	66.5	63.6	60.5	51.1	46.6	43.0	42.6	42.1

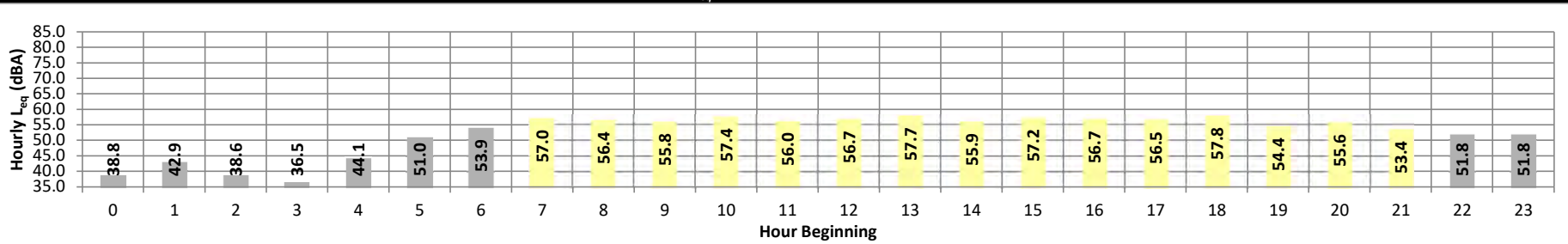
24-Hour CNEL	Leq (dBA) Daytime (7am-10pm)	Leq (dBA) Nighttime (10pm-7am)
68.0	**66.4**	**59.1**

24-Hour Noise Level Measurement Summary

Date: Friday, July 25, 2025 *Location:* L4 - Located south of the site near the residence at 52480 *Meter:* Piccolo II *JN:* 16552

Project: *Source:* Calhoun St. *Analyst:* Z. Ibrahim

Hourly L_{eq} dBA Readings (unadjusted)



Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L_{eq}	Adj.	Adj. L_{eq}
Night	0	38.8	47.0	34.8	46.1	45.2	43.9	42.9	38.4	36.6	35.2	35.1	34.9	38.8	10.0	48.8
	1	42.9	53.1	37.3	52.9	52.4	49.7	47.8	40.5	38.4	37.6	37.5	37.3	42.9	10.0	52.9
	2	38.6	47.3	35.1	47.1	46.7	44.6	42.6	37.3	35.8	35.3	35.2	35.1	38.6	10.0	48.6
	3	36.5	45.1	33.9	43.9	42.8	40.8	39.1	36.2	35.2	34.4	34.1	34.0	36.5	10.0	46.5
	4	44.1	57.3	32.6	56.9	55.9	52.1	48.4	37.4	34.7	33.2	33.0	32.7	44.1	10.0	54.1
	5	51.0	64.0	33.2	63.7	62.8	59.3	56.0	44.0	38.5	34.0	33.7	33.3	51.0	10.0	61.0
	6	53.9	66.4	36.8	66.0	65.2	62.0	59.2	49.4	44.2	38.4	37.6	37.0	53.9	10.0	63.9
Day	7	57.0	68.4	48.2	68.0	67.4	64.5	61.8	54.2	50.8	48.9	48.6	48.3	57.0	0.0	57.0
	8	56.4	68.0	41.7	67.7	66.9	64.0	61.9	53.8	47.6	43.2	42.5	41.8	56.4	0.0	56.4
	9	55.8	67.3	42.0	66.9	66.1	63.5	61.5	53.4	47.7	43.6	42.8	42.2	55.8	0.0	55.8
	10	57.4	67.5	45.4	67.1	66.2	63.6	62.1	57.0	53.4	48.3	47.2	45.8	57.4	0.0	57.4
	11	56.0	67.1	44.6	66.7	66.0	63.2	61.1	54.2	50.2	46.3	45.4	44.8	56.0	0.0	56.0
	12	56.7	68.4	44.2	68.0	67.2	63.9	61.2	55.1	50.6	45.9	45.1	44.3	56.7	0.0	56.7
	13	57.7	69.4	46.2	69.0	68.2	65.1	62.5	55.4	51.2	47.7	47.0	46.4	57.7	0.0	57.7
	14	55.9	66.9	44.9	66.6	65.9	63.1	60.7	54.0	50.1	46.4	45.7	45.0	55.9	0.0	55.9
	15	57.2	68.3	44.3	67.8	67.0	64.7	62.9	55.1	49.9	45.7	45.1	44.5	57.2	0.0	57.2
	16	56.7	67.7	43.5	67.4	66.7	64.0	62.1	55.1	49.6	45.1	44.4	43.6	56.7	0.0	56.7
	17	56.5	67.6	43.8	67.2	66.5	64.1	61.7	55.1	49.4	45.4	44.8	44.0	56.5	0.0	56.5
	18	57.8	69.9	43.6	69.4	68.4	64.9	62.7	55.6	50.0	45.3	44.5	43.8	57.8	0.0	57.8
	19	54.4	66.1	42.7	65.7	64.9	61.6	59.2	52.0	48.1	44.2	43.5	42.9	54.4	5.0	59.4
	20	55.6	67.8	40.3	67.4	66.7	63.8	60.6	52.4	46.3	41.9	41.2	40.5	55.6	5.0	60.6
	21	53.4	66.0	40.2	65.6	64.6	61.0	58.1	49.9	44.9	41.3	40.9	40.3	53.4	5.0	58.4
Night	22	51.8	64.2	40.3	63.9	63.3	59.4	56.2	48.1	43.9	41.0	40.7	40.4	51.8	10.0	61.8
	23	51.8	64.4	42.3	64.1	63.4	59.3	55.5	47.6	44.7	42.7	42.5	42.3	51.8	10.0	61.8

Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%
Day	Min	53.4	66.0	40.2	65.6	64.6	61.0	58.1	49.9	44.9	41.3	40.9	40.3
	Max	57.8	69.9	48.2	69.4	68.4	65.1	62.9	57.0	53.4	48.9	48.6	48.3
Energy Average		56.4	Average:		67.4	66.6	63.7	61.3	54.1	49.3	45.3	44.6	43.9
Night	Min	36.5	45.1	32.6	43.9	42.8	40.8	39.1	36.2	34.7	33.2	33.0	32.7
	Max	53.9	66.4	42.3	66.0	65.2	62.0	59.2	49.4	44.7	42.7	42.5	42.3
Energy Average		49.2	Average:		56.0	55.3	52.3	49.8	42.1	39.1	36.9	36.6	36.3

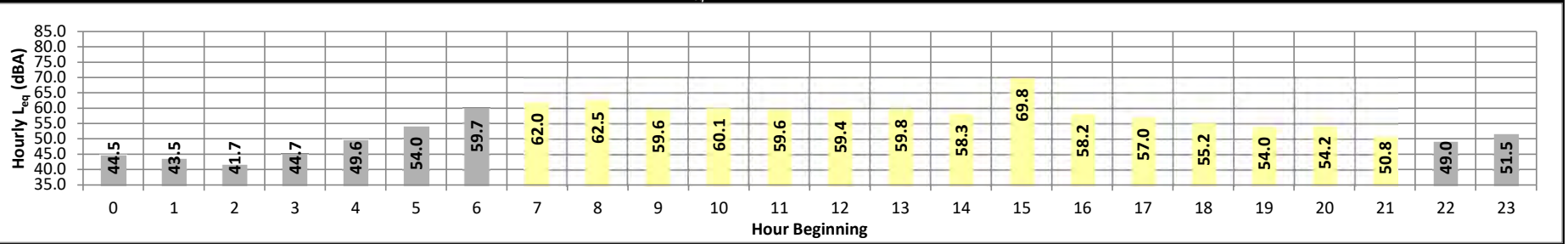
24-Hour CNEL	Leq (dBA) Daytime (7am-10pm)	Leq (dBA) Nighttime (10pm-7am)
58.2	56.4	49.2

24-Hour Noise Level Measurement Summary

Date: Friday, July 25, 2025 *Location:* L5 - Located west of the site near the residence at 83465 52nd *Meter:* Piccolo II *JN:* 16552

Project: *Source:* Ave. *Analyst:* Z. Ibrahim

Hourly L_{eq} dBA Readings (unadjusted)



Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L_{eq}	Adj.	Adj. L_{eq}
Night	0	44.5	53.9	40.1	53.7	53.2	51.1	48.7	42.7	41.6	40.6	40.5	40.2	44.5	10.0	54.5
	1	43.5	49.5	40.9	49.2	48.8	47.6	46.2	43.2	42.6	41.7	41.5	41.2	43.5	10.0	53.5
	2	41.7	49.9	37.5	49.7	49.4	47.9	46.1	40.2	39.2	38.4	38.2	37.8	41.7	10.0	51.7
	3	44.7	55.1	38.6	54.8	54.6	53.2	49.9	40.3	39.9	39.3	39.1	38.9	44.7	10.0	54.7
	4	49.6	61.1	38.0	60.9	60.5	58.4	55.6	42.9	39.4	38.7	38.5	38.3	49.6	10.0	59.6
	5	54.0	67.4	38.4	66.8	65.5	61.7	58.1	49.8	42.5	39.4	39.1	38.7	54.0	10.0	64.0
	6	59.7	71.1	44.8	70.8	70.2	67.4	64.6	57.6	53.5	46.5	45.7	45.0	59.7	10.0	69.7
Day	7	62.0	73.9	41.6	73.6	73.0	70.3	67.2	58.7	51.6	44.3	42.9	41.8	62.0	0.0	62.0
	8	62.5	76.6	41.5	75.9	74.7	69.1	65.9	57.4	50.5	43.0	42.4	41.7	62.5	0.0	62.5
	9	59.6	71.8	39.5	71.4	70.7	67.7	65.2	55.6	47.1	40.8	40.1	39.6	59.6	0.0	59.6
	10	60.1	71.3	44.7	71.0	70.5	68.5	66.1	57.4	50.8	45.5	45.2	44.8	60.1	0.0	60.1
	11	59.6	72.1	39.2	71.5	70.8	67.7	65.0	55.6	46.8	40.5	39.9	39.3	59.6	0.0	59.6
	12	59.4	71.9	38.6	71.6	71.1	67.6	64.4	54.3	46.2	39.9	39.3	38.8	59.4	0.0	59.4
	13	59.8	70.0	43.6	69.7	69.2	67.4	65.7	58.9	52.3	45.6	44.8	43.9	59.8	0.0	59.8
	14	58.3	69.2	41.7	69.0	68.5	66.5	64.5	55.4	48.2	43.1	42.5	41.9	58.3	0.0	58.3
	15	69.8	84.6	40.7	84.1	82.7	77.1	71.7	59.1	50.7	42.0	41.4	40.9	69.8	0.0	69.8
	16	58.2	70.3	38.3	70.0	69.3	66.5	63.6	54.6	44.8	39.5	39.0	38.5	58.2	0.0	58.2
	17	57.0	68.2	41.8	67.9	67.4	65.3	62.9	54.3	48.6	44.3	43.7	42.6	57.0	0.0	57.0
	18	55.2	66.5	37.3	66.2	65.6	63.2	61.4	52.8	44.2	38.5	38.0	37.5	55.2	0.0	55.2
	19	54.0	65.4	37.0	65.0	64.4	62.1	60.3	51.4	43.6	38.2	37.7	37.2	54.0	5.0	59.0
	20	54.2	64.5	49.1	64.2	63.7	61.5	59.2	51.5	49.8	49.3	49.2	49.1	54.2	5.0	59.2
	21	50.8	57.9	47.8	57.6	57.2	55.7	54.5	50.0	49.1	48.3	48.2	48.0	50.8	5.0	55.8
Night	22	49.0	56.2	46.0	55.9	55.5	54.3	52.8	48.3	47.3	46.7	46.5	46.3	49.0	10.0	59.0
	23	51.5	62.2	43.8	61.9	61.4	59.4	56.8	48.6	45.5	44.5	44.3	44.1	51.5	10.0	61.5

Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%
Day	Min	50.8	57.9	37.0	57.6	57.2	55.7	54.5	50.0	43.6	38.2	37.7	37.2
	Max	69.8	84.6	49.1	84.1	82.7	77.1	71.7	59.1	52.3	49.3	49.2	49.1
Energy Average		61.4	Average:		69.9	69.3	66.4	63.8	55.1	48.3	42.9	42.3	41.7
Night	Min	41.7	49.5	37.5	49.2	48.8	47.6	46.1	40.2	39.2	38.4	38.2	37.8
	Max	59.7	71.1	46.0	70.8	70.2	67.4	64.6	57.6	53.5	46.7	46.5	46.3
Energy Average		52.5	Average:		58.2	57.7	55.7	53.2	46.0	43.5	41.7	41.5	41.2

24-Hour CNEL	Leq (dBA) Daytime (7am-10pm)	Leq (dBA) Nighttime (10pm-7am)
62.0	61.4	52.5

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APPENDIX 8.1:

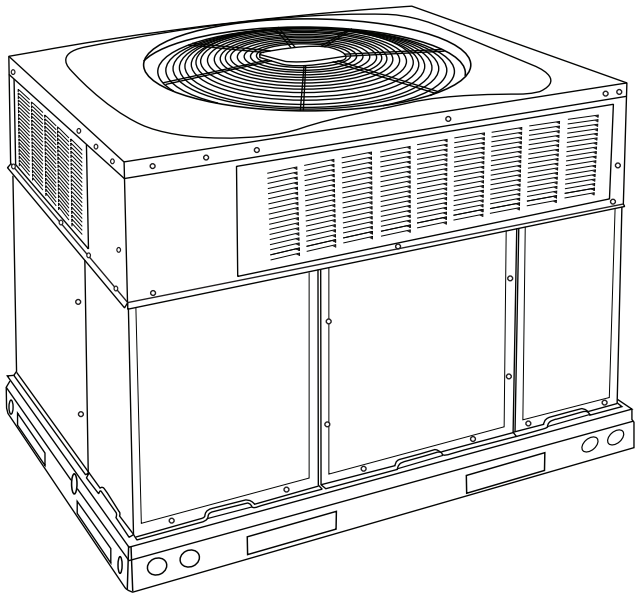
SAMPLE AIR CONDITIONING UNIT

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50VR–A
Performance™ 15 SEER 2–Stage Packaged Heat Pump System with Puron® (R–410A) Refrigerant
Single and Three Phase
2 to 5 Nominal Tons (Sizes 24–60)

Carrier
turn to the experts

Product Data



A09033

Fig. 1 - Unit 50VR-A

Single-Packaged Products with Energy-Saving Features and Puron® refrigerant.

- 15.0-15.5 SEER / 12.0-12.5 EER at 95°F (35°C) OD
- Factory-Installed TXV
- Multi-speed ECM Blower Motor - Standard
- Sound levels as low as 71dBA
- Two Stages of Cooling/Heating
- Dehumidification Feature

FEATURES/BENEFITS

One-piece heat pump unit with optional electric heater, low sound levels, easy installation, low maintenance, and dependable performance.

Puron Environmentally Sound Refrigerant is Carrier's unique refrigerant designed to help protect the environment. Puron is an HFC refrigerant which does not contain chlorine that can harm the ozone layer. Puron refrigerant is in service in millions of systems proving highly reliable, environmentally sound performance.

Easy Installation

Factory-assembled package is a compact, fully self-contained, electric cooling unit that is prewired, pre-piped, and pre-charged for minimum installation expense. These units are available in a variety of standard cooling sizes with voltage options to meet residential and light commercial requirements. Units are lightweight and install easily on a rooftop or at ground level. The high tech composite base eliminates rust problems associated with ground level applications.

Innovative Unit Base Design

On the inside a high-tech composite material will not rust and incorporates a sloped drain pan which improves drainage and helps inhibit mold, algae and bacterial growth. On the outside metal base rails provide added stability as well as easier handling and rigging.

Convertible duct configuration

Unit is designed for use in either downflow or horizontal applications. Each unit is converted from horizontal to downflow and includes horizontal duct covers. Downflow operation is provided in the field to allow vertical ductwork connections. The basepan seals on the bottom openings to ensure a positive seal in the vertical airflow mode.

Efficient operation High-efficiency design offers SEER (Seasonal Energy Efficiency Ratios) of up to 15.5 and HSPF of 8.5. (See page 4.)

Durable, dependable components

Scroll Compressors have 2 stages of cooling/heating and are designed for high efficiency. Each compressor is hermetically sealed against contamination to help promote longer life and dependable operation. Each compressor also has vibration isolation to provide quieter operation. All compressors have internal high pressure and overcurrent protection.

Multi-speed ECM Blower Motor is standard on all 50VR-A.

Direct-drive PSC (Permanent Split Capacitor) condenser-fan motors are designed to help reduce energy consumption and provide for cooing operation down to 40°F (4.4°C) outdoor temperature. Motormaster® II low ambient kit is available as a field-installed accessory.

Thermostatic Expansion Valve - A hard shutoff, balance port TXV maintains a constant superheat at the evaporator exit (cooling cycle) resulting in higher overall system efficiency.

Refrigerant system is designed to provide dependability. Liquid filter driers are used to promote clean, unrestricted operation. Each unit leaves the factory with a full refrigerant charge. Refrigerant service connections make checking operating pressures easier.

High and Low Pressure Switches provide added reliability for the compressor.

Indoor and Outdoor coils are computer-designed for optimum heat transfer and efficiency. The indoor coil is fabricated from copper tube and aluminum fins and is located inside the unit for protection against damage. The outdoor coil is internally mounted on the top tier of the unit.

Low sound ratings ensure a quiet indoor and outdoor environment with sound ratings as low as 71dBA. (See Page 4.)

Easy to service cabinets provide easy 3 panel accessibility to serviceable components during maintenance and installation. The basepan with integrated drain pan provides easy ground level installation with a mounting pad. A nesting feature ensures a positive basepan to roof curb seal when the unit is roof mounted. A convenient 3/4-in. (19.05 mm) wide perimeter flange makes frame mounting on a rooftop easy.

Dehumidification Feature

This unit has independent fan speeds for low stage cooling and high stage cooling. In addition, 208/230 VAC models have the field-selectable capability to run an enhanced dehumidification ('DHUM') speed on high stage cooling (as low as 320CFM per ton). Coupled with the improved dehumidification associated with low stage cooling, the DHUM speed allows for a complete dehumidification solution independent of cooling stage. The dehumidification control must open the control circuit on humidity rise above the dehumidification set point.

NOTE: The enhanced dehumidification feature on high stage cooling does not support use of an economizer.

Standard horizontal metal duct covers with insulation come with the unit and cover the horizontal duct openings. These can be left in place if the units are converted to downflow.

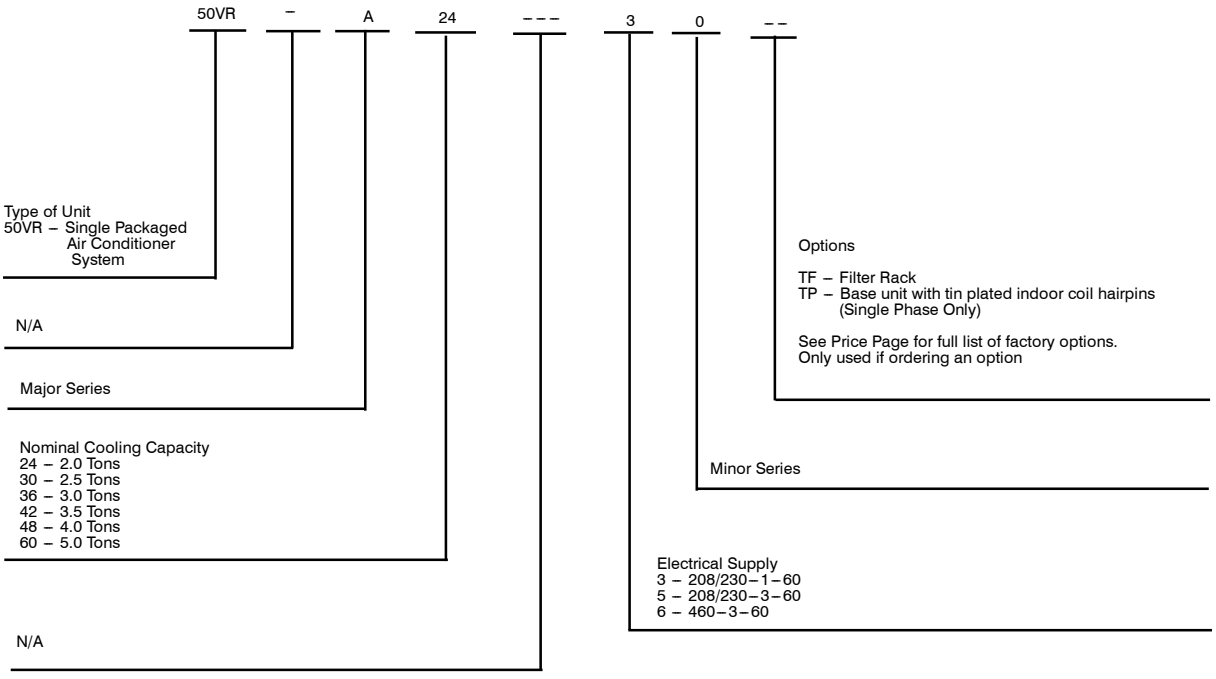
Cabinets are constructed of heavyduty, phosphated, zinc-coated prepainted steel capable of withstanding 500 hours in salt spray. Interior surfaces of the evaporator/electric heater compartment are insulated with foil-faced insulation, which keeps the conditioned air from being affected by the outdoor ambient temperature and provides improved indoor air quality. (Conforms to American Society of Heating, Refrigeration and Air Conditioning Engineers No. 62P.) The sloped drain pan minimizes standing water in the drain. An external drain is provided.

Short-Cycling protection for the compressor is incorporated into our defrost control board ensuring a five minute delay (+/-2 minutes) before restarting compressor after shutdown for any reason.

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MODEL NUMBER NOMENCLATURE



c UL us LISTED

AHRI CERTIFIED www.ahridirectory.org

Use of the AHRI Certified TM Mark indicates a manufacturer's participation in the program For verification of certification for individual products, go to www.ahridirectory.org.

ASHRAE 90.1 COMPLIANT

energy ENERGY STAR

AHRI* CAPACITIES

Cooling Capacities and Efficiencies

Unit Model 50VR-A	Nominal Tons	Standard CFM (High / Low Stage)	Net Cooling Capacities - Btuh (High Stage)	EER @A**	SEER†
24	2	850 / 650	23000	12.0	15.0
30	2-1/2	1000 / 750	30000	12.0	15.0
36	3	1200 / 900	34000	12.0	15.0
42	3-1/2	1400 / 1050	42000	12.0	15.0
48	4	1600 / 1200	47500	12.5	15.5
60	5	1750 / 1200	57000	12.0	15.0

Heat Pump Heating Capacities and Efficiencies

Unit Model 50VR-A	Heating Capacity (BTUH) @ 47_F (8.3_C)	COP @ 47_F (8.3_C)	Heating Capacity (BTUH) @ 17_F (---8.3_C)	COP @ 17_F (---8.3_C)	HSPF	Heating Cd
24	23,000	3.8	11200	2.2	8.0	0.25
30	29,000	3.8	15400	2.3	8.0	0.25
36	34,000	3.7	17200	2.3	8.0	0.25
42	42,000	3.6	24000	2.5	8.0	0.25
48	47,000	3.7	26000	2.3	8.0	0.25
60	57,000	3.5	32400	2.4	8.5	0.25

LEGEND
dB–Sound Levels (decibels)
db—Dry Bulb
SEER—Seasonal Energy Efficiency Ratio
wb—Wet Bulb
COP–Coefficient of Performance
* Air Conditioning, Heating & Refrigeration Institute.
**At "A" conditions–80°F (26.7°C) indoor db/67°F (19.4°C) indoor wb & 95°F (35°C) outdoor db.
† Rated in accordance with U.S. Government DOE Department of Energy) test procedures and/or AHRI Standards 210/240.

Notes:
1. Ratings are net values, reflecting the effects of circulating fan heat. Ratings are based on:
Cooling Standard: 80°F (26.7°C) db, 67°F wb (19.4°C) indoor entering–air temperature and 95°F db (35°C) outdoor entering–air temperature.
2. Before purchasing this appliance, read important energy cost and efficiency information available from AHRIdirectory.org.

A-WEIGHTED SOUND POWER LEVEL (dBA)

Model 50VR-A	Sound Ratings (dBA)	TYPICAL OCTAVE BAND SPECTRUM(dBA without tone adjustment)						
		125	250	500	1000	2000	4000	8000
24	73	58.5	65	66.5	67	62	57.5	54.5
30	76	59	63	69	70	63.5	59	53.5
36	73	64	63.5	68	68	65.5	60.5	52.5
42	71	64	62	65	66	63.5	59.5	52.5
48	74	59.5	65	70	67	64.5	60.5	52.5
60	73	68	63	66	66	65	59.5	52.5

NOTE: Tested in accordance with AHRI Standard 270 (not listed in AHRI).

PHYSICAL DATA

UNIT SIZE	24	30	36	42	48	60
NOMINAL CAPACITY (ton)	2	2–1/2	3	3–1/2	4	5
SHIPPING WEIGHT lb.	356	364	420	466	462	511
SHIPPING WEIGHT (kg)	162	165	191	212	210	232
COMPRESSORS	Scroll					
Quantity	1					
REFRIGERANT (R–410A)						
Quantity lb	9.0	10.0	11.0	14.6	12.0	14.8
Quantity (kg)	4.1	4.5	5.0	6.6	5.4	6.7
REFRIGERANT METERING DEVICE	TXV, Indoor TXV					
ORIFICE						
ID (in.)	.032 (2)	.040 (2)	.042 (2)	.042 (2)	.042 (2)	.052 (2)
ID (mm)	0.81 (2)	1.02 (2)	1.07 (2)	1.07 (2)	1.07 (2)	1.32 (2)
OUTDOOR COIL						
Rows...Fins/in.	2...21	2...21	2...21	2...21	2...21	2...21
Face Area (sq ft)	13.6	15.3	13.6	19.4	17.5	23.3
OUTDOOR FAN						
Nominal Cfm	2100	2500	3000	3000	3300	3600
Diameter in.	24	24	26	26	26	26
Diameter (mm)	609.6	609.6	660.4	660.4	660.4	660.4
Motor Hp (Rpm)	1/12 (800)	1/8 (810)	1/5 (810)	1/5 (810)	1/5 (810)	1/5 (810)
INDOOR COIL						
Rows...Fins/in.	3...17	3...17	3...17	3...17	3...17	4...17
Face Area (sq ft)	3.7	3.7	4.7	4.7	5.7	5.7
INDOOR BLOWER						
Nominal Low Stage Cooling Airflow (Cfm)	650	750	900	1050	1200	1400
Nominal High Stage Cooling Airflow (Cfm)	850	1000	1200	1400	1600	1750
Size in.	10x10	10x10	11x10	11x10	11x10	11x10
Size (mm.)	254x254	254x254	279.4x254	279.4x254	279.4x254	279.4x254
Motor HP (RPM)	1/2 (1050)	1/2 (1050)	3/4 (1000)	3/4 (1075)	1.0 (1075)	1.0 (1075)
HIGH–PRESSURE SWITCH (psig) Cut–out	650 +/– 15					
Reset (Auto)	420 +/– 25					
LOW–PRESSURE SWITCH (psig) cut–out	20 +/– 5					
Reset (auto)	45 +/– 5					
RETURN–AIR FILTERS†‡						
Throwaway Size in.	20x20x1	20x24x1	24x30x1		24x36x1	
Throwaway Size (mm)	508x508x25	508x610x25	610x762x25		610x914x25	

† Required filter sizes shown are based on the larger of the AHRI (Air Conditioning Heating and Refrigeration Institute) rated cooling airflow or the heating airflow velocity of 300 ft/minute for throwaway type or 450 ft/minute for high–capacity type. Air filter pressure drop for non–standard filters must not exceed 0.08 in. W.C.

‡ If using accessory filter rack refer to the filter rack installation instructions for correct filter sizes and quantity.

Electric Heat Pressure Drop Tables (IN. W.C.)

Small Cabinet: 24–30

STATIC	STANDARD CFM (SCFM)											
	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600
5 kW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.04	0.06	0.07
10 kW	0.00	0.00	0.00	0.00	0.00	0.02	0.04	0.06	0.07	0.09	0.10	0.11
15 kW	0.00	0.00	0.00	0.02	0.04	0.06	0.08	0.10	0.12	0.14	0.16	0.18
20 kW	0.00	0.00	0.02	0.04	0.06	0.08	0.09	0.11	0.13	0.15	0.17	0.19

Large Cabinet: 36–60

STATIC	STANDARD CFM (SCFM)														
	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
5 kW	0.00	0.00	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12
10 kW	0.00	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.13
15 kW	0.00	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15
20 kW	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.16

OPTIONS AND ACCESSORIES

ITEM	DESCRIPTION	FACTORY INSTALLED OPTION	FIELD INSTALLED ACCESSORY
Coil Options	Base unit with tin plated indoor coil hairpins	X	
Compressor Start Kit	Compressor Start Kit assists compressor start–up by providing additional starting torque on sing phase units only.		X
Corporate Thermostats	Thermostats provide control for the system heating and cooling functions.		X
Crankcase Heater	Crankcase Heater provides anti–floodback protection for low–load cooling applications.		X*
Economizer	Vertical Economizer with Jade Honeywell W7220 Controller, Honeywell communicating actuator, and dry bulb sensor. (Contact MicroMetl Customer Service at 1–800–662–4822 to order.)		X
	Horizontal Economizer with Jade Honeywell W7220 Controller, Honeywell communicating actuator, and dry bulb sensor. (Contact MicroMetl Customer Service at 1–800–662–4822 to order.)		X
Electric Heaters	Electric Heat Supplement		X
Filter Rack	Filter Rack features easy installation, serviceability, and high–filtering performance for vertical applications. Includes 1–in. filter.	X	X
Flat Roof Curbs	Flat Roof Curbs in both 11–in (279 mm) and 14–in. (356 mm) sizes are available for roof mounted applications.		X
Low Ambient Kit	Low Ambient Kit (Motormaster II Control) allows the use of mechanical cooling down to outdoor temperatures as low as 0°F (–18° C) when properly installed.		X
Manual Outside Air Damper	Manual Outside Air Damper includes hood and filter rack with adjustable damper blade for up to 25% outdoor air.		X
Square–to–Round Duct Transition Kit	Square–to–Round Duct Transition Kit enable 24–48 size units to be fitted to 14 in (356 mm). round ductwork.		X
Time Guard II	Automatically prevents the compressor from restarting for at least 4 minutes and 45 seconds after shutdown of the compressor. Not required when a corporate programmable thermostat is applied or with a RTU–MP control.		X
Dual Point Electric Heaters	Allows you to power the electric heater and unit contactor separately by having two individual field power supply circuits connected respectively.		X

*Refer to Price Page for application detail.

Electric Heaters

CATALOG ORDERING NO.	NOMINAL CAPACITY (kW)	FUSE QTY	USED WITH SIZES					
			24	30	36	42	48	60
ELECTRIC HEATERS (208/230 — SINGLE PHASE — 60 Hz)								
CPHEATER052A00	5.0	–	X	X	X			
CPHEATER064A00	5.0	4	X	X	X	X	X	X
CPHEATER069A00	7.2	–	X					
CPHEATER070A00	7.2	4	X	X	X	X	X	X
CPHEATER050A00	10.0	4	X	X	X	X	X	X
CPHEATER066A00	15.0	4		X	X	X	X	X
CPHEATER054A00	20.0	6				X	X	X
ELECTRIC HEATERS (208/230 — THREE PHASE — 60 Hz)								
CPHEATER055A00	5.0	–		X	X	X	X	X
CPHEATER056A00	10.0	–		X	X	X	X	
CPHEATER068A00	10.0	6		X	X	X	X	X
CPHEATER058A00	20.0	6		X	X	X	X	X
CPHEATER059A01	20.0	6				X	X	X
ELECTRIC HEATERS (460 — THREE PHASE — 60 Hz)								
CPHEATER061A00	10.0	–			X	X	X	X
CPHEATER062A00	15.0	–			X	X	X	X
CPHEATER063A00	20.0	–				X	X	X

NOTE: Electric heaters are rated at 240v. Refer to Multiplication Factors table for other voltages.
X = Approved combinations.

Minimum Airflow for Safe Electric Heater Operation (CFM)

SIZE	24	30	36	42	48	60
Cfm	800	1000	1200	1400	1600	1750

UNIT DIMENSIONS - 50VR-A24-30

UNIT	ELECTRICAL CHARACTERISTICS	UNIT WT.		UNIT HEIGHT IN/MM		CENTER OF GRAVITY IN/MM					
		LB	KG	"A"		X		Y		Z	
50VR-A24---30	208/230-1	348	157.9	44-1/8	1121	20-1/2	520.7	15-3/4	400.1	16-5/8	422.3
50VR-A30---(3/5)0	208/230-1, 208/230-3-60	356	161.5	46-1/8	1172	20-1/2	520.7	15-3/4	400.1	17-3/8	441.3

UNIT	VOLTAGE	CORNER WEIGHT LB/KG							
		"1"		"2"		"3"		"4"	
50VR-A24---30	208/230	41.8	23.7	55.7	31.6	83.5	47.4	139.2	55.2
50VR-A30---(3,5)0	208/230	42.7	24.2	57.0	32.3	85.4	48.4	142.4	56.5

NOTE: ALL TABLE DATA RELEVANT FOR ALL FACTORY INSTALLED OPTIONS EXCEPT ECONOMIZER

REQUIRED CLEARANCES TO COMBUSTIBLE MATL.

	INCHES [MM]
TOP OF UNIT	14 [355.6]
DUCT SIDE OF UNIT	2 [50.8]
SIDE OPPOSITE DUCTS	14 [355.6]
BOTTOM OF UNIT	0 [0.0]
ELECTRICAL PANEL	36 [914.4]

NEC. REQUIRED CLEARANCES.

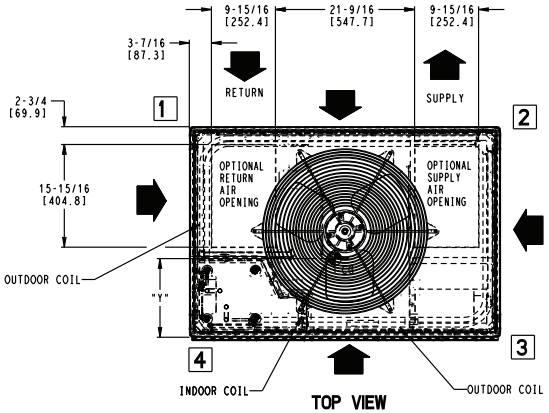
	INCHES [MM]
BETWEEN UNITS, POWER ENTRY SIDE	42 [1066.8]
UNIT AND UNGROUNDED SURFACES, POWER ENTRY SIDE	36 [914.0]
UNIT AND BLOCK OR CONCRETE WALLS AND OTHER GROUNDED SURFACES, POWER ENTRY SIDE	42 [1066.8]

REQUIRED CLEARANCE FOR OPERATION AND SERVICING

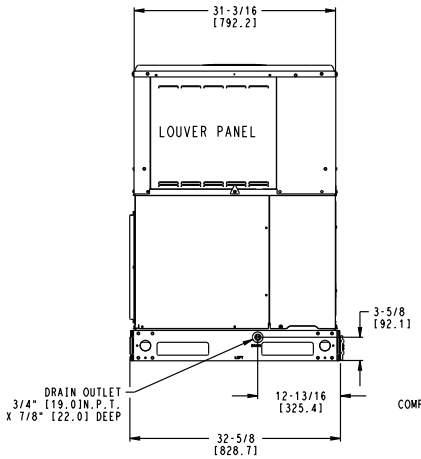
	INCHES [MM]
EVAP. COIL ACCESS SIDE	36 [914.0]
POWER ENTRY SIDE	42 [1066.8]
(EXCEPT FOR NEC REQUIREMENTS)	
UNIT TOP	48 [1219.2]
SIDE OPPOSITE DUCTS	36 [914.0]
DUCT PANEL	12 [304.8]*

*MINIMUM DISTANCES: IF UNIT IS PLACED LESS THAN 12 [304.8] FROM WALL SYSTEM, THEN SYSTEM PERFORMANCE MAYBE COMPROMISED.

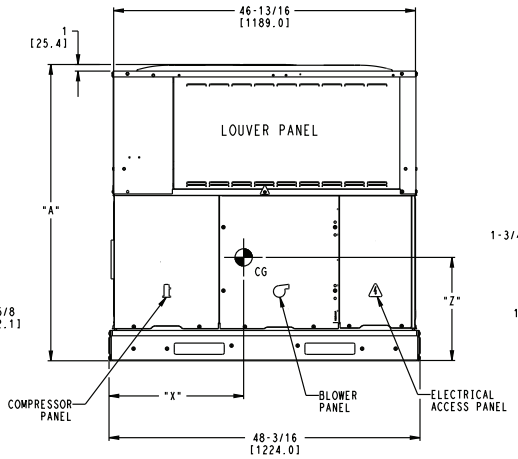
DIMENSIONS IN [] ARE IN MILLIMETERS



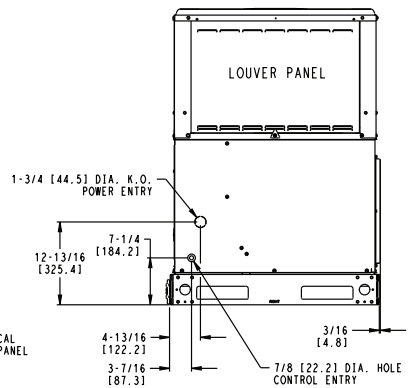
TOP VIEW



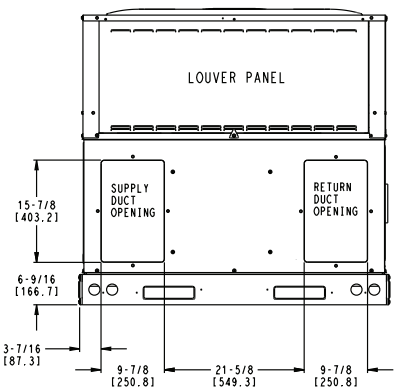
LEFT SIDE VIEW



FRONT VIEW



RIGHT SIDE VIEW



REAR VIEW

50VR500140	REV -

50VR-A

A13172

2415

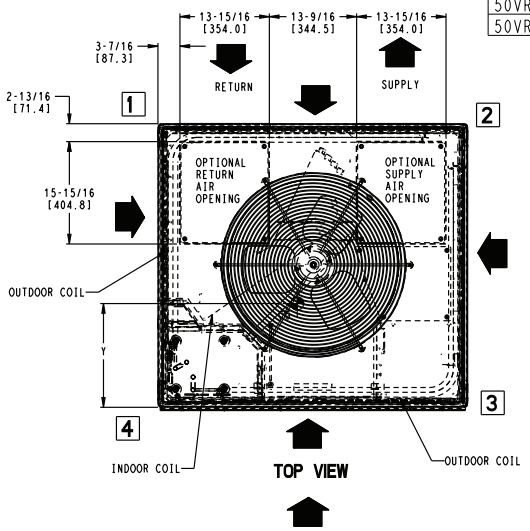
Item 2.

50VR-A

UNIT	ELECTRICAL CHARACTERISTICS	UNIT WT.		UNIT HEIGHT IN/MM		CENTER OF GRAVITY IN/MM					
		LB	KG	"A"		X		Y		Z	
50VR-A36---(3/5/6)0	208/230-1, 208/230-3-60, 460-3	413	187.3	44-3/4	1137	20-1/4	514.4	17-1/2	444.5	17-5/8	447.7
50VR-A42---(3/5/6)0	208/230-1, 208/230-3-60, 460-3	444	201.4	50-3/4	1289	20-1/4	514.4	17-1/2	444.5	17-5/8	447.7
50VR-A48---(3/5/6)0	208/230-1, 208/230-3-60, 460-3	447	202.8	48-3/4	1238	20-1/4	514.4	17-1/2	444.5	17-5/8	447.7
50VR-A60---(3/5/6)0	208/230-1, 208/230-3-60, 460-3	503	228.2	54-3/4	1391	20-1/4	514.4	17-1/2	444.5	18	457.2

UNIT	VOLTAGE	CORNER WEIGHTS LB/KG							
		"1"		"2"		"3"		"4"	
50VR-A36---(3/5/6)0	208/230/460	49.6	28.1	66.1	37.5	99.1	56.2	165.2	65.6
50VR-A42---(3/5/6)0	208/230/460	53.3	30.2	71.0	40.3	106.6	60.4	177.6	70.5
50VR-A48---(3/5/6)0	208/230/460	53.6	30.4	71.5	40.6	107.3	60.8	178.8	71.0
50VR-A60---(3/5/6)0	208/230/460	60.4	34.2	80.5	45.6	120.7	68.4	201.2	79.9

NOTE: ALL TABLE DATA RELEVANT FOR ALL FACTORY INSTALLED OPTIONS EXCEPT ECONOMIZER



TOP VIEW

REQUIRED CLEARANCES TO COMBUSTIBLE MATL.

	INCHES [MM]
TOP OF UNIT	14 [355.6]
DUCT SIDE OF UNIT	2 [50.8]
SIDE OPPOSITE DUCTS	14 [355.6]
BOTTOM OF UNIT	0 [0.0]
ELECTRICAL PANEL	36 [914.4]

NEC. REQUIRED CLEARANCES.

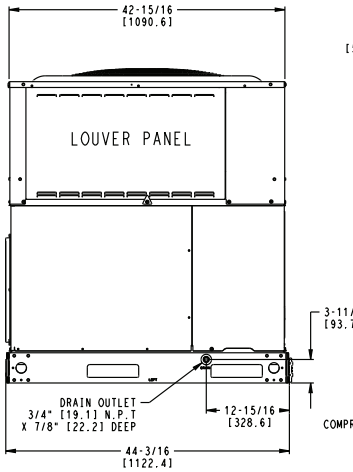
	INCHES [MM]
BETWEEN UNITS, POWER ENTRY SIDE	42 [1066.8]
UNIT AND UNGROUNDED SURFACES, POWER ENTRY SIDE	36 [914.0]
UNIT AND BLOCK OR CONCRETE WALLS AND OTHER GROUNDED SURFACES, POWER ENTRY SIDE	42 [1066.8]

REQUIRED CLEARANCE FOR OPERATION AND SERVICING

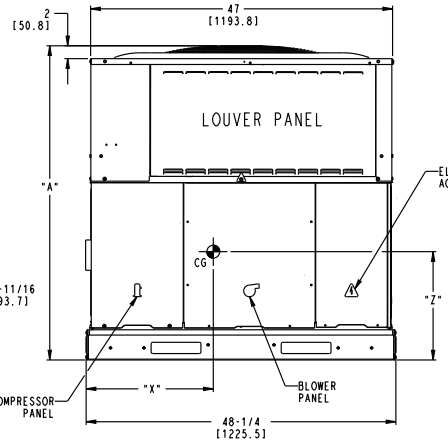
	INCHES [MM]
EVAP. COIL ACCESS SIDE	36 [914.0]
POWER ENTRY SIDE	42 [1066.8]
(EXCEPT FOR NEC REQUIREMENTS)	
UNIT TOP	48 [1219.2]
SIDE OPPOSITE DUCTS	36 [914.0]
DUCT PANEL	12 [304.8]*

*MINIMUM DISTANCES: IF UNIT IS PLACED LESS THAN 12 [304.8] FROM WALL SYSTEM, THEN SYSTEM PERFORMANCE MAYBE COMPROMISED.

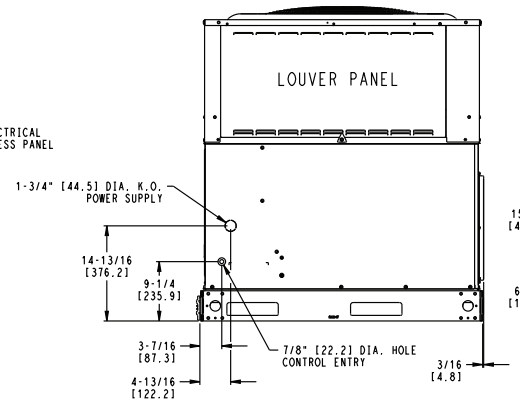
DIMENSIONS IN [] ARE IN MM



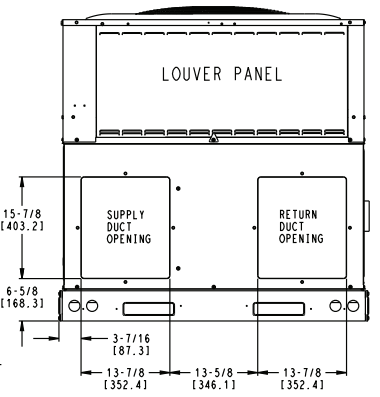
LEFT SIDE VIEW



FRONT VIEW



RIGHT SIDE VIEW

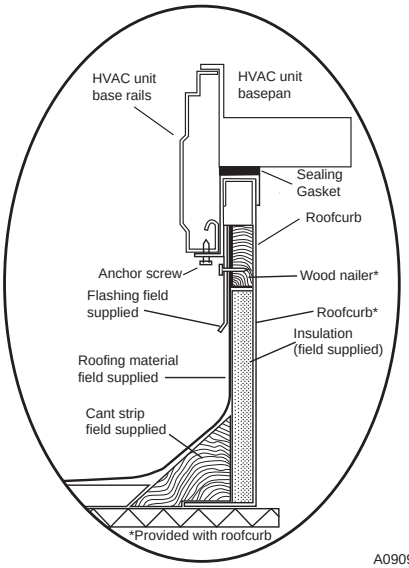


REAR VIEW

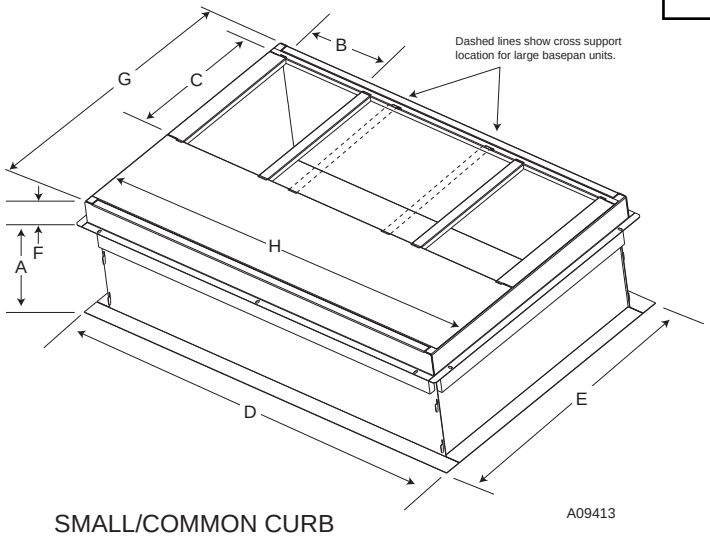
A13173

50VR500141 REV -

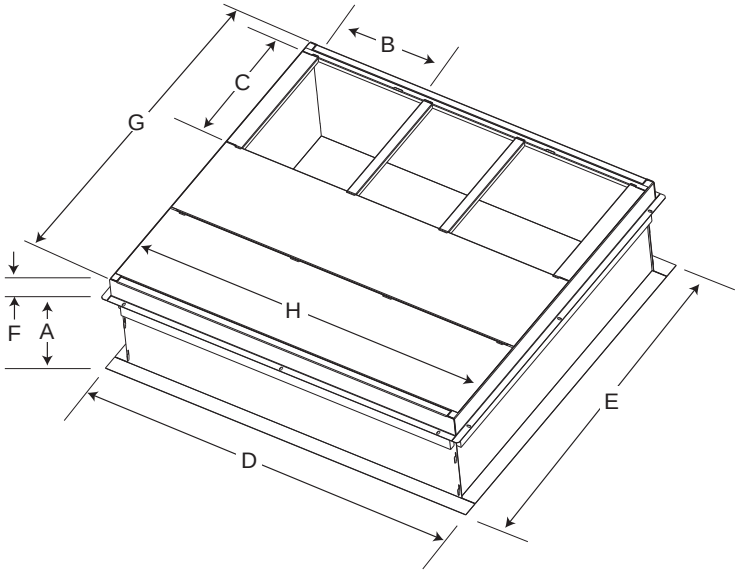
ROOF CURB ACCESSORY – 50VR–A24–60



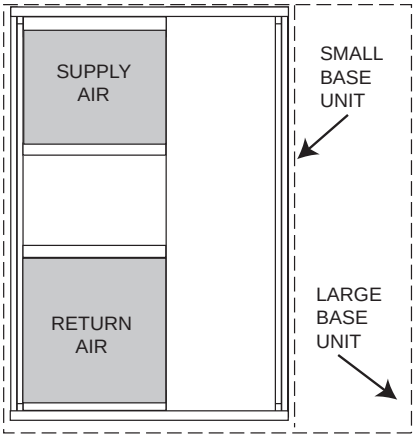
ROOF CURB DETAIL



SMALL/COMMON CURB



LARGE CURB



UNIT PLACEMENT ON COMMON CURB

SMALL OR LARGE BASE UNIT

A09414

UNIT SIZE	CATALOG NUMBER	A IN. (mm)	B (small/common base) IN. (mm)*	B (large base) IN. (mm)*	C IN. (mm)	D IN. (mm)	E IN. (mm)	F IN. (mm)	G IN. (mm)	H IN. (mm)
Small or Large	CPRFCURB010A00	11 (279)	10 (254)	14 (356)	16 (406)	47.8 (1214)	32.4 (822)	2.7 (69)	30.6 (778)	46.1 (1170)
	CPRFCURB011A00	14 (356)								
Large	CPRFCURB012A00	11 (279)	14 (356)				43.9 (1116)		42.2 (1072)	
	CPRFCURB013A00	14 (356)								

* Part Numbers CPRCURB010A00 and CPRCURB011A00 can be used on both small and large basepan units. The cross supports must be located based on whether the unit is a small basepan or a large basepan.

NOTES:

1. Roof curb must be set up for unit being installed.
2. Seal strip must be applied, as required, to unit being installed.
3. Roof curb is made of 16–gauge steel.
4. Attach ductwork to curb (flanges of duct rest on curb).
5. Insulated panels: 1–in. (25.4 mm) thick fiberglass 1 lb. density.

SELECTION PROCEDURE (WITH EXAMPLE)

1. Determine cooling and heating requirements at design conditions:

Given:

Required Cooling Capacity (TC) . . . . . 34,000 Btuh
Sensible Heat Capacity (SHC) . . . . . 24,000 Btuh
Required Heating Capacity . . . . . 12,500 Btuh
Condenser Entering Air Temperature . . . . . 95°F(35°C)
Indoor–Air Temperature . . . . . 80°F (26°C) edb
67°F (19°C) ewb
Evaporator Air Quantity . . . . . 1200 CFM
External Static Pressure . . . . . 0.20 IN. W.C.
Electrical Characteristics 230–1–60

2. Select unit based on required cooling capacity.

Enter Net Cooling Capacities table at condenser entering temperature of 95°F (35°C), indoor air entering at 1200 cfm and 67°F (19°C) ewb (entering wet bulb). The unit will provide a total capacity of 34,200 Btuh and a SHC of 24,500 Btuh.

3. Select electric heat.

The required heating capacity is 15,000 Btuh.

Determine additional electric heat capacity in kW.

$$\frac{15{,}000 \text{ Btuh}}{3{,}414 \text{ Btuh/kW}} = 4.4\text{kW of heat required}$$

Enter the electric Heater Packages table for 208/240, single–ph 50VR–A36 unit. The 5 kW heater at 240v most closely satisfies the heating required. To calculate kW at the 208v, multiply the heater kW by multiplication factor 0.75 found in the Wattage Multiplication Factors table.

5 kW x 0.75 = 3.75 kW

3.75 kW x 3414 = 12802.50 Btuh

4. Determine fan speed and power requirements at design conditions.

Before entering the air delivery tables, calculate the total static pressure required. From the given example, the Wet Coil Pressure Drop Table, and the Filter Pressure Drop Table:

External Static Pressure	0.200 IN. W.C.
Filter	0.000 IN. W.C.
Wet Coil Pressure Drop	0.130 IN. W.C.
Total Static Pressure	0.330 IN. W.C.

Enter the table for Wet Coil Air Delivery—horizontal discharge, 230. At 0.33 IN. W.C. ESP (external static pressure) and medium speed, the fan will deliver 1293 cfm. Adjusting for 208v, the motor delivers 114 cfm (deduct 10%).

5. Select unit that corresponds to power source available.

The Electrical Data Table shows that the unit is designed to operate at 208–1–60.

APPENDIX 8.2:

CADNAA OPERATIONS NOISE CALCULATIONS

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16552 - Relevant Coachella

CadnaA Noise Prediction Model: 16552-02_Operation.cna
Date: 05.08.25
Analyst: B. Maddux

Calculation Configuration

Configuration	
Parameter	**Value**
General	
Max. Error (dB)	**0.00**
Max. Search Radius (ft)	**6561.70**
Min. Dist Src to Rcvr	**0.00**
Partition	
Raster Factor	**0.50**
Max. Length of Section (ft)	**3280.80**
Min. Length of Section (ft)	**3.30**
Min. Length of Section (%)	**0.00**
Proj. Line Sources	**On**
Proj. Area Sources	**On**
Ref. Time	
Daytime Penalty (dB)	**0.00**
Recr. Time Penalty (dB)	**5.00**
Night-time Penalty (dB)	**10.00**
DTM	
Standard Height (m)	**0.00**
Model of Terrain	**Triangulation**
Reflection	
max. Order of Reflection	**2**
Search Radius Src	**328.08**
Search Radius Rcvr	**328.08**
Max. Distance Source - Rcvr	**3280.84 3280.84**
Min. Distance Rvcr - Reflector	**3.28 3.28**
Min. Distance Source - Reflector	**0.33**
Industrial (ISO 9613 (1996))	
Lateral Diffraction	**some Obj**
Obst. within Area Src do not shield	**On**
Screening	**Incl. Ground Att. over Barrier**
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	**3.0 20.0 0.0**
Temperature (°F)	**50**
rel. Humidity (%)	**70**
Ground Absorption G	**0.50**
Wind Speed for Dir. (mph)	**6.7**
Roads (TNM)	
Railways (FTA/FRA)	
Aircraft (???)	
Strictly acc. to AzB	

Receiver Noise Levels

Name	M.	ID	Level Lr			Limit. Value			Land Use			Height		Coordinates			
			Day	Night	CNEL	Day	Night	CNEL	Type	Auto	Noise Type			X	Y	Z	
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)				(ft)		(ft)	(ft)	(ft)	
R1		R1	50.3	43.6	51.4	0.0	0.0	0.0		x	Total	5.00	r	6576713.36	2187811.69	5.00	
R2		R2	49.6	41.4	49.9	0.0	0.0	0.0		x	Total	5.00	r	6577266.14	2187619.33	5.00	
R3		R3	46.0	40.8	48.2	0.0	0.0	0.0		x	Total	5.00	r	6576991.23	2185760.47	5.00	
R4		R4	47.5	40.7	48.6	0.0	0.0	0.0		x	Total	5.00	r	6575213.88	2186372.45	5.00	
R5		R5	44.5	37.5	45.4	0.0	0.0	0.0		x	Total	5.00	r	6573722.13	2187348.69	5.00	

Point Source(s)

Name	M.	ID	Result. PWL			Lw / Li			Operating Time			Height		Coordinates		
			Day	Evening	Night	Type	Value	norm.	Day	Special	Night			X	Y	Z
			(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(ft)		(ft)	(ft)	(ft)
AC_RES001		AC_RES001	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6574935.11	2187653.94	3.00
AC_RES002		AC_RES002	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6574931.64	2187549.77	3.00
AC_RES003		AC_RES003	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6574931.64	2187443.87	3.00
AC_RES004		AC_RES004	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6574933.37	2187338.84	3.00
AC_RES005		AC_RES005	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6574938.58	2187234.67	3.00
AC_RES006		AC_RES006	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575145.35	2187552.90	3.00
AC_RES007		AC_RES007	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575122.44	2187480.50	3.00
AC_RES008		AC_RES008	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575072.44	2187475.29	3.00
AC_RES009		AC_RES009	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575057.85	2187322.69	3.00
AC_RES010		AC_RES010	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575145.35	2187272.17	3.00
AC_RES011		AC_RES011	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575128.69	2187199.25	3.00
AC_RES012		AC_RES012	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575174.52	2187219.04	3.00
AC_RES013		AC_RES013	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575264.62	2187208.63	3.00
AC_RES014		AC_RES014	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575283.89	2187270.61	3.00
AC_RES015		AC_RES015	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575338.06	2187320.09	3.00

Name	M.	ID	Result. PWL			Lw / Li			Operating Time			Height		Coordinates		
			Day	Evening	Night	Type	Value	norm.	Day	Special	Night			X	Y	Z
			(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(ft)		(ft)	(ft)	(ft)
AC_RES016		AC_RES016	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575364.62	2187409.67	3.00
AC_RES017		AC_RES017	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575406.29	2187393.52	3.00
AC_RES018		AC_RES018	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575496.92	2187370.61	3.00
AC_RES019		AC_RES019	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575531.29	2187395.09	3.00
AC_RES020		AC_RES020	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575609.94	2187340.92	3.00
AC_RES021		AC_RES021	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575641.19	2187303.94	3.00
AC_RES022		AC_RES022	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575604.21	2187218.00	3.00
AC_RES023		AC_RES023	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575577.64	2187195.61	3.00
AC_RES024		AC_RES024	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575484.42	2187183.63	3.00
AC_RES025		AC_RES025	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575459.94	2187161.75	3.00
AC_RES026		AC_RES026	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575391.19	2187095.09	3.00
AC_RES027		AC_RES027	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575536.50	2187289.88	3.00
AC_RES028		AC_RES028	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575442.75	2187296.65	3.00
AC_RES029		AC_RES029	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575409.94	2187281.54	3.00
AC_RES030		AC_RES030	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575343.79	2187209.67	3.00
AC_RES031		AC_RES031	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575344.83	2187200.82	3.00
AC_RES032		AC_RES032	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575438.58	2186967.48	3.00
AC_RES033		AC_RES033	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575558.37	2186975.29	3.00
AC_RES034		AC_RES034	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575588.58	2187002.38	3.00
AC_RES035		AC_RES035	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575614.62	2187090.92	3.00
AC_RES036		AC_RES036	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575694.83	2187100.29	3.00
AC_RES037		AC_RES037	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575699.52	2187019.04	3.00
AC_RES038		AC_RES038	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575727.12	2186987.79	3.00
AC_RES039		AC_RES039	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575811.50	2187028.42	3.00
AC_RES040		AC_RES040	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575672.96	2186963.84	3.00
AC_RES041		AC_RES041	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575624.00	2186889.36	3.00
AC_RES042		AC_RES042	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575528.69	2186850.29	3.00
AC_RES043		AC_RES043	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575435.98	2186865.40	3.00
AC_RES044		AC_RES044	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575419.83	2186802.90	3.00
AC_RES045		AC_RES045	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575518.27	2186811.75	3.00
AC_RES046		AC_RES046	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575638.58	2186837.79	3.00
AC_RES047		AC_RES047	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575726.08	2186876.34	3.00
AC_RES048		AC_RES048	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575755.25	2186886.75	3.00
AC_RES049		AC_RES049	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575838.06	2186936.75	3.00
AC_RES050		AC_RES050	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575803.69	2187062.27	3.00
AC_RES051		AC_RES051	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575865.67	2187096.13	3.00
AC_RES052		AC_RES052	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575897.96	2187097.69	3.00
AC_RES053		AC_RES053	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575959.94	2187062.27	3.00
AC_RES054		AC_RES054	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575959.94	2187008.63	3.00
AC_RES055		AC_RES055	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575949.00	2186937.79	3.00
AC_RES056		AC_RES056	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575928.69	2186917.48	3.00
AC_RES057		AC_RES057	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575857.33	2186908.63	3.00
AC_RES058		AC_RES058	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575456.54	2186660.91	3.00
AC_RES059		AC_RES059	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575498.20	2186662.65	3.00
AC_RES060		AC_RES060	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575463.05	2186595.38	3.00
AC_RES061		AC_RES061	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575592.39	2186647.46	3.00
AC_RES062		AC_RES062	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575605.84	2186571.94	3.00
AC_RES063		AC_RES063	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575652.72	2186580.62	3.00
AC_RES064		AC_RES064	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575656.62	2186657.01	3.00
AC_RES065		AC_RES065	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575748.64	2186683.92	3.00
AC_RES066		AC_RES066	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575790.74	2186622.29	3.00
AC_RES067		AC_RES067	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575931.80	2186656.14	3.00
AC_RES068		AC_RES068	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575955.23	2186667.86	3.00
AC_RES069		AC_RES069	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576099.33	2186510.74	3.00
AC_RES070		AC_RES070	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576106.28	2186498.15	3.00
AC_RES071		AC_RES071	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576105.41	2186353.19	3.00
AC_RES072		AC_RES072	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576204.80	2186392.68	3.00
AC_RES073		AC_RES073	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576175.18	2186328.01	3.00
AC_RES074		AC_RES074	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576169.75	2186228.19	3.00
AC_RES075		AC_RES075	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576094.88	2186209.74	3.00
AC_RES076		AC_RES076	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576157.82	2186045.90	3.00
AC_RES077		AC_RES077	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576175.18	2186121.85	3.00
AC_RES078		AC_RES078	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576272.83	2186130.53	3.00
AC_RES079		AC_RES079	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576302.13	2186061.09	3.00
AC_RES080		AC_RES080	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576329.26	2186065.43	3.00
AC_RES081		AC_RES081	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576353.13	2186140.30	3.00
AC_RES082		AC_RES082	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576449.70	2186139.21	3.00
AC_RES083		AC_RES083	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576474.35	2186070.25	3.00
AC_RES084		AC_RES084	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576290.33	2186398.02	3.00
AC_RES085		AC_RES085	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576341.02	2186431.36	3.00
AC_RES086		AC_RES086	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576377.83	2186343.16	3.00
AC_RES087		AC_RES087	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576424.35	2186306.36	3.00
AC_RES088		AC_RES088	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576481.30	2186293.16	3.00
AC_RES089		AC_RES089	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576549.35	2186318.16	3.00
AC_RES090		AC_RES090	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576642.41	2186336.22	3.00
AC_RES091		AC_RES091	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576658.38	2186332.05	3.00
AC_RES092		AC_RES092	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576695.88	2186372.33	3.00

Name	M.	ID	Result. PWL			Lw / Li			Operating Time			Height		Coordinates		
			Day	Evening	Night	Type	Value	norm.	Day	Special	Night			X	Y	Z
			(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(ft)		(ft)	(ft)	(ft)
AC_RES093		AC_RES093	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576738.94	2186461.91	3.00
AC_RES094		AC_RES094	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576648.66	2186382.05	3.00
AC_RES095		AC_RES095	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576551.44	2186357.75	3.00
AC_RES096		AC_RES096	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576531.30	2186446.63	3.00
AC_RES097		AC_RES097	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576522.96	2186496.63	3.00
AC_RES098		AC_RES098	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576644.49	2186480.66	3.00
AC_RES099		AC_RES099	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576461.85	2186503.58	3.00
AC_RES100		AC_RES100	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576466.71	2186455.66	3.00
AC_RES101		AC_RES101	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576491.02	2186365.38	3.00
AC_RES102		AC_RES102	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576607.69	2186534.83	3.00
AC_RES103		AC_RES103	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576594.49	2186602.19	3.00
AC_RES104		AC_RES104	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576561.85	2186578.58	3.00
AC_RES105		AC_RES105	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576493.10	2186567.47	3.00
AC_RES106		AC_RES106	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576488.24	2186562.61	3.00
AC_RES107		AC_RES107	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576420.19	2186554.27	3.00
AC_RES108		AC_RES108	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576353.52	2186562.61	3.00
AC_RES109		AC_RES109	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576363.24	2186493.86	3.00
AC_RES110		AC_RES110	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576549.14	2186065.60	3.00
AC_RES111		AC_RES111	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576585.07	2186132.79	3.00
AC_RES112		AC_RES112	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576679.34	2186117.68	3.00
AC_RES113		AC_RES113	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576691.84	2186044.25	3.00
AC_RES114		AC_RES114	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576731.43	2186036.43	3.00
AC_RES115		AC_RES115	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576752.26	2186110.39	3.00
AC_RES116		AC_RES116	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576846.53	2186114.56	3.00
AC_RES117		AC_RES117	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576872.57	2186043.73	3.00
AC_RES118		AC_RES118	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576984.55	2186128.10	3.00
AC_RES119		AC_RES119	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576984.03	2186197.37	3.00
AC_RES120		AC_RES120	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576909.03	2186210.39	3.00
AC_RES121		AC_RES121	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576896.01	2186305.71	3.00
AC_RES122		AC_RES122	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576965.28	2186340.60	3.00
AC_RES123		AC_RES123	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576970.49	2186380.71	3.00
AC_RES124		AC_RES124	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576894.97	2186372.37	3.00
AC_RES125		AC_RES125	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576855.91	2186460.91	3.00
AC_RES126		AC_RES126	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576764.87	2186503.34	3.00
AC_RES127		AC_RES127	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576767.65	2186563.06	3.00
AC_RES128		AC_RES128	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576769.73	2186624.17	3.00
AC_RES129		AC_RES129	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576772.51	2186683.90	3.00
AC_RES130		AC_RES130	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576777.37	2186745.01	3.00
AC_RES131		AC_RES131	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6577062.09	2187006.12	3.00
AC_RES132		AC_RES132	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6577009.31	2186955.42	3.00
AC_RES133		AC_RES133	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6577007.93	2186942.92	3.00
AC_RES134		AC_RES134	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576954.45	2186892.92	3.00
AC_RES135		AC_RES135	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576862.09	2186817.23	3.00
AC_RES136		AC_RES136	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576857.23	2186889.45	3.00
AC_RES137		AC_RES137	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576771.12	2186816.53	3.00
AC_RES138		AC_RES138	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576768.34	2186888.06	3.00
AC_RES139		AC_RES139	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576714.87	2186829.03	3.00
AC_RES140		AC_RES140	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576644.04	2186845.70	3.00
AC_RES141		AC_RES141	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576612.79	2186784.59	3.00
AC_RES142		AC_RES142	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576544.73	2186807.51	3.00
AC_RES143		AC_RES143	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576528.06	2186775.56	3.00
AC_RES144		AC_RES144	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576453.06	2186778.34	3.00
AC_RES145		AC_RES145	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576970.43	2187043.62	3.00
AC_RES146		AC_RES146	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576921.12	2187092.23	3.00
AC_RES147		AC_RES147	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6577005.84	2187101.95	3.00
AC_RES148		AC_RES148	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6577054.45	2187151.95	3.00
AC_RES149		AC_RES149	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576956.54	2187154.03	3.00
AC_RES150		AC_RES150	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6577005.15	2187204.03	3.00
AC_RES151		AC_RES151	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6577018.34	2187211.67	3.00
AC_RES152		AC_RES152	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6577071.81	2187265.15	3.00
AC_RES153		AC_RES153	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576939.87	2187263.06	3.00
AC_RES154		AC_RES154	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576893.34	2187313.06	3.00
AC_RES155		AC_RES155	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576887.79	2187316.53	3.00
AC_RES156		AC_RES156	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576841.95	2187365.84	3.00
AC_RES157		AC_RES157	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576818.34	2187246.40	3.00
AC_RES158		AC_RES158	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576767.65	2187295.01	3.00
AC_RES159		AC_RES159	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576855.84	2186897.78	3.00
AC_RES160		AC_RES160	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576843.34	2186963.76	3.00
AC_RES161		AC_RES161	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576840.56	2186971.40	3.00
AC_RES162		AC_RES162	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576818.34	2187036.67	3.00
AC_RES163		AC_RES163	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576814.87	2187044.31	3.00
AC_RES164		AC_RES164	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576785.70	2187108.20	3.00
AC_RES165		AC_RES165	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576764.18	2186901.95	3.00
AC_RES166		AC_RES166	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576749.59	2186970.01	3.00
AC_RES167		AC_RES167	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576746.81	2186983.20	3.00
AC_RES168		AC_RES168	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576716.26	2187049.17	3.00
AC_RES169		AC_RES169	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576663.48	2187063.06	3.00

Name	M.	ID	Result. PWL			Lw / Li			Operating Time			Height		Coordinates		
			Day	Evening	Night	Type	Value	norm.	Day	Special	Night			X	Y	Z
			(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(ft)		(ft)	(ft)	(ft)
AC_RES170		AC_RES170	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576713.48	2187115.15	3.00
AC_RES171		AC_RES171	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576720.43	2187117.92	3.00
AC_RES172		AC_RES172	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576771.81	2187169.31	3.00
AC_RES173		AC_RES173	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576707.93	2187357.51	3.00
AC_RES174		AC_RES174	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576781.54	2187424.87	3.00
AC_RES175		AC_RES175	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576734.31	2187474.17	3.00
AC_RES176		AC_RES176	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576728.76	2187477.65	3.00
AC_RES177		AC_RES177	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576682.93	2187526.95	3.00
AC_RES178		AC_RES178	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576610.01	2187456.12	3.00
AC_RES179		AC_RES179	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576653.76	2187404.73	3.00
AC_RES180		AC_RES180	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576660.01	2187400.56	3.00
AC_RES181		AC_RES181	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576573.90	2187356.81	3.00
AC_RES182		AC_RES182	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576523.90	2187305.42	3.00
AC_RES183		AC_RES183	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576507.23	2187373.48	3.00
AC_RES184		AC_RES184	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576442.65	2187394.31	3.00
AC_RES185		AC_RES185	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576435.01	2187397.09	3.00
AC_RES186		AC_RES186	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576502.37	2187477.65	3.00
AC_RES187		AC_RES187	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576557.93	2187522.78	3.00
AC_RES188		AC_RES188	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576589.87	2187558.20	3.00
AC_RES189		AC_RES189	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576639.87	2187606.81	3.00
AC_RES190		AC_RES190	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576571.12	2187642.92	3.00
AC_RES191		AC_RES191	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576521.81	2187591.53	3.00
AC_RES192		AC_RES192	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576486.40	2187559.59	3.00
AC_RES193		AC_RES193	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576437.09	2187508.90	3.00
AC_RES194		AC_RES194	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576366.95	2187415.15	3.00
AC_RES195		AC_RES195	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576359.31	2187415.84	3.00
AC_RES196		AC_RES196	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576290.56	2187419.31	3.00
AC_RES197		AC_RES197	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576373.20	2187349.17	3.00
AC_RES198		AC_RES198	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576390.56	2187283.90	3.00
AC_RES199		AC_RES199	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576393.34	2187268.62	3.00
AC_RES200		AC_RES200	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576390.56	2187196.40	3.00
AC_RES201		AC_RES201	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576374.59	2187176.26	3.00
AC_RES202		AC_RES202	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576325.98	2187123.48	3.00
AC_RES203		AC_RES203	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576309.31	2187108.20	3.00
AC_RES204		AC_RES204	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576258.62	2187058.20	3.00
AC_RES205		AC_RES205	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576103.06	2187041.53	3.00
AC_RES206		AC_RES206	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576101.68	2187112.37	3.00
AC_RES207		AC_RES207	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576140.56	2187105.42	3.00
AC_RES208		AC_RES208	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576204.45	2187135.28	3.00
AC_RES209		AC_RES209	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576218.34	2187145.01	3.00
AC_RES210		AC_RES210	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576269.04	2187192.23	3.00
AC_RES211		AC_RES211	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576285.01	2187215.15	3.00
AC_RES212		AC_RES212	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576287.79	2187283.90	3.00
AC_RES213		AC_RES213	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576276.68	2187306.81	3.00
AC_RES214		AC_RES214	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576237.09	2187363.06	3.00
AC_RES215		AC_RES215	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576228.76	2187390.15	3.00
AC_RES216		AC_RES216	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576160.01	2187407.51	3.00
AC_RES217		AC_RES217	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576132.93	2187408.90	3.00
AC_RES218		AC_RES218	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576067.65	2187381.81	3.00
AC_RES219		AC_RES219	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576413.48	2187648.48	3.00
AC_RES220		AC_RES220	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576362.79	2187600.56	3.00
AC_RES221		AC_RES221	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576326.68	2187565.84	3.00
AC_RES222		AC_RES222	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576276.68	2187515.15	3.00
AC_RES223		AC_RES223	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576298.20	2187636.67	3.00
AC_RES224		AC_RES224	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576246.12	2187585.98	3.00
AC_RES225		AC_RES225	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576230.84	2187569.31	3.00
AC_RES226		AC_RES226	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576178.76	2187519.31	3.00
AC_RES227		AC_RES227	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576138.48	2187641.53	3.00
AC_RES228		AC_RES228	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576086.40	2187591.53	3.00
AC_RES229		AC_RES229	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576068.34	2187551.95	3.00
AC_RES230		AC_RES230	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576018.34	2187600.56	3.00
AC_RES231		AC_RES231	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576010.01	2187596.40	3.00
AC_RES232		AC_RES232	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575963.48	2187645.70	3.00
AC_RES233		AC_RES233	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576030.15	2187387.37	3.00
AC_RES234		AC_RES234	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575968.34	2187421.40	3.00
AC_RES235		AC_RES235	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575857.93	2187404.73	3.00
AC_RES236		AC_RES236	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575839.87	2187311.67	3.00
AC_RES237		AC_RES237	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575902.37	2187278.34	3.00
AC_RES238		AC_RES238	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575866.26	2187194.31	3.00
AC_RES239		AC_RES239	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575794.73	2187185.98	3.00
AC_RES240		AC_RES240	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575748.90	2187263.06	3.00
AC_RES241		AC_RES241	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575780.84	2187329.03	3.00
AC_RES242		AC_RES242	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575703.76	2187376.95	3.00
AC_RES243		AC_RES243	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575719.04	2187458.90	3.00
AC_RES244		AC_RES244	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575708.62	2187499.87	3.00
AC_RES245		AC_RES245	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575612.79	2187501.26	3.00
AC_RES246		AC_RES246	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575593.34	2187579.73	3.00

Name	M.	ID	Result. PWL			Lw / Li			Operating Time			Height		Coordinates		
			Day	Evening	Night	Type	Value	norm.	Day	Special	Night			X	Y	Z
			(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(ft)		(ft)	(ft)	(ft)
AC_RES247		AC_RES247	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575861.40	2187607.51	3.00
AC_RES248		AC_RES248	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575519.04	2187535.28	3.00
AC_RES249		AC_RES249	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575459.31	2187535.28	3.00
AC_RES250		AC_RES250	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575400.98	2187535.98	3.00
AC_RES251		AC_RES251	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575340.56	2187535.28	3.00
AC_RES252		AC_RES252	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575280.84	2187535.28	3.00
AC_RES253		AC_RES253	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575221.12	2187508.90	3.00
AC_RES254		AC_RES254	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575162.09	2187508.20	3.00
AC_RES255		AC_RES255	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575249.68	2187011.88	3.00
AC_RES256		AC_RES256	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575255.11	2186937.01	3.00
AC_RES257		AC_RES257	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575255.11	2186861.06	3.00
AC_RES258		AC_RES258	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575254.02	2186785.10	3.00
AC_RES259		AC_RES259	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575254.02	2186711.32	3.00
AC_RES260		AC_RES260	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575248.60	2186636.45	3.00
AC_RES261		AC_RES261	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575251.85	2186561.58	3.00
AC_RES262		AC_RES262	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575249.68	2186487.79	3.00
AC_RES263		AC_RES263	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575900.73	2186431.37	3.00
AC_RES264		AC_RES264	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575918.09	2186296.82	3.00
AC_RES265		AC_RES265	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575915.92	2186221.95	3.00
AC_RES266		AC_RES266	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575915.92	2186149.25	3.00
AC_RES267		AC_RES267	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575907.24	2186079.81	3.00
AC_RES268		AC_RES268	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6575949.55	2185962.62	3.00
AC_RES269		AC_RES269	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576011.40	2185888.84	3.00
AC_RES270		AC_RES270	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576088.44	2185900.77	3.00
AC_RES271		AC_RES271	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576162.23	2185883.41	3.00
AC_RES272		AC_RES272	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576236.01	2185887.75	3.00
AC_RES273		AC_RES273	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576311.97	2185891.01	3.00
AC_RES274		AC_RES274	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576384.67	2185893.18	3.00
AC_RES275		AC_RES275	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576461.71	2185891.01	3.00
AC_RES276		AC_RES276	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576537.66	2185896.43	3.00
AC_RES277		AC_RES277	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576613.62	2185891.01	3.00
AC_RES278		AC_RES278	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576688.49	2185874.73	3.00
AC_RES279		AC_RES279	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576761.19	2185869.30	3.00
AC_RES280		AC_RES280	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576837.14	2185867.13	3.00
AC_RES281		AC_RES281	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576909.84	2185873.64	3.00
AC_RES282		AC_RES282	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6576985.80	2185875.81	3.00
AC_RES283		AC_RES283	76.0	76.0	76.0	Lw	76		675.00	0.00	405.00	3.00	r	6577065.01	2185881.24	3.00
AC_COM001		AC_COM001	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6576119.31	2186998.36	5.00
AC_COM002		AC_COM002	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6576153.17	2186997.06	5.00
AC_COM003		AC_COM003	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6576116.27	2186911.56	5.00
AC_COM004		AC_COM004	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6576323.52	2187049.36	5.00
AC_COM005		AC_COM005	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6576353.90	2187074.32	5.00
AC_COM006		AC_COM006	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6576374.52	2186991.85	5.00
AC_COM007		AC_COM007	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6576413.58	2186949.54	5.00
AC_COM008		AC_COM008	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6576447.22	2186877.92	5.00
AC_COM009		AC_COM009	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6576470.01	2186898.54	5.00
AC_COM010		AC_COM010	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6576488.45	2186982.09	5.00
AC_COM011		AC_COM011	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6576414.67	2187047.19	5.00
AC_COM012		AC_COM012	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6576472.18	2187109.04	5.00
AC_COM013		AC_COM013	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6576530.77	2187152.44	5.00
AC_COM014		AC_COM014	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6576592.62	2187087.34	5.00
AC_COM015		AC_COM015	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6576543.79	2187038.51	5.00
AC_COM016		AC_COM016	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6576538.37	2186966.90	5.00
AC_COM017		AC_COM017	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6576607.81	2187032.00	5.00
AC_COM018		AC_COM018	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6576545.96	2186889.86	5.00
AC_COM019		AC_COM019	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6576614.89	2186715.91	5.00
AC_COM020		AC_COM020	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6576316.27	2186668.00	5.00
AC_COM021		AC_COM021	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6576818.36	2187433.14	5.00
AC_COM022		AC_COM022	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6576839.19	2187408.14	5.00
AC_COM023		AC_COM023	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6574668.44	2187585.74	5.00
AC_COM024		AC_COM024	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6574687.98	2187599.85	5.00
AC_COM025		AC_COM025	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6574668.44	2187266.73	5.00
AC_COM026		AC_COM026	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6574689.06	2187241.77	5.00
AC_COM027		AC_COM027	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6574702.08	2187207.05	5.00
AC_COM028		AC_COM028	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6574703.17	2187183.18	5.00
AC_COM029		AC_COM029	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6574703.17	2187164.73	5.00
AC_COM030		AC_COM030	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6574771.53	2187198.37	5.00
AC_COM031		AC_COM031	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6574853.99	2187196.20	5.00
AC_COM032		AC_COM032	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6574818.18	2187196.20	5.00
AC_COM033		AC_COM033	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6576815.08	2187599.83	5.00
AC_COM034		AC_COM034	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6574674.23	2187437.70	5.00
AC_COM035		AC_COM035	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6574714.16	2187428.15	5.00
AC_COM036		AC_COM036	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6574686.38	2187385.62	5.00
AC_COM037		AC_COM037	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6576980.14	2186721.92	5.00
AC_COM038		AC_COM038	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6576980.14	2186680.69	5.00
AC_COM039		AC_COM039	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6576980.14	2186637.28	5.00
AC_COM040		AC_COM040	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6577045.25	2186635.11	5.00

Name	M.	ID	Result. PWL			Lw / Li			Operating Time			Height		Coordinates		
			Day	Evening	Night	Type	Value	norm.	Day	Special	Night			X	Y	Z
			(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(ft)		(ft)	(ft)	(ft)
AC_COM041		AC_COM041	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6577045.25	2186680.69	5.00
AC_COM042		AC_COM042	88.9	88.9	88.9	Lw	88.9		675.00	0.00	405.00	5.00	g	6577047.42	2186719.75	5.00
BBCOURT1		BBCOURT1	88.9	88.9	88.9	Lw	88.9		900.00	0.00	0.00	5.00	r	6577016.06	2187596.74	5.00
OUT01		OUT01	91.5	91.5	91.5	Lw	91.5		900.00	0.00	0.00	5.00	r	6576100.42	2187318.27	5.00
OUT02		OUT02	91.5	91.5	91.5	Lw	91.5		900.00	0.00	0.00	5.00	r	6576162.92	2187346.92	5.00
OUT03		OUT03	91.5	91.5	91.5	Lw	91.5		900.00	0.00	0.00	5.00	r	6576209.79	2187293.53	5.00
OUT04		OUT04	91.5	91.5	91.5	Lw	91.5		900.00	0.00	0.00	5.00	r	6576222.81	2187232.33	5.00
OUT05		OUT05	91.5	91.5	91.5	Lw	91.5		900.00	0.00	0.00	5.00	r	6576155.10	2187197.18	5.00
OUT06		OUT06	91.5	91.5	91.5	Lw	91.5		900.00	0.00	0.00	5.00	r	6576084.79	2187158.11	5.00
OUT07		OUT07	91.5	91.5	91.5	Lw	91.5		900.00	0.00	0.00	5.00	r	6576048.33	2187091.71	5.00
OUT08		OUT08	91.5	91.5	91.5	Lw	91.5		900.00	0.00	0.00	5.00	r	6576159.01	2186931.55	5.00
OUT09		OUT09	91.5	91.5	91.5	Lw	91.5		900.00	0.00	0.00	5.00	r	6576208.49	2186935.46	5.00
OUT10		OUT10	91.5	91.5	91.5	Lw	91.5		900.00	0.00	0.00	5.00	r	6576475.42	2186716.71	5.00
OUT11		OUT11	91.5	91.5	91.5	Lw	91.5		900.00	0.00	0.00	5.00	r	6576556.14	2186725.82	5.00
OUT12		OUT12	91.5	91.5	91.5	Lw	91.5		900.00	0.00	0.00	5.00	r	6576666.82	2186788.32	5.00
OUT13		OUT13	91.5	91.5	91.5	Lw	91.5		900.00	0.00	0.00	5.00	r	6576356.93	2186622.96	5.00
OUT14		OUT14	91.5	91.5	91.5	Lw	91.5		900.00	0.00	0.00	5.00	r	6576284.01	2186624.26	5.00
OUT15		OUT15	91.5	91.5	91.5	Lw	91.5		900.00	0.00	0.00	5.00	r	6576472.81	2187037.02	5.00
OUT16		OUT16	91.5	91.5	91.5	Lw	91.5		900.00	0.00	0.00	5.00	r	6576659.89	2187254.66	5.00
OUT17		OUT17	91.5	91.5	91.5	Lw	91.5		900.00	0.00	0.00	5.00	r	6576598.70	2187227.31	5.00
OUT18		OUT18	91.5	91.5	91.5	Lw	91.5		900.00	0.00	0.00	5.00	r	6576636.46	2187188.25	5.00
OUT19		OUT19	91.5	91.5	91.5	Lw	91.5		900.00	0.00	0.00	5.00	r	6576689.84	2186533.30	5.00
OUT20		OUT20	91.5	91.5	91.5	Lw	91.5		900.00	0.00	0.00	5.00	r	6576264.06	2186460.39	5.00
OUT21		OUT21	91.5	91.5	91.5	Lw	91.5		900.00	0.00	0.00	5.00	r	6575762.76	2186716.90	5.00
OUT22		OUT22	91.5	91.5	91.5	Lw	91.5		900.00	0.00	0.00	5.00	r	6575813.54	2186750.75	5.00
OUT23		OUT23	91.5	91.5	91.5	Lw	91.5		900.00	0.00	0.00	5.00	r	6574727.84	2187533.69	5.00
OUT24		OUT24	91.5	91.5	91.5	Lw	91.5		900.00	0.00	0.00	5.00	r	6574860.48	2187410.77	5.00
OUT25		OUT25	91.5	91.5	91.5	Lw	91.5		900.00	0.00	0.00	5.00	r	6574859.09	2187392.02	5.00
OUT26		OUT26	91.5	91.5	91.5	Lw	91.5		900.00	0.00	0.00	5.00	r	6574740.34	2187346.19	5.00
OUT27		OUT27	91.5	91.5	91.5	Lw	91.5		900.00	0.00	0.00	5.00	r	6574812.56	2187260.77	5.00
OUT28		OUT28	91.5	91.5	91.5	Lw	91.5		900.00	0.00	0.00	5.00	r	6574863.26	2187287.16	5.00
OUT29		OUT29	91.5	91.5	91.5	Lw	91.5		900.00	0.00	0.00	5.00	r	6574867.43	2187556.61	5.00
OUT30		OUT30	91.5	91.5	91.5	Lw	91.5		900.00	0.00	0.00	5.00	r	6574821.59	2187580.91	5.00
OUT31		OUT31	91.5	91.5	91.5	Lw	91.5		900.00	0.00	0.00	5.00	r	6574797.29	2187560.77	5.00
OUT32		OUT32	91.5	91.5	91.5	Lw	91.5		900.00	0.00	0.00	5.00	r	6574685.48	2187506.61	5.00
KIDS1		KIDS1	89.4	89.4	89.4	Lw	89.4		900.00	0.00	0.00	5.00	r	6576843.75	2187642.31	5.00
SWIM01		SWIM01	94.6	94.6	94.6	Lw	94.6		900.00	0.00	0.00	5.00	r	6576374.94	2186786.67	5.00
SWIM02		SWIM02	94.6	94.6	94.6	Lw	94.6		900.00	0.00	0.00	5.00	r	6576325.63	2186806.81	5.00
SWIM03		SWIM03	94.6	94.6	94.6	Lw	94.6		900.00	0.00	0.00	5.00	r	6576278.41	2186860.97	5.00
SWIM04		SWIM04	94.6	94.6	94.6	Lw	94.6		900.00	0.00	0.00	5.00	r	6576229.11	2186908.19	5.00
SWIM05		SWIM05	94.6	94.6	94.6	Lw	94.6		900.00	0.00	0.00	5.00	r	6576072.86	2187220.00	5.00
SWIM06		SWIM06	94.6	94.6	94.6	Lw	94.6		900.00	0.00	0.00	5.00	r	6576155.50	2187272.78	5.00
SWIM07		SWIM07	94.6	94.6	94.6	Lw	94.6		900.00	0.00	0.00	5.00	r	6576183.19	2186898.91	5.00
SWIM08		SWIM08	94.6	94.6	94.6	Lw	94.6		900.00	0.00	0.00	5.00	r	6576531.49	2186693.83	5.00
SWIM09		SWIM09	94.6	94.6	94.6	Lw	94.6		900.00	0.00	0.00	5.00	r	6576324.25	2186594.00	5.00
SWIM10		SWIM10	94.6	94.6	94.6	Lw	94.6		900.00	0.00	0.00	5.00	r	6576677.98	2186584.24	5.00
SWIM11		SWIM11	94.6	94.6	94.6	Lw	94.6		900.00	0.00	0.00	5.00	r	6575969.43	2187250.47	5.00
SWIM12		SWIM12	94.6	94.6	94.6	Lw	94.6		900.00	0.00	0.00	5.00	r	6574743.12	2187318.41	5.00
SWIM13		SWIM13	94.6	94.6	94.6	Lw	94.6		900.00	0.00	0.00	5.00	r	6574764.65	2187293.41	5.00
SWIM14		SWIM14	94.6	94.6	94.6	Lw	94.6		900.00	0.00	0.00	5.00	r	6574842.43	2187357.99	5.00
SWIM15		SWIM15	94.6	94.6	94.6	Lw	94.6		900.00	0.00	0.00	5.00	r	6574843.81	2187456.61	5.00
SWIM16		SWIM16	94.6	94.6	94.6	Lw	94.6		900.00	0.00	0.00	5.00	r	6574813.95	2187518.41	5.00
SWIM17		SWIM17	94.6	94.6	94.6	Lw	94.6		900.00	0.00	0.00	5.00	r	6574734.79	2187517.02	5.00
PICKLE1		PICKLE1	96.4	96.4	96.4	Lw	96.4		900.00	0.00	0.00	5.00	r	6577042.97	2187418.78	5.00
PICKLE2		PICKLE2	96.4	96.4	96.4	Lw	96.4		900.00	0.00	0.00	5.00	r	6576983.07	2187364.10	5.00
SPORT01		SPORT01	87.0	87.0	87.0	Lw	87.0		900.00	0.00	0.00	5.00	r	6576937.06	2187468.26	5.00
SPORT02		SPORT02	87.0	87.0	87.0	Lw	87.0		900.00	0.00	0.00	5.00	r	6576890.19	2187516.01	5.00
SPORT03		SPORT03	87.0	87.0	87.0	Lw	87.0		900.00	0.00	0.00	5.00	r	6576924.04	2187631.46	5.00
SPORT04		SPORT04	87.0	87.0	87.0	Lw	87.0		900.00	0.00	0.00	5.00	r	6577056.86	2187503.85	5.00
SPORT05		SPORT05	87.0	87.0	87.0	Lw	87.0		900.00	0.00	0.00	5.00	r	6576046.44	2187309.41	5.00
SPORT06		SPORT06	87.0	87.0	87.0	Lw	87.0		900.00	0.00	0.00	5.00	r	6576083.77	2187202.64	5.00

Line Source(s)

Name	M.	ID	Result. PWL			Result. PWL'			Lw / Li			Operating Time			Moving Pt. Src				Height
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Special	Night	Number			Speed	
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	Day	Evening	Night	(mph)	(ft)

Name	ID	Height		Coordinates			
		Begin	End	x	y	z	Ground
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Area Source(s)

Name	M.	ID	Result. PWL			Result. PWL''			Lw / Li			Operating Time			Height
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Special	Night	(ft)
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	

Name	ID	Height				Coordinates			
		Begin		End		x	y	z	Ground
		(ft)		(ft)		(ft)	(ft)	(ft)	(ft)

Barrier(s)

Name	Sel.	M.	ID	Absorption		Z-Ext.	Cantilever		Height		Coordinates			
				left	right		horz.	vert.	Begin	End	x	y	z	Ground
						(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Building(s)

Name	Sel.	M.	ID	RB	Residents	Absorption	Height		Coordinates				
							Begin		x	y	z	Ground	
							(ft)		(ft)	(ft)	(ft)	(ft)	
BUILDING			BUILDING00001	x	0		0.00	a	6576101.17	2187019.41	0.00	0.00	
									6576175.39	2187019.41	0.00	0.00	
									6576174.52	2186972.10	0.00	0.00	
									6576101.17	2186972.53	0.00	0.00	
BUILDING			BUILDING00002	x	0		0.00	a	6576109.85	2186932.60	0.00	0.00	
									6576131.99	2186920.45	0.00	0.00	
									6576118.97	2186898.32	0.00	0.00	
									6576097.27	2186910.47	0.00	0.00	
BUILDING			BUILDING00003	x	0		0.00	a	6576354.21	2187096.67	0.00	0.00	
									6576381.99	2187067.15	0.00	0.00	
									6576331.64	2187019.41	0.00	0.00	
									6576302.99	2187047.19	0.00	0.00	
BUILDING			BUILDING00004	x	0		0.00	a	6576414.54	2187069.32	0.00	0.00	
									6576435.37	2187047.19	0.00	0.00	
									6576410.63	2187022.45	0.00	0.00	
									6576389.37	2187045.02	0.00	0.00	
BUILDING			BUILDING00005	x	0		0.00	a	6576376.35	2187025.05	0.00	0.00	
									6576447.96	2186950.40	0.00	0.00	
									6576415.41	2186918.71	0.00	0.00	
									6576343.36	2186993.80	0.00	0.00	
BUILDING			BUILDING00006	x	0		0.00	a	6576461.85	2186926.09	0.00	0.00	
									6576486.15	2186902.66	0.00	0.00	
									6576493.97	2186909.17	0.00	0.00	
									6576510.03	2186891.37	0.00	0.00	
									6576461.85	2186843.19	0.00	0.00	
									6576418.88	2186889.20	0.00	0.00	
BUILDING			BUILDING00007	x	0		0.00	a	6576460.98	2186972.53	0.00	0.00	
									6576495.70	2187007.26	0.00	0.00	
									6576520.88	2186980.78	0.00	0.00	
									6576483.98	2186947.36	0.00	0.00	
BUILDING			BUILDING00008	x	0		0.00	a	6576550.82	2187064.11	0.00	0.00	
									6576578.17	2187035.03	0.00	0.00	
									6576545.18	2187002.92	0.00	0.00	
									6576518.27	2187032.43	0.00	0.00	
									6576537.80	2187051.96	0.00	0.00	
BUILDING			BUILDING00009	x	0		0.00	a	6576566.02	2187094.93	0.00	0.00	
									6576584.68	2187112.29	0.00	0.00	
									6576615.06	2187079.74	0.00	0.00	
									6576596.83	2187061.51	0.00	0.00	
BUILDING			BUILDING00010	x	0		0.00	a	6576526.52	2187170.89	0.00	0.00	
									6576557.33	2187139.64	0.00	0.00	
									6576538.24	2187122.27	0.00	0.00	
									6576507.86	2187154.39	0.00	0.00	
BUILDING			BUILDING00011	x	0		0.00	a	6576481.38	2187134.43	0.00	0.00	
									6576503.08	2187110.99	0.00	0.00	
									6576467.49	2187078.00	0.00	0.00	
									6576445.79	2187100.14	0.00	0.00	
BUILDING			BUILDING00012	x	0		0.00	a	6577064.34	2186749.27	0.00	0.00	
									6577062.60	2186662.90	0.00	0.00	
									6577065.64	2186662.46	0.00	0.00	
									6577063.90	2186575.66	0.00	0.00	
									6577013.12	2186576.53	0.00	0.00	
									6577013.12	2186597.79	0.00	0.00	
									6576950.19	2186597.79	0.00	0.00	
									6576951.92	2186699.36	0.00	0.00	
									6576946.72	2186699.36	0.00	0.00	
									6576949.32	2186754.91	0.00	0.00	
									6577026.58	2186754.04	0.00	0.00	
									6577026.58	2186750.14	0.00	0.00	
BUILDING			BUILDING00013	x	0		0.00	a	6574677.44	2187286.05	0.00	0.00	
									6574715.63	2187242.64	0.00	0.00	
									6574707.82	2187237.43	0.00	0.00	
									6574707.82	2187229.62	0.00	0.00	
									6574742.54	2187229.62	0.00	0.00	
									6574743.41	2187217.47	0.00	0.00	

Name	Sel.	M.	ID	RB	Residents	Absorption	Height		Coordinates			
							Begin		x	y	z	Ground
							(ft)		(ft)	(ft)	(ft)	(ft)
									6574884.03	2187218.34	0.00	0.00
									6574886.64	2187175.80	0.00	0.00
									6574737.33	2187176.67	0.00	0.00
									6574738.20	2187153.23	0.00	0.00
									6574691.33	2187154.10	0.00	0.00
									6574691.33	2187219.21	0.00	0.00
									6574652.26	2187266.08	0.00	0.00
BUILDING			BUILDING00014	x	0		0.00	a	6574709.82	2187615.91	0.00	0.00
									6574730.22	2187593.77	0.00	0.00
									6574680.74	2187547.33	0.00	0.00
									6574646.01	2187583.79	0.00	0.00
									6574684.64	2187618.94	0.00	0.00
									6574697.23	2187605.49	0.00	0.00
BUILDING			BUILDING00015	x	0		0.00	a	6574750.61	2187429.89	0.00	0.00
									6574754.09	2187407.32	0.00	0.00
									6574750.61	2187389.09	0.00	0.00
									6574741.07	2187372.60	0.00	0.00
									6574723.70	2187357.84	0.00	0.00
									6574708.08	2187350.90	0.00	0.00
									6574678.57	2187351.76	0.00	0.00
									6574653.39	2187363.05	0.00	0.00
									6574642.98	2187376.07	0.00	0.00
									6574635.16	2187390.83	0.00	0.00
									6574633.43	2187410.79	0.00	0.00
									6574635.16	2187430.76	0.00	0.00
									6574642.98	2187447.25	0.00	0.00
									6574653.39	2187459.40	0.00	0.00
									6574676.83	2187468.95	0.00	0.00
									6574704.61	2187470.69	0.00	0.00
									6574733.25	2187457.67	0.00	0.00

Ground Absorption(s)

Name	Sel.	M.	ID	G	Coordinates	
					x	y
					(ft)	(ft)

Contour(s)

Name	Sel.	M.	ID	OnlyPts	Height		Coordinates		
					Begin	End	x	y	z
					(ft)	(ft)	(ft)	(ft)	(ft)

Vertical Area Source(s)

Name	ID	Height		Coordinates			
		Begin	End	x	y	z	Ground
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Rail

Name	Sel.	M.	ID	Lw'		Train Class	Correct.	Vmax
				Day	Night		Track	
				(dBA)	(dBA)		(dB)	(km(mph)

Sound Level Spectra

Name	ID	Type	Oktave Spectrum (dB)											Source
			Weight.	31.5	63	125	250	500	1000	2000	4000	8000	A	lin	

Roads

Name	Sel.	M.	ID	Lme			Count Data		exact Count Data						Speed Limit		SCS	Surface		Gradient	Mult. Reflection		
				Day	Evening	Night	DTV	Str.class.	M			p (%)			Auto	Truck	Dist.	Dstro	Type		Drefl	Hbuild	Dist.
				(dBA)	(dBA)	(dBA)			Day	Evening	Night	Day	Evening	Night	(mph)	(mph)		(dB)		(%)	(dB)	(ft)	(ft)

RoadsGeo

Name	Height		Coordinates				Dist	LSlope
	Begin	End	x	y	z	Ground	(ft)	(%)
	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)		

APPENDIX 9.1:

CADNAA CONSTRUCTION NOISE CALCULATIONS

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16552 - Relevant Coachella

CadnaA Noise Prediction Model: 16552-02_Construction.cna
Date: 05.08.25
Analyst: B. Maddux

Calculation Configuration

Configuration	
Parameter	**Value**
General	
Max. Error (dB)	**0.00**
Max. Search Radius (ft)	**6561.70**
Min. Dist Src to Rcvr	**0.00**
Partition	
Raster Factor	**0.50**
Max. Length of Section (ft)	**3280.80**
Min. Length of Section (ft)	**3.30**
Min. Length of Section (%)	**0.00**
Proj. Line Sources	**On**
Proj. Area Sources	**On**
Ref. Time	
Daytime Penalty (dB)	**0.00**
Recr. Time Penalty (dB)	**5.00**
Night-time Penalty (dB)	**10.00**
DTM	
Standard Height (m)	**0.00**
Model of Terrain	**Triangulation**
Reflection	
max. Order of Reflection	**2**
Search Radius Src	**328.08**
Search Radius Rcvr	**328.08**
Max. Distance Source - Rcvr	**3280.84 3280.84**
Min. Distance Rvcr - Reflector	**3.28 3.28**
Min. Distance Source - Reflector	**0.33**
Industrial (ISO 9613 (1996))	
Lateral Diffraction	**some Obj**
Obst. within Area Src do not shield	**On**
Screening	**Incl. Ground Att. over Barrier**
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	**3.0 20.0 0.0**
Temperature (°F)	**50**
rel. Humidity (%)	**70**
Ground Absorption G	**0.50**
Wind Speed for Dir. (mph)	**6.7**
Roads (TNM)	
Railways (FTA/FRA)	
Aircraft (???)	
Strictly acc. to AzB	

Receiver Noise Levels

Name	M.	ID	Level Lr			Limit. Value			Land Use			Height		Coordinates		
			Day	Night	CNEL	Day	Night	CNEL	Type	Auto	Noise Type			X	Y	Z
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)				(ft)		(ft)	(ft)	(ft)
R1		R1	63.2	-43.8	60.2	0.0	0.0	0.0		x	Total	5.00	r	6576713.36	2187811.69	5.00
R2		R2	61.5	-45.5	58.5	0.0	0.0	0.0		x	Total	5.00	r	6577266.14	2187619.33	5.00
R3		R3	63.6	-43.4	60.6	0.0	0.0	0.0		x	Total	5.00	r	6576991.23	2185760.47	5.00
R4		R4	63.3	-43.7	60.3	0.0	0.0	0.0		x	Total	5.00	r	6575213.88	2186372.45	5.00
R5		R5	54.6	-52.4	51.6	0.0	0.0	0.0		x	Total	5.00	r	6573722.13	2187348.69	5.00

Point Source(s)

Name	M.	ID	Result. PWL			Lw / Li			Operating Time			Height		Coordinates		
			Day	Evening	Night	Type	Value	norm.	Day	Special	Night			X	Y	Z
			(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(ft)		(ft)	(ft)	(ft)

Line Source(s)

Name	M.	ID	Result. PWL			Result. PWL'			Lw / Li			Operating Time			Moving Pt. Src				Height
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Special	Night	Number			Speed	
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	Day	Evening	Night	(mph)	(ft)

Name	ID	Height		Coordinates			
		Begin	End	x	y	z	Ground
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Area Source(s)

Name	M.	ID	Result. PWL			Result. PWL''			Lw / Li			Operating Time			Height	
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Special	Night	(ft)	
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)		
CA1		CA1	122.9	15.9	15.9	67.6	-39.4	-39.4	PWL-Pt	115.9					8	r

Name	ID	Height				Coordinates			
		Begin		End		x	y	z	Ground
		(ft)		(ft)		(ft)	(ft)	(ft)	(ft)
CA1	CA1	8.00	r			6574560.40	2187709.86	8.00	0.00
						6577138.04	2187706.83	8.00	0.00
						6577112.80	2185819.53	8.00	0.00
						6575836.24	2185818.22	8.00	0.00
						6575837.65	2186427.42	8.00	0.00
						6575193.35	2186428.92	8.00	0.00
						6575194.92	2187107.91	8.00	0.00
						6574552.71	2187109.37	8.00	0.00

Barrier(s)

Name	Sel.	M.	ID	Absorption		Z-Ext.	Cantilever		Height		Coordinates			
				left	right		horz.	vert.	Begin	End	x	y	z	Ground
						(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Building(s)

Name	Sel.	M.	ID	RB	Residents	Absorption	Height	Coordinates				
							Begin	x	y	z	Ground	
							(ft)	(ft)	(ft)	(ft)	(ft)	

Ground Absorption(s)

Name	Sel.	M.	ID	G	Coordinates	
					x	y
					(ft)	(ft)

Contour(s)

Name	Sel.	M.	ID	OnlyPts	Height		Coordinates		
					Begin	End	x	y	z
					(ft)	(ft)	(ft)	(ft)	(ft)

Vertical Area Source(s)

Name	ID	Height				Coordinates			
		Begin		End		x	y	z	Ground
		(ft)		(ft)		(ft)	(ft)	(ft)	(ft)

Rail

Name	Sel.	M.	ID	Lw'		Train Class	Correct.	Vmax
				Day	Night		Track	
				(dBA)	(dBA)		(dB)	(km(mph)

Sound Level Spectra

Name	ID	Type	Oktave Spectrum (dB)											Source
			Weight.	31.5	63	125	250	500	1000	2000	4000	8000	A	lin	

Roads

Name	Sel.	M.	ID	Lme			Count Data		exact Count Data						Speed Limit		SCS	Surface		Gradient	Mult. Reflection		
				Day	Evening	Night	DTV	Str.class.	M			p (%)			Auto	Truck	Dist.	Dstro	Type		Drefl	Hbuild	Dist.
				(dBA)	(dBA)	(dBA)			Day	Evening	Night	Day	Evening	Night	(mph)	(mph)		(dB)		(%)	(dB)	(ft)	(ft)

RoadsGeo

Name	Height				Coordinates				Dist	LSlope
	Begin		End		x	y	z	Ground	(ft)	(%)
	(ft)		(ft)		(ft)	(ft)	(ft)	(ft)		

Fehr & Peers

COVA Transportation Analysis Report

Prepared for:
City of Coachella
Relevant Partners

Submitted:
November 2025

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Executive Summary

Fehr & Peers has completed a transportation analysis for the proposed COVA development (Project) in Coachella, California. This study presents the Level of Service (LOS) and Vehicle Miles Traveled (VMT) analysis consistent with the *County of Riverside's Transportation Analysis Guidelines for Level of Service & Vehicle Miles Traveled* (December 2020)[1]. This study is consistent with the requirements of Senate Bill 743 (SB 743), the California Governor's Office of Land Use and Climate Innovation's *Technical Advisory on Evaluating Transportation Impacts in CEQA* (December 2018).

Project Description

The Project is an 85-acre mixed-use development (proposed rezoning from regional commercial) in the City of Coachella bounded by Avenue 52 to the north, Van Buren Street to the east, Calhoun Street to the west, and generally Avenue 53 to the south. The Project will feature two primary components:

- **Private Sector**: Includes 165 single-family recreational home dwelling units and 244 condo-hotel recreational home units, both operating under fractional ownership, timeshare, second home, and short-term and long-term rental models. These accommodations will be complemented by significant on-site resort amenities (i.e. dining, entertainment, recreational).
- **Public Sector**: Includes a beach club, restaurant, and an event tent. These sub-areas are expected to operate with a typical weekday capacity of 500 persons and a weekend capacity of 1,500. The public sector components will generally be operational between 11:00 AM and 2:00 AM, with the highest level of activity occurring in the evening between 7:00 PM and 8:00 PM, and on weekends.

The Project's unique resort features—dwelling units, dining, amenities, outdoor/recreational spaces, and entertainment—create a self-contained destination. This will provide substantial local options for Coachella and regional appeal for the Coachella Valley, drawing visitors already in the area for vacations or events. COVA expects high internal trip capture, with most guests staying onsite for lodging, recreation, dining, and entertainment. A significant portion of public-facing restaurants, beach club, and event spaces will serve onsite guests.

CEQA Transportation Impact Analysis

CEQA Guidelines Section §15064.3 requires Vehicle Miles of Travel (VMT) analysis for land use projects. A full VMT assessment was performed since the Project did not qualify for any of the screening criteria outlined in the County Guidelines.

The Project was run in RIVCOM and the net regional change in total VMT within the City and County boundaries is forecast to decrease, resulting in a **less-than-significant transportation impact**. The Project commute VMT per employee was also reviewed and resulted in a decrease.

[1] County of Riverside TIA Guidelines (2020)

The CEQA Transportation Impact Study also evaluated the Project's consistency with established programs, plans, ordinances, and policies and potential for creating geometric design hazards or hindering emergency access.

Level of Service (LOS) Analysis

Fehr & Peers evaluated the Project's effects on the transportation system in the following Level of Service (LOS) Analysis (Analysis) consistent with procedures outlined by the County's Guidelines.

The LOS analysis prepared traffic forecasts for the following scenarios, and evaluated operations of study intersections:

- Existing (2025) Conditions, one intersection operates at D or worse
- Opening Year (2030) Plus Project, two intersections operate at D or worse
- Opening Year (2030) Plus Project Plus Cumulative, five intersections operate at D or worse

The Study identified improvements to bring the operationally deficient intersection to acceptable levels (LOS D or better), which will require a traffic signal, traffic signal timing updates, and converting a turn lane to a shared turn lane through. The Project's fair share contribution towards these improvements was also identified.

1. Introduction

Fehr & Peers completed a transportation assessment for the proposed COVA development (Project) in the City of Coachella, California [Pre-App (23-06)]. This report presents the methodology, analysis, and findings of the Transportation Impact Assessment (TIA) prepared for the Project. The analysis comprises of a California Environmental Quality Act (CEQA) Vehicle Miles Traveled (VMT) assessment and a local transportation Level of Service (LOS) assessment. The purpose of this assessment is to evaluate potential CEQA transportation impacts and assess changes to the local transportation system with the Project.

This chapter outlines the project description, geographic scope of the transportation impact analysis, and analysis scenarios. This assessment is consistent with the requirements outlined in *County of Riverside Transportation Analysis Guidelines for Level of Service & Vehicle Miles Traveled (2020).* The scoping agreement was approved by the City on May 5th, 2025 (see **Appendix A** – *Scoping Agreement for Transportation LOS Analysis*).

1.1 Project Description

The Project is an 85-acre mixed-use development in the City of Coachella bounded by Avenue 52 to the north, Van Buren Street to the east, Calhoun Street to the west, and generally Avenue 53, which is located to the south of the site. The Project proposes rezoning of the site from existing regional commercial (R-C) to Planned Unit Development.

The Project will feature two primary components – a private sector and public sector.

- **Private Sector**: Includes 165 single-family recreational home dwelling units comprised of estate lots, zero lot line lots, bungalow lots, and VIP suites; 244 condo-hotel recreational home units, which will operate like the single-family lots. These units will all operate under fractional ownership, timeshare, second homes, and/or short-term and long-term rental models. These accommodations will be complemented by on-site resort amenities (i.e. recreational courts, spa/pool, lagoon and water features, bar and entertainment, library, restaurant), which can be used by guests/owners of this sector.
- **Public Sector**: Includes a 10 TSF[2] beach club, 6 TSF restaurant, and a 7 TSF event tent. These sub-areas are anticipated to operate with an assumed typical weekday capacity of 500 persons [100 person beach club, 200 person restaurant, and 200 person event tent] and an assumed weekend capacity of 1,500 [1,000 person beach club, 200 person restaurant, and 300 person event tent]; other special events with higher capacity would be rare and may require additional traffic control. The public sector components will generally be operational between 11:00 AM and 2:00 AM, with the highest level of activity occurring in the evening between 7:00 PM and 8:00 PM, and on weekends.

The resort characteristics of the Project are unique, designed to function as an internal destination with resort home dwelling units, dining experiences, on-site resort amenities, outdoor and recreational spaces, and entertainment areas. This is projected to result in significant locally serving

[2] TSF: Thousand Square Feet

options for the City of Coachella and regionally for the Coachella Valley, attracting those already in the area vacationing or visiting for local events.

The Project would be affected by typical seasonality trends observed within the Coachella Valley, and further confirmed through market research conducted by the Developer (**Table 1.1**). Time of year use distribution will be concentrated between mid-February through May, with the lowest demand generally occurring mid-July through the end of September, and the first half of December.

COVA is positioned to achieve significant internal capture of trips between the onsite uses with the expectation that a majority of onsite guests will stay on the property once they arrive. Many of guest daily needs would be accommodated by the resort lodging, recreation, dining, and entertainment options without leaving the property. A significant share of the public facing restaurant, beach club and event space are anticipated to be used by onsite guests.

Access to and from the Project will be provided via five proposed driveways along Calhoun Street (2), Avenue 52 (2), and Van Burent Street (1). The Project includes three full access driveways on Calhoun Street (1), Avenue 52 (1), and Van Buren Street (1). In addition, Calhoun Street will have a right in, right out driveway and Avenue 52 will have a right out exit only driveway. Public sector access is available exclusively off Calhoun Street; private sector access can be made via Avenue 52 or Van Buren Street, as well as through the Calhoun Street driveway. **Figure 1.1** shows the proposed site plan.

Table 1.1 Coachella Valley Seasonality Travel Demand Trends

Week	% of Capacity
1	62%
2	67%
3	67%
4	95%
5	95%
6	71%
7	100%
8	100%
9	100%
10	100%
11	100%
12	100%
13	100%
14	100%
15	100%
16	100%
17	100%
18	62%
19	67%
20	62%
21	62%
22	52%
23	52%
24	52%
25	52%
26	52%
27	43%
28	38%
29	38%
30	43%
31	38%
32	38%
33	33%
34	38%
35	38%
36	43%
37	38%
38	43%
39	57%
40	52%
41	57%
42	57%
43	57%
44	62%
45	62%
46	62%
47	76%
48	43%
49	43%
50	48%
51	86%
52	86%
Average	*65%*

Source: 2023 The Ranch - Coachella Market Area Analysis Report (CA Desert Travel Demand)



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THE CITY OF COACHELLA OF THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

TECHNICAL SITE PLAN

EXHIBIT DATE: JULY 3, 2025

REVISIONS

NO.	DATE	DESCRIPTION

DATA TABLE

APPLICANT / LAND OWNER	RELEVANT COACHELLA OWNER, LLC		
ADDRESS	6417 SELMA AVENUE HOLLYWOOD, CALIFORNIA 90028		
CONTACT	GRANT KING		
EXHIBIT PREPARER	MSA CONSULTING, INC.		
ADDRESS	34200 BOB HOPE DRIVE RANCHO MIRAGE, CALIFORNIA 92270		
CONTACT	PAUL DEPALATIS, AICP	**TELEPHONE**	(760) 320-9811
SOURCE OF TOPOGRAPHY	INLAND AERIAL SURVEYS, INC.		
ADDRESS	7117 ARLINGTON AVENUE, SUITE A RIVERSIDE, CALIFORNIA 92503		
DATE OF TOPOGRAPHY	DECEMBER 22, 2021	**TELEPHONE**	(951) 687-4252
ASSESSOR'S PARCEL NUMBERS	780-040-001, 780-040-003, 780-060-001 & 780-060-002		

LEGAL DESCRIPTION

BEING A PORTION OF NE 1/4 OF SECTION 12, TOWNSHIP 6 SOUTH, RANGE 7 EAST, SAN BERNARDINO MERIDIAN.

LAND USE DESCRIPTION	ACREAGE
EXISTING GROSS AREA	87.16 AC.
PROPOSED PUBLIC RIGHT OF WAY DEDICATION (CALHOUN STREET, AVENUE 52 & VAN BUREN STREET)	6.02 AC.
PROPOSED NET AREA	**81.14 AC.**

PROJECT STATISTICS

SINGLE-FAMILY RESIDENTIAL	LOT SIZE	# BEDS	# STORIES	# UNITS	FLOOR AREA (SF)
GRAND ESTATE LOT	100' X 160'	6	2	6	8,665 SF/UNIT [1]
ESTATE LOT (STANDARD)+ADU [4]	75' X 150'	4-5	2	17	4,721 SF/UNIT [1]
ESTATE LOT (COMPACT)	75' X 150'	4-5	2	10	4,403 SF/UNIT [1]
ZERO LOT LINE RESIDENCE	60' X 150'	4-5	2	12	4,585 SF/UNIT [1]
LAGOON BUNGALOW	NA	3-4	2	61	2,600 SF/UNIT [1]
LAKE BUNGALOW	NA	3-4	2	51	2,600 SF/UNIT [1]
TOTAL				**157**	**613,932 SF** [2]
CONDO HOTEL					
HOTEL COTTAGES (1ST FLR.)	NA	1	1	120	1,248 SF/UNIT
HOTEL COTTAGES (2ND FLR.LOCKOFF)	NA	1	1	120	1,149 SF/UNIT
TOTAL				**240**	**287,640 SF**
BEACH CLUB					
BEACH CLUB VIP VILLAS	NA	1	1	5	4,629 SF/UNIT [1]
TOTAL					**32,245 SF** [2]
MAIN CLUB AMENITIES					256,531 SF [3]
PUBLIC BEACH AREA					16,173 SF [3]
SPORTS CENTER					5,100 SF [3]

PARKING PROVIDED	CAR SPACES	PARKING RATIO	CART SPACES
HOTEL (2-LEVEL BASEMENT PARKING GARAGE)	360		-
BEACH CLUB (2-LEVEL PARKING GARAGE)	143		-
HOTEL COTTAGES	47	0.2 SPACES/UNIT	50
BUNGALOWS	56	0.5 SPACES/UNIT	104
ZERO LOT LINE LOTS	24	2.0 SPACES/UNIT	-
ESTATE LOTS	54	2.0 SPACES/UNIT	27
GRAND ESTATE LOTS	12	2.0 SPACES/UNIT	12
TOTAL	**696**		**193**

NOTES :

1. INTERIOR FLOOR AREA ONLY. DOESN'T INCLUDE EXT. COVERED AREA AND ADU AREA
2. INCLUDES EXT. COVERED AREA AND ADU AREA
3. PLEASE REFER TO LANDSCAPE PACKAGE FOR COMPLETE BLDG. PROGRAMMING
4. ADU FLOOR AREA, 518 SF

WATER AMENITIES	AREA
HOTEL LAGOON	9.4 ACRES
LAKE	2.5 ACRES
BEACH CLUB LAGOON	0.4 ACRES
TOTAL	12.0 ACRES

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1.2 CEQA Transportation Impact Analysis

According to current CEQA guidelines and the County's VMT Analysis Guidelines, a project's transportation impact is considered significant if the associated change to the transportation system with the project will:

A. Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit roadway, bicycle, and pedestrian facilities.

B. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).

C. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

D. Result in inadequate emergency access.

1.2.1 Analysis Scenarios

As part of the CEQA VMT assessment, Fehr & Peers analyzed the following scenarios described below:

- Project Level Assessment – Compares daily total Origin-Destination (OD) VMT generated by the Project per service population to the No Project (2045) City and County average total VMT per service population
    - Cumulative (2025) No Project Conditions (Threshold)
    - Cumulative (2045) Plus Project Conditions
- Cumulative Level Assessment – Analyzes the Project's effect on total VMT per service population at the City and County level; calculates the net regional change in VMT between the threshold and Plus Project Conditions.
    - Cumulative (2025) No Project Conditions (Threshold)
    - Cumulative (2045) Plus Project Conditions

1.3 Level of Service (LOS) Analysis

The LOS analysis identifies improvements at study intersections to maintain acceptable intersection operations. LOS is a qualitative description of traffic flow from a vehicle driver's perspective based on factors such as speed, travel time, delay, and freedom to maneuver. The Highway Capacity Manual 7th Edition (HCM) identifies six levels of service ranging from LOS A (free-flow conditions) to LOS F (over capacity conditions). The City of Coachella utilizes a "LOS D or better" minimum standard for intersection operations.

1.3.1 Study Area

The study area was selected based on trip generation and distribution estimates, and consists of intersections where more than 50 peak hour trips are likely to be added as a result of the Project.

Figure 1.2 shows the study area. Fehr & Peers evaluated operations at the following 14 study intersections:

1. West Driveway 1 and Calhoun Street
2. West Driveway 2 and Calhoun Street
3. Calhoun Street and Avenue 52
4. North Driveway 1 and Avenue 52
5. North Driveway 2 and Avenue 52
6. Van Buren Street and 52nd Avenue
7. East Driveway and Van Buren Street
8. Calhoun Street and Avenue 50
9. Van Buren Street and Avenue 50
10. Calhoun Street and Avenue 48
11. Van Buren Street and Avenue 48
12. Dillon Road and Avenue 48
13. SR-86 SB Ramps and Dillon Road
14. SR-86 NB Ramps and Dillon Road

1.3.2 Analysis Scenarios

Fehr & Peers studied the AM and PM peak hour LOS at the identified study intersections for the following scenarios:

- Existing (2025) Conditions: Existing (2025) traffic volumes, lane geometries, and traffic signal timing.
- Opening Year (2030) Plus Project Conditions: Background traffic volumes during the Project's opening year with traffic volumes generated by the Project. The opening year volumes were developed by applying an ambient growth rate of two percent to the Existing (2025) traffic volumes.
- Opening Year (2030) Plus Project Plus Cumulative Projects Conditions: Opening Year Plus Project traffic volumes plus traffic generated by cumulative projects within a five-mile radius of the Project.

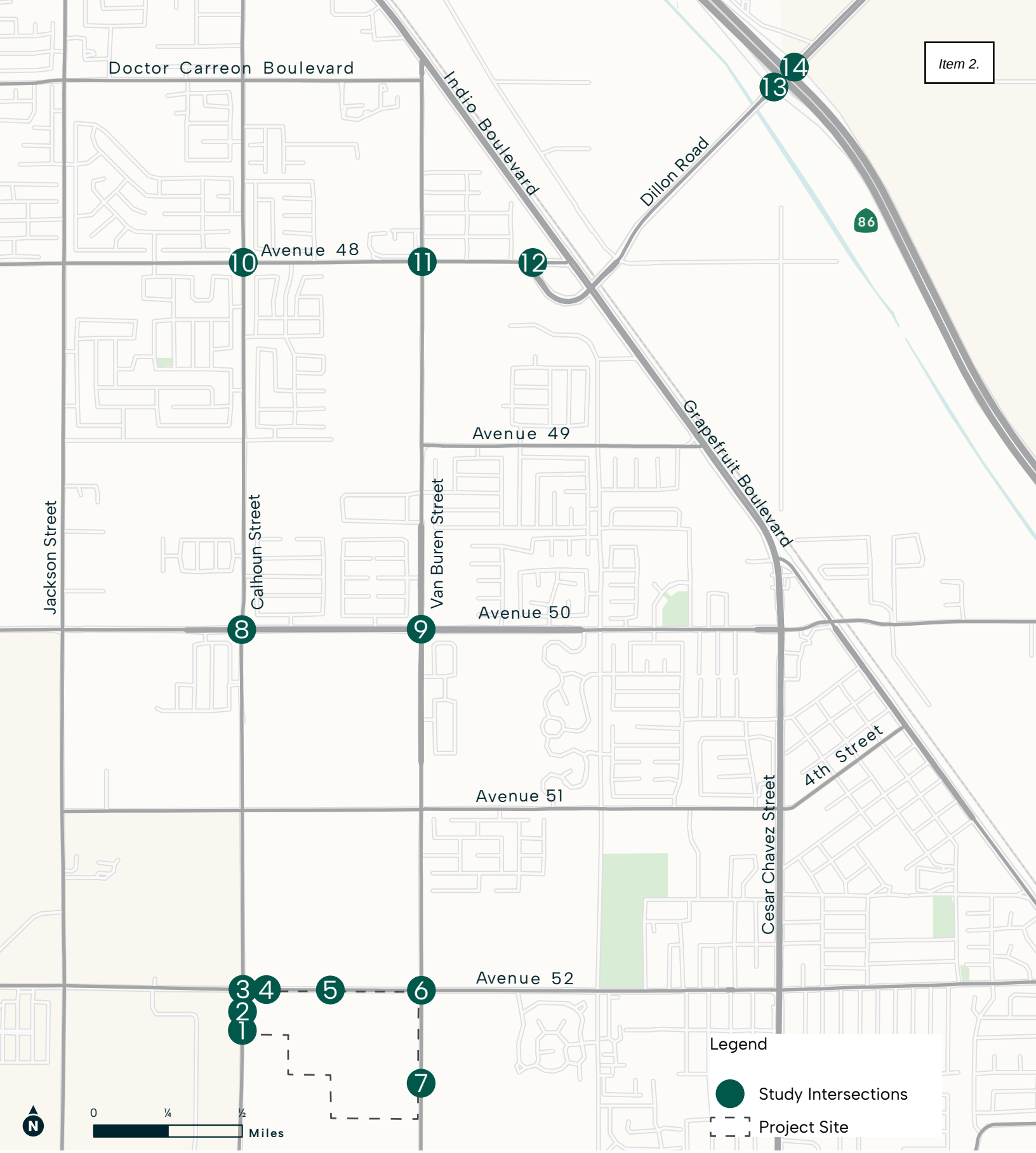


FIGURE 1.2

Study Area

1.4 Report Organization

The remainder of this report is organized into the following chapters:

- **Chapter 2 – Analysis Methodology** describes the methods and assumptions used to complete the local transportation study which are consistent with the County's guidelines.
- **Chapter 3 – Existing Year (2025) Conditions** describes the transportation system in the Project vicinity, including the surrounding roadway network, AM and PM peak period intersection turning movement volumes and intersection LOS, and existing bicycle, pedestrian, and transit facilities.
- **Chapter 4 – Project Characteristics** presents relevant Project information including Project trip generation, distribution, and assignment.
- **Chapter 5 – CEQA Transportation Study** evaluates the Project's potential impact on transportation according to CEQA. This includes a full VMT assessment and evaluation of the CEQA Appendix G checklist items.
- **Chapter 6 – Local Transportation Study** evaluates the Project's potential effects on the surrounding roadway network including intersection operations and intersection queueing. Improvements and the Project's fair share contribution towards improvements at deficient locations are identified.

2. Analysis Methodology

The analysis methodologies and assumptions used to evaluate the Project are described below and consistent with the scoping memorandum that was approved by the City of Coachella on May 5, 2025, included as **Appendix A**.

2.1 Intersection Analysis

Intersection operating conditions were evaluated using the Transportation Research Board (TRB) *Highway Capacity Manual* (HCM) *7th Edition* methodology, which is considered the state-of-the practice methodology for evaluating intersection operations.

The HCM 7th Edition methodology for signalized and all-way stop-controlled intersections estimates the average control delay for vehicles at intersections. For side-street stop-controlled intersections, The HCM 7th Edition methodology estimates the worst-case approach delay.

After the quantitative delay estimates are complete, the methodology assigns a qualitative letter grade that represents the operations of the intersection. These grades range from level of service (LOS) A (minimal delay) to LOS F (excessive congestion). LOS E represents at-capacity operations. Descriptions of the LOS letter grades for signalized and unsignalized intersections are provided in **Table 2.1**.

Fehr & Peers used the Synchro 12 software to facilitate the HCM calculations intersections. The following parameters are consistent with the County's Guidelines (*County of Riverside Transportation Analysis Guidelines for Level of Service & Vehicle Miles Traveled* (2020)) and HCM for use in the LOS analysis:

- Measured Peak Hour Factors (PHF) were utilized in the Existing (2025) and Opening Year (2030) scenarios.
- Signal timing information for study intersections 6, 8, 9, 10, 11, and 12 were provided by the City of Coachella. Signal timing information for study intersections 13 and 14 were provided by Caltrans. These signal timings were used for the Existing (2025) and Opening Year (2030) Plus Project scenarios.
- A standard heavy vehicle factor of 2% was used for all analysis scenarios.

Table 2.1 Intersection Level of Service (LOS) Grades

Level of Service	Description	Signalized Delay (Seconds)	Unsignalized Delay (Seconds)
A	Operations with very low delay occurring with favorable progression and/or short cycle length	≤ 10.0	≤ 10.0
B	Operations with low delay occurring with good progression and/or short cycle lengths	> 10.0 to 20.0	> 10.0 to 15.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear	> 20.0 to 35.0	> 15.0 to 25.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable	> 35.0 to 55.0	> 25.0 to 35.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences	> 55.0 to 80.0	> 35.0 to 50.0
F	Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths	> 80.0	> 50.0

Source: Highway Capacity Manual 7th Edition (Transportation Research Board, 2022).

2.2 LOS Standards

Based on the relevant guidelines, the following performance criteria were used to determine deficiencies at study intersections:

- **City of Coachella** – The City of Coachella utilizes a LOS od "D or better" as its minimum standard for intersection operations.
- **Caltrans** – Caltrans no longer defines acceptable LOS standards with their latest adoption of the Vehicle Miles Traveled-Focused Transportation Impact Study Guide (TISG), May 2020. This study assumes the LOS D minimum acceptable standard at the Caltrans study intersections, SR-86 and Dillion Road.

2.3 Travel Demand Modeling

VMT forecasts were prepared using the Riverside County Travel Demand Model (RIVCOM). The latest version of RIVCOM (version 4.0.1) was released in February 2024 and is considered the best tool available for VMT estimation in Riverside County. RIVCOM has a 2018 base year and 2045 cumulative year, with land uses and roadway networks consistent with the *2020 Southern California Association of Governments Regional Transportation Plan and Sustainable Communities Strategy* (2024 SCAG RTP/SCS).

The RIVCOM 2045 model was updated to include all pending and approved development projects within a five-mile radius of the Project site; a list of these projects was provided as part of the Scoping Agreement approval and is included in **Appendix B**. No roadway network changes were made to the model.

The Project was assigned to a mix of employment categories shown in **Table 2.2**. The Project's employment was updated to reflect both traditional on-site employees (hospitality, food service, maintenance, and operations staff) and the Project's unique customer base (as detailed in the Project Description). The customer population is represented through visitor-based trip generation inputs that reflect the recreational and hospitality nature of the Project, with average daily customer projections provided in **Table 2.3**. This approach ensures that the model inputs align with the expected travel behavior of the site, where guests often stay multiple days, utilize on site amenities, and generate trips distinct from a typical residential development.

Due to the seasonal nature of tourist activity in the Coachella region, along with the heavier weekend programming at the public facing elements of the Project, an average daily population was derived to represent in the typical weekday model. This represents a midpoint between minimum and maximum employment and guest population that is reflective of the annualized demand.

Table 2.2 Average Daily Employment Categories for the Project

Total Employment	Retail	Arts and Entertainment	Other Services
330	31%	66%	3%

Notes:
1. Retail includes convenience, clothing, and other retail trade.
2. Arts and Entertainment includes traveler accommodation, food services, and drinking places
3. Other services includes can include on-site professional management or concierge services

Table 2.3 Average Daily Customer Projections for the Project

Private On-site Guests	Public Guests
950	1,100

2.5 Transportation Impact Analysis Methodology

The County's Guidelines establish VMT impact thresholds for typical projects that do not screen from VMT assessment. These guidelines specify that a land use project will have a significant impact if:

- **Residential** land use VMT per capita exceeds the county-wide averages, or
- **Office** land uses employee VMT per employee exceeds county-wide averages, or
- **Retail** land uses there is a net change in total VMT.

Two other VMT thresholds of significance – "**Other Employment**" and "**Other Customer**" – are provided for all other service and goods providers that are not included in the basic office/retail categories. Given the unique resort characteristics of the Project, which most resemble the retail and/or other customer land use type, the VMT analysis used the net regional change metric (Boundary Method VMT), consistent with the County Guidelines for retail uses, rather than a household or employee only per capita comparison. This metric accounts for the regional impacts of visitor travel patterns, which are more appropriate for land use that will serve as a destination for visitors to the Coachella Valley. Given the significant onsite guest component, this Project is not like a typical retail/customer project and the threshold of significance should utilize a per service population (residents and employees) and/or per employee metric based on employees to best reflect the Project's operations.

Net change on VMT from the Project was measured within multiple regional areas to compare the traffic redistribution with the Project. The Boundary Method is utilized to measure the project's net change in total VMT. The Boundary Method is the sum of all weekday VMT on a roadway network within a designated boundary. Boundary Method VMT estimates VMT by multiplying the number of trips on each roadway segment by the length of that segment. This approach includes all trips, including those trips that do not begin or end in the designated boundary. This is the only VMT method that captures the effect of cut-through and/or displaced traffic. The two boundaries chosen to measure the net change in total VMT are the Coachella City Limits and the Riverside County Limits.

Consistent with the City approval/recommendation for retail and other customer-oriented land uses, the analysis also evaluated customer trips separately from employee trips. The County Guidelines recommend that the total Project VMT impact is therefore evaluated as the sum of the regional VMT delta for customers and the regional VMT delta for employees, calculated using the County's recommended formula:

$$\Delta = E \times (VMT_E - VMT_T)$$

Where:

- **Δ** = Change in VMT relative to threshold
- **E** = Number of employees
- **VMT_E** = Estimated VMT per employee for the project
- **VMT_T** = Threshold VMT per employee

This approach ensures the analysis aligns with the Project's actual operations and provides a fair, context-sensitive assessment of its transportation effects.

3. Existing Year (2025) Conditions

This chapter summarizes the Existing Year (2025) Conditions of the roadway, transit, bicycle, and pedestrian networks within the Project study area and documents existing traffic volumes and intersection operations.

3.1 Existing Roadway Facilities

3.1.1 Regional Roadways

Regional roadways in the Project vicinity include:

- **Interstate 10 Freeway (I-10)**: I-10 is an east/west interstate highway located north of the Project site. Near the Project study area, I-10 is generally a four- or six-lane facility. Access to I-10 near the Project study area is provided via Dillon Road.
- **State Route 86 (SR-86)**: SR-86 is an east/west state highway that extends from Coachella at the northernmost end to Borrego Springs at the southernmost end. SR-86 is located to the east of the Project site and is generally four lanes. Access to SR-86 near the Project study area is provided via Dillon Road.

3.1.2 Local Roadways

Local roadways in the Project vicinity include:

- **Van Buren Street**: Classified as a major north/south arterial in the City's General Plan, connecting Coachella to Indio and communities to the south. It provides access to residential, agricultural, and commercial uses and is provides access to the Project site to the east.
- **Calhoun Street**: A north/south collector as classified in the City's General Plan. It provides connectivity between neighborhoods, agricultural lands, and east–west avenues such as 50th Avenue and 52nd Avenue. Calhoun Street provides access to the Project's western side.
- **52nd Avenue**: Classified as an east/west as a Primary Arterial to the west of Van Buren Street and Major Arterial to the east in the City's General Plan. It serves local circulation and access to agricultural and residential areas. It connects to Van Buren Street and Calhoun Street and provides access to the northern side of the Project.

3.2 Bicycle Facilities

Bicycle facilities are typically classified as follows:

- **Class I – Bike Path or Bike Trail**: Class I facilities are bicycle trails or paths that are off-street and separated from automobiles. They are a minimum of eight feet in width for two-way travel and include bike lane signage and designated street crossings where needed. A Class I Bike Path may parallel a roadway (within the parkway) or may be a separate right-of-way that meanders through a neighborhood or along a flood control channel or utility right-of-way.

- **Class II – Bike Lane**: Class II Bike Lanes can be either located next to a curb or parking lane. If located next to a curb, a minimum width of five feet is recommended. However, a Bike Lane adjacent to a parking lane can be four feet in width. Bike Lanes are designated for the use of bicycles and include bike lane signage, special lane lines, and pavement markings.
- **Class III – Bike Routes**: This is a street for shared use by motor vehicles and bicyclists. While bicyclists have no exclusive use or priority, signage – both by the side of the street and stenciled on the roadway surface – alerts motorists to bicyclists sharing the roadway space and denotes that the street is an official bike route.
- **Class IV – Separated Bikeway**: Class IV bicycle facilities, sometimes called cycle tracks or separated bikeways, provide a right-of-way designated exclusively for bicycle travel adjacent to a roadway and are protected from vehicular traffic via separations (e.g. grade separation, flexible posts, inflexible physical barriers, on-street parking).

3.2.1 Existing Bicycle Facilities

Class II Buffered Bike Lanes are located on Van Buren Street in the Project vicinity. Avenue 50 and Avenue 48 have existing Class II Bike Lanes, and portions of Avenue 52 (east of Van Buren Street). Otherwise, all other roadways within the Project vicinity have either no bicycle facilities or have a narrow striped shoulder. There are no Class I, Class III, or Class IV facilities located in the Project vicinity.

3.2.2 Planned Bicycle Facilities

The City of Coachella updated their Active Transportation Plan in 2020, which proposes the following planned bicycle facilities near the study area:

- Class II Bike Lane along Dillon Road
- Class II Bike Lane on Calhoun Street between 50th Avenue and city limits

3.3 Pedestrian Facilities

The Project site is in an area with some developed pedestrian network to the north. All local roads in the Project that act as borders do not have sidewalks. Some study intersections provide marked crosswalks, along Avenue 50 and Avenue 48.

3.4 Transit Facilities

Bus Transit

Local transit service in the Project vicinity is provided with SunLine Transit system, which provides a fixed route and microtransit service. Routes 6, 8, and 11 provide stops near study intersection. The nearest bus stop is one mile from the Project site, which serves Route 8 and runs Monday to Friday (approximately 1 hour frequency).

3.5 Existing Year (2025) Traffic Volumes

3.5.1 Data Collection

Traffic counts were collected in May 2025 during morning peak period (7:00 to 9:00 AM) and evening peak period (4:00 PM to 6:00 PM) at the study intersections. Counts were collected during fair weather, while school was in session, and during a typical (non-holiday) weekday.

A Big Data source, Streetlight, was reviewed to compare May travel patterns against Spring travel patterns in the City to verify that peak season travel was accurately accounted for. Streetlight data indicated that March 2025 traffic volumes were approximately 15% higher than those observed in May 2025. Streetlight traffic volumes data were collected within the immediate Census Block Groups to the project site – extending about 5 miles in all directions. A cumulative average of all block groups showed a 15% decline between March and May. Traffic counts were thus adjusted to scale collected May 2025 traffic counts to the peak seasonal volumes of March by a factor of 15%.

The existing conditions peak hour turning movement counts are provided in **Appendix C**. Existing (2025) peak hour traffic volumes with the 15% adjustment[3] are provided in **Figure 3.1** along with existing lane configurations and traffic control.

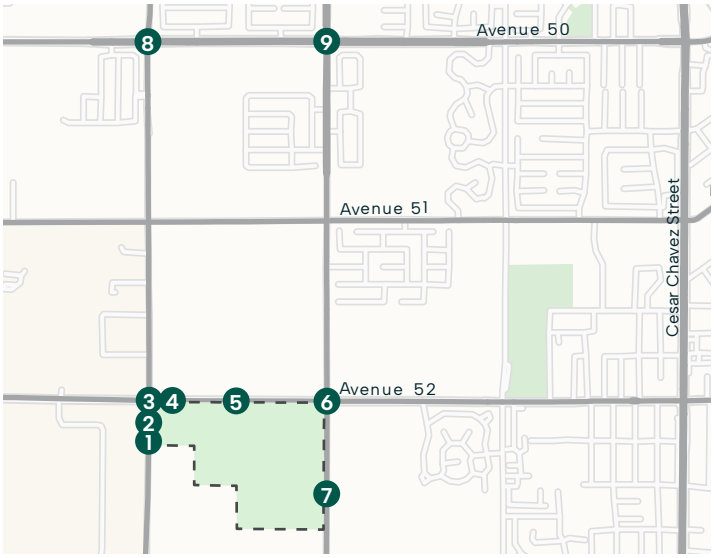
Fehr & Peers collected the following information during a field visit to the study area on May 5, 2025:

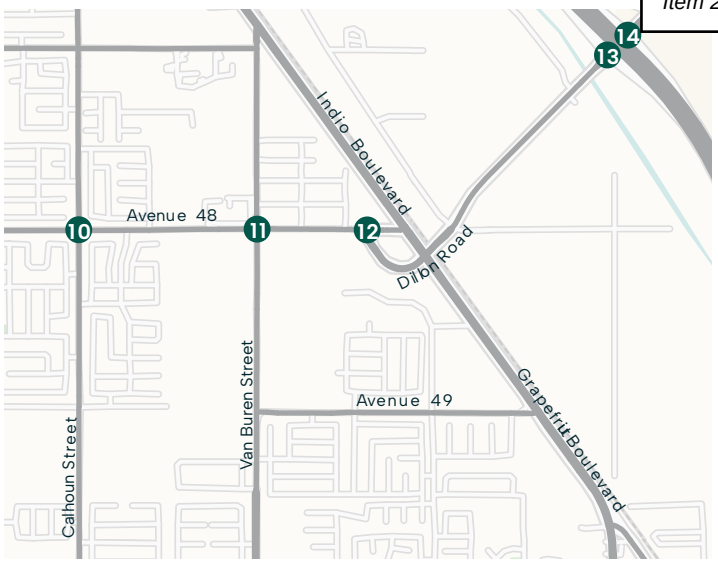
- Lane configurations
- Signal phasing
- Land uses in the study area
- Existing pedestrian and bicycle facilities
- On-street parking conditions
- Transit service

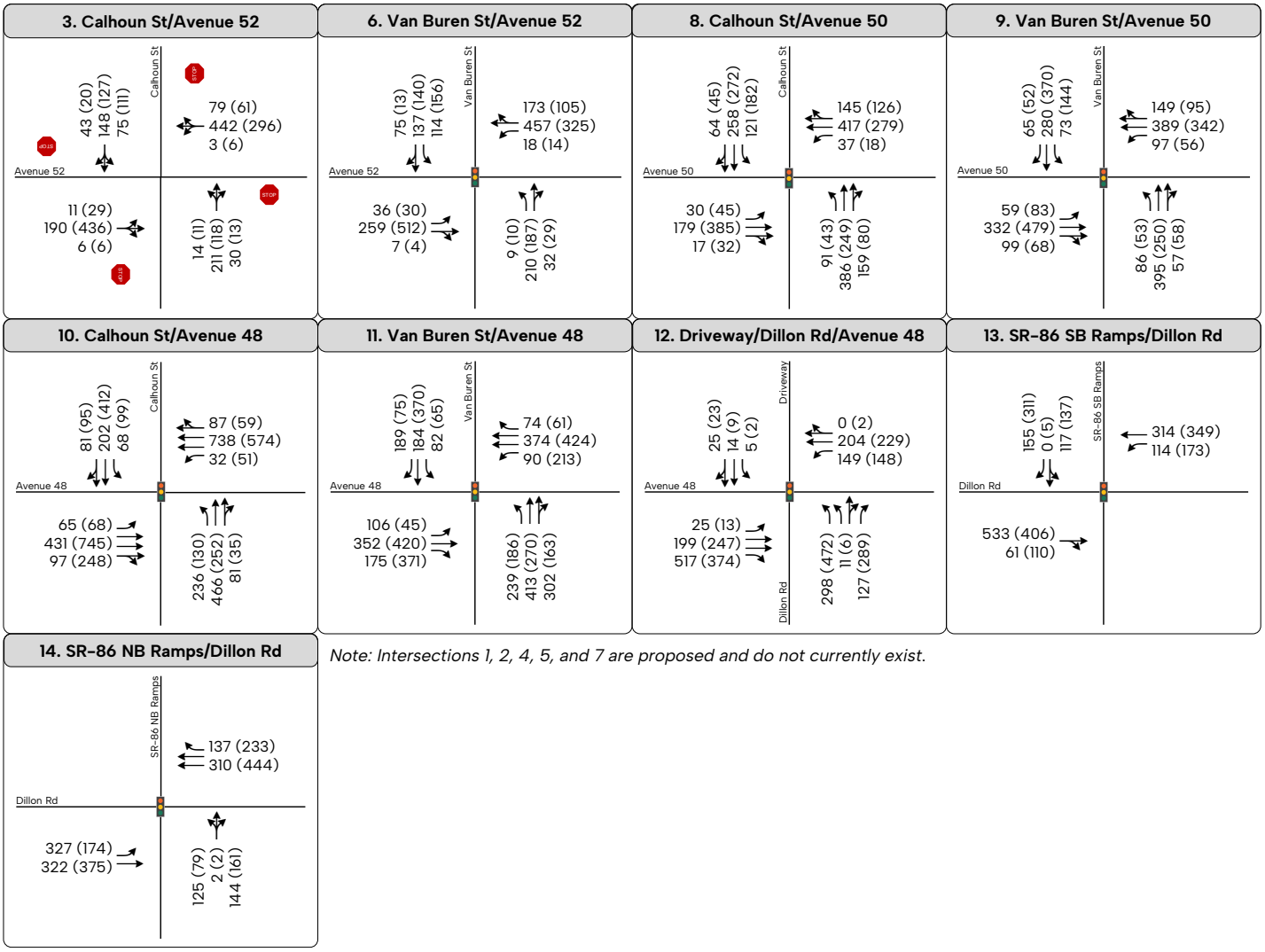
Fehr & Peers requested and reviewed the following information from the City of Coachella, surrounding jurisdictions, and Caltrans:

- Traffic signal timing information at all signalized intersections
- All pending and approved development projects within a five-mile radius of the Project (see **Appendix B**).

[3] Traffic counts were increased with approval (May 5, 2025 – 123-13.55 PC #1) and as outline in the Project Scoping Agreement, p. 6







Note: Intersections 1, 2, 4, 5, and 7 are proposed and do not currently exist.

FIGURE 3.1

Peak Hour Traffic Volumes and Lane Configurations – Existing (2025)

3.6 Existing Year (2025) Intersections Operations

Existing lane configurations, signal timing, and traffic volumes were used to evaluate operations at the study intersections under peak hour conditions. The LOS results are summarized in **Table 3.1** and detailed LOS worksheets are provided in **Appendix C**. All intersections operate at LOS D or better under Existing Year (2025) conditions except Calhoun Street and 52nd Avenue.

Table 3.1 Existing Year (2025) Intersection Levels of Service

ID	Intersection	Control[1]	Peak Hour	LOS/Delay
1	West Driveway 1 and Calhoun Street[1]	SSSC[2]	AM	-
			PM	-
2	West Driveway 2 and Calhoun Street[1]	SSSC[2]	AM	-
			PM	-
3	Calhoun Street and 52nd Avenue	AWSC[3]	AM	**E / 43**
			PM	**F / 71**
4	North Driveway 1 and Avenue 52[1]	SSSC[2]	AM	-
			PM	-
5	North Driveway 2 and Avenue 52[1]	SSSC[2]	AM	-
			PM	-
6	Van Buren Street and 52nd Avenue	Signal	AM	D / 36
			PM	C / 16
7	East Driveway and Van Buren Street[1]	SSSC[2]	AM	-
			PM	-
8	Calhoun Street and Avenue 50	Signal	AM	C / 28
			PM	C / 23
9	Van Buren Street and Avenue 50	Signal	AM	C / 34
			PM	D / 36
10	Calhoun Street and Avenue 48	Signal	AM	D / 37
			PM	C / 32
11	Van Buren Street and Avenue 48	Signal	AM	C / 33
			PM	D / 40
12	Dillon Road and Avenue 48	Signal	AM	C / 24
			PM	C / 23
13	SR-86 SB Ramps and Dillon Road	Signal	AM	B / 15
			PM	B / 16
14	SR-86 NB Ramps and Dillon Road	Signal	AM	B / 18
			PM	B / 15

Notes:

1. Project driveway does not currently exist.
2. SSSC: Side-Street Stop Control
3. AWSC: All-Way Stop-Control

Source: Fehr & Peers, 2025.

4. Project Characteristics

This chapter provides an overview of the Project components and the Project's trip generation, distribution, and assignment characteristics for evaluation of the Project's effect on the surrounding roadway network. Traffic associated with the Project was estimated using a three-step process:

1. **Trip Generation** – The *amount* of vehicle traffic entering/exiting the project site was estimated.
2. **Trip Distribution** – The *direction* trips would use to approach and depart the site was projected.
3. **Trip Assignment** – Trips were then *assigned* to specific roadway segments and intersection turning movements.

4.1 Project Trip Generation

Trip generation refers to the process of estimating the amount of vehicle traffic that would enter and exit a project. Estimates for the proposed Project were calculated for the weekday peak (one-hour) periods during the morning (AM) and evening (PM) commute when traffic volumes on the adjacent streets are typically the highest. Fehr & Peers used the *Trip Generation Manual, 12th Edition* (Institute of Transportation Engineers [ITE], 2025) to obtain trip rates for calculating the number of trips that the Project would generate on a typical weekday operations; weekend rates are for information purposes. The unique characteristics of the Project were taken into account to accurately represent the private and public sector components' travel behavior.

4.1.1 Private Sector Land Use Codes

Trip generation estimates for the private sector components were sourced from the ITE 12th edition land use codes. The intended land use characteristics (ownership and use) were considered to apply the ITE land use code with the most representative overlap. The estate lots, zero lot line lots, bungalow lots, VIP suites and the condo hotel units will be a majority (>75%) fractional ownership second homes that will be used for short-term and long-term rental, ITE code 260 "Recreational Homes" was applied. The condo hotel units may be sold as individual, one-bedroom units or up to four-bedroom; and area expected to operate like recreational home ITE characterized units. Overall, these ITE code selections are further supported by the seasonality of the proposed site discussed in the Project Description.

4.1.2 Public Sector Land Use Codes

Trip generations for the public sector (beach club and restaurant) used the most comparable ITE land use code that represented the best matched time of day distribution for the planned components; calculations were based on seats to match the developer's weekday and weekend peak person capacity assumptions. The event tent was calculated using assumptions, which similarly derived from the peak capacity – detailed below.

- ITE code 445 "Movie Theatre" was applied to the beach club. The beach club will not open sooner than 11:00 AM, similar to a movie theatre, with a majority of the trips arriving in close duration to each other. Both the movie theatre and the beach club are entertainment uses open all day and night, where people come and stay for a few hours, and arrival and departure times are spread out throughout the day with multiple rounds of event/movie turn over.
- ITE Code 931 "Fine Dining Restaurant" was applied to the restaurant to match the time-of-day distribution, guest stay duration, and turnover assumption (lunch service and dinner service).
- The event tent will operate with a 200-person and 300-person peak capacity assumption for the weekday and weekend, respectively. ITE code 445 was applied for the daily, AM and PM trip rate to be conservatively high. AM trips are nominal and characteristics of employee / maintenance / delivery trips, since the event barn would not open sooner than 11:00 AM for guests. The PM trips were factored to match comparable event trip generation counts for a concert "event arrival peak – 7:00 PM to 8:00 PM" (77% in and 23% out) from data collected at the Acrisure Arena in Palm Desert in 2023[4] (included as **Appendix H**).

4.1.3 Internal Capture

The Project is positioned to achieve significant internal capture (33%) of trips between the onsite uses with the expectation that a majority of onsite guests will stay on the property once they arrive. Many of guest daily needs would be accommodated by the resort lodging, recreation, dining, and entertainment options without leaving the property. A significant share of the public facing restaurant, beach club and event space are anticipated to be used by onsite guests. The same amount of internal trips from the private area to the public area for the weekday scenario was applied to the weekend scenario.

4.1.4 Trip Generation Estimates

Table 4.1 identifies the trip generation rates for the Project and **Table 4.2** shows the associated daily and peak hour project trip generation.

[4] Classic Club Specific Plan Arena Trip Generation Memorandum, Fehr & Peers, 2023.

Table 4.1 Trip Generation Rates – Weekday

Land Use	ITE Land Code	Quantity	Unit	Daily Rate	AM Peak Hour			PM Peak Hour		
					In	Out	Rate	In	Out	Rate
Private										
Single Family Residential	260	165	DU	3.68	38%	62%	0.28	56%	44%	0.31
Condo Hotel	260	244	DU	3.68	38%	62%	0.28	56%	44%	0.31
Public										
Beach Club	445	100	seats	1.76	72%	28%	0.09	37%	63%	0.08
Restaurant	931	200	seats	2.60	69%	31%	0.15	59%	41%	0.37
Event Tent	custom	200	attendee	1.76	72%	28%	0.09	77%	23%	0.28

Source: Trip Generation Manual 12th Edition (Institute of Transportation Engineers, 2025).

Table 4.2 Project Trip Generation – Weekday

ITE Code	Land Use	Quantity	Units	Daily Trips	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Private										
Single Family Residential	260	165	DU	607	17	29	46	29	22	51
Condo Hotel	260	244	DU	898	26	42	68	43	33	76
Private Subtotal				***1,505***	***43***	***71***	***114***	***72***	***55***	***127***
Public										
Beach Club	445	100	seats	176	6	3	9	3	5	8
Beach Club with Internalization[1]				116	4	2	116	4	2	6
Restaurant	931	200	seats	520	21	9	30	44	30	74
Restaurant with Internalization[1]				343	14	6	343	14	6	20
Event Tent	N/A	200	attendees	352	13	5	18	43	13	56
Event Tent with Internalization[1]				232	9	3	232	9	3	12
Public Subtotal				***692***	***27***	***11***	***38***	***59***	***32***	***91***
Weekday Total				**2,197**	**70**	**82**	**152**	**131**	**87**	**218**

Note:
1. Internalization of 33% was applied.

Source: Trip Generation Manual 12th Edition (Institute of Transportation Engineers, 2025).

Table 4.3 and **Table 4.4** display trip rates and trip generation for weekend operations, which are provided for informational purposes.

Table 4.3 Trip Generation Rates – Weekend

Land Use	ITE Land Code	Quantity	Unit	Daily Rate	AM Peak Hour			PM Peak Hour		
					In	Out	Rate	In	Out	Rate
Private										
Single Family Residential	260	165	DU	4.06	38%	62%	0.28	47%	53%	0.40
Condo	260	244	DU	4.06	38%	62%	0.28	47%	53%	0.40
Public										
Beach Club	445	1,000	seats	2.24	72%	28%	0.09	51%	49%	0.28
Restaurant	931	200	seats	2.57	69%	31%	0.15	59%	41%	0.36
Event Tent	custom	300	attendees	2.24	72%	28%	0.09	77%	23%	0.28

Source: Trip Generation Manual 12th Edition (Institute of Transportation Engineers, 2025).

Table 4.4 Project Trip Generation – Weekday

ITE Code	Land Use	Quantity	Units	Daily Trips	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Private										
Single Family Residential	260	165	DU	670	17	29	46	31	35	66
Condo Hotel	260	244	DU	991	26	42	68	46	52	98
Private Subtotal				***1,661***	***43***	***71***	***114***	***77***	***87***	***164***
Public										
Beach Club	445	1,000	seats	2,240	65	25	90	143	137	280
Beach Club with Internalization[1]				2,180	63	24	2,180	63	24	87
Restaurant	931	200	seats	514	21	9	30	42	30	72
Restaurant with Internalization[1]				337	14	6	337	14	6	20
Event Tent	custom	300	attendees	672	19	8	27	65	19	84
Event Tent with Internalization[1]				552	15	6	552	15	6	21
Public Subtotal				***3,070***	***92***	***36***	***128***	***219***	***170***	***389***
Weekday Total				**4,731**	**135**	**107**	**242**	**296**	**257**	**553**

Note:
1. Internalization of 33% was applied.

Source: Trip Generation Manual 12th Edition (Institute of Transportation Engineers, 2025).

4.2 Project Trip Distribution

The Project trip distribution reflects the likely approach and departure routes to the Project site. Trip geographic distribution would be as follows: 60% north, 5% south, 10% east, and 25% west. Access to the Project site will be provided exclusively from Calhoun Street, Avenue 52, and Van Buren Street. Project trips would utilize Van Buren Street or Calhoun Street to access the Project, with most trips

travelling to/from I-10 via Dillon Road. There are five total Project driveways: two along Calhoun Street (one full access and one right in right out only), one full access driveway along Avenue 52, and one full access driveway along Van Burent Street. Calhoun Street would represent 40%, Avenue 52 30% and Van Burent Street 30% of entry/exit trip percentages for the Project. The Project trip distribution (**Figure 4.1**) was approved by the City on 5/52025.

4.3 Project Trip Assignment

Project trip assignment refers to the specific route and roadway segments vehicles would take to access and leave the Project. Using the trip distribution percentages, Project trips were assigned to the roadway network as presented in **Figure 4.2**.

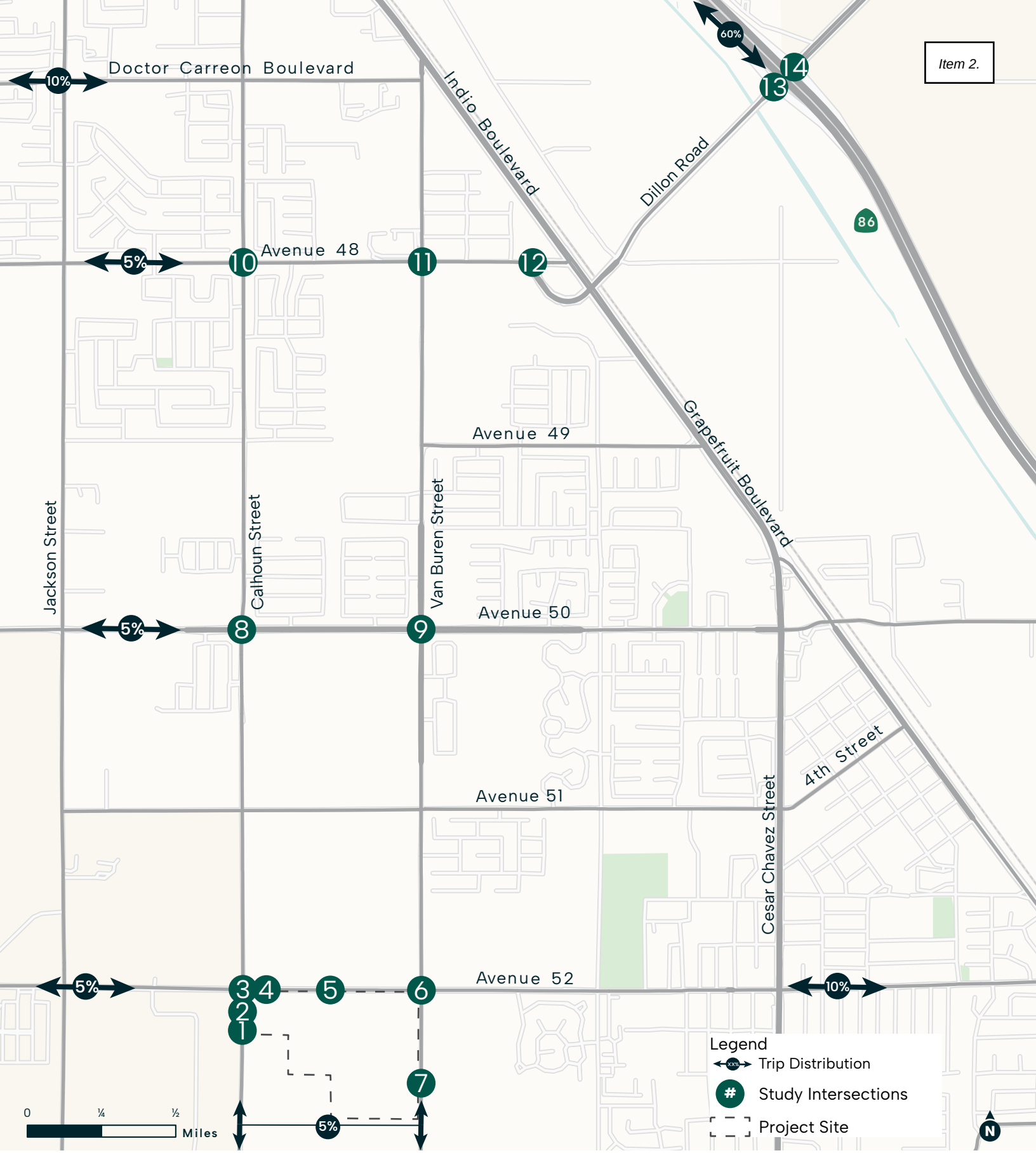
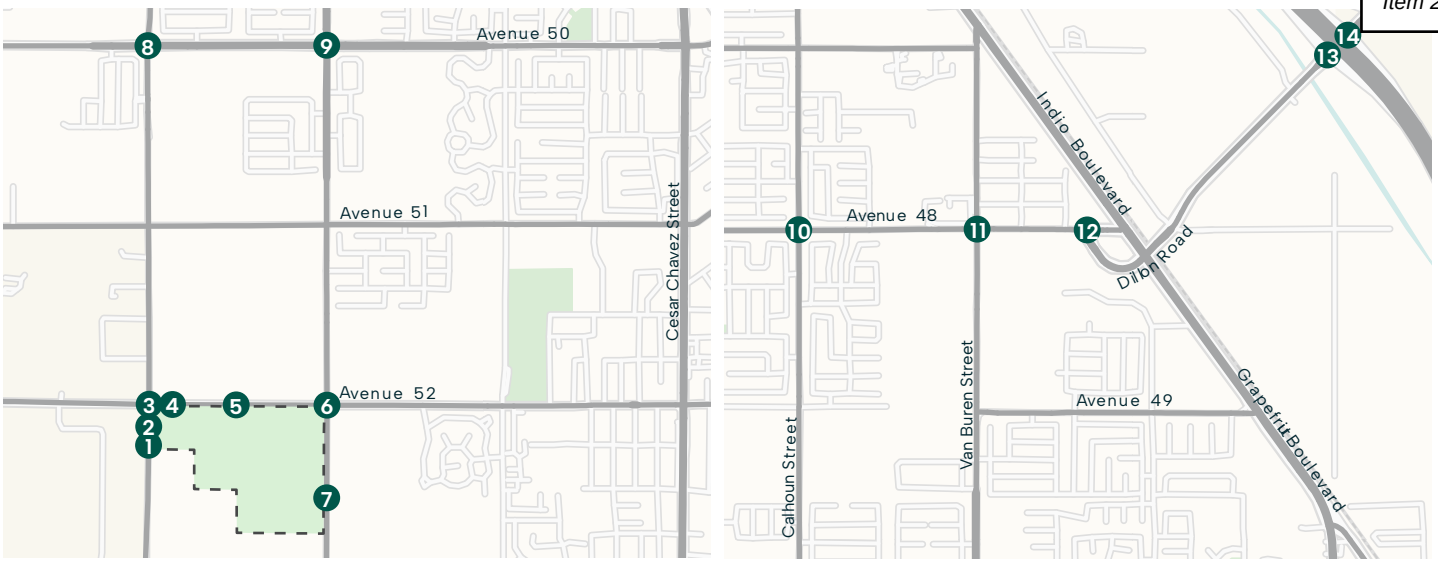


FIGURE 4.1

Trip Distribution



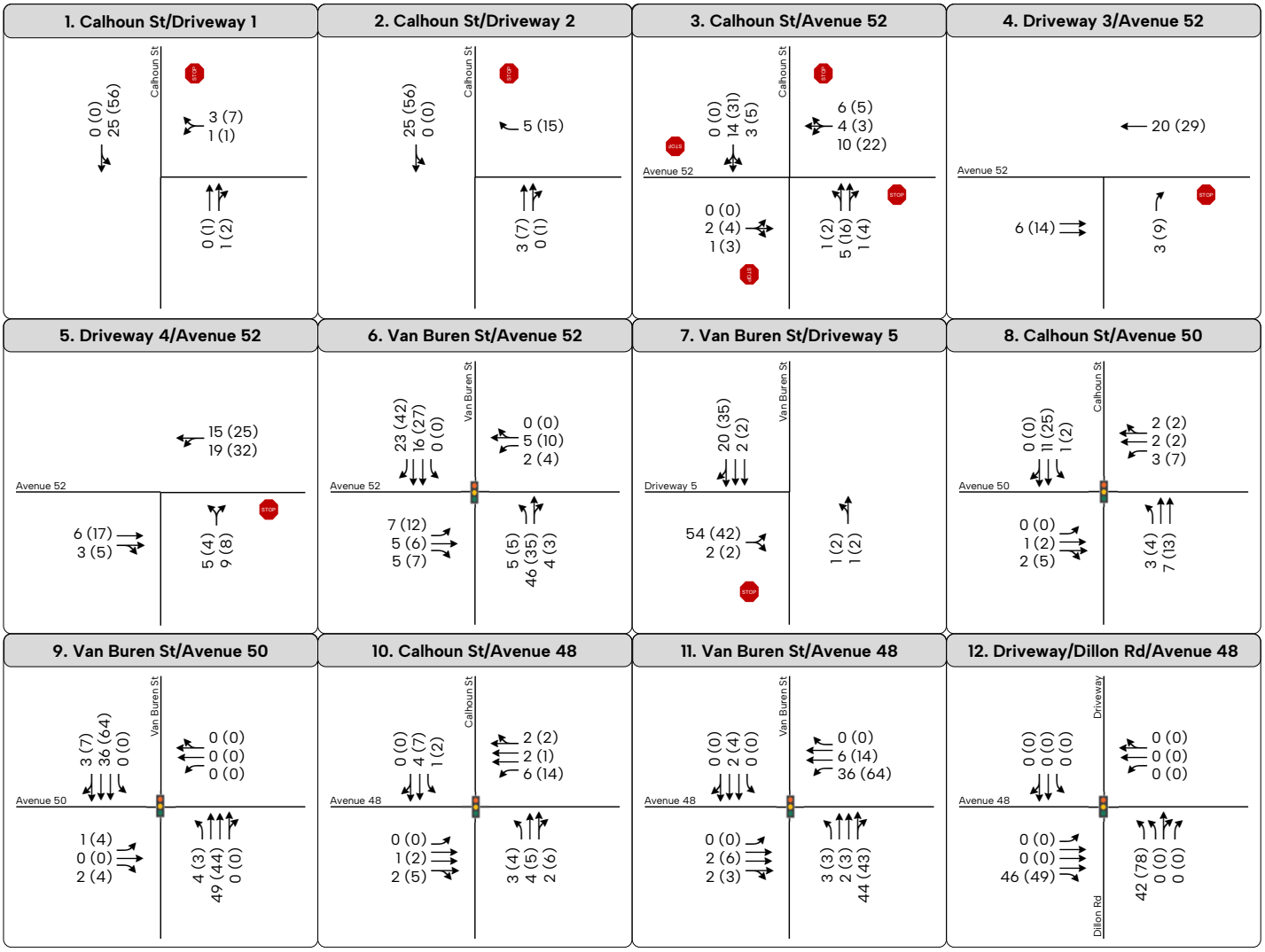
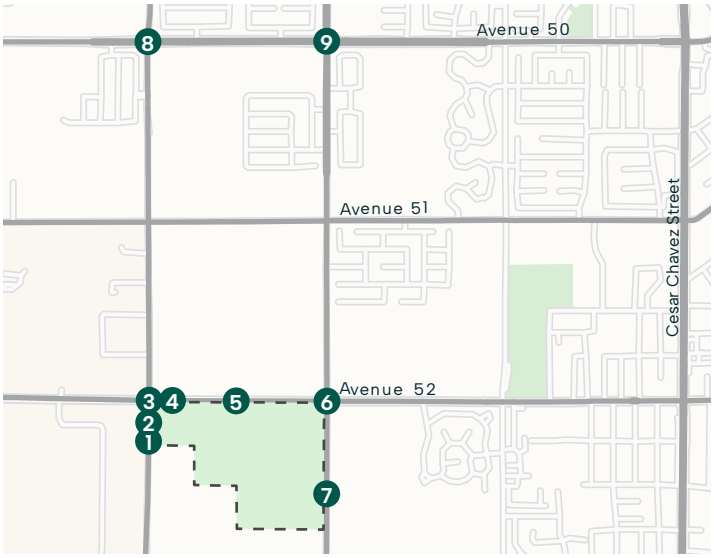
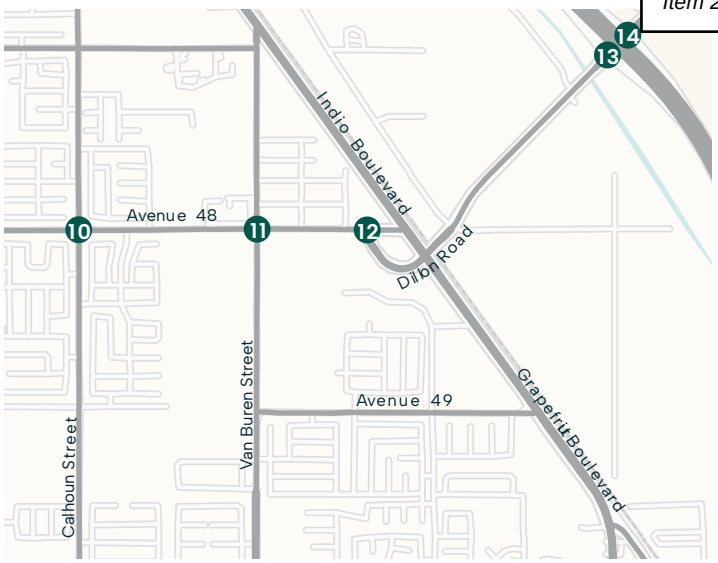
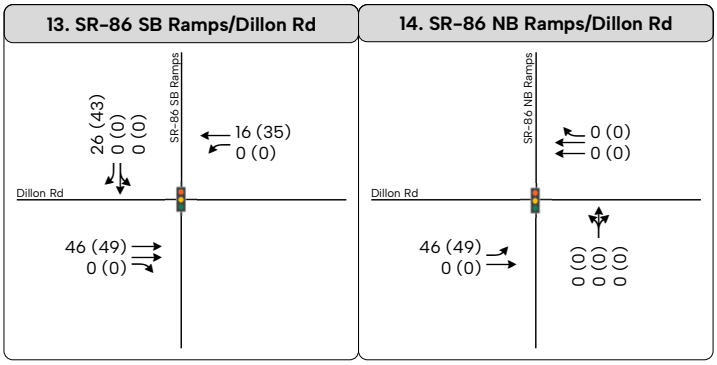


FIGURE 4.2

Project-Only Turning Movement Volumes







AM (PM) Peak Hour Traffic Volume

Lane Configuration

Stop Sign

Signalized

Study Intersections

FIGURE 4.2

Project-Only Turning Movement Volumes

Fehr & Peers

5. CEQA Transportation Study

Based on the definitions and determining factors outlined in the CEQA Appendix G Environmental Checklist Form, the Project would have a significant impact on the environment if the Project would:

A. Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit roadway, bicycle, and pedestrian facilities.

B. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).

C. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

D. Result in inadequate emergency access.

5.1 Program, Plan, Ordinance, and Policy Review

The *City of Coachella General Plan* (2015) includes policies related to circulation; an impact is considered significant if the project conflicts with an adopted policy within the Mobility Element (ME) of the General Plan. Policies applicable to the Project include:

- **ME-1.5** Require that the City consider improvements to add roadway capacity only after considering improvements to other modes of travel.
    - The improvements identified in Chapter 6 do not include roadway widenings that would increase capacity. Instead, signal timing adjustments are recommended to improve traffic flow and intersection operations.
- **ME-2.3** Periodically review and update designated truck routes to ensure efficiency and limit negative impacts on residential areas and other sensitive land uses.
    - The Project is not expected to generate heavy vehicle trips to or from the site.
- **ME-3.4** Require that all development or redevelopment projects provide pedestrian connections to the external pedestrian network.
    - The Project includes construction of new sidewalks along the project frontage on Calhoun Street, Avenue 53, and 52nd Avenue, improving pedestrian connectivity.
- **ME-4.1** Require that the City provide additional bicycle facilities along all roadways in the City which are built or reconstructed in the City except in those instances in which there is insufficient right-of-way or other physical limitations.
    - The Project proposes construction of bicycle facilities along the project frontage on Calhoun Street, Avenue 53, and 52nd Avenue.
- **ME-5.4** Encourage new large residential or commercial developments to locate on existing and planned transit routes.

  - The Project site is currently not served or planned to be served by any public transit services. The City will continue to monitor development patterns and transit demand and will adjust service as needed to support travel options.

- **ME-6.1** Require that new development pay for its fair share of construction costs for new and/or upgraded transportation infrastructure needed to accommodate this development.
  - Chapter 6 outlines required intersection improvements and the Project's fair share contribution. The Project will also widen its adjacent roadway frontage consistent with the City's General Plan buildout.
- **ME-8.3** Prioritize connections between the City's bicycle and pedestrian network to regional facilities such as the CV Link and other regional trail facilities.
  - The Project includes construction of bicycle facilities that enhance connectivity and contribute to the City's overall regional bicycle and pedestrian network.

Based on the above assessment, the Project's impact on existing programs, plans, ordinances, and policies is **less-than-significant.**

5.2 Vehicle Miles Traveled Assessment

CEQA Guidelines Section §15064.3 requires Vehicle Miles of Travel (VMT) analysis for land use projects. The analysis is consistent with the *County of Riverside's Transportation Analysis Guidelines for Level of Service & Vehicle Miles Traveled* (December 2020)[5].

5.2.1 Screening Criteria

The County's Guidelines identify screening criteria which land use projects can apply when evaluating transportation impacts. VMT impacts for a project will be presumed less than significant if any one of the screening criteria outlined in **Table 5.1** are met. The proposed Project does not satisfy any of the screening criteria. Therefore, a full VMT modeling and forecasting assessment was completed to determine if the Project would result in a significant transportation impact related to VMT.

[5] County of Riverside TIA Guidelines (2020)

Table 5.1 VMT Screening Criteria Assessment

Screening Criterion	Description	Satisfied by Project
Transit Priority Area (TPA) screening	Presumed less than significant VMT impact for projects located in TPAs (1/2 mile of a rapid transit station or high-frequency bus route).	No
Low VMT area screening	Presumed less than significant VMT impact for projects located in low VMT generated model traffic analysis zones (TAZs). These TAZs generate total daily VMT/SP that is less than the City baseline level.	No
Project type screening	Local serving retail projects (per OPR's Technical Advisory less than 50,000 square feet), local essential services (i.e. day care, Police, Medical), small projects (i.e. DU <110 units, general office less than 165 TSF, parks), and affordable housing projects are presumed to have a less than significant VMT impact.	No

Source: County of Riverside – CEQA Assessment and VMT Analysis, 2020.

5.2.2 Traffic Modeling Socio-Economic Data

Due to the seasonal nature of tourist activity in the Coachella region, along with the heavier weekend programming at the public facing elements of the Project, an average daily service population (SP) was derived to represent in the typical weekday model. This represents a midpoint between minimum and maximum employment and guest population that is reflective of the annualized demand.

Table 5.2 represents the Project SP, which was derived by annualizing weekday and weekend daily averages derived from the approved Project trip generation and regionally sensitive inputs. Inputs included an average annual demand rate (65.2%) for the Coachella region (based on Project market research validated with Streetlight data), total public and private area employee facility square footage and respective ratios for square foot per employee to calculate the total operating employee counts, private area total hotel condo room count and respective employee per room ratios to total the operating employee count for the sub-area, and a public area turnover rate for guests.

Model trip generation was reviewed to verify that the retail, arts and entertainment and other services employment categories would accurately represent the project. The model generates trips by approximately 50% more than the Project's trip generation forecast, generally underestimating the internal capture anticipated by the project. No adjustments were applied to the model forecasts in order to provide a conservative assessment.

Table 5.2 Project Service Population

Program Area	Visitor Type	Annualized Average	
		Population	Employment
Private	Resident Guests	950	-
	Employees	-	210
Public	Employees	-	120
	Guests	1,100	-
	Project Total	**2,050**	**330**

Source: Fehr & Peers, 2025.

5.2.3 VMT Analysis

Analysis Scenarios

VMT estimates were prepared under the Cumulative (2045) No Project Conditions and under the Cumulative (2045) Plus Project Conditions. The No Project Condition model runs were used to determine the project-generated threshold of significance and the county-wide boundary VMT without the Project and the city-wide boundary VMT without the Project. The Plus Project Conditions model runs were used to determine VMT associated with the Project.

VMT Results

Project VMT findings compared to the county-wide thresholds are presented in **Table 5.3**. Under the Cumulative (2045) Plus Project scenarios, the Project VMT per service population (SP), the Project Boundary VMT, the Boundary VMT per SP, and the total net regional change would be below the County average.

Table 5.3 County-wide and Project VMT Estimates

Scenario	Project	County-wide Cumulative No Project (Threshold)	Delta	Threshold Exceeded
OD VMT per Employee	22.64	28.41	(5.78)	No
Boundary VMT	80,751,251	80,760,223	(8,972)	No
Boundary VMT / SP	17.78	17.79	(0.01)	No
Total Net Regional VMT Change[1]			(1,906)	No

Source: RIVCOM, 2025.

Project VMT findings compared to the city-wide thresholds are presented in **Table 5.4**. Under the Cumulative (2045) Plus Project scenarios, the Project VMT per service population (SP), the Project

Boundary VMT, the Boundary VMT per SP, and the total net regional change would be below the City average.

Table 5.4 City-wide and Project VMT Estimates

Scenario	Project	City-wide Cumulative No Project (Threshold)	Delta	Threshold Exceeded
OD VMT per Employee	22.64	29.12	(6.48)	No
Boundary VMT	1,753,964	1,754,359	(395)	No
Boundary VMT / SP	11.07	11.10	(0.03)	No
Total Net Regional VMT Change[1]			(2,139)	No

Source: RIVCOM, 2025.

Since the Project-level VMT estimates for the Project would be below the established significance thresholds (county-wide cumulative no project and city-wide cumulative no project), the Project would result in **less-than-significant** transportation impact related to VMT.

5.3 Geometric Design Features

Vehicular access to the private sector of the site will be provided by an entry/exit driveway on Avenue 52 and the driveway on Van Buren Street. On-site vehicle circulation is provided by a network of internal roadways. The public sector of the project has access points that are aligned perpendicular to Calhoun Street and Avenue 52. There are no obstructions that would limit sight distance from the Project access point. The roadways internal to the Project site would be constructed per City standards.

The Project does not propose any substandard design features, therefore the Project's impact to geometric design hazards would be **less-than-significant**.

5.4 Emergency Access

Factors such as the number of access points, roadway width, and proximity to fire stations determine whether a project provides enough emergency access. The fire station most likely to serve the site is Riverside County Fire Department – Coachella fire Station 79, located at 1377 6th Street approximately 1.5 miles from the project site. Emergency vehicles could utilize any of the three Project access points at Avenue 52 or Van Buren Street or the emergency access point from the west side of the project site via Calhoun Street. If one entrance is blocked, emergency personnel could access the site from the other entrance point. Internal roadways are designed to accommodate emergency vehicles.

The Project will make roadway improvements that will reduce intersection delay during peak hours even with increased traffic volumes and is not expected to increase emergency response times for adjacent neighborhoods.

The Project's impact on emergency access would be **less-than-significant**.

6. Local Transportation Study

This section presents the transportation operations analysis consistent with the County's Guidelines. The operational analysis is intended to assess the potential effect of the Project on the surrounding roadway network. For the study, maintaining LOS D or better as a standard for intersection operations.

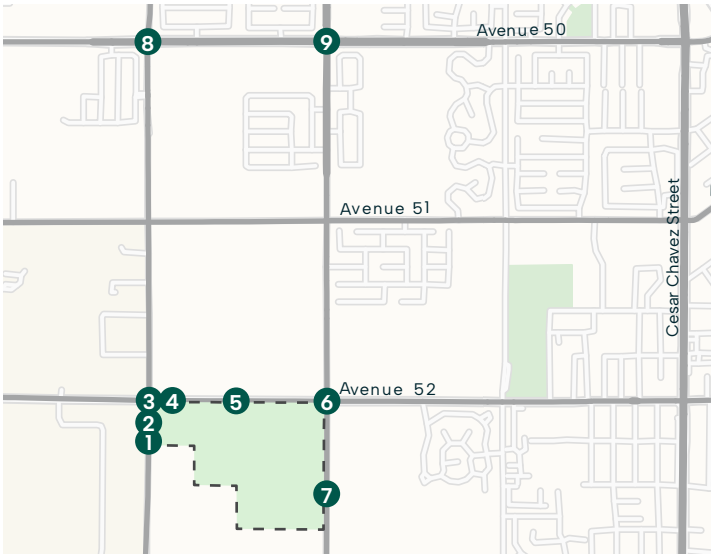
6.1 Opening Year (2030) Conditions

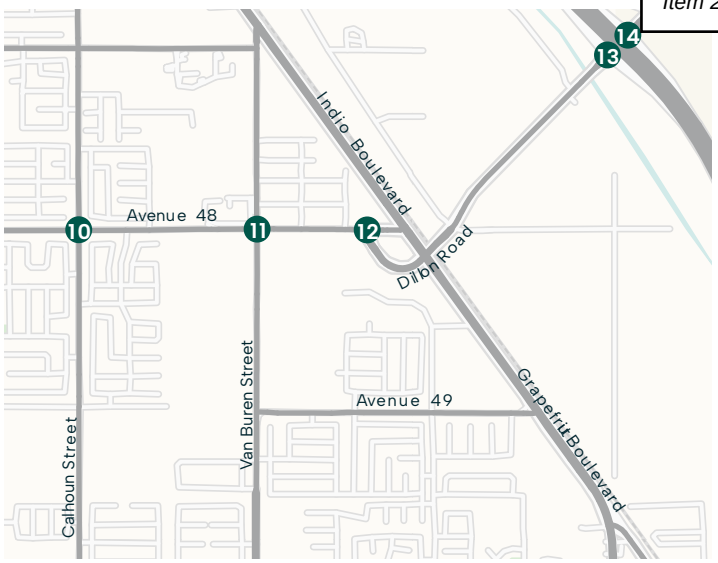
This section presents intersection operations under Opening Year (2030) Plus Project and Plus Project and Cumulative Project conditions. Improvements are identified for deficient intersections.

6.1.1 Traffic Volume Development

Consistent with the County's Guidelines, an annual ambient growth rate was applied to existing traffic counts to forecast 2030 traffic volumes. An annual ambient growth rate of 2% was agreed upon in the scoping form (**Appendix A**). Pending and approved development (cumulative) projects within a five-mile radius of the Project site that could influence travel in the study area were collected and assessed. Fehr & Peers coordinated with the City of Coachella to obtain a list of development projects for use in the TIA. The list is documented in **Appendix B**. All relevant projects provided were assumed to be in operation by 2030. *Trip Generation, 12th Edition* rates were applied to each project that was anticipated to affect peak hour intersection operations. The trip generation estimates for these projects are provided in **Appendix B**. The trips were assigned to the study area based on professional judgement and knowledge of the land uses and their typical peak hour travel patterns.

Project trips from **Figure 4.2** were added to Opening Year forecast to develop Opening Year (2030) Plus Project. Intersection turning movement forecasts for Opening Year (2030) Plus Project are presented in **Figure 6.1**. Cumulative project trips were then added to develop Opening Year (2030) Plus Project and Cumulative Projects intersection turning movement forecasts, as presented in **Figure 6.2**.





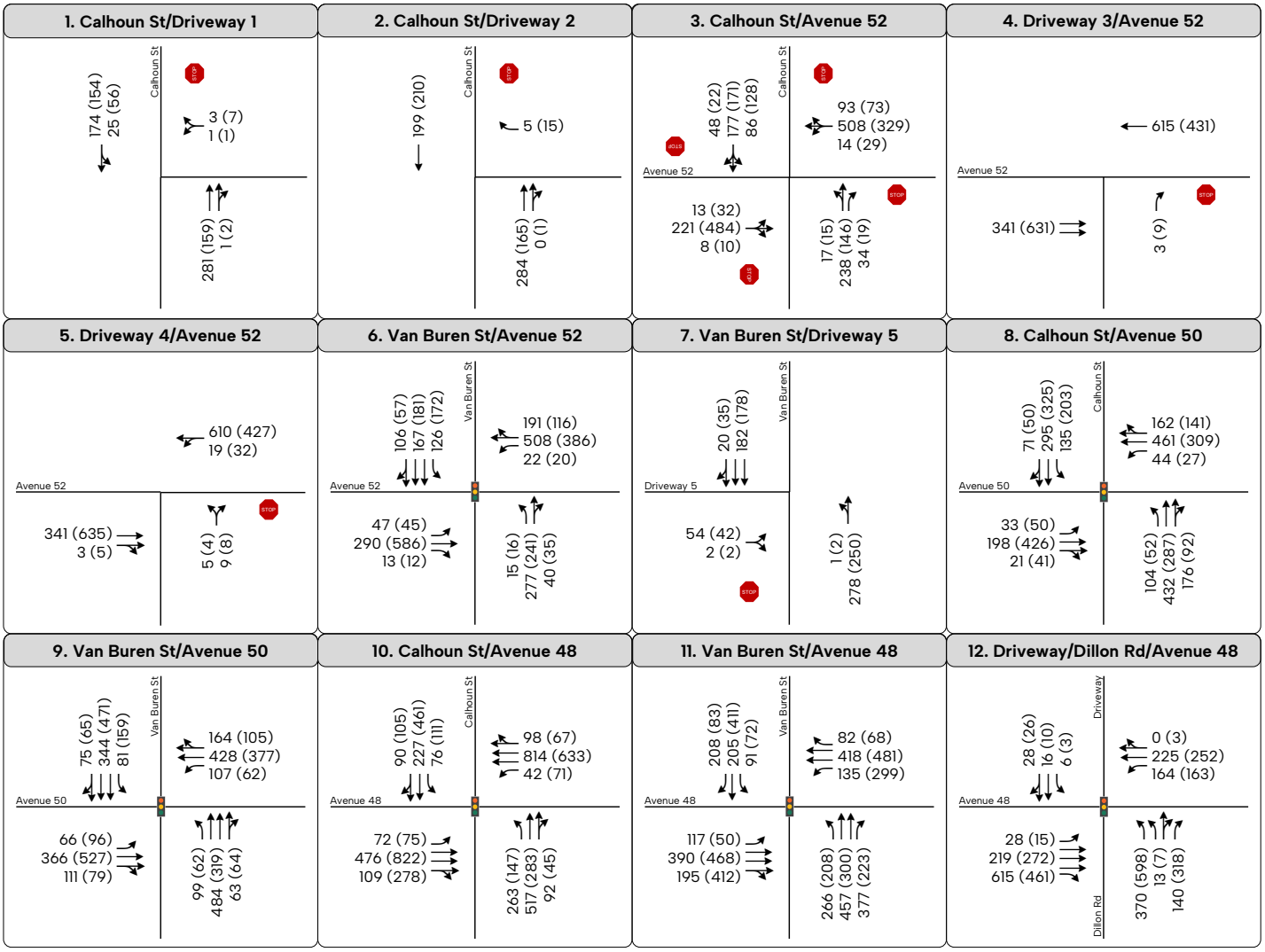
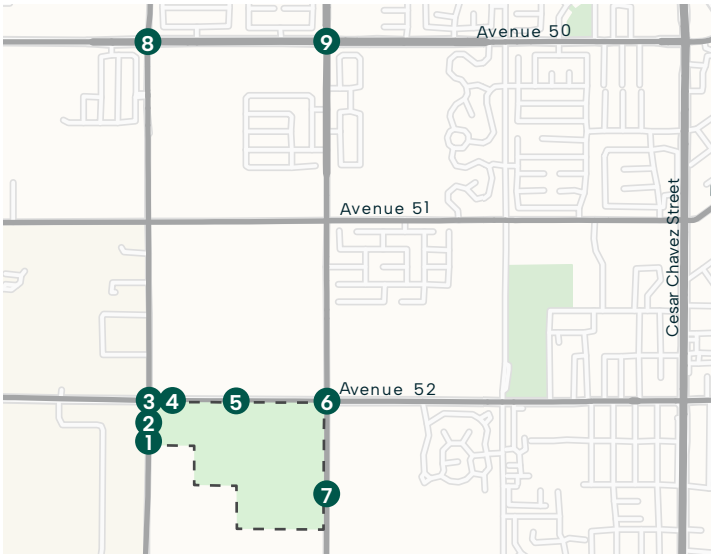
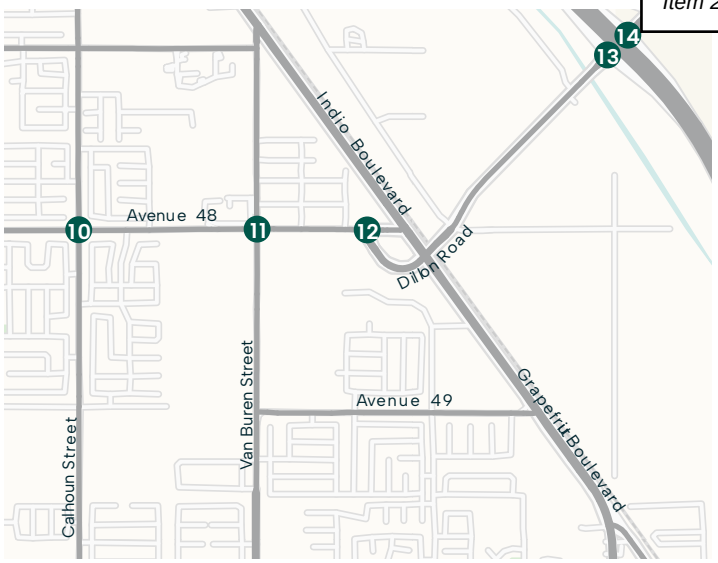


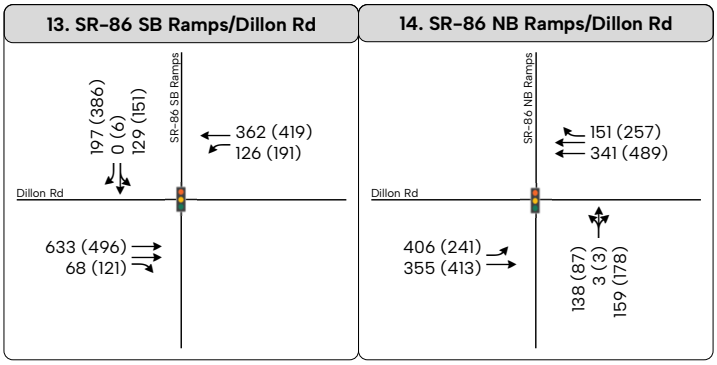
FIGURE 6.1

Peak Hour Traffic Volumes and Lane Configurations Opening Year Plus Project (2030)

Fehr & Peers







AM (PM) Peak Hour Traffic Volume

Lane Configuration

Stop Sign

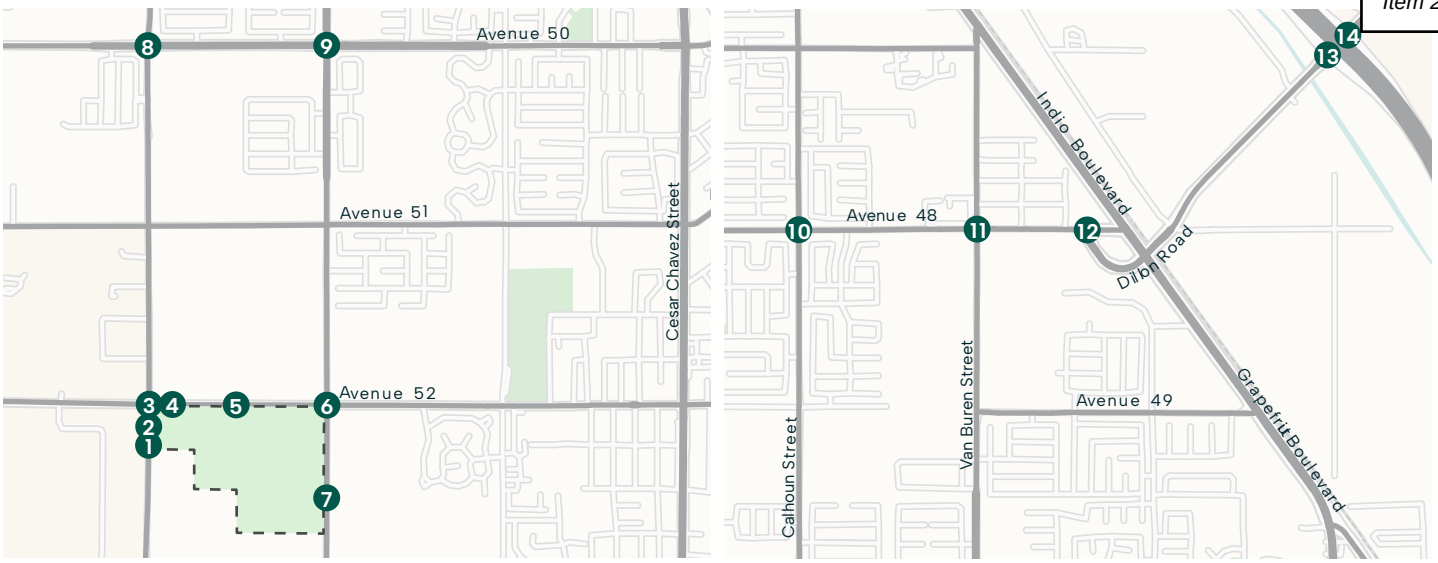
Signalized

Study Intersections

FIGURE 6.1

Peak Hour Traffic Volumes and Lane Configurations Opening Year Plus Project (2030)

Fehr & Peers



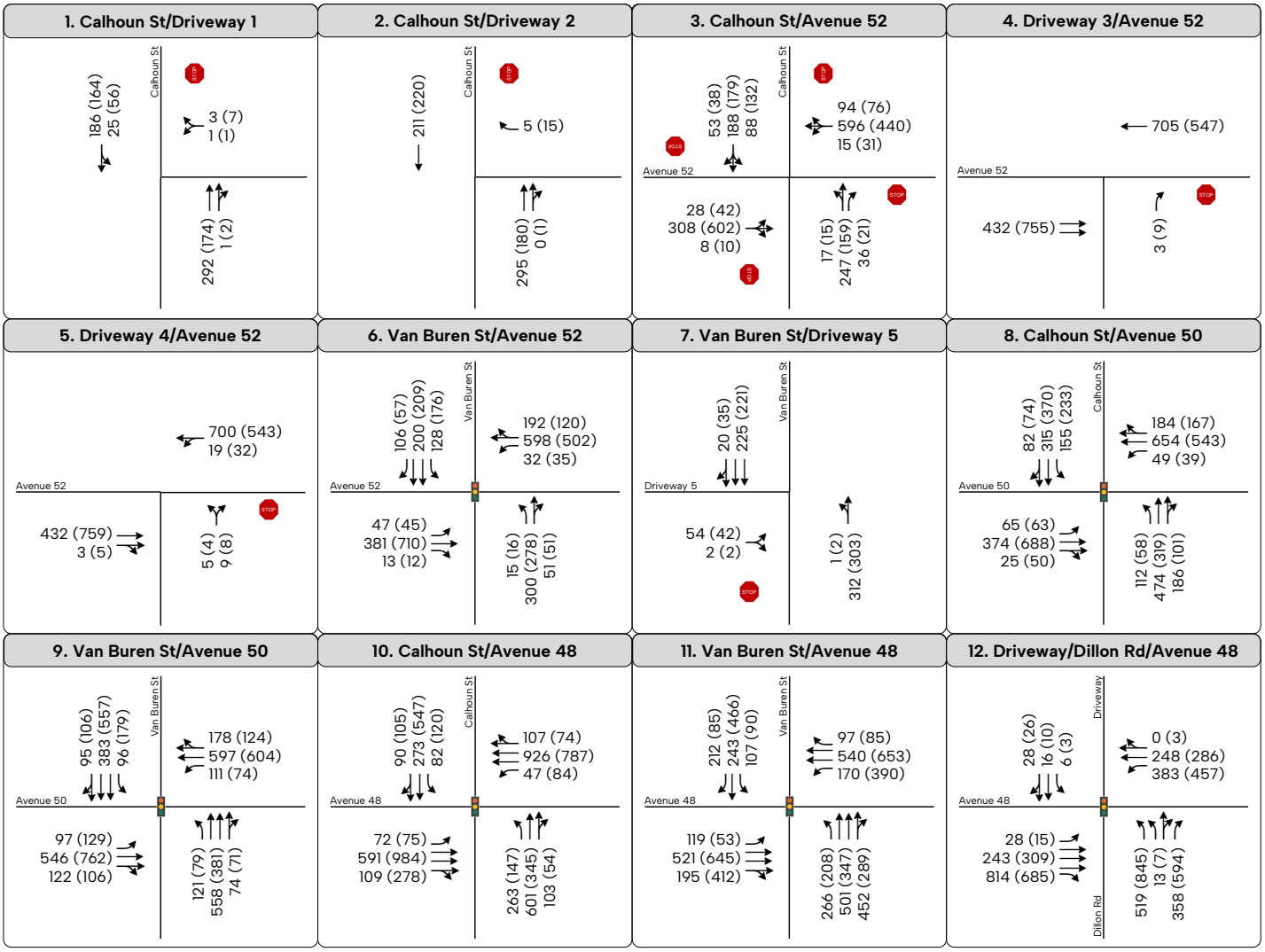
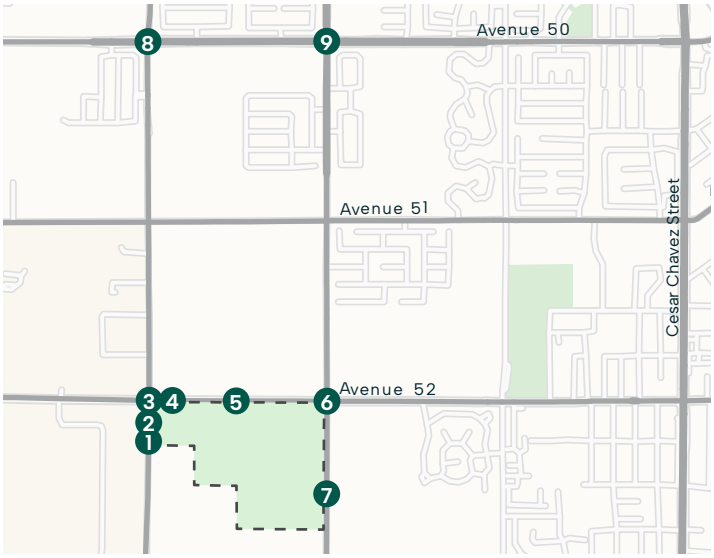
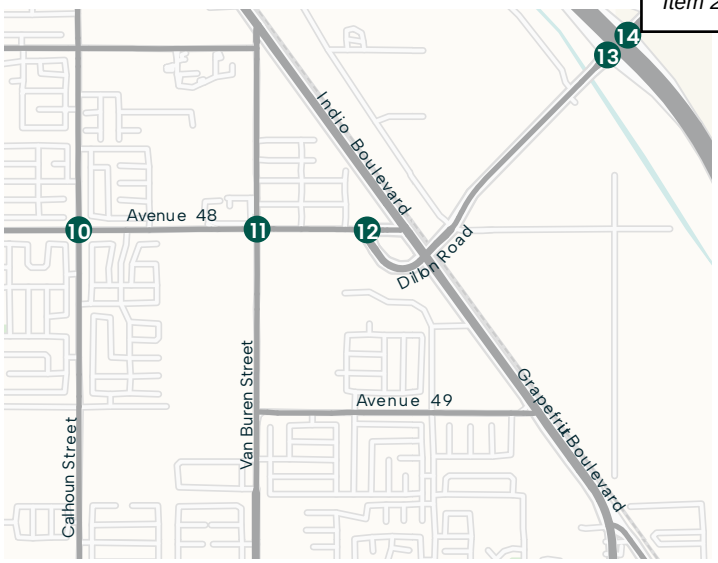
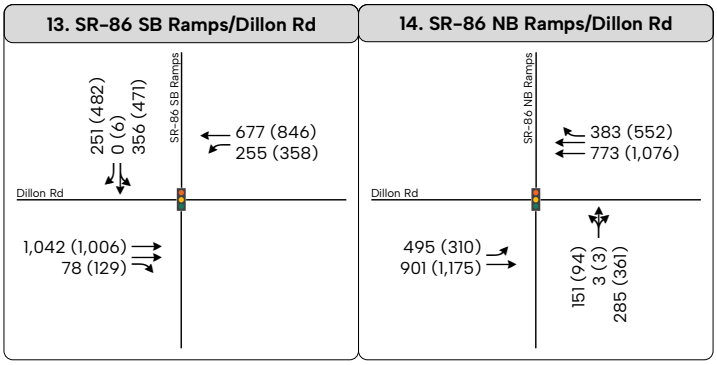


FIGURE 6.2

Peak Hour Traffic Volumes and Lane Configurations – Opening Year Plus Project and Cumulative Projects (2030)







AM (PM) Peak Hour Traffic Volume

Lane Configuration

Stop Sign

Signalized

Study Intersections

FIGURE 6.2

Peak Hour Traffic Volumes and Lane Configurations – Opening Year Plus Project and Cumulative Projects (2030)

6.1.2 Opening Year (2030) Intersection Operations

Opening Year (2030) intersection operations were evaluated using the HCM methodology detailed in Section 2.1. Opening year lane configurations and intersection control types changed as documented in **Appendix D** and as summarized below:

- The Project will implement an additional lane in the direction adjacent to the Project on the north and west side
- The Project will implement two lanes in the direction adjacent to the project on the east side of the project
- Additional lanes were added based off Southern California Association of Governments' (SCAG) Regional Transportation Plan (RTP).

Traffic signal timings, peak hour factors and heavy vehicle percentages were left unchanged from existing conditions.

Intersection operations under Opening Year (2030) Plus Project and Plus Project and Cumulative Projects conditions are presented in **Table 6.1**. Intersection LOS calculation worksheets are provided in **Appendix E**.

Under the Plus Project scenario, the following intersections are forecasted to operate deficiently (below LOS D):

- Intersection 3: Calhoun Street and Avenue 52
- Intersection 6: Van Buren Street and Avenue 52

Under the Plus Projects and Cumulative Projects scenario the following intersections are forecasted to operate deficiently (below LOS D):

- Intersection 3: Calhoun Street and Avenue 52
- Intersection 6: Van Buren Street and Avenue 52
- Intersection 11: Van Buren Street and Avenue 48
- Intersection 12: Dillon Road and Avenue 48
- Intersection 13: SR-86 SB Ramps and Dillon Road PM Peak Hour

All other study intersections would operate at acceptable service levels of LOS D or better.

Table 6.1. Opening Year (2030) Intersection Levels of Service

ID	Intersection	Control[1]	Peak Hour	Opening Year with Project		Opening Year with Project and Cumulative Projects	
				LOS/Delay	Side Street Stop Worst Movement	LOS/Delay	Side Street Stop Worst Movement
1	West Driveway 1 and Calhoun St*	SSSC[1]	AM	A / 1	Westbound	A / 1	Westbound
			PM	A / 1	Westbound	A / 1	Westbound
2	West Driveway 2 and Calhoun St*	SSSC[1]	AM	A / 1	Westbound	A / 1	Westbound
			PM	A / 1	Westbound	A / 1	Westbound
3	Calhoun St and Ave 52	AWSC[2]	AM	**F / 95**		**F / 187**	
			PM	**F / 156**		**F / >250**[4]	
4	North Driveway 1 and Ave 52*	SSSC[1]	AM	A / 1	Northbound	A / 1	Northbound
			PM	A / 1	Northbound	A / 1	Northbound
5	North Driveway 2 and Ave 52*	SSSC[1]	AM	A / 1	Northbound	A / 1	Northbound
			PM	A / 1	Northbound	A / 1	Northbound
6	Van Buren St and Ave 52	Signal	AM	**E / 56**		**F / 87**	
			PM	C / 34		D / 55	
7	East Driveway and Van Buren St.*	SSSC[1]	AM	A / 1	Eastbound	A / 1	Eastbound
			PM	A / 1	Eastbound	A / 1	Eastbound
8	Calhoun St and Ave 50	Signal	AM	C / 29		D / 36	
			PM	C / 25		C / 33	
9	Van Buren St and Ave 50	Signal	AM	C / 34		D / 36	
			PM	C / 35		D / 38	
10	Calhoun St and Ave 48	Signal	AM	D / 42		D / 45	
			PM	C / 34		D / 37	
11	Van Buren St and Ave 48	Signal	AM	C / 29		C / 34	
			PM	C / 44		**E / 68**	
12	Dillon Rd and Ave 48	Signal	AM	C / 25		**E / 61**	
			PM	D / 24		**F / 86**	
13	SR-86 SB Ramps and Dillon Rd	Signal	AM	B / 12		C / 35	
			PM	B / 14		**E / 65**	
14	SR-86 NB Ramps and Dillon Rd	Signal	AM	C / 22		C / 24	
			PM	B / 16		C / 39	

Note:
1. SSSC: Side-Street Stop Control
2. AWSC: All-Way Stop Control
3. Deficient intersection operations are noted in bold text (below LOS D).
4. Delay estimates are above 250 seconds are out of the bounds of the Syncro software

Source: Fehr & Peers, 2025.

6.1.2.1 Freeway Off-Ramp Queueing Assessment

Storage capacity for all SR-86 northbound and southbound off-ramps in the study area were evaluated using HCM 7th Edition methodologies. Existing storage capacities were compared against 95th percentile queue estimates prepared using the Synchro 12 software.

The following two intersections were included in the off-ramp queuing analysis for the Opening (2030) scenarios:

- 13. SR-86 SB Ramps and Dillion Road
- 14. SR-86 NB Ramps and Dillion Road

No movements are forecasted to exceed existing storage capacity under Opening Year (2030) Plus Project and Cumulative Projects. The queuing analysis summary in **Table 6.2** presents results for one scenario Opening Year with Project and Cumulative Projects only. This scenario has higher traffic volumes than Opening Year with Project which queues are not reported since lower traffic volumes typically result in shorter queues. Detailed queuing worksheets are provided in **Appendix F**.

Table 6.2 SR-86 Off-Ramp 95th Percentile Queues

Intersection		Movement	Storage Length (ft)	Peak Hour	Opening Year (2030) Plus Project and Cumulative Projects
13	SR-86 SB Ramps and Dillion Road	SBT	1,325	AM	325
				PM	450
		SBR	1,325	AM	100
				PM	375
14	SR-86 NB Ramps and Dillion Road	NBLTR	1,475	AM	325
				PM	425

Notes:
1. Queue results are reported in feet per lane and rounded up to the nearest 25-feet interval.

Source: Fehr & Peers, 2025.

6.1.3 Opening Year (2030) Improvements

Feasible measures were identified to improve intersection operations at deficient intersections to an acceptable LOS (LOS D or better).

- **Calhoun Street and Avenue 52 (Intersection 3) –** This intersection is expected to operate at LOS E and F during AM and PM peak hour under Opening Year (2030) Plus Project and Cumulative Projects. A traffic signal is warranted and recommended at Calhoun and Avenue 52 to improve operations. Signal warrant analyses for project driveways (Intersections 1 and 2, 4 and 5, and 7) indicate that signals are not warranted. Detailed signal warrant analysis are provided in **Appendix G**.

- **Van Buren Street and Avenue 52 (Intersection 6) –** This intersection is expected to operate at LOS E and F during AM and PM peak hour under Opening Year (2030) Plus Project and Cumulative Projects. To improve intersection operations, optimizing splits and increasing cycle lengths would improve to acceptable conditions. Communication with Coachella Valley Sync is not needed because intersection 6 is uncoordinated.
- **Van Buren Street and Avenue 48 (Intersection 11) –** This intersection is expected to operate at LOS E during PM peak hour under Opening Year (2030) Plus Project and Cumulative Projects. To improve intersection operations, convert southbound right lane to a shared southbound right through.
- **Dillon Road and Avenue 48 (Intersection 12) –** This intersection is expected to operate at LOS E and F during AM and PM peak hour under Opening Year (2030) Plus Project and Cumulative Projects. To improve intersection operations, optimizing the traffic signal timing would improve to acceptable conditions.
- **SR-86 and Southbound Ramps and Dillion Road (Intersection 13)** – This intersection is expected to operate at LOS E during PM peak hour in Opening Year (2030) Plus Project and Cumulative Projects. To improve intersection operations, optimizing the traffic signal timing would improve to acceptable conditions.

Table 6.3 compares intersection operations without and with improvements under improvements.

Table 6.3 Opening Year (2030) with Improvements Levels of Service

Intersection	Peak Hour	Opening Year (2030) Plus Project		Opening Year (2030) Plus Project and Cumulative Projects		Opening Year (2030) Plus Project w/ Improvement		Opening Year (2030) Plus Project and Cumulative w/ Improvement		Fair Share %
		LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	
3. Calhoun St and Avenue 52	AM	**F**	**95**	**F**	**187**	B	14	C	34	18.6%
	PM	**F**	**156**	**F**	**>250**	C	21	C	28	
6. Van Buren St and Ave 52	AM	**E**	**56**	**F**	**87**	D	43	D	55	23.1%
	PM	C	34	D	55	C	32	D	45	
11. Van Buren St and Ave 48	AM	C	29	C	34	C	29	C	34	13.2%
	PM	C	44	**E**	**68**	D	35	D	52	
12. Dillon Road and Avenue 48	AM	C	25	E	61	C	30	D	53	8.9%
	PM	C	24	**F**	**86**	C	28	D	50	
13. SR-86 and Southbound Ramps	AM	B	12	**C**	**35**	B	12	C	34	7.0%
	PM	B	14	**E**	**65**	B	15	D	53	

Notes:
1. Percent of fair share at the intersection is calculated using PM peak hour volumes.
2. Potentially deficient intersection operations are noted in **bold text**

Source: Fehr & Peers, 2025

Project Improvement Fair Share

The calculated Project fair share contribution towards these improvements is based on the formula outlined in the County's Guidelines:

$$\text{Project Fair Share (P)} = [T(p) \div (T(t) - T(e))]*100$$

Independent variables and associated values for this calculation are shown in **Table 6.4**, formula is assumed to be traffic volumes at individual intersections. Total traffic volumes are from Opening Year plus Project and Existing Traffic are from collected counts.

Table 6.4 Opening Year (2030) Project Fair Share Calculations

Variable	Description	Intersection 3 Values	Intersection 6 Values	Intersection 11 Values	Intersection 12 Values	Intersection 13 Values
T(p)	Project Traffic	95	151	140	127	127
T(t)	Total Traffic[1]	1,745	2,178	3,723	3,240	3,298
T(e)	Existing Traffic	1,234	1,525	2,663	1,814	1,491

Note: Traffic values are the sum of all turning movements.
1. Total Traffic Volumes are forecast volumes for the Opening Year Plus Project Plus Cumulative Projects (2030) Peak PM scenario.
Source: Fehr & Peers, 2025.

Appendix A: Approved Scoping Agreement

123-13.55 PC #1

5.5.25 accept as redlined

SCOPING AGREEMENT FOR TRANSPORTATION LOS ANALYSIS

This letter acknowledges the Riverside County Transportation Department requirements for transportation level of service analysis of the following project. The analysis must follow the Riverside County Transportation Department Transportation Analysis Guidelines, December 2020.

Case No.	Pre-App (23-06)
Related Cases	N/A
Project Name:	The Ranch at Coachella
Project Address:	Bound by Avenue 52, Van Buren St Avenue 53, and Calhoun St; City of Coachella
Project Description:	See Attachment 01A

	Traffic Consultant	Applicant/Developer
Name:	Fehr & Peers	Mr. Grant King, Managing Partner
Address:	3750 University Avenue, Suite 225,	6417 Selma Avenue 2nd Floor
	Riverside, CA 92501	Hollywood CA, 90028
Telephone:	949-308-6318	323-466-1400
E-mail:	P.Herrmann@fehrandpeers.com	grant@relevantgroup.com

Current GP Land Use	Regional Retail District	Proposed Land Use	Regional Retail District
Current Zoning	Regional Commercial (R-C)	Proposed Zoning	Planned Unit Development

A. Trip Generation Source: Institute of Transportation Engineers' (ITE) Trip Generation Manual, 11th Edition.

	Current Trip Generation			Proposed Trip Generation		
	In	Out	Total	In	Out	Total
AM Trips	See	Attach. 02		See	Attach. 02	
PM Trips						

Internal Trip Allowance ☑ Yes ☐ No (See Attached 03 % Trip Discount)

Pass-By Trip Allowance ☐ Yes ☑ No (N/A % Trip Discount)

A pass-by trip discount of 25% is allowed for appropriate land uses. The pass-by trips at adjacent study area intersections and project driveways shall be indicated on a report figure.

B. Trip Geographic Distribution: N 60 % S 5 % E 10 % W 25 %

(See Attachment 4)

C. Background Traffic

Project Build-out Year:	2030
Phase Year(s)	N/A
Other projects to be analyzed:	N/A
Model/Forecast methodology	RIVCOM

Annual Ambient Growth Rate: 2 %

D. Study intersections: *(NOTE: Subject to revision after other projects, trip generation and distribution are determined, or comments from other agencies.)*

1. See Attachment 04
2.
3.
4.
5.
6.
7.
8.
9.
10.

E. Study Roadway Segments: *(NOTE: Subject to revision after other projects, trip generation and distribution are determined, or comments from other agencies.)*

1. N/A
2.
3.
4.
5.
6.
7.
8.
9.
10.

F. Other Jurisdictional

Is this project within a City's Sphere of Influence or one-mile radius of City boundaries? ☑ Yes ☐ No

If yes, name of jurisdiction(s): City of Indio, California

G. Site Plan (please attach reduced copy) - A conceptual land use plan has been provided in **Attachment 01B**

H. Specific issues to be addressed in the Study (in addition to the standard analysis described in the Guideline) (To be filled out by Transportation Department)

(NOTE: If the traffic study states that "a traffic signal is warranted" (or "a traffic signal appears to be warranted," or similar statement) at an existing unsignalized intersection under existing conditions, 8-hour approach traffic volume information must be submitted in addition to the peak hourly turning movement counts for that intersection.)

~~N/A~~ Provide Fair Share Analysis As Applicable.
Perform TS Warrants for I/S 1, 2, 3, 4, 5

I. Existing Conditions

Traffic count data must be new or recent. Provide traffic count dates if using other than new counts.
Date of counts New traffic counts will be collected May 2025, justification in Attch. 03

***NOTE* Traffic Study Submittal Form and appropriate fee must be submitted with this form.**

Recommended by:

rrmann, TE
Fehr & Peers — 04/23/2025
Traffic Consultant — Date

Approved Scoping Agreement

City of Coachella - Traffic — Date

Scoping Agreement Submitted on _____
Revised on _____

Attachment 02

Project Description

The project site is located within the City of Coachella, bound by Avenue 52 in the north, Van Buren Street in the east, Avenue 53 in the south, and Calhoun Street in the west. The site is directly accessible via all but Avenue 53, which is located in the Unincorporated area of the County of Riverside.

There are two distinct sectors of the 85-acre site plan – a private sector and a public sector. Circulation access can be made to the public sector off Calhoun Street; private sector access can be made via Avenue 52 and Van Buren Street, as well as through the Calhoun Street public sector access point.

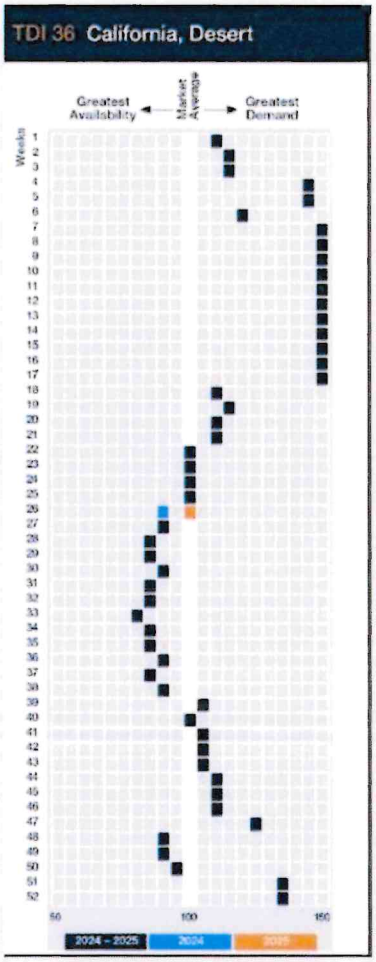
The **private sector** includes single family residential units comprised of estate lots, zero lot line lots, bungalow lots, and VIP suites, as well as condo hotel units (which will operate like the single family lots), and resort amenities that can be used by guests/owners of this sector. The estate lots, zero lot line lots, bungalow lots, VIP suites, and condo hotels will operate with a majority of fractional ownership and a minority of full ownership. These residential components and the condo hotel units will be used as second homes, timeshare, short term rental, and long-term rental properties, all of which are affected by the seasonality of the desert community. Time of year use distribution will be concentrated between mid-February through May, with the lowest demand generally occurring mid-July through the end of September, and the first half of December (***Figure 1*** below).

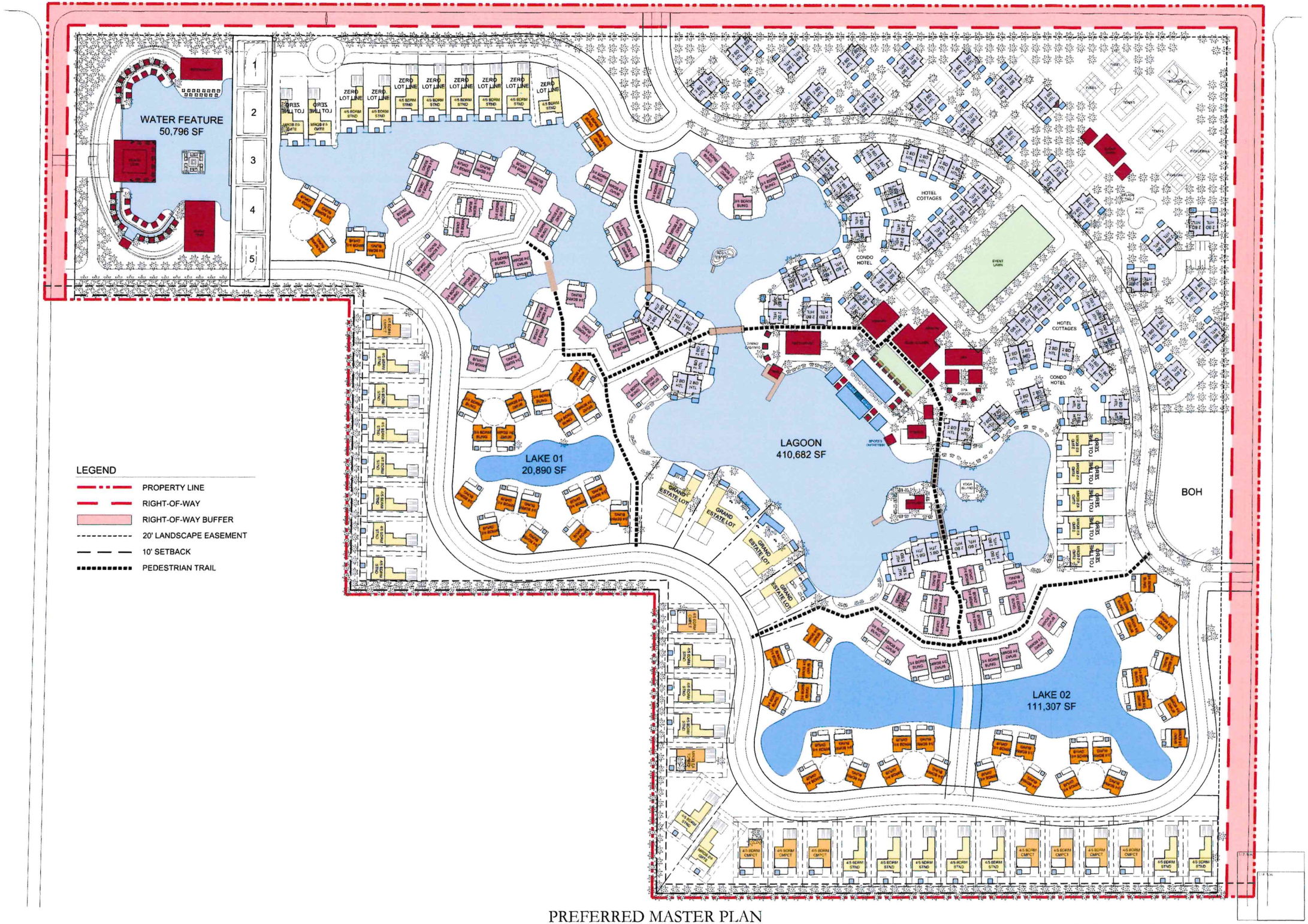
The **public sector** is comprised of three primary components, which affect trip generation – a beach club, an event tent, and a restaurant. These components would operate with an assumed typical weekday capacity of 500 persons [100 persons – beach club, 200 persons – restaurant, and 200 persons – event tent] and an assumed weekend capacity of 1,500 [1,000 persons – beach club, 200 persons – restaurant, and 300 persons – event tent]; other special events with higher capacity would be rare and would require additional traffic control. The public sector components will generally be operational between 11:00 AM and 2:00 AM, with expected event arrival peaks to be between 7:00 PM and 8:00 PM.

The resort characteristics of the proposed site plan results in most guest/owners arriving on site and staying on site for an extended duration, where they will have access to on-site amenities, including the public sector area. It is anticipated that a large portion of guests at the public facilities would be on-site guests, resulting in approximately 33% internal capture between the public and private uses (weekday). For example, the event barn (public sector) could host corporate events, where guests would stay on-site in the private sector. The same weekday trip internal capture totals were applied to the weekend trip generation to ensure an appropriate internalization discount relative to the total private area units. Thus, the same amount of internal trips from the private area to the public area for the weekday scenario was applied to the weekend scenario.

Figure 1 – California Desert Travel Demand – The Ranch at Coachella, Market Area Analysis

FIGURE 3-7 CALIFORNIA DESERT TRAVEL DEMAND





PREFERRED MASTER PLAN

VITA
PLANNING | LANDSCAPE ARCHITECTURE | ARCHITECTURE

The Ranch
COACHELLA, CA

April 18, 2025
1" = 60'-0"

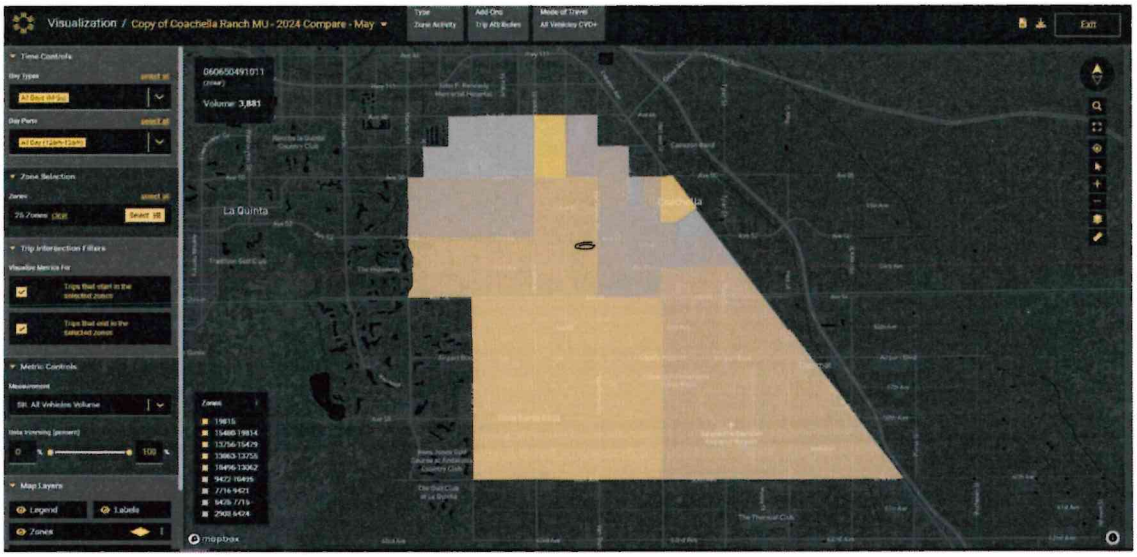
THE RANCH AT COACHELLA

Study Intersection Count Collection

For study intersections where trip distributions justify the intersection to be studied, traffic counts will be collected in May of 2025. Based on the seasonality of the desert community that the project site is within, counts would ideally be collected by the end of March. Should counts be collected in May, a comparison of historical ADT data from March 2024 and May 2024 (Big Data sources as noted below) will be used as a factor to scale collected May traffic counts to the appropriate peak levels (March).

Preliminary data were collected within the immediate Census Block Groups to the project site – extending about 5 miles in all directions (***Figure 2***). An average March Block Group to May Block Group comparison showed a 13% decline in volumes between the study months. A cumulative average of all block groups showed a 15% decline between March and May. Traffic counts can be appropriately factored to scale May counts to the normalized peak volumes of March by roughly ~15%.

Figure 2 – Big Data (Streetlight) Block Group Study Area



March Total	May Total
239,959	204,867
	15%

March showed cumulative proximal area volume that is 15% higher

March 2024 compared to May 2024 showed an average block group difference of 13%

Attachment 02A: Trip Generation - The Ranch at Coachella Fully Occupied Weekday

	Assumptions	Land Use	Comparable Time of Day ITE Land Use	ITE Code	Quantity	Units	Trip Generation Rates							Estimated Trip Generation						
							Daily	AM			PM			Trip Rate		AM Peak Hour Trips			PM Peak Hour Trips		
								% In	% Out	Rate	% In	% Out	Rate	Unit	Daily Trips	In	Out	Total	In	Out	Total
Private	Mixture of use/operation - second home, fractional ownership, short term rental, long term rental/ownership	Single Family Residential (Estate Lots, Zero Lots, Bungalow Lots)	Recreational Homes	260	165	DU	3.55	55%	45%	0.22	46%	54%	0.29	per DU	586	20	16	36	22	26	48
Private	Mixture of use/operation - second home, fractional ownership, short term rental, long term rental/ownership	Condo Hotel Units	Recreational Homes	260	244	DU	3.55	55%	45%	0.22	46%	54%	0.29	per DU	866	30	24	54	33	38	71
														Private Sector Subtotal	**1,452**	**50**	**40**	**90**	**55**	**64**	**119**
Public	100 Person Assumed Max Occupancy, open to the public 11am to 2am	Beach Club	Movie Theater	445	100	seats	1.76	72%	28%	0.09	51%	49%	0.29	per seat	176	6	3	9	15	14	29
														*Subtotal Trips (Beach Club) - Internalization Applied**	116	4	2	6	10	9	19
Public	200 Person Assumed Max Occupancy, open to the public 11am to 2am	Restaurant	Fine Dining Restaurant	931	200	seats	2.60	69%	31%	0.15	67%	33%	0.28	per seat	520	21	9	30	38	18	56
														*Subtotal Trips (Restaurant) - Internalization Applied**	343	14	6	20	25	12	37
Public	200 Person Assumed Max Occupancy, open to the public 11am to 2am	Event Tent	Custom	N/A	200	attendee	1.76	72%	28%	0.09	77%	23%	0.29	per attendee	352	13	5	18	45	13	58
														*Subtotal Trips (Event Barn) - Internalization Applied**	232	9	3	12	29	9	38
														Public Sector Subtotal	**692**	**27**	**11**	**38**	**64**	**30**	**94**
														WEEKDAY TOTAL	**2,144**	**77**	**51**	**128**	**119**	**94**	**213**

**Internal capture of 33% from private sector*

Attachment 02B: Trip Generation - The Ranch at Coachella Fully Occupied Weekend

	Assumptions	Land Use	Comparable Time of Day ITE Land Use	ITE Code	Quantity	Units	Trip Generation Rates								Estimated Trip Generation						
							Daily	AM			PM			Trip Rate		AM Peak Hour Trips			PM Peak Hour Trips		
								% In	% Out	Rate	% In	% Out	Rate	Unit	Daily Trips	In	Out	Total	In	Out	Total
Private	Mixture of use/operation - second home, fractional ownership, short term rental, long term rental/ownership	Single Family Residential (Estate Lots, Zero Lots, Bungalow Lots)	Recreational Homes	260	165	DU	3.34	46%	54%	0.30	48%	52%	0.39	per DU	551	23	27	50	31	33	64
Private	Mixture of use/operation - second home, fractional ownership, short term rental, long term rental/ownership	Condo Hotel Units	Recreational Homes	260	244	DU	3.34	46%	54%	0.30	48%	52%	0.39	per DU	815	34	39	73	46	49	95
														Private Sector Subtotal	**1,366**	**57**	**66**	**123**	**77**	**82**	**159**
Public	1,000 Person Assumed Max Occupancy, open to the public 11am to 2am	Beach Club	Movie Theater	445	1000	seats	2.24	72%	28%	0.09	52%	48%	0.31	per seat	2,240	65	25	90	161	149	310
							*Subtotal Trips (Beach Club) - Internalization Applied**								2,180	63	24	87	156	144	300
Public	200 Person Assumed Max Occupancy, open to the public 11am to 2am	Restaurant	Fine Dining Restaurant	931	200	seats	2.57	69%	31%	0.15	59%	41%	0.33	per seat	514	21	9	30	39	27	66
							*Subtotal Trips (Restaurant) - Internalization Applied**								337	14	6	20	26	21	47
Public	300 Person Assumed Max Occupancy, open to the public 11am to 2am	Event Tent	Custom	N/A	300	attendee	2.24	72%	28%	0.09	77%	23%	0.31	per attendee	672	19	8	27	72	21	93
							*Subtotal Trips (Event Barn) - Internalization Applied**								552	15	6	21	56	17	73
														Public Sector Subtotal	**3,070**	**92**	**36**	**128**	**238**	**182**	**420**
														WEEKEND TOTAL	**4,436**	**149**	**102**	**251**	**315**	**264**	**579**

**Internal capture from the weekday total trips were applied/subtracted from weekend trips*

THE RANCH AT COACHELLA

Attachment 04

Trip Generation Methodology

Trip generation estimates for the **private sector** components were sourced from the ITE 11th edition land use codes[1]. The intended land use characteristics (ownership and use) were considered to apply the ITE land use code with the most representative overlap. The estate lots, zero lot line lots, bungalow lots, VIP suites and the condo hotel units will be a majority (>75%) fractional ownership second homes that will be used for short-term and long-term rental, ITE code 260 "Recreational Homes" was applied. The condo hotel units may be sold as individual, one-bedroom units or up to four-bedroom; and area expected to operate like recreational home ITE characterized units. Overall, these ITE code selections are further supported by the seasonality of the proposed site, as described in **Attachment 01 – *Figure 1***.

Trip generations for the **public sector** (beach club and restaurant) used the most comparable ITE land use code that represented the best matched time of day distribution for the planned components; calculations were based on seats to match the developer's weekday and weekend peak person capacity assumptions. The event tent was calculated using assumptions, which similarly derived from the peak capacity – detailed below.

ITE code 445 "Movie Theatre" was applied to the beach club. The beach club will not open sooner than 11:00 AM, similar to a movie theatre, with a majority of the trips arriving in close duration to each other. Both the movie theatre and the beach club are entertainment uses open all day and night, where people come and stay for a few hours, and arrival and departure times are spread out throughout the day with multiple rounds of event/movie turn over.

ITE Code 931 "Fine Dining Restaurant" was applied to the restaurant to match the time-of-day distribution, guest stay duration, and turnover assumption (lunch service and dinner service).

The event tent will operate with a 200-person and 300-person peak capacity assumption for the weekday and weekend, respectively. ITE code 445 was applied for the daily, AM and PM trip rate to be conservatively high. AM trips are nominal and characteristics of employee / maintenance / delivery trips, since the event barn would not open sooner than 11:00 AM for guests. The PM trips were factored to match comparable event trip generation counts for a concert "event arrival peak – 7:00 PM to 8:00 PM" (77% in and 23% out)[2].

As detailed in **Attachment 01**, it is anticipated that a portion of the guests in the public facilities will stay on-site and an internal capture reduction was applied to the public uses. The same amount of internal trips from the private area to the public area for the weekday scenario was applied to the weekend scenario.

ITE Land Use code cover page description used in trip generation calculations are attached below.

trip gen

[1] Institute of Transportation Engineers' (ITE) Trip Generation Manual, 11th Edition
[2] Classic Club Specific Plan – counts collected April 6th, 2023; Fehr & Peers 2023.

Include as reference w/ TIA Submittal

Land Use: 931
Fine Dining Restaurant

Description

A fine dining restaurant is a full-service eating establishment with a typical duration of stay of at least 1 hour. A fine dining restaurant generally does not serve breakfast; some do not serve lunch; all serve dinner. This type of restaurant often requests and sometimes requires a reservation and is generally not part of a chain. A patron commonly waits to be seated, is served by wait staff, orders from a menu and pays after the meal. Some of the study sites have lounge or bar facilities (serving alcoholic beverages), but meal service is the primary draw to the restaurant. Fast casual restaurant (Land Use 930) and high-turnover (sit-down) restaurant (Land Use 932) are related uses.

Additional Data

If the fine dining restaurant has outdoor seating, its area is not included in the overall gross floor area. For a restaurant that has significant outdoor seating, the number of seats may be more reliable than GFA as an independent variable on which to establish a trip generation rate.

The sites were surveyed in the 1980s, the 1990s, and the 2010s in Alberta (CAN), California, Colorado, Florida, Indiana, Kentucky, New Jersey, and Utah.

Source Numbers

126, 260, 291, 301, 338, 339, 368, 437, 440, 976, 1053

Land Use: 260
Recreational Homes

Description

A recreational home is either (1) a second home used by its owner periodically for recreation or (2) rented on a seasonal basis. Some sites in the database are located within a resort that contains local services and complete recreational facilities. Timeshare (Land Use 265) is a related land use.

Additional Data

A large number of internal trips are made for recreational purposes in resort communities containing recreational homes.

The sites were surveyed in the 1980s, the 2000s, and the 2010s in California, New York, and Oregon.

Source Numbers

187, 901, 968, 1046

Land Use: 445
Movie Theater

Description

A movie theater is a place where movies are screened for public entertainment. A theater includes a lobby, refreshment area, and audience seating for each movie screen. Amenities such as reclining seats, tiered stadium seating, and assigned seating are sometimes offered. A theater can be stand-alone or part of a larger retail complex.

Additional Data

Caution should be used when applying these data, as the peaking characteristics for this land use can have a significant impact on trip generation rates. Peaking at movie theaters typically occur in time periods shorter than an hour. The start and end times for a movie theater may be staggered to reduce peak surging impacts.

For 25 sites with data for both number of movie screens and number of seats, the average number of seats per movie screen was 236 (with values ranging between 150 and 336). The database includes two exceptions, both theaters with three movie screens and with an average of 740 seats per movie screen.

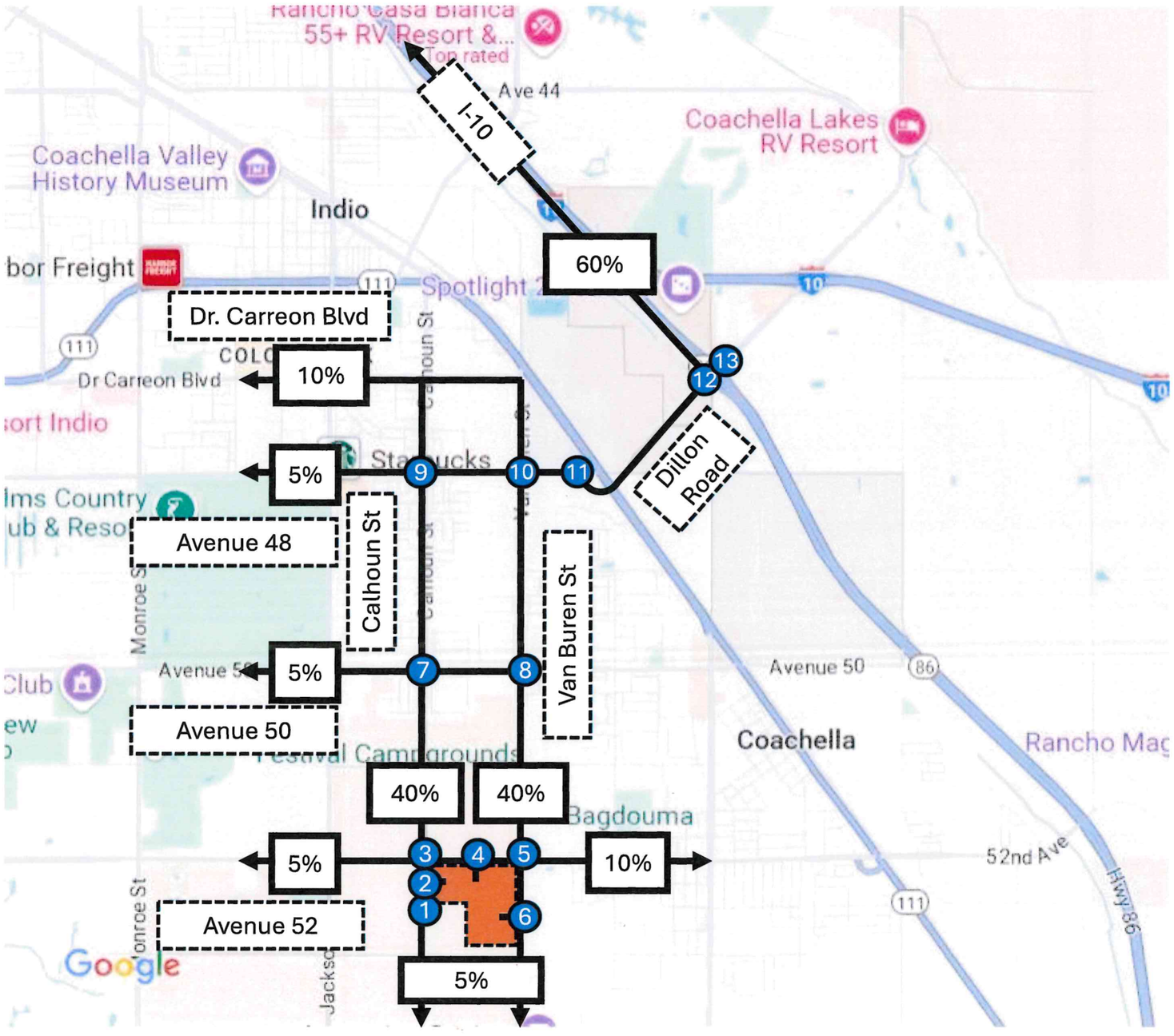
The peak hour of the generator for movie theaters occurred on Friday and Saturday evenings between 6:00 p.m. and 10:00 p.m.

The sites were surveyed in the 1980s, 1990s, the 2000s, and the 2010s in California, Connecticut, Georgia, Hawaii, Maryland, New York, North Carolina, Ohio, Oregon, Pennsylvania, South Carolina, Texas, Virginia, and Wisconsin.

Source Numbers

213, 215, 241, 283, 387, 397, 418, 433, 440, 443, 450, 451, 452, 453, 455, 456, 457, 458, 459, 513, 544, 618, 959

Figure 4: Project Trip Distribution



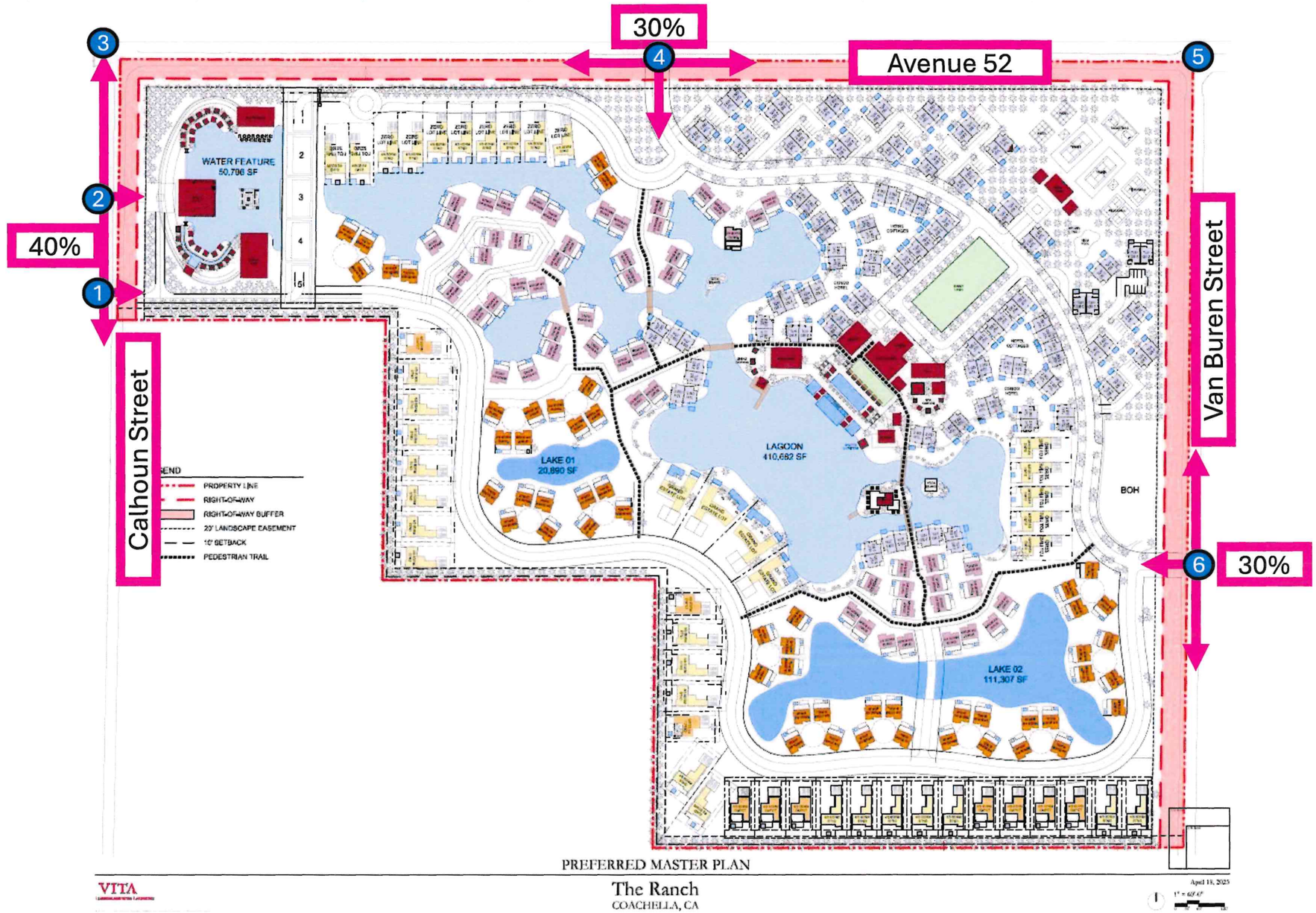
Study Intersections

1. West Driveway 1 and Calhoun Street
2. West Driveway 2 and Calhoun Street
3. Calhoun Street and Avenue 52
4. North Driveway and Avenue 52
5. Van Buren Street and Avenue 52
6. East Driveway and Van Buren Street
7. Calhoun Street and Avenue 50
8. Van Buren Street and Avenue 50
9. Calhoun Street and Avenue 48
10. Van Buren Street and Avenue 48
11. Dillon Road and Avenue 48
12. SR-86 SB Ramps and Dillon Road
13. SR-86 NB Ramps and Dillon Road

(#) = Study Intersection [%] = Trip Distribution

= Project Site [ ] = Street Name

The Project site features four entry/exit driveways. The West Driveways will provide public access to the Beach Club. Given this knowledge, 40% of trips are anticipated to use the West Driveways and the remaining 60% would evenly use the North and East Driveways.



PREFERRED MASTER PLAN

VITA

The Ranch
COACHELLA, CA

April 18, 2025

Appendix B: Pending and Approved Development Projects

Project ID	Name of Project	CASE ID	Type	Jurisdiction	Address	Description	Approved?	Status / Opening Year	Additional Comments	Include In Analysis?
1	**Bellissima by Pulte**	Architectural Review No. 21-15	Single-family residential	Coachella	East of Frederick Street between Avenue 53 and 54; Tentative Tract Map 31978	111 single-family residences ranging in size from 1,342 sq. ft. to 2,467 sq. ft. and included 1 and 2 story residences	Admin Approval on 4/5/22	Under Construction		Yes
2	**Mariposa Pointe – D.R. Horton**	Architectural Review No. 21-09	Single-family residential	Coachella	SEC of Calhoun Street and 50th Avenue; Tract 32074	1 and 2-story single family residences with attached garages on the 155 vacant lots within Tract 32074 with Spanish, Tuscan and Italianate architectural design. Plan 1 - 1,898 sq. ft. (4 bed, 3 bath and 2-bay garage) Plan 2 – 2,239 sq. ft. (4 bed, 3 bath and 2-bay garage) 2-story Plan 3 - 2,435 sq. ft. (4 bedr, 3.5 bath and 2-bay garage) 2-story	Admin Approval 1/5/22	Under Construction		Yes
3	**Pyramid Ranch**		Single-family residential	Coachella	West of Van Buren Street, South of Avenue 50, North of Avenue 51 (APN #'s 779-280-002 and 779-320-001)	204 Single-Family residential lots; 39 Acres	City Council Approved 10/30/23	Under Construction	Pyramid Ranch	Coachella, California Homes	Pulte	Yes
4	**Tripoli Mixed-Use Project**	Change of Zone (CZ) 22-01 Conditional Use Permit (CUP) 351 Architectural Review (AR) 22-04	Mixed-Use (multi-family & retail)	Coachella	Northeast Corner of Cesar Chavez Street and Bagdad Avenue	108 Apartment units and 2 retail units with Building A 3-stories and Building B 4-stories; 2.83 acres	Planning Commission approved 4/20/22, City Council Approved 5/11/22	Under Construction		Yes
5	**Villa Verde Apartments**	AR No. 19-06, CZ 19-01	Multi-family residential	Coachella	84-824 Calle Verde	152-unit Apartment Community with one to three bedroom dwellings (27 freestanding buildings) at 84-824 Calle Verde. The developments consist of 1, 2 and 3-bedroom apartment units, including: Property management and resident service office, Community room, Laundry facilities, Common open spaces spread over five patio areas; 9.4 acres	Approved Administrative Review 2/20/20	Will begin construction by: 12/2025 Completion slated for: Fall 2027		Yes
6	**Vista Del Agua**	TTM 38145 (related cases - SP 14-01, GPA 14-01, CZ 14-01, EA14-04, TPM 36872) SCH No. 2015031003	Single-family residential w/ commercial, neighborhood center & park	Coachella	East of Tyler Street, north of Avenue 48, and west of Polk Street, on the south side of the I-10 Freeway and Vista Del Sur. APN 603-150-005, -007, -009, -010 & -011	TTM38145 is to subdivide 42.92 acres into 204 single family lots TTM 38146 is to divide 46.92 acres into 254 single-family lots (APN: 603-150-009, 010 & -011) The "Vista Del Agua" project is a proposed master-planned community to be developed on 275.38 acres of vacant land located east of Tyler Street, north of Avenue 48, and west of Polk Street, on the south side of the I-10 Freeway and Vista Del Sur. The project will include a variety of residential neighborhoods with up to 1,640 total dwelling units, plus 17.57 acres of General Commercial use, 8.27 acres of Neighborhood Center with Residential Overlay, and a 13.82 park site. The proposed roadway network includes a new public street to connect Vista Del Sur to Avenue 48, and Polk Street to Avenue 47.	Planning Commission approved 5/13/20	Under review		Yes
7	**Coachella Gateway**	CUP 254 (Modification), AR 24-02 Coachella Gateway	Commercial Project (multi-tenant) w/ drive-thru restaurant	Coachella	48151 Grapefruit Blvd. Southwest corner of Grapefruit Boulevard and Avenue 48	A 4,605 SF multi-tenant commercial building that will include a drive-thru restaurant and two other tenants; 4.85 acres	Planning Commission Approved 7/7/24	Under review		Yes
8	**Coachella Vineyards/Hotel Ozara**	AR No. 16-03 (Modification), CUP 266, TTM 37040, EA 16-01	Commercial Project (RV Subdivision/Resort)	Coachella	Northeast Corner of Vista Del Norte and Tyler Street	The project is for a RV Subdivision/Resort that includes 188 lots for Recreational Vehicles, 100 unit two bedroom townhomes, and an 11-story 200-room hotel and associated facilities. The project includes an 8-story parking structure and a retail plaza that includes 4 retail buildings; 48 acres	Original Approval – 9/26/2018 Modification Planning Commission Approved – 2/29/24	Under Construction- Phase 1 Operational as of 9/2024	ITEM-Attachment-001-3f3afa5d9def4eacab00e679c3450e75.pdf	Yes
9	**Fountainhead Plaza**	CUP 346, 347, AR 21-12 (related to CUP 321, 322, AR 20-03 and TPM 37940)	Commercial Project (Retail Center/ Shopping Center)	Coachella	Northeast corner of 1st Street and Cesar Chavez Street	New 20,422 sq. ft. Aldi supermarket, 2,600 sq. ft. Panda Express and 2,050 sq. ft. Starbucks on 8.25 acres at the NEC of 1st Street and Cesar Chavez Street	City Council Approved 1/26/2022	Under Construction		Yes
10	**HOTN/Sinsemilla Dispensary & Pub Project**	CUP 299, CUP 300, CZ 18-03	Commercial Project (Cannabis)	Coachella	1694 6th Street	1,839 sq. ft. retail cannabis dispensary and 1,432 sq. ft. bar/pub; .11 ares	Planning Commission Approved 3/20/19 CC Approved 5/8/19	Under Construction		Yes
11	**JJWR Industrial Development**	TPM 38218, AR 21-07, CUP 354	Commercial Project (Industrial warehouses and offices w/ RV storage)	Coachella	53-457 and 53-459 Enterprise Way	Construction of two 25,750 sq. ft. industrial building to create up to 32 warehouse condos and 8 office condos of which some will accommodate RV storage; 3.29 acres	PC Approved 5/18/22, CC Approved 6/8/22	Under review		Yes
12	**Roots Café**	CUP No. 374, AR No. 23-16	Commercial Project (Cannabis)	Coachella	45800 Dillon Road	Construction of a 1,750 sq. ft. retail cannabis business within an existing building located in the R-C (Regional Commercial) zone; 1.27 acres	Planning Commission Approved 7/3/2024	Under review		Yes
13	**Sun Community Credit Union**	AR 24-07, CUP 381	Commercial Project (Bank)	Coachella	NEC of Cesar Chavez St and Valley Rd	4,130 sq. ft. commercial bank; 1.97 acres	Planning Commission Approved 7/3/24	Under Construction Completion slated for: Early 2026		Yes
14	**Pueblo Cannabis**	CUP 336, CZ 20-08	Commercial Project (Cannabis)	Coachella	85-591 Grapefruit Blvd	A 1500 sq. ft. retail cannabis dispensary in an existing building on .30 acres of land in the CG-RC zone	Planning Commission Approved 5/26/21, City Council Approved 6/9/21 – CZ Time Extension for CUP Approved by PC 6/15/22	Under Construction Completion slated for: Spring 2026		Yes
15	**West Coast Self Storage**		Commercial	Indio	NEC OF DR CARREON BLVD AND CALHOUN ST, INDIO, CA 92201; A. P. N. 612-130-008	The proposed project is for the construction of a self-storage facility within an approximate 62,000 squarefoot building along with 72 parking stalls.	Approved	Under review		Yes
16	**Riverside County Office of Education**	SCH No. 2024010419	Commercial (Zone M)	Indio	South of Dr. Carreon Blvd., east of Calhoun St., and north of Quail Ave	The proposed project, Riverside County Office of Education Facilities Expansion, is proposing the development of a 33,000-square-foot Riverside County of Education Facilities Expansion Project for a new conference center, offices, warehouse storage, and parking lot.	Approved	Under Construction		Yes
17	**JFM Villas**	SCH No. 2025051381	Residential (High)	Indio	SWC of Dr. Carreon Blvd. and Van Buren Street	Tentative Parcel Map No. 38805 to subdivide 34.43-acres into two new parcels measuring 2.58 acres and 5.52 acres and a 25.87-acre remainder. The purpose of the map is to support the development of an additional 150 residential units, including 100 multi-family units and 50 senior housing units, within the density limits established in the Specific Plan.	Approved	Expected to begin construction by Spring 2025	Proposed zoning change to Fred Young SP	Yes
18	**Sierra Blanca**		Single-family residential	La Quinta	South of Avenue 54 and north of Mountain View Lane, between Monroe St and Ardennas Dr.	34 single family home units	Approved	Under Construction	Sierra Blanca Development	Yes

19	**Bravo Estates**	Site development permit 2024-0001? Resolution No. 2025-002	Single-family residential	La Quinta	Northwest corner of Madison Street and Avenue 52; APN: 777-470-001 through -014	A proposal to develop 14 one-story single-family homes. The site is 8.4 acres and zoned Very Low Density Residential, which allows up to 2 units per acre. The project includes a development agreement to allow for year-round short-term vacation rentals. Access to the project is off Madison Street.	Approved 1/21/25	Under review		Yes
20	**East of Monroe Residential**	TR36902, TR36902E01	Single-family residential	Riverside County	South of Avenue 55, east of Monroe St.	SCHEDULE A SUBDIVISION TO DIVIDE 40 GROSS ACRES INTO 80 SINGLE FAMILY RESIDENTIAL LOTS WITH LOT SIZES RANGING FROM APPROXIMATELY 10,000 SQ. FT. TO 39,700 SQ. FT. INCLUDING PRIVATE STREETS ALONG WITH OPEN SPACE RETENTION BASIN AND PERIMETER BUFFERS. 1ST EOT FOR TR36902 EXTENDING THE EXPIRATION DATE 3 YEARS TO 6/9/2026.	Approved 5/23/2023	Under review		Yes
21	**Quick-Crete Products Facility**	PPT250012	Commercial	Riverside County	South of Avenue 54, west of Shady Ln.	PLOT PLAN FOR A QUICK-CRETE PRODUCTS FACILITY (RELOCATING FROM A FACILITY IN NORCO, CALIFORNIA) FOR THE CREATION OF CONCRETE BENCHES, CONTAINERS, AND TABLES WITHIN A 100,000 SQ. FT. BUILDING. WITH 3 BUILDINGS (TOTALING 2,800 SQ. FT. FOR SECURITY/CARETAKER, CUSTOMER EXPERIENCE & ADMINISTRATION), A CONCRETE BATCH PLANT, A 55,000 SQ. FT. PRODUCT & SCULPTURE GARDEN, A 75,000 SQ. FT. OUTDOOR STORAGE AREA FOR FINISHED PRODUCT, A 70,000 SQ. FT. AREA FOR MOLD STORAGE, A 190,000 SQ. FT. AREA FOR WATER DETENTION/FUTURE EXPANSION, AND 135 PARKING SPACES. (CVE: 24001)	Approved 2/21/2025	Under review		Yes
22	**Townhomes**	PPT240006	Multi-Family Residential	Riverside County	South of Avenue 54, east of Jackson st.	THE PROPOSED PROJECT INCLUDES DEVELOPMENT OF 158 NEW TOWNHOUSE (MULTI-FAMILY) UNITS ON APPROXIMATELY 18.22 DEVELOPABLE ACRES.	Approved 5/15/2024	Under review		Yes

Appendix C: Intersection Turning Movement Counts

INTERSECTION TURNING MOVEMENT COUNTS

T112224

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, May 6, 25

LOCATION: Coachella
NORTH & SOUTH: Calhoun St
EAST & WEST: 52nd Ave

PROJECT #: SC5374
LOCATION #: 1
CONTROL: STOP ALL

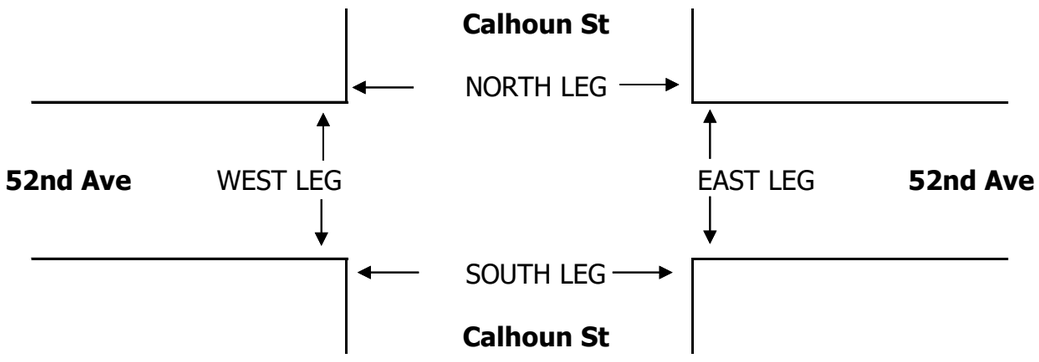
NOTES:

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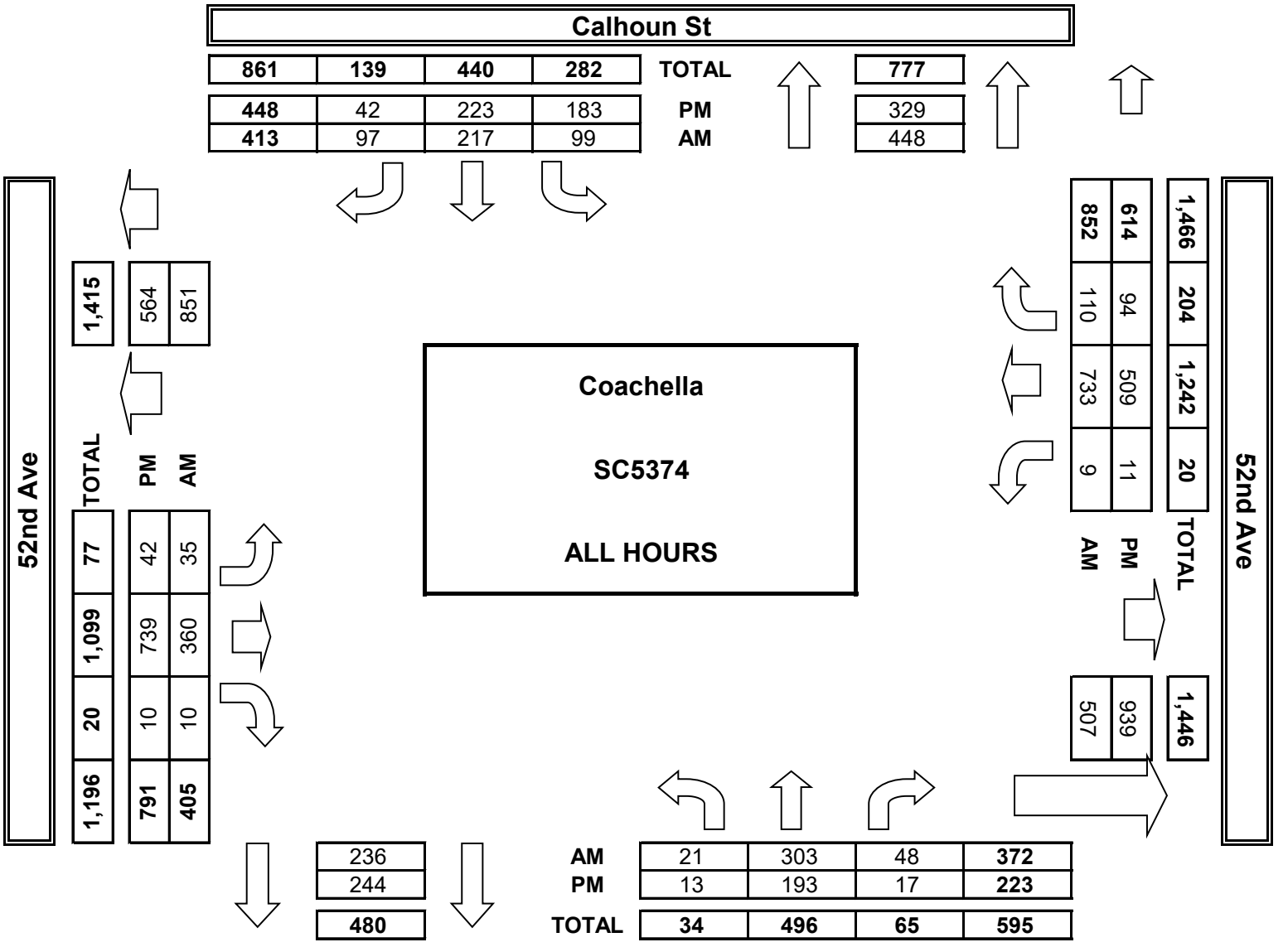
		NORTHBOUND Calhoun St			SOUTHBOUND Calhoun St			EASTBOUND 52nd Ave			WESTBOUND 52nd Ave			
	LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
AM	7:00 AM	4	66	19	10	46	3	2	21	0	3	55	10	239
	7:15 AM	6	75	16	12	27	10	2	37	1	1	84	22	293
	7:30 AM	2	39	1	17	33	8	4	33	2	0	102	15	256
	7:45 AM	1	42	4	21	36	14	1	51	1	1	94	11	277
	8:00 AM	3	27	5	15	32	5	2	44	1	0	104	20	258
	8:15 AM	1	27	2	11	20	6	6	49	2	2	109	14	249
	8:30 AM	3	15	1	5	8	26	7	57	3	1	95	8	229
	8:45 AM	1	12	0	8	15	25	11	68	0	1	90	10	241
	VOLUMES	21	303	48	99	217	97	35	360	10	9	733	110	2,042
	APPROACH %	6%	81%	13%	24%	53%	23%	9%	89%	2%	1%	86%	13%	
	APP/DEPART	372	/	448	413	/	236	405	/	507	852	/	851	0
	BEGIN PEAK HR		7:15 AM											
	VOLUMES	12	183	26	65	128	37	9	165	5	2	384	68	1,084
	APPROACH %	5%	83%	12%	28%	56%	16%	5%	92%	3%	0%	85%	15%	
	PEAK HR FACTOR		0.570			0.810			0.844			0.915		0.925
	APP/DEPART	221	/	260	230	/	135	179	/	256	454	/	433	0
PM	4:00 PM	4	37	3	18	29	6	10	119	1	2	86	15	330
	4:15 PM	2	32	2	21	25	1	6	87	2	1	46	8	233
	4:30 PM	1	12	3	33	27	6	5	85	0	1	64	12	249
	4:45 PM	2	21	3	24	29	4	4	88	2	1	61	18	257
	5:00 PM	1	25	1	19	26	8	3	92	2	0	77	7	261
	5:15 PM	0	22	2	22	29	9	6	104	2	2	55	11	264
	5:30 PM	1	19	1	25	30	6	4	91	1	2	57	8	245
	5:45 PM	2	25	2	21	28	2	4	73	0	2	63	15	237
	VOLUMES	13	193	17	183	223	42	42	739	10	11	509	94	2,076
	APPROACH %	6%	87%	8%	41%	50%	9%	5%	93%	1%	2%	83%	15%	
	APP/DEPART	223	/	329	448	/	244	791	/	939	614	/	564	0
	BEGIN PEAK HR		4:00 PM											
	VOLUMES	9	102	11	96	110	17	25	379	5	5	257	53	1,069
	APPROACH %	7%	84%	9%	43%	49%	8%	6%	93%	1%	2%	82%	17%	
	PEAK HR FACTOR		0.693			0.845			0.787			0.765		0.810
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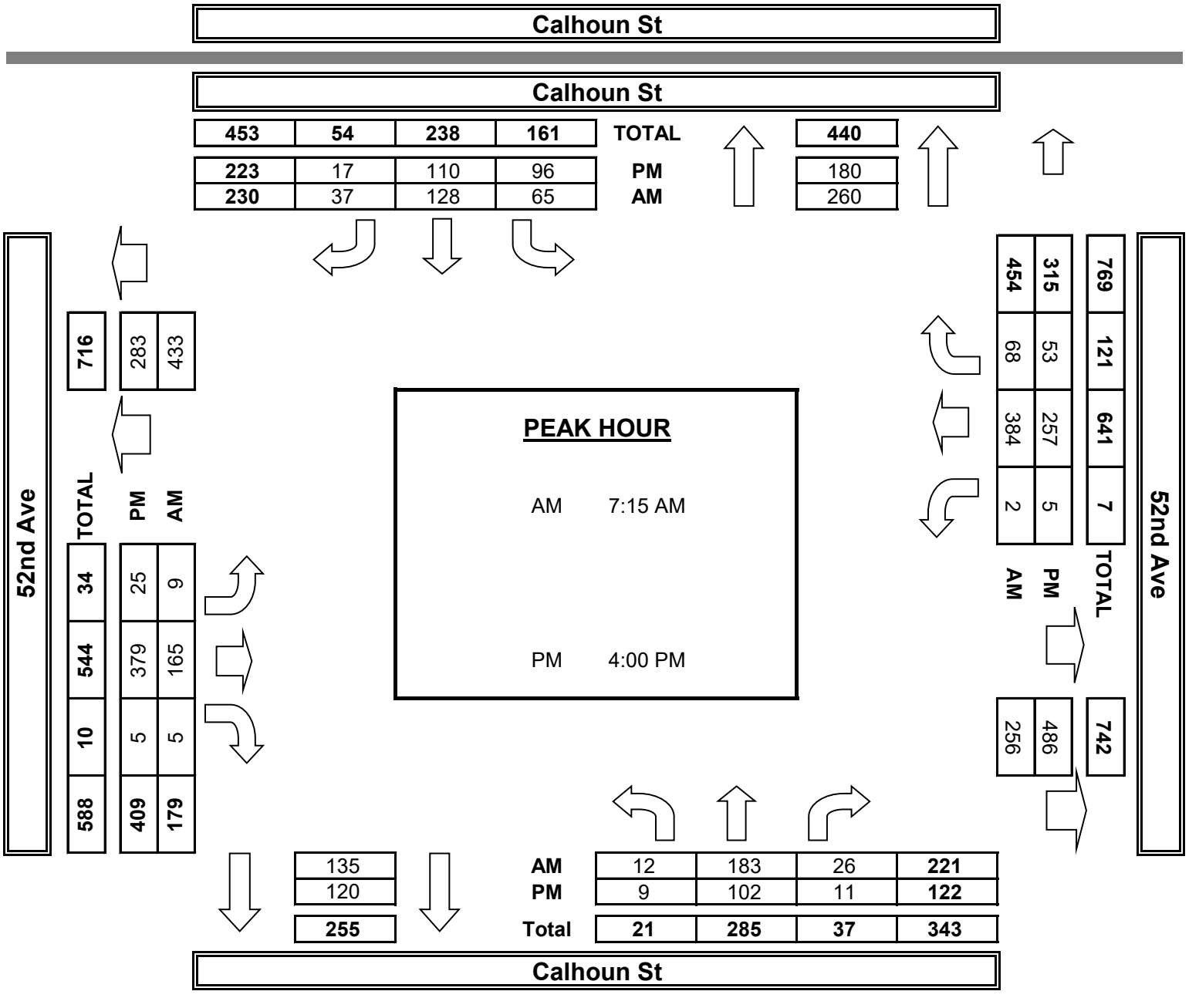
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0	0	0	0	0
0	0	0	0	0
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AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

T112224

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, May 6, 25

LOCATION: Coachella
NORTH & SOUTH: Van Buren St
EAST & WEST: 52nd Ave

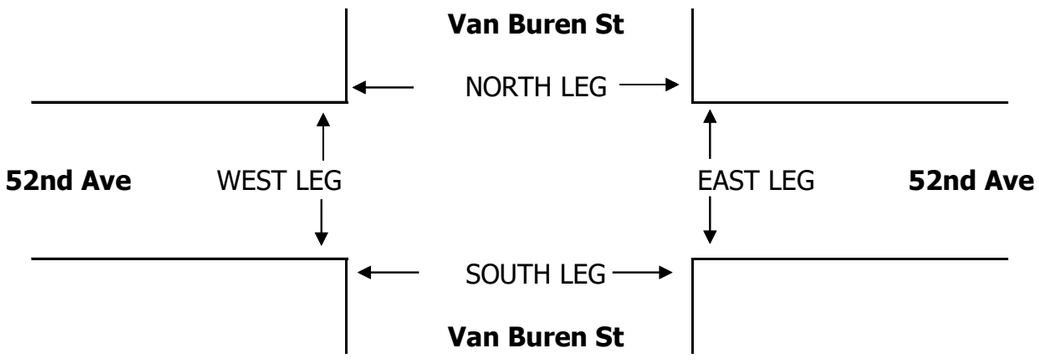
PROJECT #: SC5374
LOCATION #: 2
CONTROL: SIGNAL

NOTES:

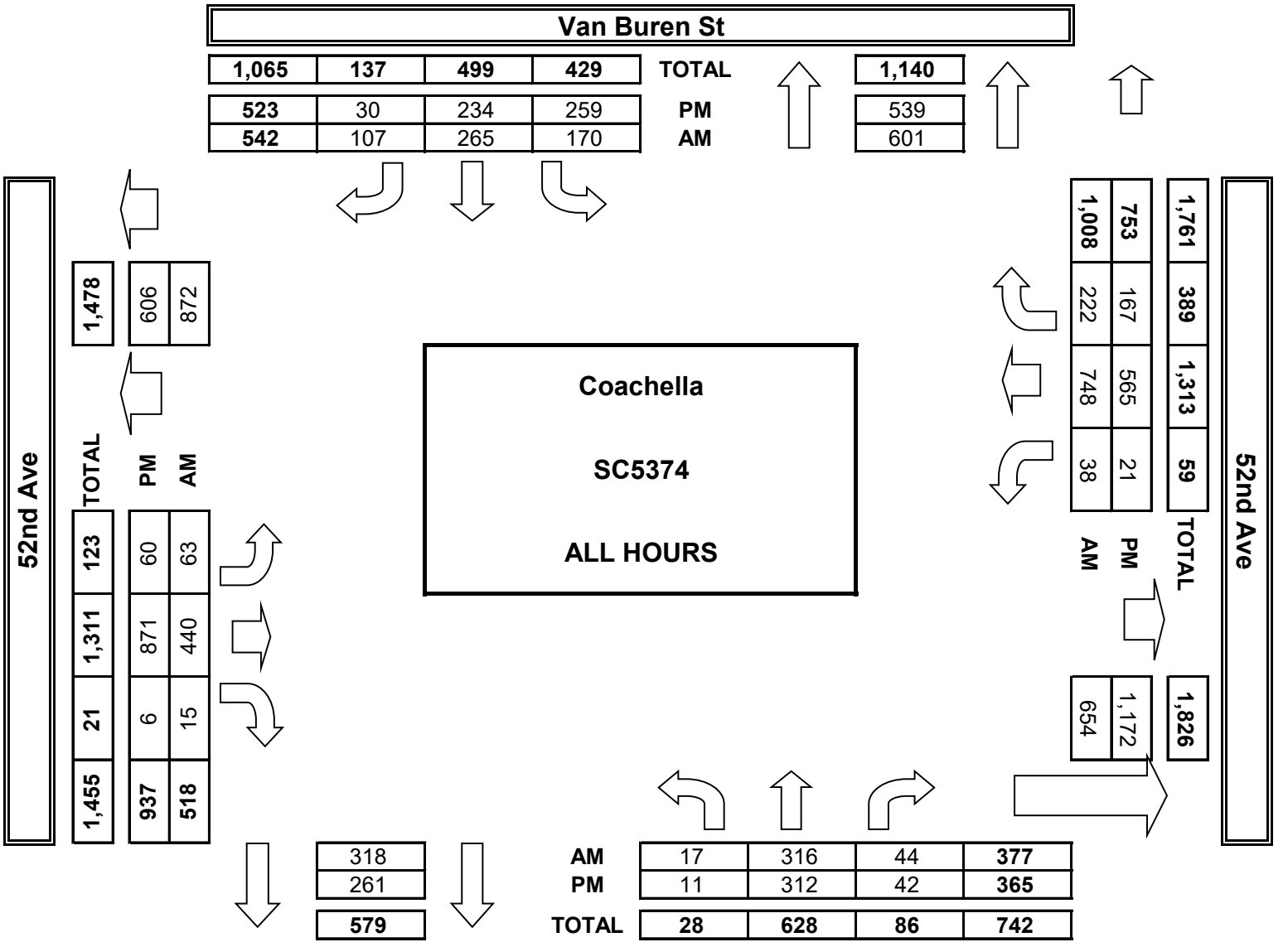
AM
PM
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OTHER

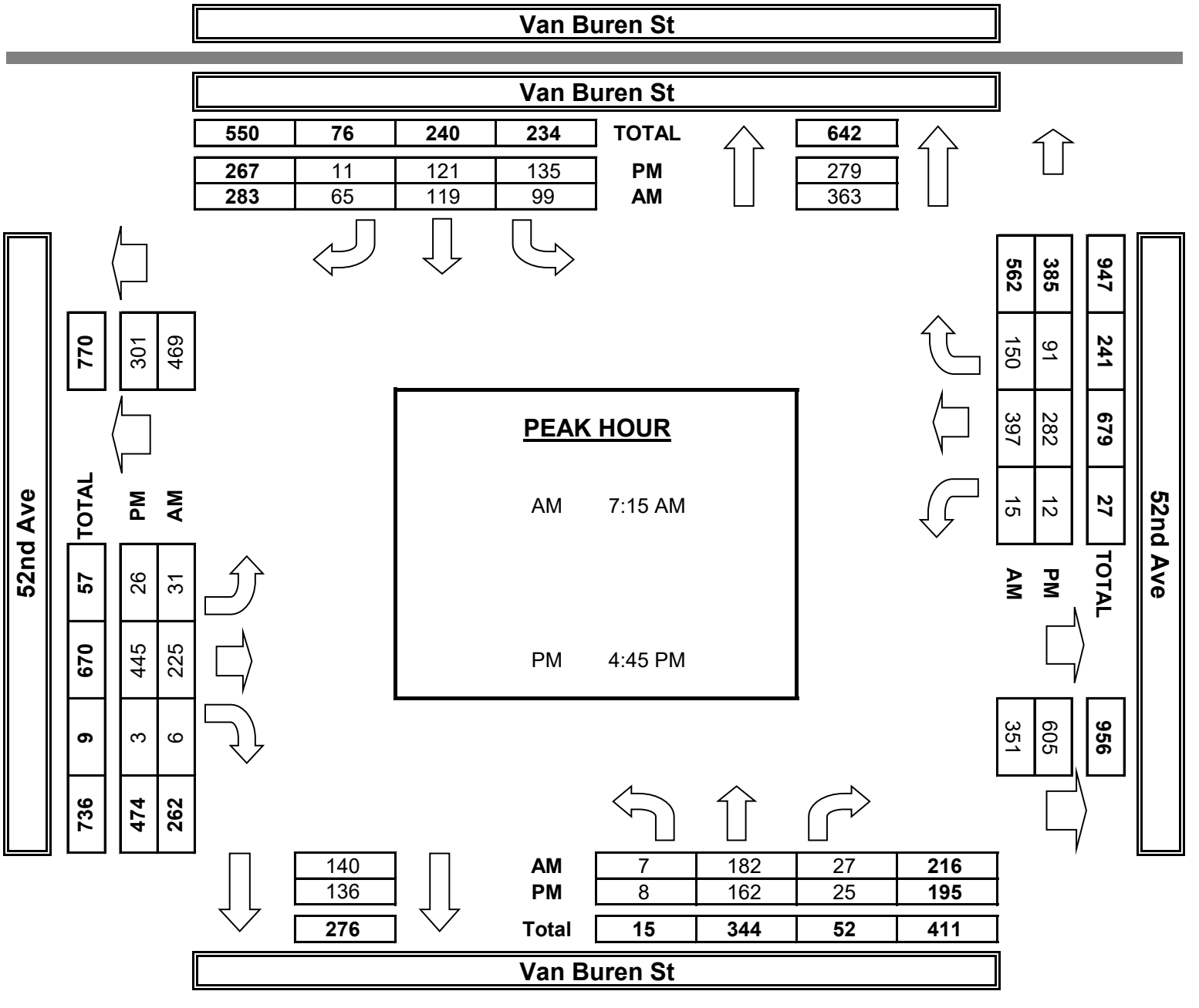
▲ N
◄ W
E ►
S ▼

		NORTHBOUND Van Buren St			SOUTHBOUND Van Buren St			EASTBOUND 52nd Ave			WESTBOUND 52nd Ave				U-TURNS				
	LANES:	NL 1	NT 1	NR 0	SL 1	ST 1	SR 0	EL 1	ET 1	ER 0	WL 1	WT 1	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	5	55	9	5	69	6	8	49	0	14	68	15	303	0	0	0	0	0
	7:15 AM	1	57	11	7	36	6	11	57	0	7	102	21	316	0	0	0	0	0
	7:30 AM	2	46	7	17	33	11	4	45	0	1	107	33	306	0	0	0	0	0
	7:45 AM	3	42	2	34	27	22	10	60	3	3	83	48	337	0	0	0	0	0
	8:00 AM	1	37	7	41	23	26	6	63	3	4	105	48	364	0	0	0	0	0
	8:15 AM	2	23	2	45	33	17	5	49	4	3	96	28	307	0	0	0	0	0
	8:30 AM	2	27	4	11	21	10	7	54	3	1	97	13	250	0	0	0	0	0
	8:45 AM	1	29	2	10	23	9	12	63	2	5	90	16	262	0	0	0	0	0
	VOLUMES	17	316	44	170	265	107	63	440	15	38	748	222	2,445	0	0	0	0	0
	APPROACH %	5%	84%	12%	31%	49%	20%	12%	85%	3%	4%	74%	22%						
	APP/DEPART	377	/	601	542	/	318	518	/	654	1,008	/	872	0					
	BEGIN PEAK HR		7:15 AM																
	VOLUMES	7	182	27	99	119	65	31	225	6	15	397	150	1,323	0	0	0	0	
	APPROACH %	3%	84%	13%	35%	42%	23%	12%	86%	2%	3%	71%	27%						
	PEAK HR FACTOR		0.783			0.786			0.897			0.895		0.909					
	APP/DEPART	216	/	363	283	/	140	262	/	351	562	/	469	0					
PM	4:00 PM	2	45	7	18	28	7	16	123	2	4	83	12	347	0	0	0	0	0
	4:15 PM	0	38	3	43	26	6	5	114	0	0	50	20	305	0	0	0	0	0
	4:30 PM	0	45	5	30	31	4	8	107	0	4	74	23	331	0	0	0	0	0
	4:45 PM	2	32	6	28	29	1	6	110	2	4	79	12	311	0	0	0	0	0
	5:00 PM	4	57	8	28	34	2	7	100	0	3	77	20	340	0	0	0	0	0
	5:15 PM	0	40	3	31	29	1	8	117	0	5	63	27	324	0	0	0	0	0
	5:30 PM	2	33	8	48	29	7	5	118	1	0	63	32	346	0	0	0	0	0
	5:45 PM	1	22	2	33	28	2	5	82	1	1	76	21	274	0	0	0	0	0
	VOLUMES	11	312	42	259	234	30	60	871	6	21	565	167	2,578	0	0	0	0	0
	APPROACH %	3%	85%	12%	50%	45%	6%	6%	93%	1%	3%	75%	22%						
	APP/DEPART	365	/	539	523	/	261	937	/	1,172	753	/	606	0					
	BEGIN PEAK HR		4:45 PM																
	VOLUMES	8	162	25	135	121	11	26	445	3	12	282	91	1,321	0	0	0	0	
	APPROACH %	4%	83%	13%	51%	45%	4%	5%	94%	1%	3%	73%	24%						
	PEAK HR FACTOR		0.707			0.795			0.948			0.963		0.954					
	APP/DEPART	195	/	279	267	/	136	474	/	605	385	/	301	0					



AimTD LLC
TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

T112224

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, May 6, 25

LOCATION: Coachella
NORTH & SOUTH: Calhoun St
EAST & WEST: 51st Ave

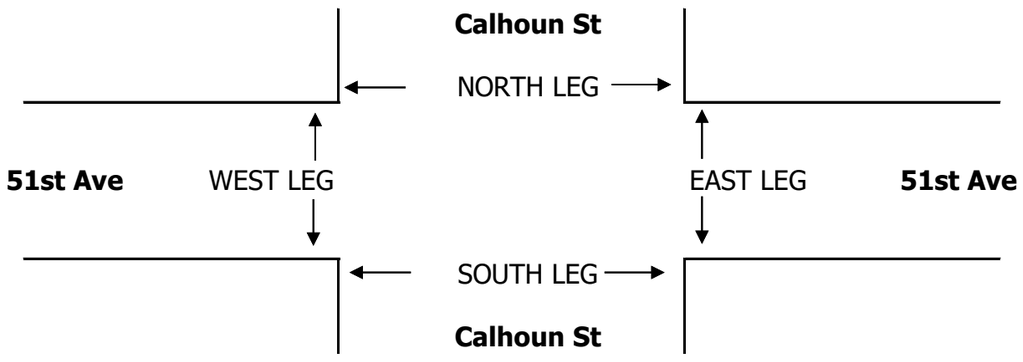
PROJECT #: SC5374
LOCATION #: 3
CONTROL: STOP ALL

NOTES:
Minor Construction AM; Queue NB PM

AM
PM
MD
OTHER
OTHER

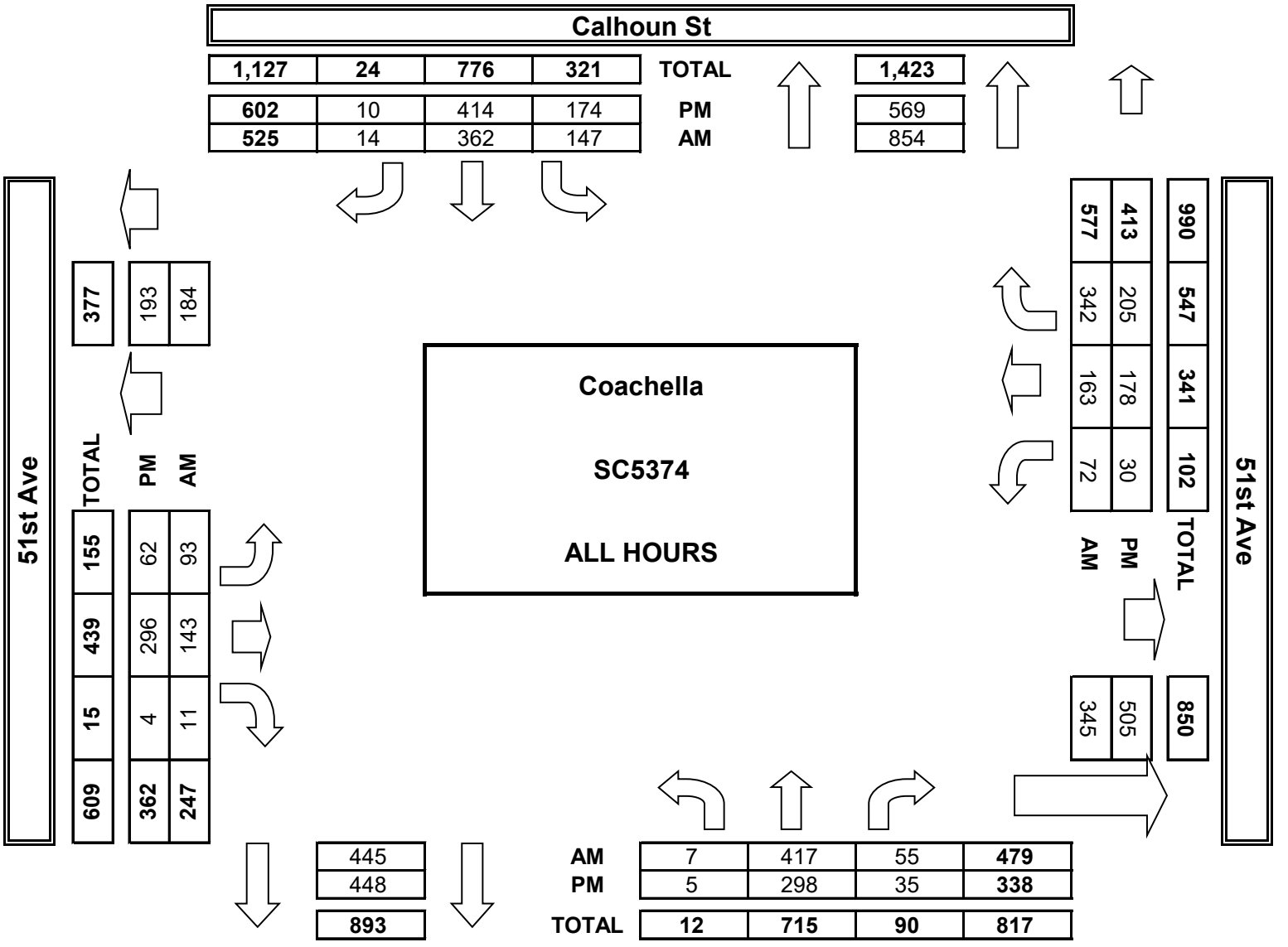
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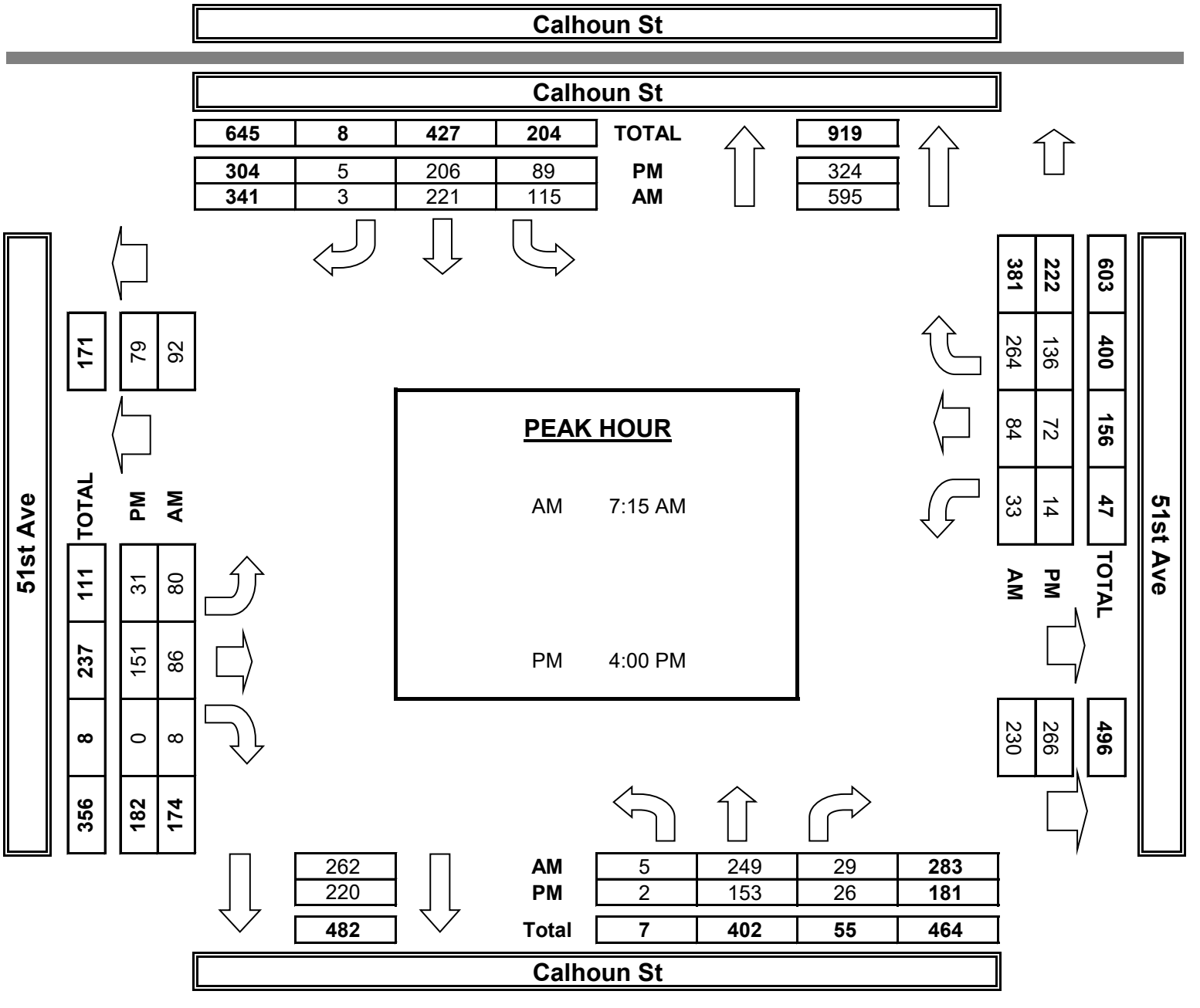
	NORTHBOUND Calhoun St			SOUTHBOUND Calhoun St			EASTBOUND 51st Ave			WESTBOUND 51st Ave				U-TURNS				
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 1	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM 7:00 AM	0	71	15	2	58	2	8	8	1	3	14	29	211	0	0	0	0	0
7:15 AM	2	85	17	19	49	0	13	14	3	4	23	27	256	0	1	0	0	1
7:30 AM	1	62	3	30	58	1	23	21	3	9	18	91	320	0	0	0	0	0
7:45 AM	1	55	5	34	70	1	34	37	1	7	18	91	354	0	1	0	0	1
8:00 AM	1	47	4	32	44	1	10	14	1	13	25	55	247	0	0	0	0	0
8:15 AM	1	44	3	12	29	3	2	8	1	5	20	25	153	0	0	0	0	0
8:30 AM	0	25	4	7	20	2	0	21	0	15	22	13	129	0	0	0	0	0
8:45 AM	1	28	4	11	34	4	3	20	1	16	23	11	156	0	0	0	0	0
VOLUMES	7	417	55	147	362	14	93	143	11	72	163	342	1,828	0	2	0	0	2
APPROACH %	1%	87%	11%	28%	69%	3%	38%	58%	4%	12%	28%	59%						
APP/DEPART	479	/	854	525	/	445	247	/	345	577	/	184	0					
BEGIN PEAK HR		7:15 AM																
VOLUMES	5	249	29	115	221	3	80	86	8	33	84	264	1,179	0	2	0	0	
APPROACH %	2%	88%	10%	34%	65%	1%	46%	49%	5%	9%	22%	69%						
PEAK HR FACTOR		0.680			0.804			0.604			0.807		0.830					
APP/DEPART	283	/	595	341	/	262	174	/	230	381	/	92	0					
PM 4:00 PM	0	50	8	24	50	2	10	48	0	4	14	15	225	0	0	0	0	0
4:15 PM	2	35	9	23	51	0	4	41	0	2	24	32	223	0	1	0	0	1
4:30 PM	0	23	6	19	54	1	5	36	0	3	20	62	229	0	2	0	0	2
4:45 PM	0	45	3	23	51	2	12	26	0	5	14	27	208	0	1	0	0	1
5:00 PM	1	35	2	13	52	4	13	30	0	1	18	23	192	0	0	0	0	0
5:15 PM	1	35	3	26	59	1	8	36	4	5	23	13	214	0	0	0	0	0
5:30 PM	0	32	3	30	56	0	7	54	0	6	32	18	238	0	0	0	0	0
5:45 PM	1	43	1	16	41	0	3	25	0	4	33	15	182	0	0	0	0	0
VOLUMES	5	298	35	174	414	10	62	296	4	30	178	205	1,715	0	4	0	0	4
APPROACH %	1%	88%	10%	29%	69%	2%	17%	82%	1%	7%	43%	50%						
APP/DEPART	338	/	569	602	/	448	362	/	505	413	/	193	0					
BEGIN PEAK HR		4:00 PM																
VOLUMES	2	153	26	89	206	5	31	151	0	14	72	136	889	0	4	0	0	
APPROACH %	1%	85%	14%	29%	68%	2%	17%	83%	0%	6%	32%	61%						
PEAK HR FACTOR		0.780			0.987			0.784			0.653		0.962					
APP/DEPART	181	/	324	304	/	220	182	/	266	222	/	79	0					



AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

T112224

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, May 6, 25

LOCATION: Coachella
NORTH & SOUTH: Van Buren St
EAST & WEST: 51st Ave

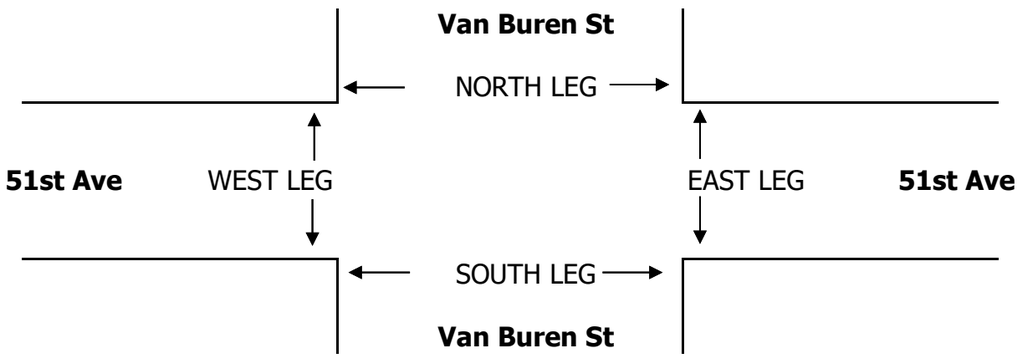
PROJECT #: SC5374
LOCATION #: 4
CONTROL: SIGNAL

NOTES:

AM
PM
MD
OTHER
OTHER

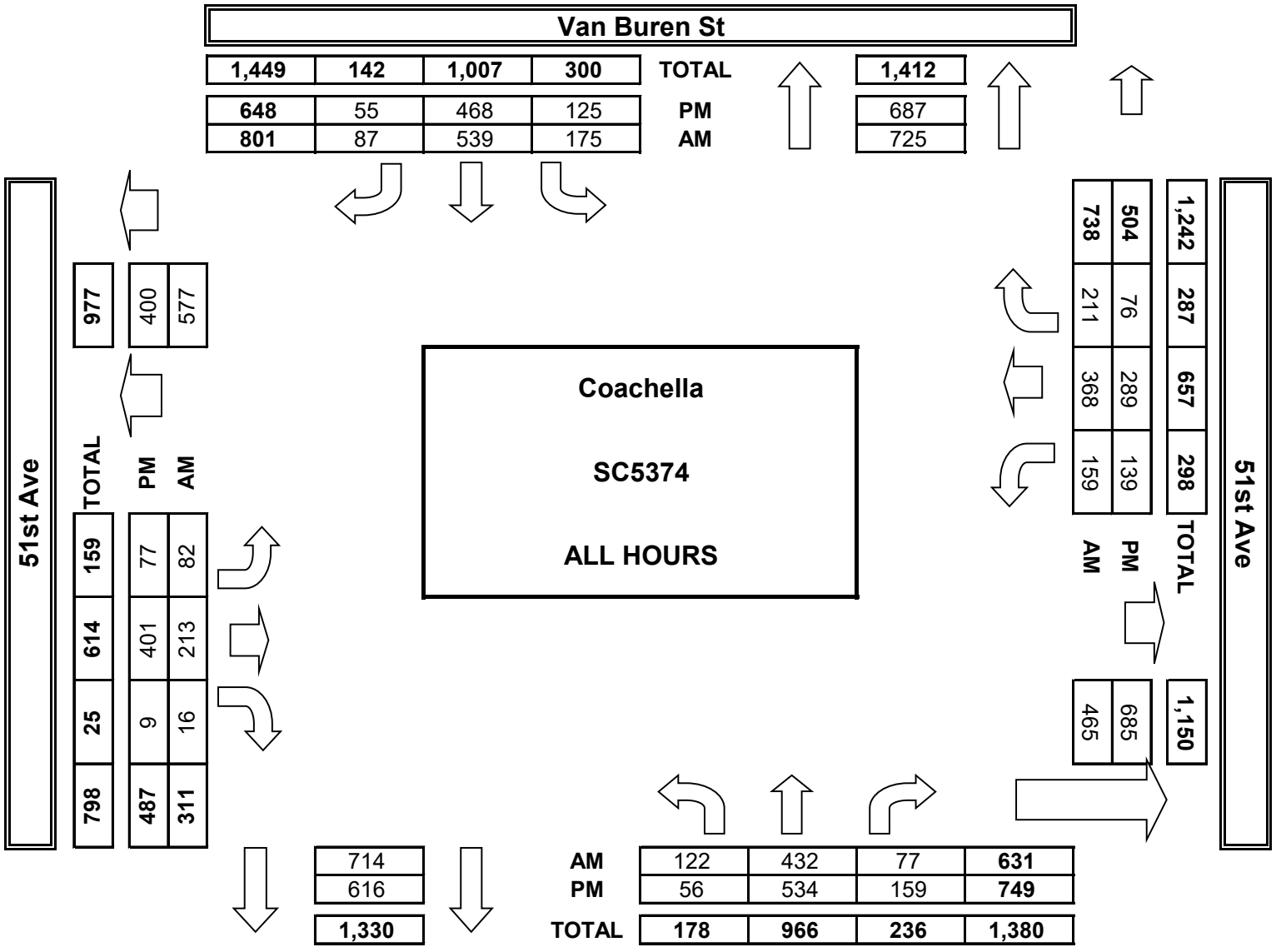
▲ N
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S ▼

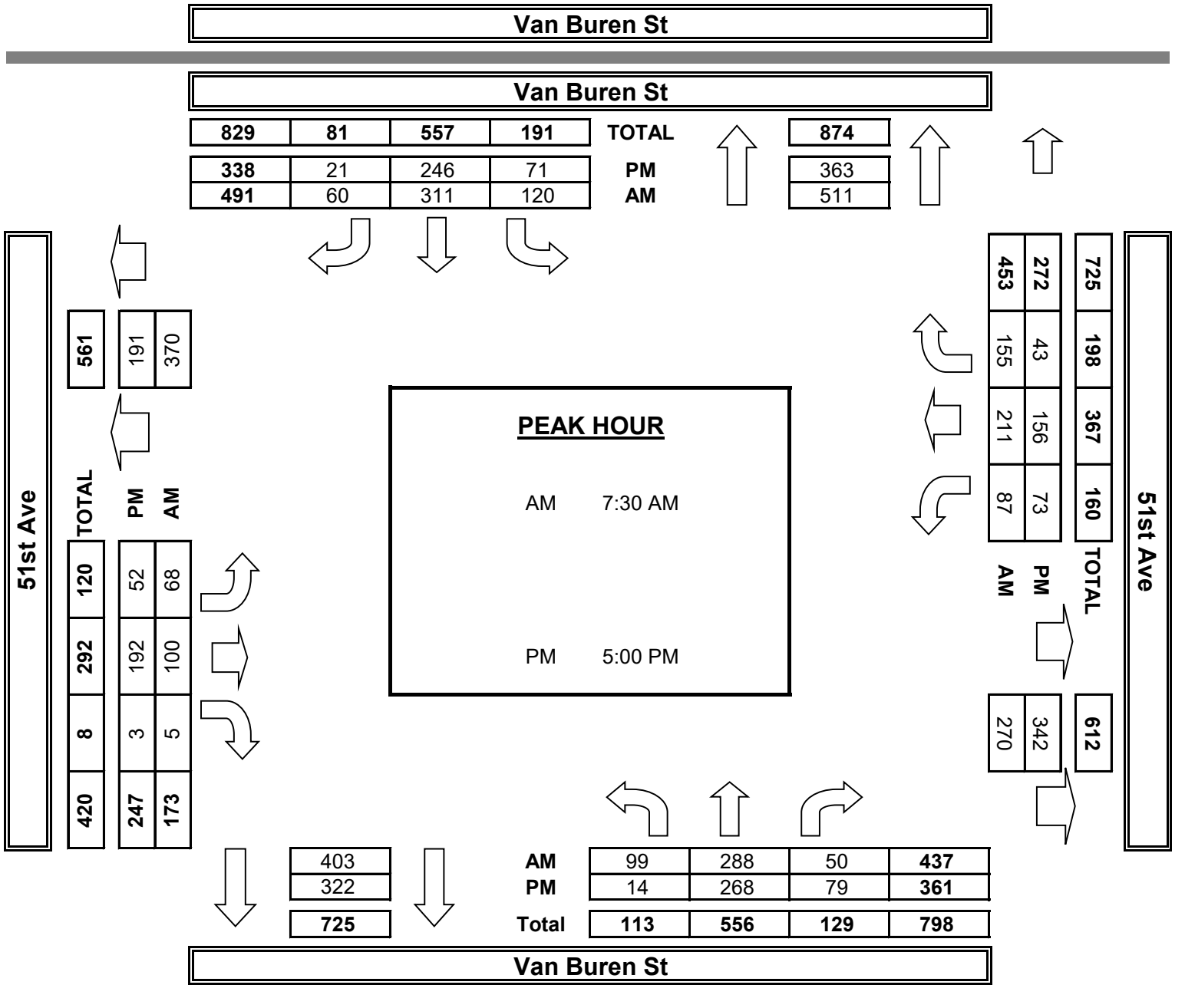
		NORTHBOUND Van Buren St			SOUTHBOUND Van Buren St			EASTBOUND 51st Ave			WESTBOUND 51st Ave				U-TURNS				
	LANES:	NL 1	NT 1	NR 0	SL 1	ST 1	SR 0	EL 1	ET 1	ER 0	WL 1	WT 1	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	5	43	2	17	68	5	2	22	3	23	38	27	255	0	0	0	0	0
	7:15 AM	13	36	5	21	67	11	6	36	3	16	34	15	263	0	0	0	0	0
	7:30 AM	45	73	11	21	70	24	13	24	2	20	59	34	396	0	0	0	0	0
	7:45 AM	38	91	6	30	81	18	28	28	3	34	63	50	470	0	0	0	0	0
	8:00 AM	13	72	21	35	80	10	17	33	0	19	52	58	410	0	0	0	0	0
	8:15 AM	3	52	12	34	80	8	10	15	0	14	37	13	278	0	0	0	0	0
	8:30 AM	3	33	12	11	40	8	4	25	3	18	41	8	206	0	0	0	0	0
	8:45 AM	2	32	8	6	53	3	2	30	2	15	44	6	203	0	0	0	0	0
	VOLUMES	122	432	77	175	539	87	82	213	16	159	368	211	2,481	0	0	0	0	0
	APPROACH %	19%	68%	12%	22%	67%	11%	26%	68%	5%	22%	50%	29%						
	APP/DEPART	631	/	725	801	/	714	311	/	465	738	/	577	0					
	BEGIN PEAK HR		7:30 AM																
	VOLUMES	99	288	50	120	311	60	68	100	5	87	211	155	1,554	0	0	0	0	
	APPROACH %	23%	66%	11%	24%	63%	12%	39%	58%	3%	19%	47%	34%						
	PEAK HR FACTOR		0.809			0.952			0.733			0.770		0.827					
	APP/DEPART	437	/	511	491	/	403	173	/	270	453	/	370	0					
PM	4:00 PM	7	65	20	14	68	7	10	64	2	15	31	7	310	0	0	0	0	0
	4:15 PM	12	70	24	10	49	10	6	55	1	19	38	8	302	0	0	0	0	0
	4:30 PM	10	71	18	19	64	12	3	50	2	14	33	8	304	0	0	0	0	0
	4:45 PM	13	60	18	11	41	5	6	40	1	18	31	10	254	0	0	0	0	0
	5:00 PM	6	64	17	15	57	2	8	42	1	17	32	7	268	0	0	0	0	0
	5:15 PM	2	77	17	11	51	4	26	37	1	19	34	12	291	0	0	0	0	0
	5:30 PM	4	64	18	34	75	11	9	74	0	17	46	20	372	0	0	0	0	0
	5:45 PM	2	63	27	11	63	4	9	39	1	20	44	4	287	0	0	0	0	0
	VOLUMES	56	534	159	125	468	55	77	401	9	139	289	76	2,388	0	0	0	0	0
	APPROACH %	7%	71%	21%	19%	72%	8%	16%	82%	2%	28%	57%	15%						
	APP/DEPART	749	/	687	648	/	616	487	/	685	504	/	400	0					
	BEGIN PEAK HR		5:00 PM																
	VOLUMES	14	268	79	71	246	21	52	192	3	73	156	43	1,218	0	0	0	0	
	APPROACH %	4%	74%	22%	21%	73%	6%	21%	78%	1%	27%	57%	16%						
	PEAK HR FACTOR		0.940			0.704			0.744			0.819		0.819					
	APP/DEPART	361	/	363	338	/	322	247	/	342	272	/	191	0					



AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

T112224

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, May 6, 25

LOCATION: Coachella
NORTH & SOUTH: Calhoun St
EAST & WEST: Ave 50

PROJECT #: SC5374
LOCATION #: 5
CONTROL: SIGNAL

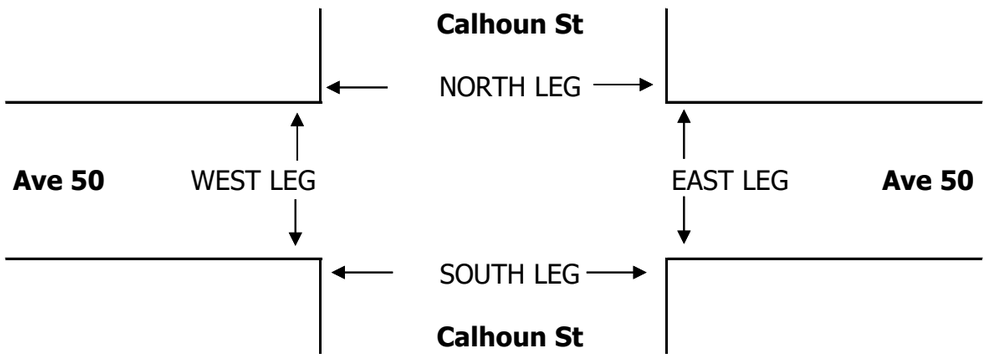
NOTES: Minor Constraction

AM PM MD OTHER OTHER — ▲ N, ◄ W, E ►, S ▼

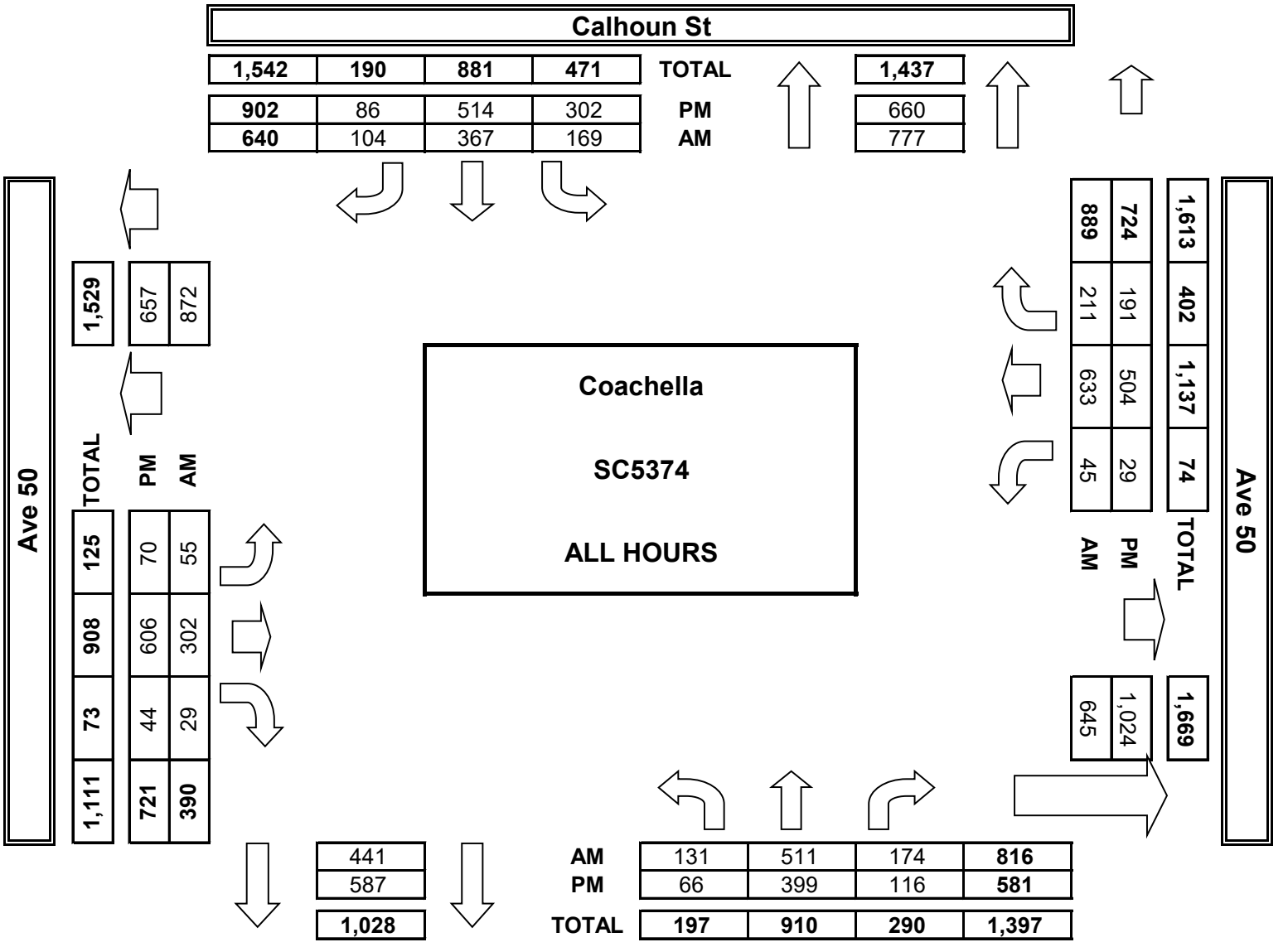
		NORTHBOUND Calhoun St			SOUTHBOUND Calhoun St			EASTBOUND Ave 50			WESTBOUND Ave 50			
	LANES:	NL 1	NT 1	NR 0	SL 1	ST 1.5	SR 0.5	EL 1	ET 1	ER 1	WL 2	WT 0.5	WR 0.5	TOTAL
AM	7:00 AM	19	78	14	14	47	8	5	26	3	4	53	22	293
	7:15 AM	16	90	13	19	59	15	4	33	3	5	96	30	383
	7:30 AM	19	80	45	30	54	12	7	52	3	5	91	26	424
	7:45 AM	24	89	59	34	65	20	6	43	3	14	89	36	482
	8:00 AM	20	76	21	22	46	8	9	27	5	8	86	34	362
	8:15 AM	16	48	13	16	34	9	6	47	5	2	67	30	293
	8:30 AM	9	22	6	15	21	13	7	42	3	3	84	19	244
	8:45 AM	8	28	3	19	41	19	11	32	4	4	67	14	250
	VOLUMES	131	511	174	169	367	104	55	302	29	45	633	211	2,735
	APPROACH %	16%	63%	21%	26%	57%	16%	14%	77%	7%	5%	71%	24%	
	APP/DEPART	816	/	777	640	/	441	390	/	645	889	/	872	0
	BEGIN PEAK HR		7:15 AM											
	VOLUMES	79	335	138	105	224	55	26	155	14	32	362	126	1,655
	APPROACH %	14%	61%	25%	27%	58%	14%	13%	78%	7%	6%	70%	24%	
	PEAK HR FACTOR		0.802			0.807			0.790			0.935		0.857
	APP/DEPART	552	/	487	384	/	270	199	/	398	520	/	500	0
PM	4:00 PM	11	59	15	45	68	13	21	100	6	0	71	18	427
	4:15 PM	10	39	14	35	71	11	5	75	12	5	54	25	356
	4:30 PM	9	56	21	46	40	6	7	79	4	5	69	36	378
	4:45 PM	7	62	19	32	57	9	6	80	5	5	48	30	360
	5:00 PM	8	44	16	40	64	9	8	69	2	3	59	20	342
	5:15 PM	7	46	14	23	69	11	7	81	5	4	71	17	355
	5:30 PM	5	44	4	44	87	14	4	58	7	4	70	28	369
	5:45 PM	9	49	13	37	58	13	12	64	3	3	62	17	340
	VOLUMES	66	399	116	302	514	86	70	606	44	29	504	191	2,928
	APPROACH %	11%	69%	20%	33%	57%	10%	10%	84%	6%	4%	70%	26%	
	APP/DEPART	581	/	660	902	/	587	721	/	1,024	724	/	657	0
	BEGIN PEAK HR		4:00 PM											
	VOLUMES	37	216	69	158	236	39	39	334	27	15	242	109	1,521
	APPROACH %	11%	67%	21%	36%	55%	9%	10%	84%	7%	4%	66%	30%	
	PEAK HR FACTOR		0.915			0.859			0.787			0.832		0.891
	APP/DEPART	322	/	364	433	/	278	400	/	561	366	/	318	0

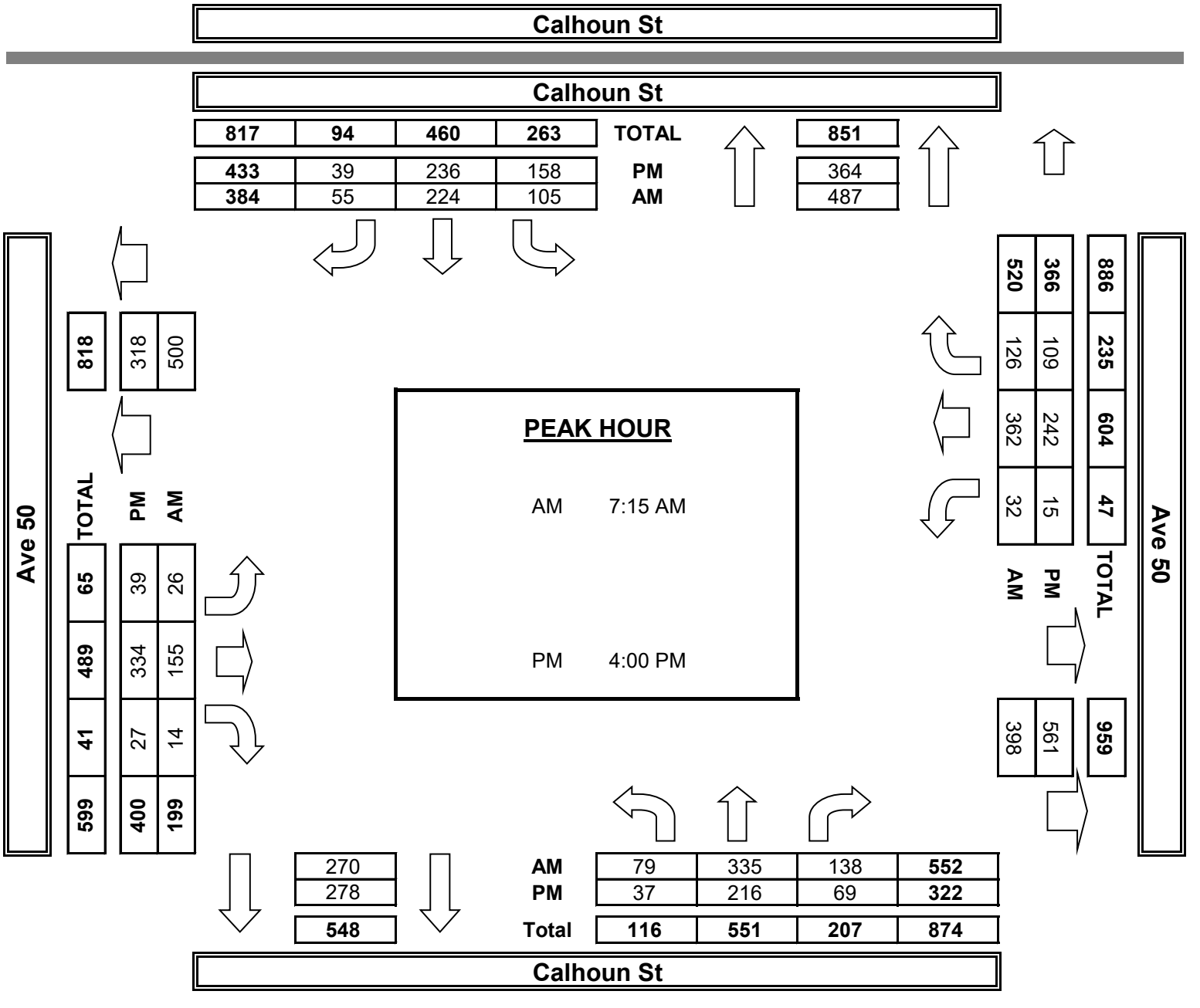
U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	
0	0	0	0	0
0	0	1	0	1
0	0	1	0	1
0	0	1	0	1
0	0	1	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	4	0	4
0	0	4	0	
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	1	0	1
0	0	0	0	0
0	0	0	0	0
0	0	1	0	1
0	0	0	0	



AimTD LLC
TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

T112224

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, May 6, 25

LOCATION: Coachella
NORTH & SOUTH: Van Buren St
EAST & WEST: Ave 50

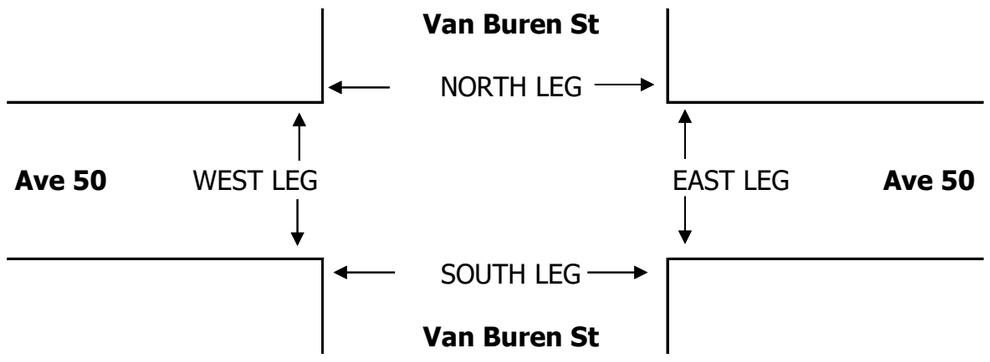
PROJECT #: SC5374
LOCATION #: 6
CONTROL: SIGNAL

NOTES:

AM
PM
MD
OTHER
OTHER

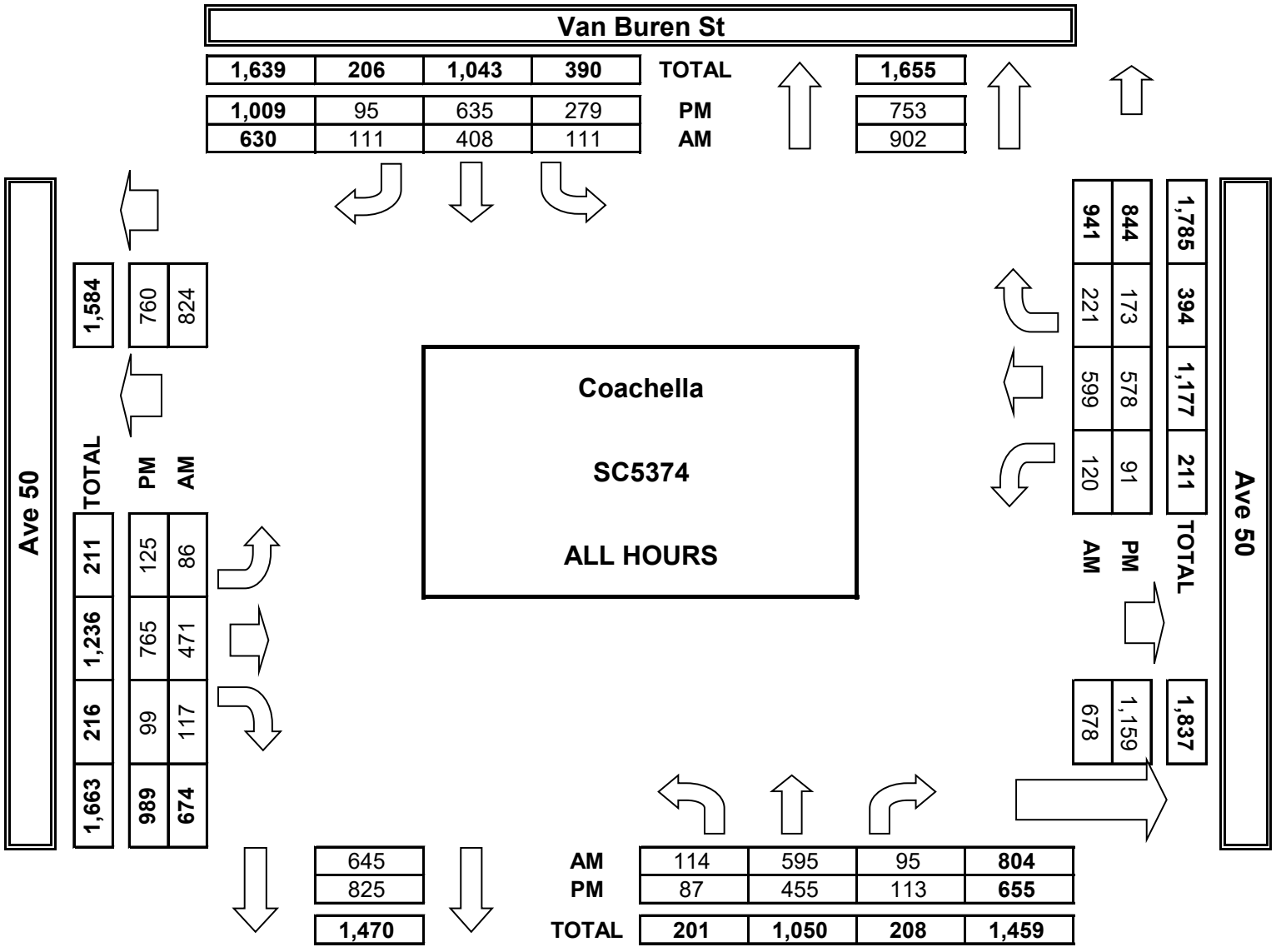
N
W
E
S

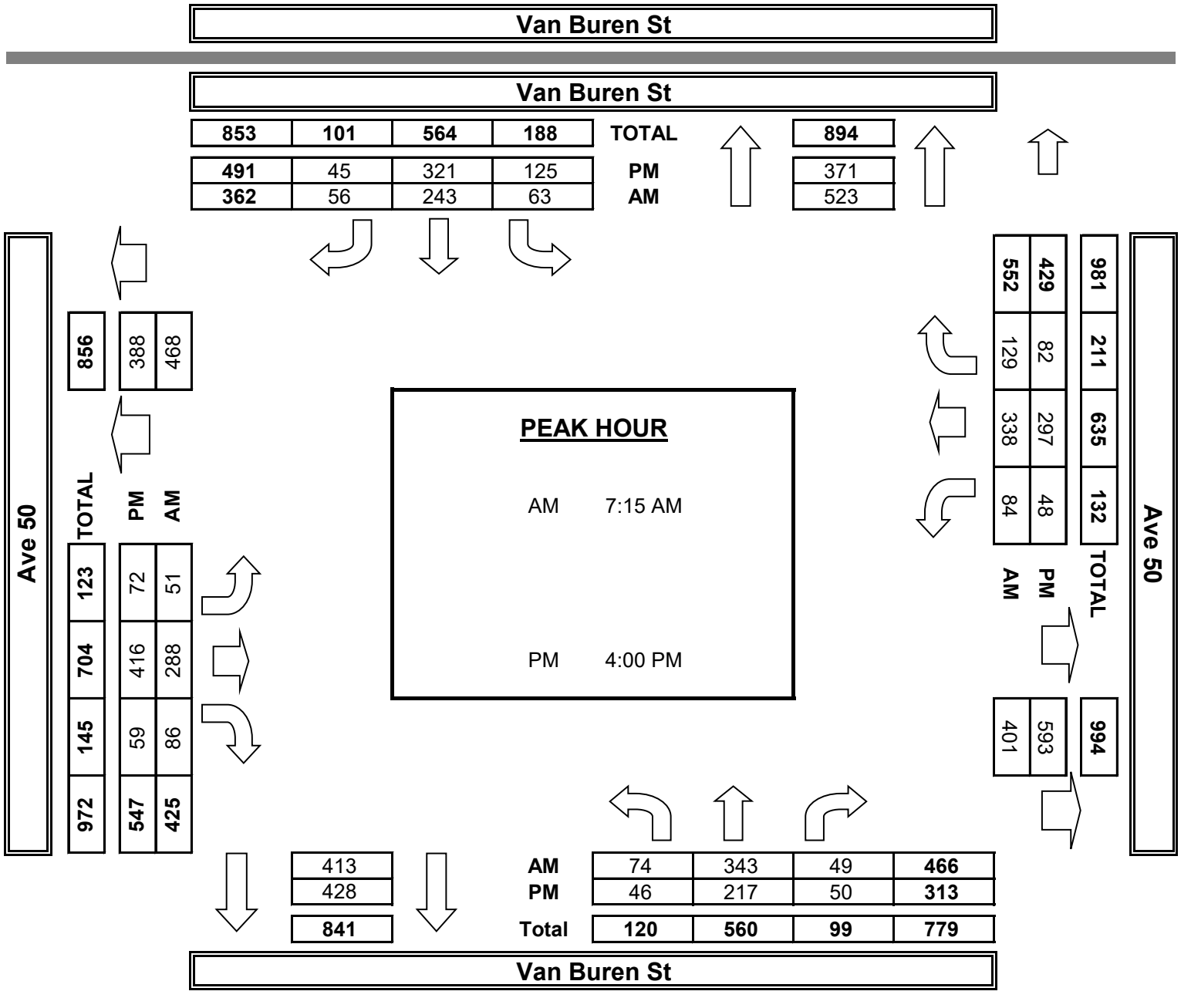
	NORTHBOUND Van Buren St			SOUTHBOUND Van Buren St			EASTBOUND Ave 50			WESTBOUND Ave 50				U-TURNS				
LANES:	NL 1	NT 1.5	NR 0.5	SL 1	ST 1	SR 1	EL 1	ET 1.5	ER 0.5	WL 1	WT 1.5	WR 0.5	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM 7:00 AM	9	70	10	11	37	13	13	40	9	16	48	32	308	0	0	0	0	0
7:15 AM	19	81	14	15	45	17	8	45	7	7	74	27	359	0	0	0	0	0
7:30 AM	14	90	8	14	65	14	14	91	29	37	86	37	499	0	0	0	0	0
7:45 AM	19	93	15	17	82	14	13	102	40	26	89	34	544	0	0	0	0	0
8:00 AM	22	79	12	17	51	11	16	50	10	14	89	31	402	0	0	0	1	1
8:15 AM	11	70	15	7	50	14	6	53	14	6	81	26	353	0	0	0	0	0
8:30 AM	6	56	9	17	40	15	8	48	4	11	80	12	306	0	0	0	0	0
8:45 AM	14	56	12	13	38	13	8	42	4	3	52	22	277	0	0	0	0	0
VOLUMES	114	595	95	111	408	111	86	471	117	120	599	221	3,049	0	0	0	1	1
APPROACH %	14%	74%	12%	18%	65%	18%	13%	70%	17%	13%	64%	23%						
APP/DEPART	804	/	902	630	/	645	674	/	678	941	/	824	0					
BEGIN PEAK HR		7:15 AM																
VOLUMES	74	343	49	63	243	56	51	288	86	84	338	129	1,805	0	0	0	1	
APPROACH %	16%	74%	11%	17%	67%	15%	12%	68%	20%	15%	61%	23%						
PEAK HR FACTOR		0.917			0.801			0.685			0.863		0.830					
APP/DEPART	466	/	523	362	/	413	425	/	401	552	/	468	0					
PM 4:00 PM	10	63	13	42	77	13	16	116	14	9	70	28	471	0	0	0	1	1
4:15 PM	14	51	14	34	94	8	27	90	16	13	76	16	453	0	0	0	1	1
4:30 PM	12	56	13	25	76	14	17	109	15	13	88	24	462	0	0	0	0	0
4:45 PM	10	47	10	24	74	10	12	101	14	13	63	14	392	0	0	0	0	0
5:00 PM	9	54	14	45	75	12	20	96	10	8	68	23	434	0	0	0	0	0
5:15 PM	6	66	10	44	91	14	10	87	13	8	66	20	435	0	0	0	0	0
5:30 PM	13	62	19	28	73	7	11	80	11	19	88	28	439	0	0	0	0	0
5:45 PM	13	56	20	37	75	17	12	86	6	8	59	20	409	0	0	0	0	0
VOLUMES	87	455	113	279	635	95	125	765	99	91	578	173	3,497	0	0	0	2	2
APPROACH %	13%	69%	17%	28%	63%	9%	13%	77%	10%	11%	68%	20%						
APP/DEPART	655	/	753	1,009	/	825	989	/	1,159	844	/	760	0					
BEGIN PEAK HR		4:00 PM																
VOLUMES	46	217	50	125	321	45	72	416	59	48	297	82	1,780	0	0	0	2	
APPROACH %	15%	69%	16%	25%	65%	9%	13%	76%	11%	11%	69%	19%						
PEAK HR FACTOR		0.910			0.903			0.937			0.858		0.943					
APP/DEPART	313	/	371	491	/	428	547	/	593	429	/	388	0					



AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

T112224

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, May 6, 25

LOCATION: Coachella
NORTH & SOUTH: Van Buren St
EAST & WEST: Ave 48

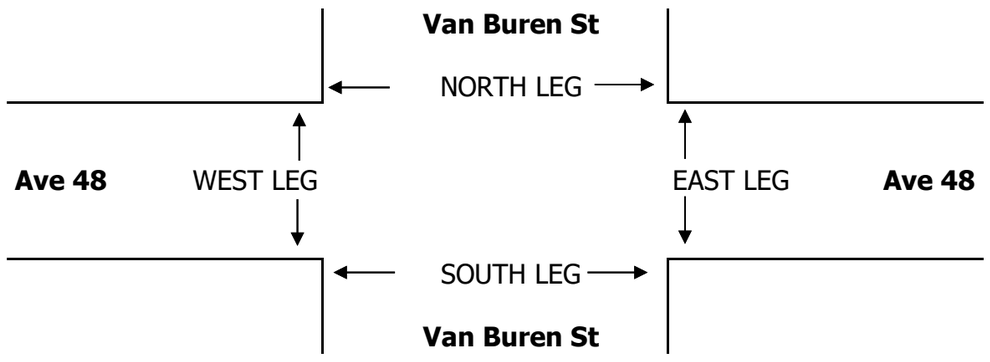
PROJECT #: SC5374
LOCATION #: 7
CONTROL: SIGNAL

NOTES:

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OTHER
OTHER

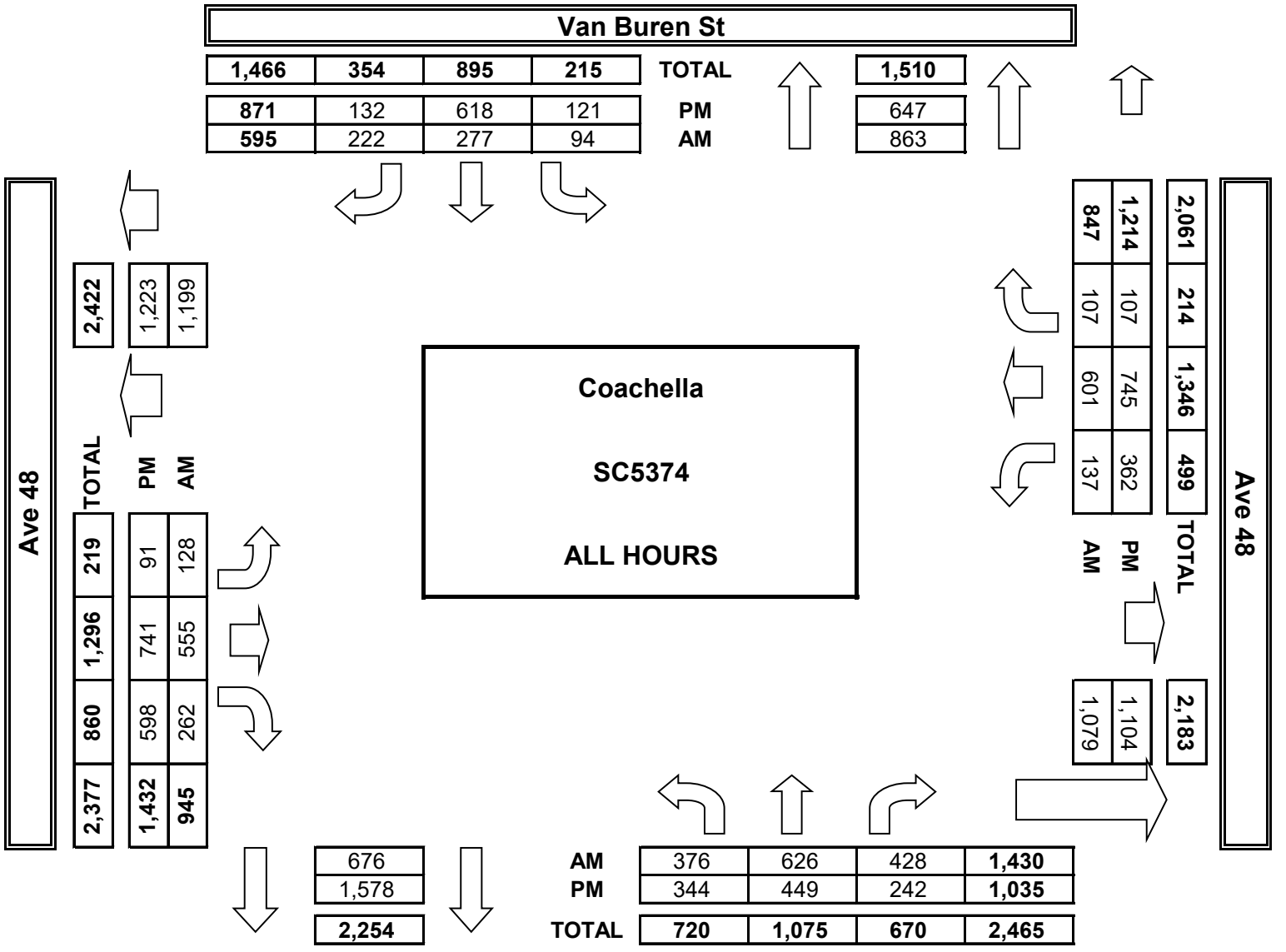
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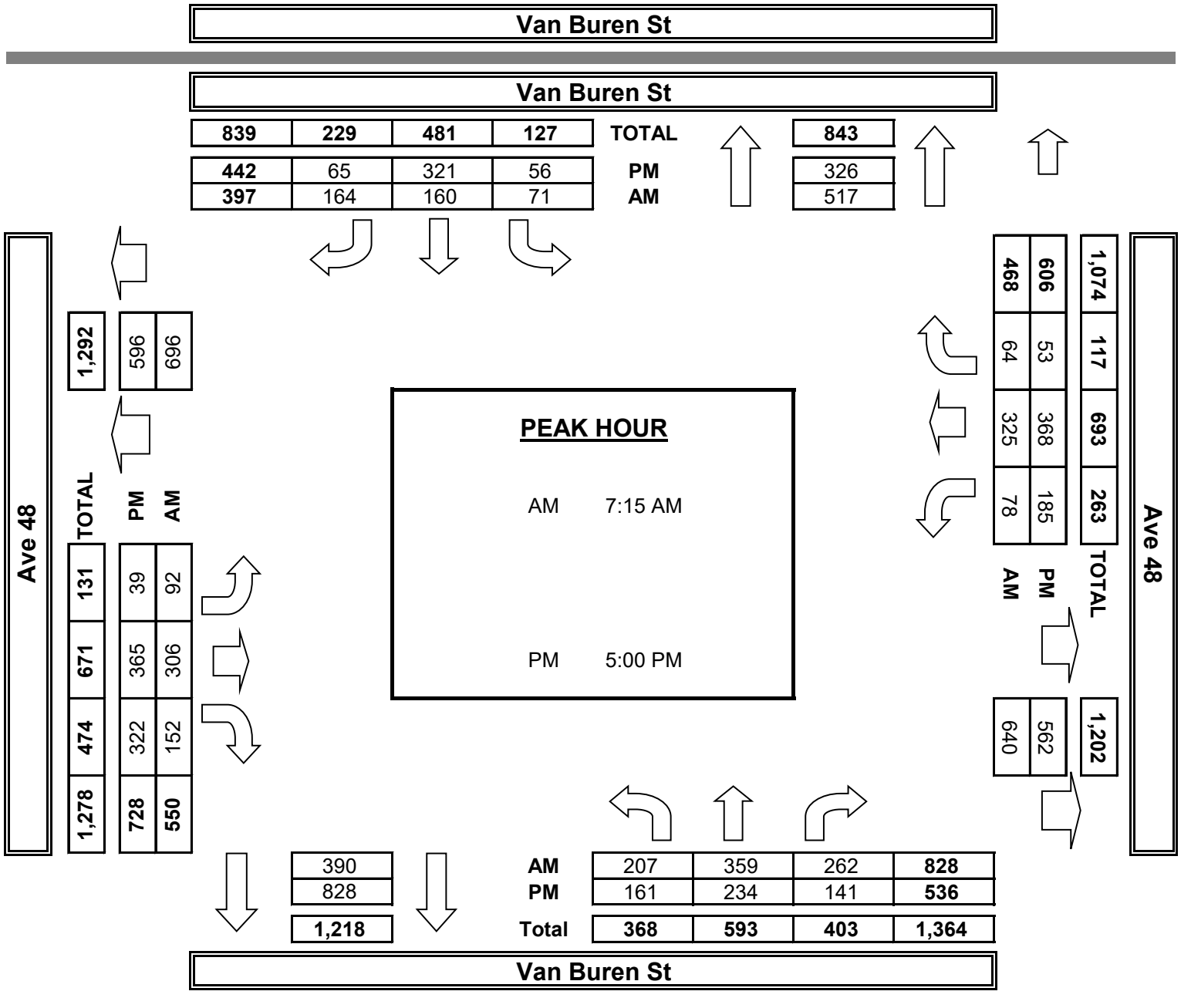
	NORTHBOUND Van Buren St			SOUTHBOUND Van Buren St			EASTBOUND Ave 48			WESTBOUND Ave 48				U-TURNS				
LANES:	NL 1	NT 2	NR 0	SL 1	ST 1	SR 1	EL 1	ET 1	ER 1	WL 1	WT 2	WR 1	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM 7:00 AM	28	75	55	3	24	6	12	64	16	13	60	9	365	0	0	0	0	0
7:15 AM	40	83	70	6	31	13	20	70	30	10	51	12	436	0	0	0	0	0
7:30 AM	51	95	82	22	40	48	23	65	32	17	95	21	591	0	1	0	0	1
7:45 AM	54	87	61	16	45	52	31	93	43	30	84	17	613	0	0	0	1	1
8:00 AM	62	94	49	27	44	51	18	78	47	21	95	14	600	0	1	0	0	1
8:15 AM	64	74	46	6	32	23	9	61	29	16	57	14	431	0	0	0	1	1
8:30 AM	33	60	32	6	35	21	10	63	38	13	86	9	406	0	0	0	0	0
8:45 AM	44	58	33	8	26	8	5	61	27	17	73	11	371	0	0	0	0	0
VOLUMES	376	626	428	94	277	222	128	555	262	137	601	107	3,817	0	2	0	2	4
APPROACH %	26%	44%	30%	16%	47%	37%	14%	59%	28%	16%	71%	13%						
APP/DEPART	1,430	/	863	595	/	676	945	/	1,079	847	/	1,199	0					
BEGIN PEAK HR		7:15 AM																
VOLUMES	207	359	262	71	160	164	92	306	152	78	325	64	2,243	0	2	0	1	
APPROACH %	25%	43%	32%	18%	40%	41%	17%	56%	28%	17%	69%	14%						
PEAK HR FACTOR		0.908			0.807			0.823			0.880		0.913					
APP/DEPART	828	/	517	397	/	390	550	/	640	468	/	696	0					
PM 4:00 PM	42	54	25	19	79	26	18	88	74	51	107	12	595	0	0	0	0	0
4:15 PM	51	65	23	16	83	19	8	99	79	50	92	13	598	0	0	0	0	0
4:30 PM	49	53	30	14	74	14	13	102	64	39	88	10	550	0	0	0	0	0
4:45 PM	41	43	23	16	61	8	13	87	59	37	90	19	497	0	0	0	0	0
5:00 PM	41	45	32	15	82	11	5	88	69	42	102	10	542	0	0	0	0	0
5:15 PM	44	58	35	12	74	17	8	90	97	57	96	18	606	0	0	0	0	0
5:30 PM	34	63	39	15	83	19	16	91	78	38	85	14	575	0	0	0	0	0
5:45 PM	42	68	35	14	82	18	10	96	78	48	85	11	587	0	0	2	0	2
VOLUMES	344	449	242	121	618	132	91	741	598	362	745	107	4,552	0	0	2	0	2
APPROACH %	33%	43%	23%	14%	71%	15%	6%	52%	42%	30%	61%	9%						
APP/DEPART	1,035	/	647	871	/	1,578	1,432	/	1,104	1,214	/	1,223	0					
BEGIN PEAK HR		5:00 PM																
VOLUMES	161	234	141	56	321	65	39	365	322	185	368	53	2,312	0	0	2	0	
APPROACH %	30%	44%	26%	13%	73%	15%	5%	50%	44%	31%	61%	9%						
PEAK HR FACTOR		0.924			0.944			0.933			0.886		0.954					
APP/DEPART	536	/	326	442	/	828	728	/	562	606	/	596	0					



AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

T112224

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, May 6, 25

LOCATION: Coachella
NORTH & SOUTH: Calhoun St
EAST & WEST: Ave 48

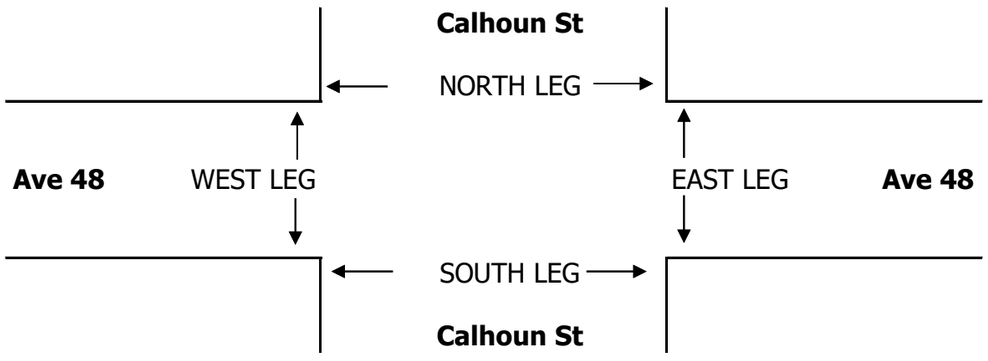
PROJECT #: SC5374
LOCATION #: 8
CONTROL: SIGNAL

NOTES:

AM
PM
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OTHER
OTHER

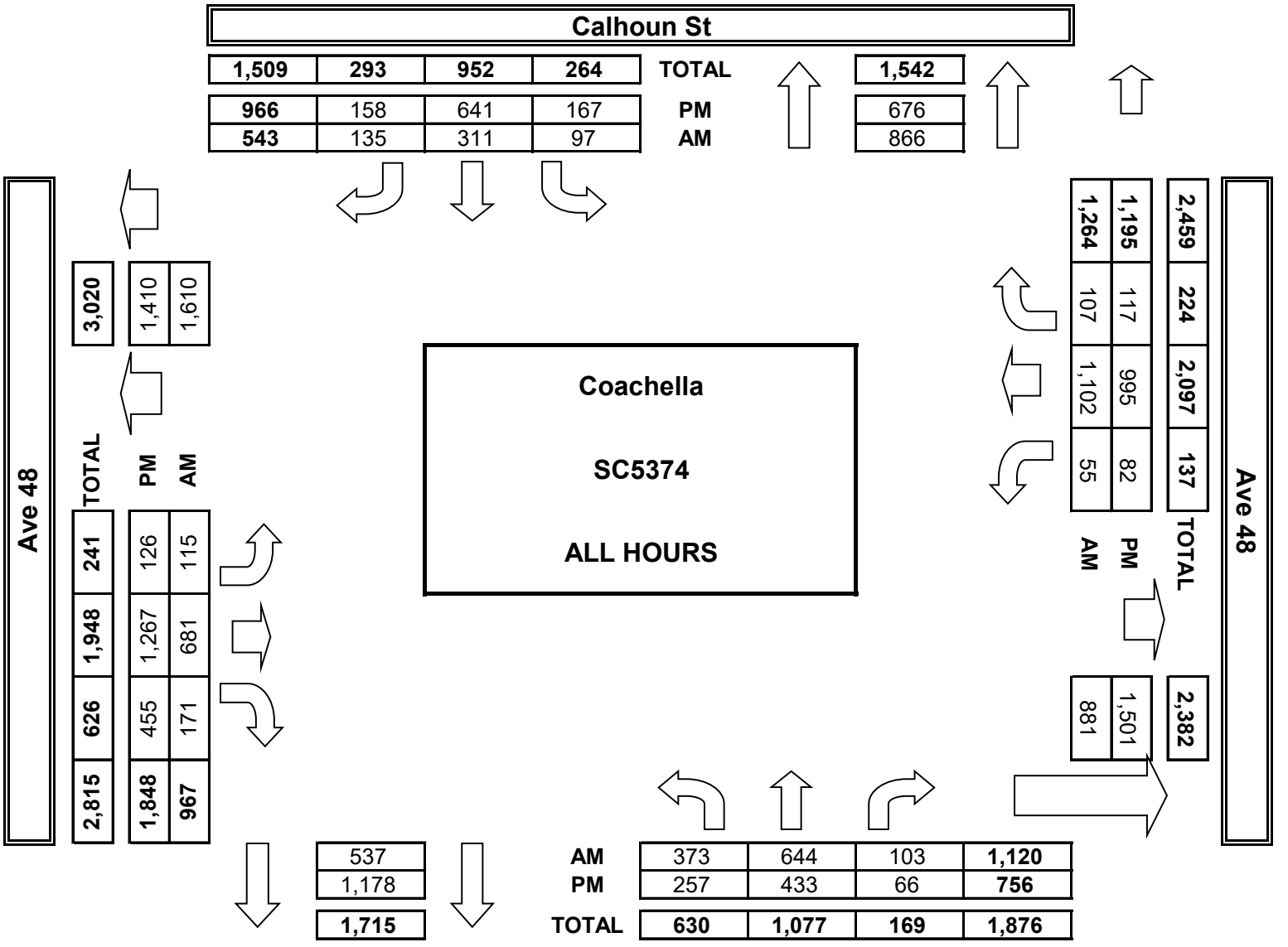
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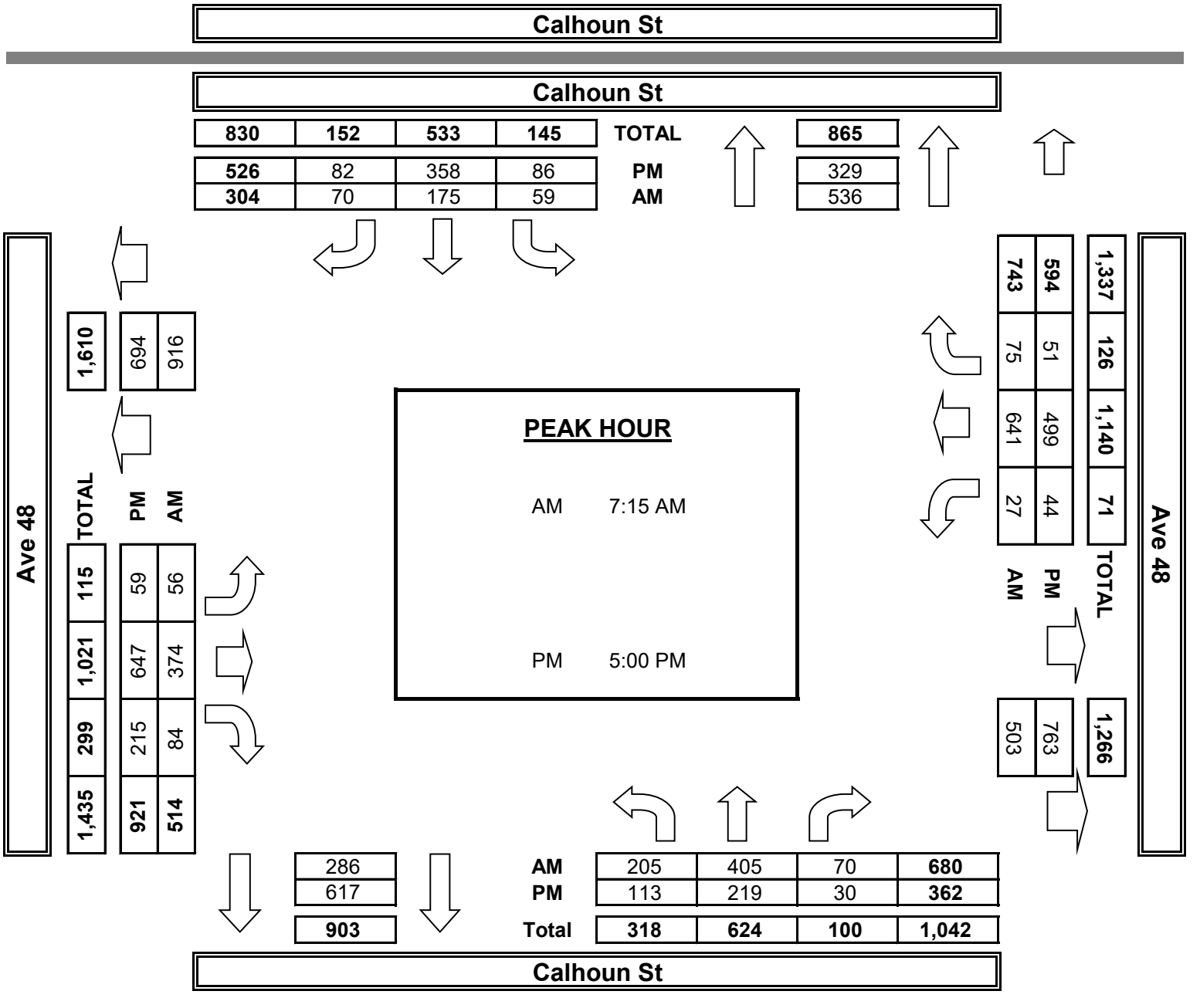
		NORTHBOUND Calhoun St			SOUTHBOUND Calhoun St			EASTBOUND Ave 48			WESTBOUND Ave 48				U-TURNS				
	LANES:	NL 1	NT 1.5	NR 0.5	SL 1	ST 2	SR 0	EL 1	ET 3	ER 0	WL 1	WT 3	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	52	81	10	13	31	16	13	65	20	6	77	11	395	0	0	0	0	0
	7:15 AM	46	97	11	12	48	14	13	89	21	5	106	13	475	0	0	0	0	0
	7:30 AM	67	109	25	11	42	18	13	66	19	2	164	22	558	0	0	0	0	0
	7:45 AM	52	101	22	18	49	24	11	111	25	11	185	21	630	0	0	0	0	0
	8:00 AM	40	98	12	18	36	14	19	108	19	9	186	19	578	0	0	0	0	0
	8:15 AM	48	59	7	9	33	21	18	76	26	3	141	8	449	0	0	0	0	0
	8:30 AM	38	53	7	6	38	10	14	97	13	10	116	9	411	0	0	0	0	0
	8:45 AM	30	46	9	10	34	18	14	69	28	9	127	4	398	0	0	0	0	0
	VOLUMES	373	644	103	97	311	135	115	681	171	55	1,102	107	3,894	0	0	0	0	0
	APPROACH %	33%	58%	9%	18%	57%	25%	12%	70%	18%	4%	87%	8%						
	APP/DEPART	1,120	/	866	543	/	537	967	/	881	1,264	/	1,610	0					
	BEGIN PEAK HR		7:15 AM																
	VOLUMES	205	405	70	59	175	70	56	374	84	27	641	75	2,241	0	0	0	0	
	APPROACH %	30%	60%	10%	19%	58%	23%	11%	73%	16%	4%	86%	10%						
	PEAK HR FACTOR		0.846			0.835			0.874			0.856		0.889					
	APP/DEPART	680	/	536	304	/	286	514	/	503	743	/	916	0					
PM	4:00 PM	42	68	12	30	77	22	19	164	74	7	156	21	692	0	0	0	0	0
	4:15 PM	26	47	9	21	74	24	14	168	63	15	118	17	596	0	0	0	0	0
	4:30 PM	33	49	6	22	62	20	15	142	52	6	108	11	526	0	0	0	0	0
	4:45 PM	43	50	9	8	70	10	19	146	51	10	114	17	547	0	0	0	1	1
	5:00 PM	29	59	4	25	89	24	11	166	50	8	124	17	606	0	0	0	0	0
	5:15 PM	27	40	8	25	94	20	23	143	42	13	124	14	573	0	0	0	0	0
	5:30 PM	28	55	10	19	91	22	13	178	64	10	125	8	623	0	0	0	0	0
	5:45 PM	29	65	8	17	84	16	12	160	59	13	126	12	601	0	0	0	0	0
	VOLUMES	257	433	66	167	641	158	126	1,267	455	82	995	117	4,765	0	0	0	1	1
	APPROACH %	34%	57%	9%	17%	66%	16%	7%	69%	25%	7%	83%	10%						
	APP/DEPART	756	/	676	966	/	1,178	1,848	/	1,501	1,195	/	1,410	0					
	BEGIN PEAK HR		5:00 PM																
	VOLUMES	113	219	30	86	358	82	59	647	215	44	499	51	2,403	0	0	0	0	
	APPROACH %	31%	60%	8%	16%	68%	16%	6%	70%	23%	7%	84%	9%						
	PEAK HR FACTOR		0.887			0.946			0.903			0.983		0.964					
	APP/DEPART	362	/	329	526	/	617	921	/	763	594	/	694	0					



AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

T112224

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, May 6, 25

LOCATION: Coachella
NORTH & SOUTH: Dillon Rd
EAST & WEST: Ave 48

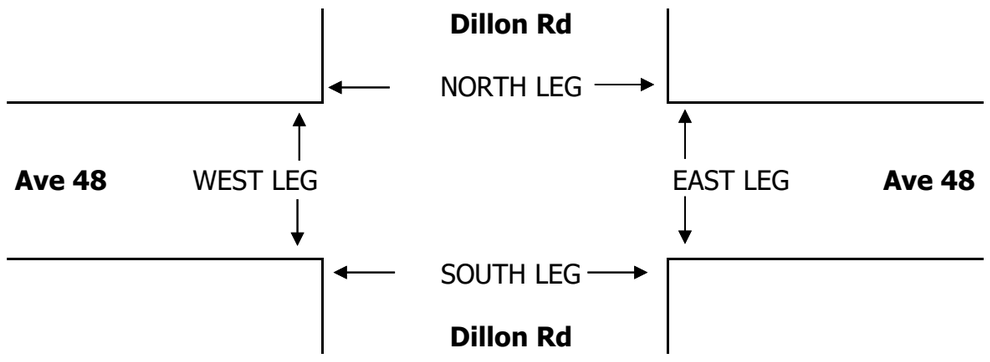
PROJECT #: SC5374
LOCATION #: 9
CONTROL: SIGNAL

NOTES:

AM
PM
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OTHER
OTHER

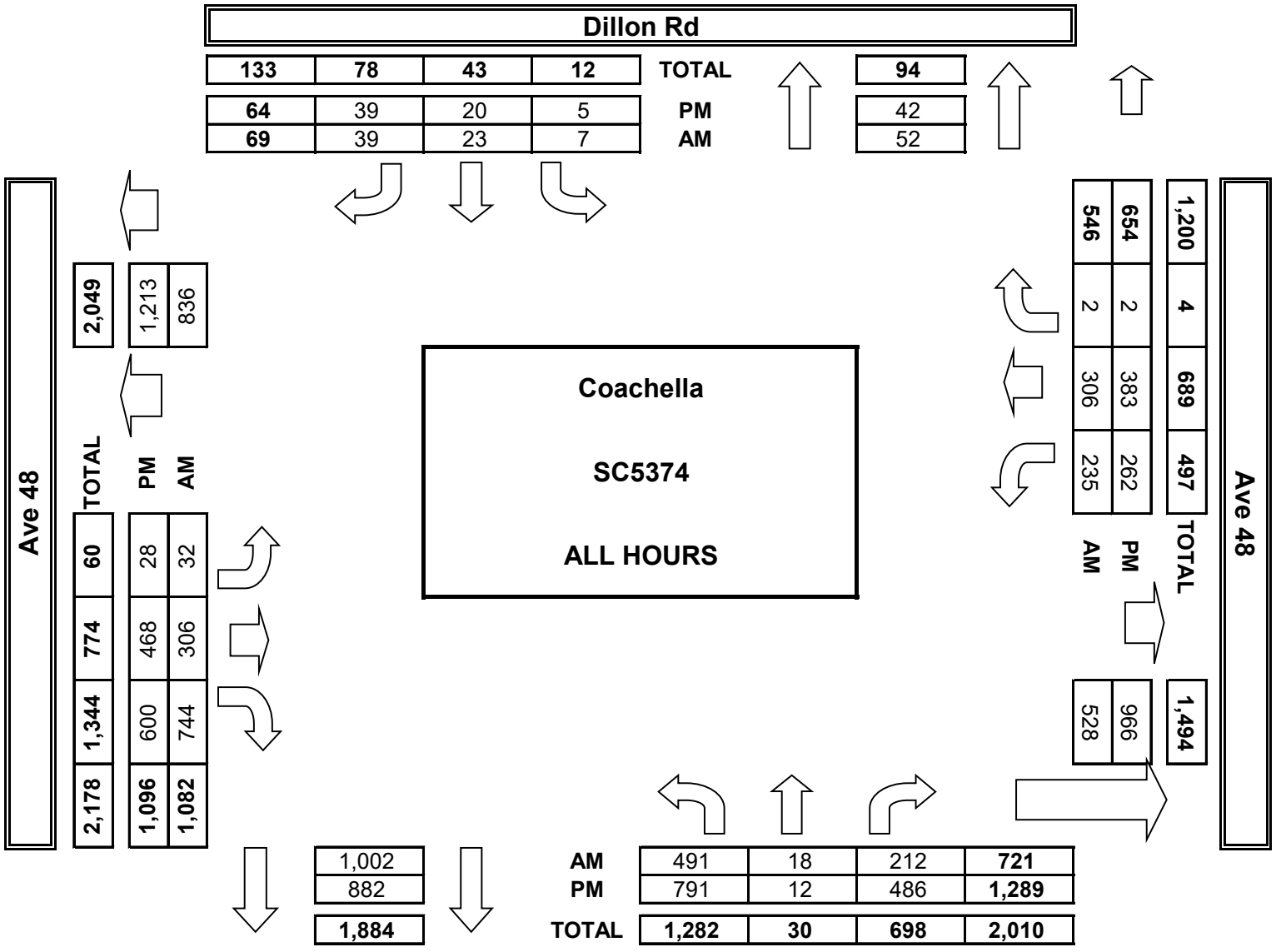
N ▲ S ▼ W ◄ E ►

		NORTHBOUND Dillon Rd			SOUTHBOUND Dillon Rd			EASTBOUND Ave 48			WESTBOUND Ave 48				U-TURNS				
	LANES:	NL 2	NT 0.5	NR 1.5	SL 1	ST 1.5	SR 0.5	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	51	3	23	1	2	5	1	27	90	24	28	0	255	0	0	0	0	0
	7:15 AM	46	2	23	3	2	4	6	35	107	25	30	0	283	0	0	0	0	0
	7:30 AM	76	2	30	0	6	6	7	32	127	32	54	0	372	0	0	0	0	0
	7:45 AM	81	3	32	0	3	5	7	53	119	38	44	0	385	0	0	0	0	0
	8:00 AM	56	2	25	1	1	6	1	53	96	34	49	0	324	0	0	0	2	2
	8:15 AM	60	3	29	0	5	3	5	31	76	28	28	0	268	0	0	0	0	0
	8:30 AM	73	1	24	1	1	3	3	37	63	24	36	0	266	0	0	0	0	0
	8:45 AM	48	2	26	1	3	7	2	38	66	30	37	2	262	0	0	0	1	1
	VOLUMES	491	18	212	7	23	39	32	306	744	235	306	2	2,418	0	0	0	3	3
	APPROACH %	68%	2%	29%	10%	33%	57%	3%	28%	69%	43%	56%	0%						
	APP/DEPART	721	/	52	69	/	1,002	1,082	/	528	546	/	836	0					
	BEGIN PEAK HR		7:15 AM																
	VOLUMES	259	9	110	4	12	21	21	173	449	129	177	0	1,366	0	0	0	2	
	APPROACH %	69%	2%	29%	11%	32%	57%	3%	27%	70%	42%	57%	0%						
	PEAK HR FACTOR		0.815			0.771			0.898			0.895		0.887					
	APP/DEPART	378	/	30	37	/	590	643	/	289	308	/	457	0					
PM	4:00 PM	125	1	58	1	1	8	2	63	65	39	52	0	415	0	0	0	1	1
	4:15 PM	94	1	64	1	4	4	7	66	59	25	38	0	363	0	0	0	2	2
	4:30 PM	78	3	56	1	5	5	6	62	76	35	51	0	378	0	0	0	0	0
	4:45 PM	100	2	67	0	2	5	4	56	68	42	54	0	400	0	0	0	1	1
	5:00 PM	100	1	58	1	0	5	2	52	83	36	49	0	387	0	0	0	1	1
	5:15 PM	113	0	67	0	1	5	4	55	86	27	44	0	402	0	0	0	2	2
	5:30 PM	97	2	59	0	4	5	1	51	88	23	52	1	383	0	0	0	0	0
	5:45 PM	84	2	57	1	3	2	2	63	75	35	43	1	368	0	0	0	0	0
	VOLUMES	791	12	486	5	20	39	28	468	600	262	383	2	3,103	0	0	0	7	7
	APPROACH %	61%	1%	38%	8%	31%	61%	3%	43%	55%	40%	59%	0%						
	APP/DEPART	1,289	/	42	64	/	882	1,096	/	966	654	/	1,213	0					
	BEGIN PEAK HR		4:45 PM																
	VOLUMES	410	5	251	1	7	20	11	214	325	128	199	1	1,576	0	0	0	4	
	APPROACH %	62%	1%	38%	4%	25%	71%	2%	39%	59%	39%	60%	0%						
	PEAK HR FACTOR		0.925			0.778			0.948			0.856		0.975					
	APP/DEPART	666	/	17	28	/	460	550	/	470	332	/	629	0					



AimTD LLC

TURNING MOVEMENT COUNTS



INTERSECTION TURNING MOVEMENT COUNTS

T112224

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, May 6, 25

LOCATION: Coachella
NORTH & SOUTH: SR-86 SB Ramps
EAST & WEST: Dillon Rd

PROJECT #: SC5374
LOCATION #: 10
CONTROL: SIGNAL

NOTES:

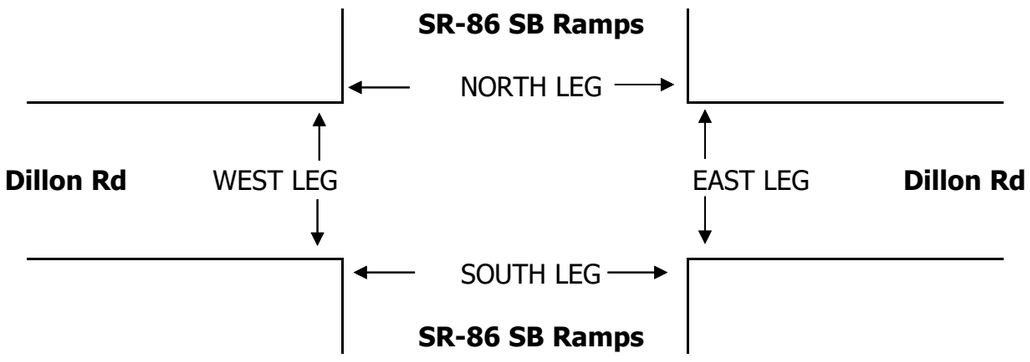
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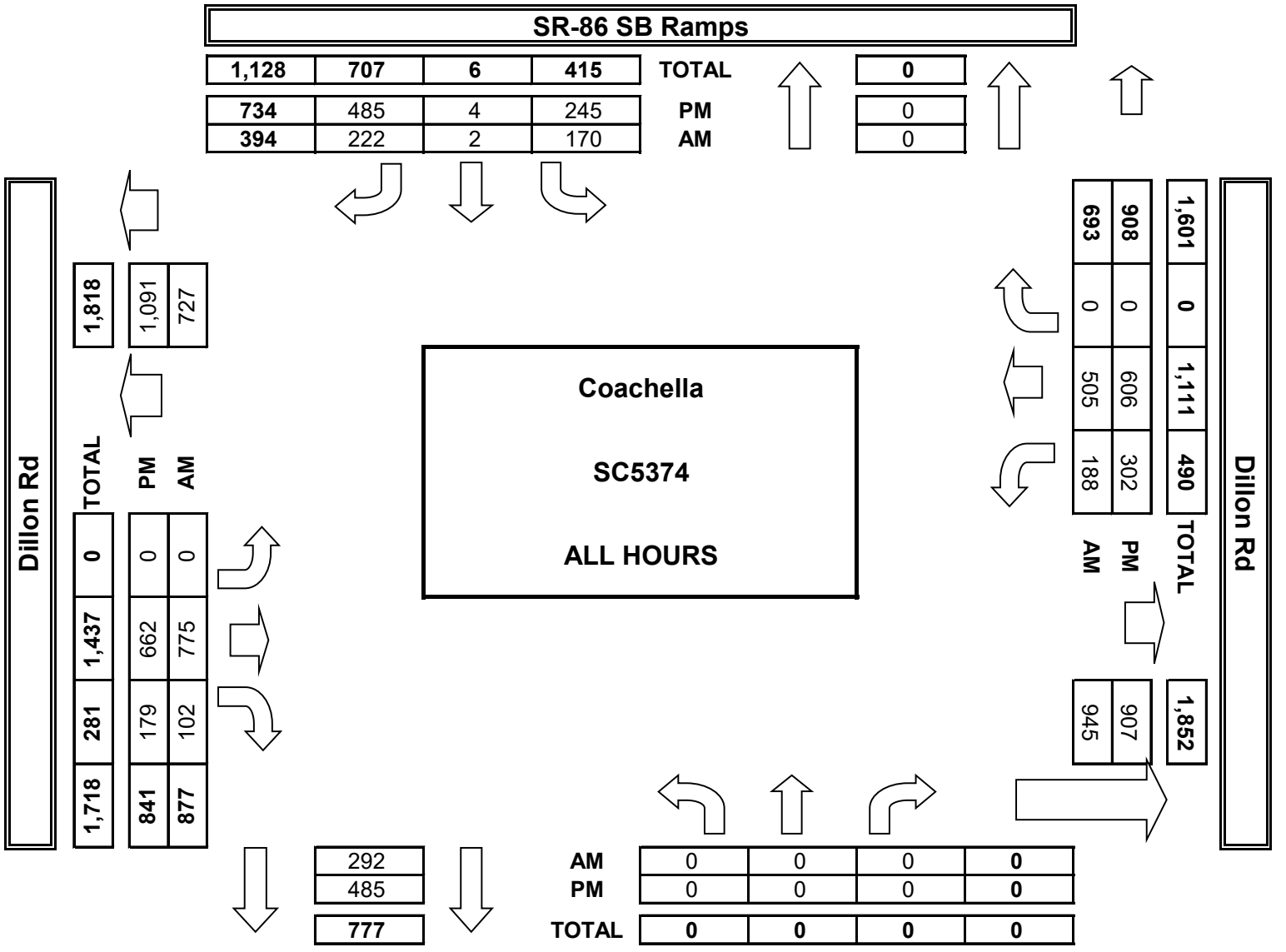
		NORTHBOUND SR-86 SB Ramps			SOUTHBOUND SR-86 SB Ramps			EASTBOUND Dillon Rd			WESTBOUND Dillon Rd			
	LANES:	NL X	NT X	NR X	SL 0.5	ST 0.5	SR 1	EL X	ET 1	ER 0	WL 1	WT 1	WR X	TOTAL
AM	7:00 AM	0	0	0	12	0	26	0	86	13	29	63	0	229
	7:15 AM	0	0	0	15	1	22	0	90	11	26	55	0	220
	7:30 AM	0	0	0	18	0	36	0	145	11	27	78	0	315
	7:45 AM	0	0	0	30	0	48	0	128	18	19	64	0	307
	8:00 AM	0	0	0	30	0	25	0	102	16	31	63	0	267
	8:15 AM	0	0	0	23	0	25	0	88	8	22	68	0	234
	8:30 AM	0	0	0	20	0	21	0	66	15	21	57	0	200
	8:45 AM	0	0	0	22	1	19	0	70	10	13	57	0	192
	VOLUMES	0	0	0	170	2	222	0	775	102	188	505	0	1,964
	APPROACH %	0%	0%	0%	43%	1%	56%	0%	88%	12%	27%	73%	0%	
	APP/DEPART	0	/	0	394	/	292	877	/	945	693	/	727	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	0	0	0	101	0	134	0	463	53	99	273	0	1,123
	APPROACH %	0%	0%	0%	43%	0%	57%	0%	90%	10%	27%	73%	0%	
	PEAK HR FACTOR		0.000			0.753			0.827			0.886		0.891
	APP/DEPART	0	/	0	235	/	152	516	/	564	372	/	407	0
PM	4:00 PM	0	0	0	31	0	62	0	82	21	49	89	0	334
	4:15 PM	0	0	0	29	0	49	0	71	14	30	86	0	279
	4:30 PM	0	0	0	36	0	46	0	73	20	42	52	0	269
	4:45 PM	0	0	0	31	0	72	0	77	24	31	79	0	314
	5:00 PM	0	0	0	29	2	50	0	99	22	44	89	0	335
	5:15 PM	0	0	0	30	1	70	0	91	22	50	78	0	342
	5:30 PM	0	0	0	29	1	78	0	86	27	25	57	0	303
	5:45 PM	0	0	0	30	0	58	0	83	29	31	76	0	307
	VOLUMES	0	0	0	245	4	485	0	662	179	302	606	0	2,483
	APPROACH %	0%	0%	0%	33%	1%	66%	0%	79%	21%	33%	67%	0%	
	APP/DEPART	0	/	0	734	/	485	841	/	907	908	/	1,091	0
	BEGIN PEAK HR		4:45 PM											
	VOLUMES	0	0	0	119	4	270	0	353	95	150	303	0	1,294
	APPROACH %	0%	0%	0%	30%	1%	69%	0%	79%	21%	33%	67%	0%	
	PEAK HR FACTOR		0.000			0.910			0.926			0.852		0.946
	APP/DEPART	0	/	0	393	/	249	448	/	472	453	/	573	0

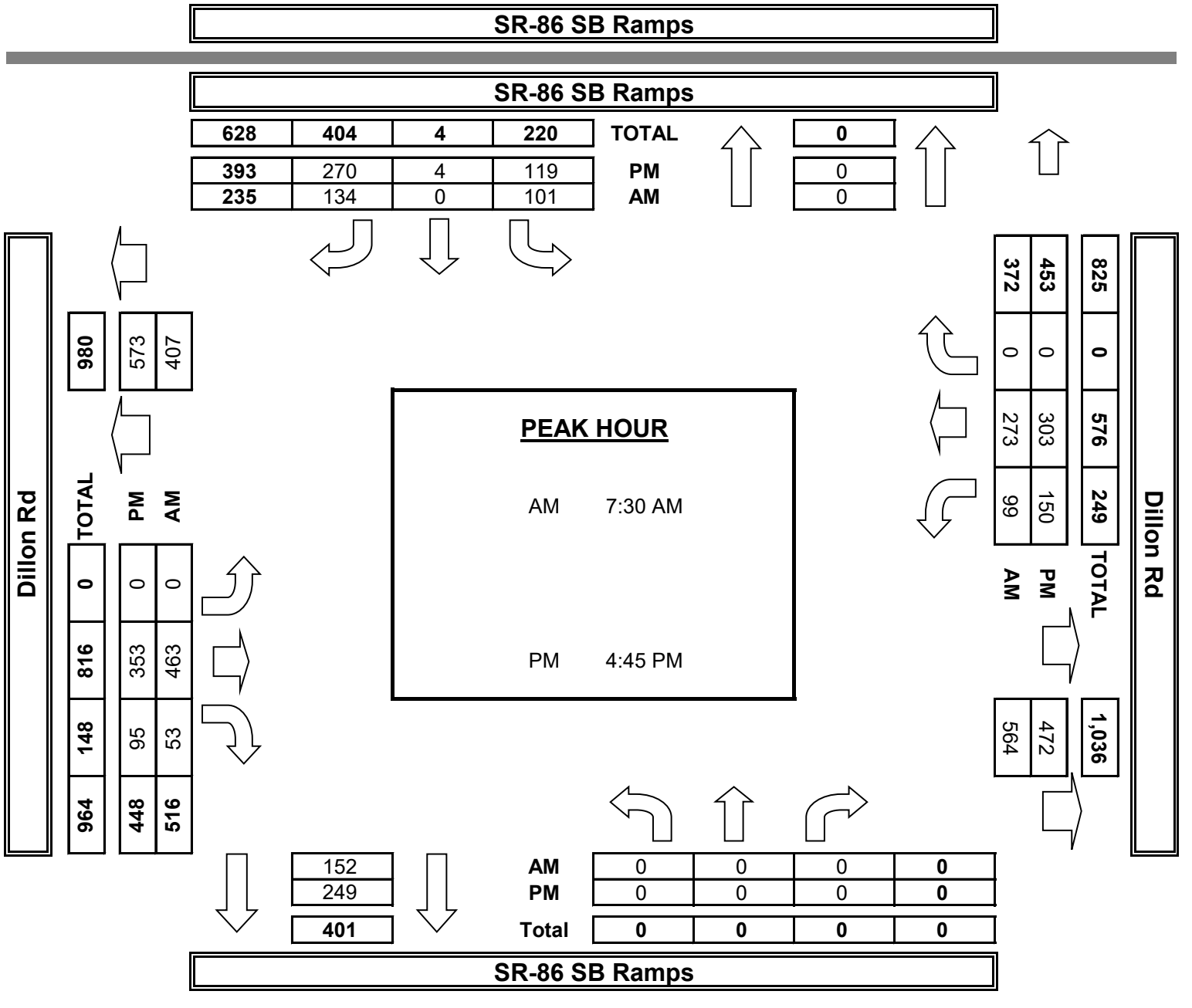
U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
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0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0



AimTD LLC
TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

T112224

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, May 6, 25

LOCATION: Coachella
NORTH & SOUTH: SR-86 NB Ramps
EAST & WEST: Dillon Rd

PROJECT #: SC5374
LOCATION #: 11
CONTROL: SIGNAL

NOTES:

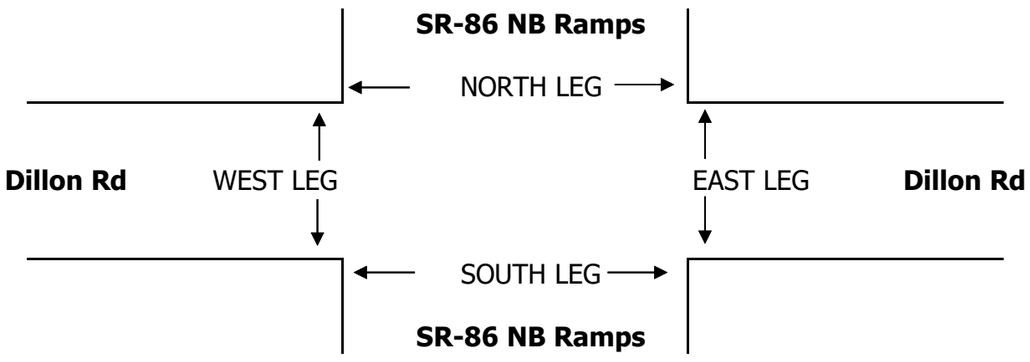
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		NORTHBOUND SR-86 NB Ramps			SOUTHBOUND SR-86 NB Ramps			EASTBOUND Dillon Rd			WESTBOUND Dillon Rd			
	LANES:	NL 0	NT 1	NR 0	SL X	ST X	SR X	EL 1	ET 1	ER X	WL X	WT 2	WR 1	TOTAL
AM	7:00 AM	23	0	44	0	0	0	43	54	0	0	68	34	266
	7:15 AM	24	1	19	0	0	0	62	40	0	0	57	31	234
	7:30 AM	34	0	29	0	0	0	86	77	0	0	71	26	323
	7:45 AM	28	0	29	0	0	0	88	70	0	0	60	32	307
	8:00 AM	27	1	37	0	0	0	55	77	0	0	67	28	292
	8:15 AM	19	0	30	0	0	0	55	56	0	0	71	33	264
	8:30 AM	26	0	43	0	0	0	35	51	0	0	52	24	231
	8:45 AM	18	0	36	0	0	0	40	52	0	0	52	29	227
	VOLUMES	199	2	267	0	0	0	464	477	0	0	498	237	2,145
	APPROACH %	43%	0%	57%	0%	0%	0%	49%	51%	0%	0%	68%	32%	
	APP/DEPART	468	/	703	0	/	0	942	/	744	735	/	698	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	108	1	125	0	0	0	284	280	0	0	269	119	1,186
	APPROACH %	46%	0%	53%	0%	0%	0%	50%	50%	0%	0%	69%	31%	
	PEAK HR FACTOR		0.900			0.000			0.865			0.933		0.918
	APP/DEPART	234	/	404	0	/	0	564	/	405	388	/	377	0
PM	4:00 PM	12	0	30	0	0	0	24	89	0	0	126	41	322
	4:15 PM	21	0	39	0	0	0	30	70	0	0	95	49	304
	4:30 PM	5	0	29	0	0	0	29	80	0	0	89	45	277
	4:45 PM	24	1	42	0	0	0	32	74	0	0	86	40	299
	5:00 PM	19	1	35	0	0	0	32	96	0	0	114	49	346
	5:15 PM	20	0	31	0	0	0	41	80	0	0	108	58	338
	5:30 PM	16	0	42	0	0	0	31	84	0	0	66	46	285
	5:45 PM	13	0	32	0	0	0	47	66	0	0	98	49	305
	VOLUMES	130	2	280	0	0	0	266	639	0	0	782	377	2,476
	APPROACH %	32%	0%	68%	0%	0%	0%	29%	71%	0%	0%	67%	33%	
	APP/DEPART	412	/	645	0	/	0	905	/	919	1,159	/	912	0
	BEGIN PEAK HR		5:00 PM											
	VOLUMES	68	1	140	0	0	0	151	326	0	0	386	202	1,274
	APPROACH %	33%	0%	67%	0%	0%	0%	32%	68%	0%	0%	66%	34%	
	PEAK HR FACTOR		0.901			0.000			0.932			0.886		0.921
	APP/DEPART	209	/	354	0	/	0	477	/	466	588	/	454	0

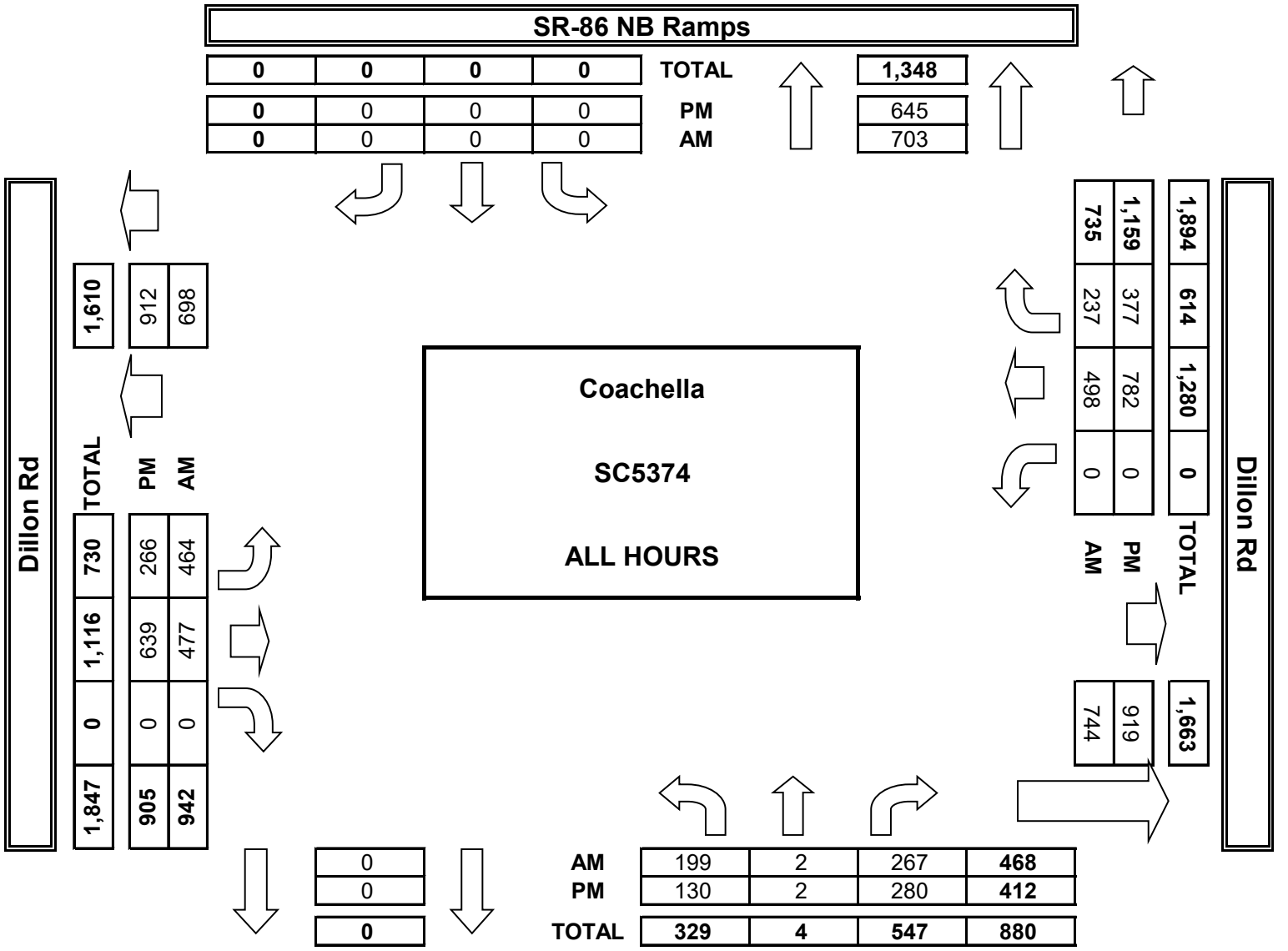
U-TURNS

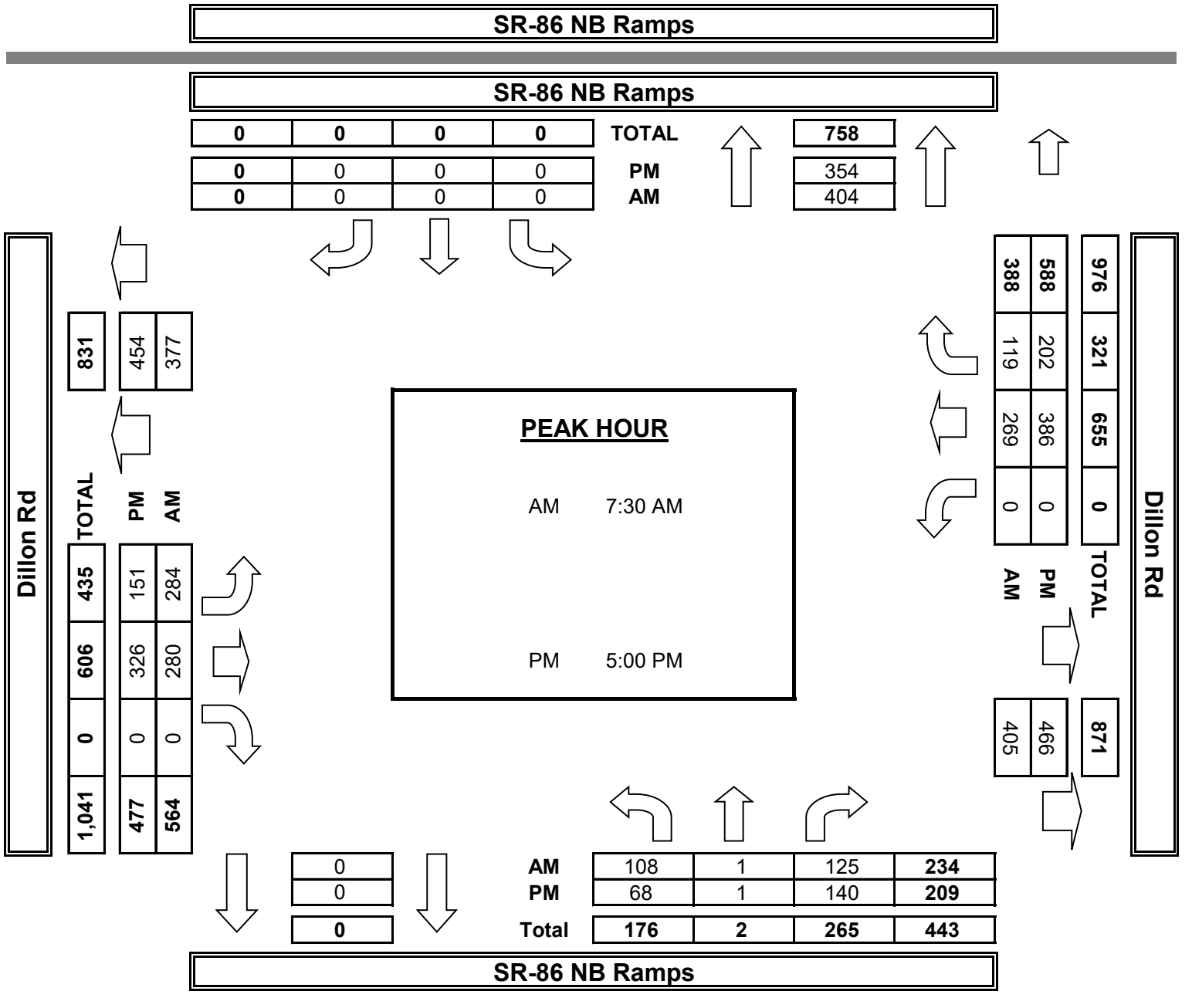
NB	SB	EB	WB	TTL
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0	0	1	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	1	0	1
0	0	0	0	
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
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0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0



AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

T112224

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, May 6, 25

LOCATION: Coachella
NORTH & SOUTH: Cabazon Rd
EAST & WEST: Dillon Rd

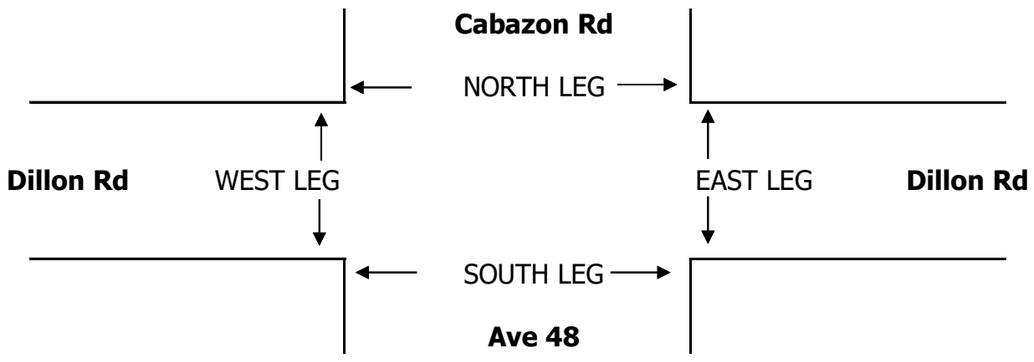
PROJECT #: SC5374
LOCATION #: 12
CONTROL: SIGNAL

NOTES:

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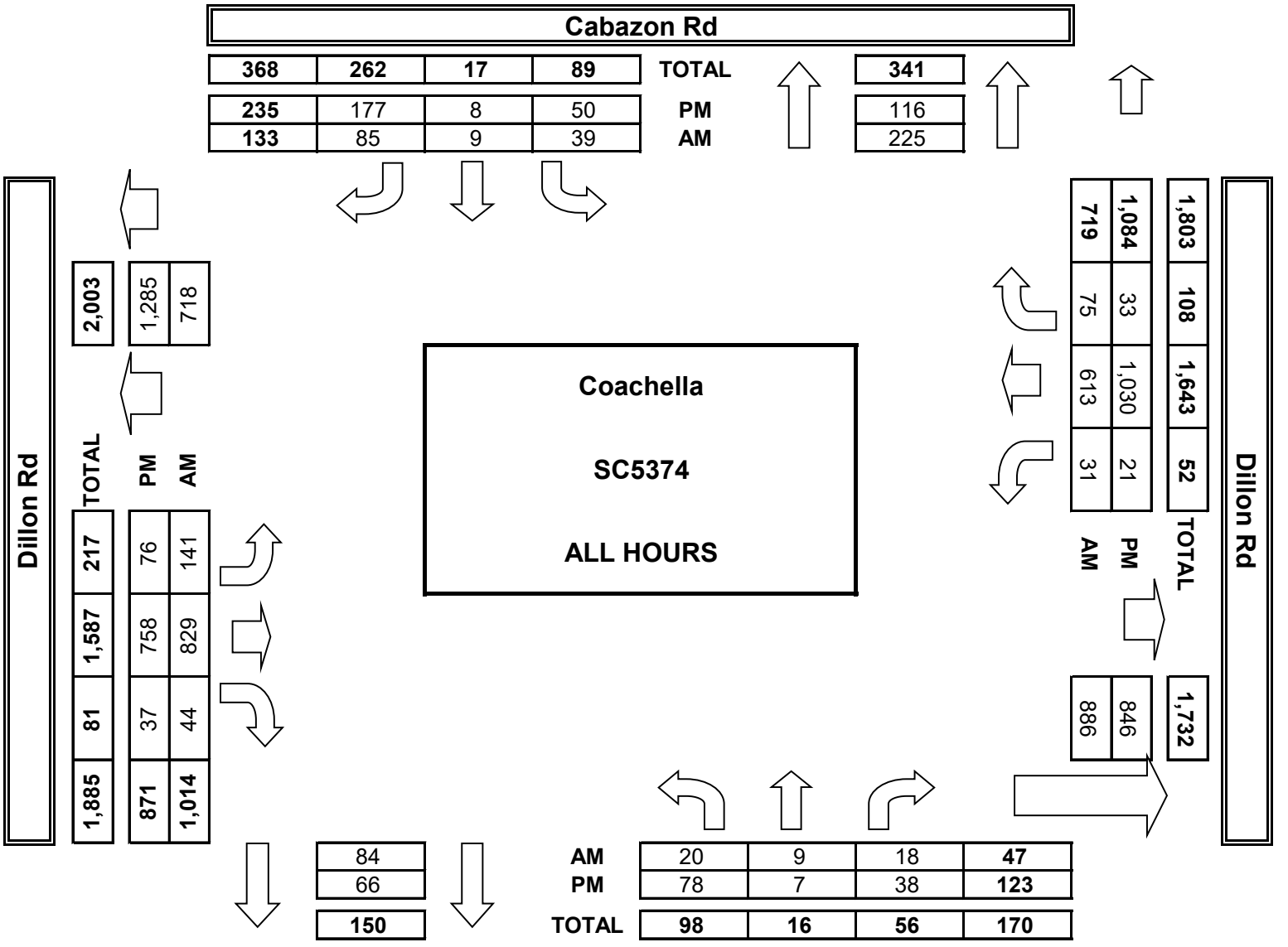
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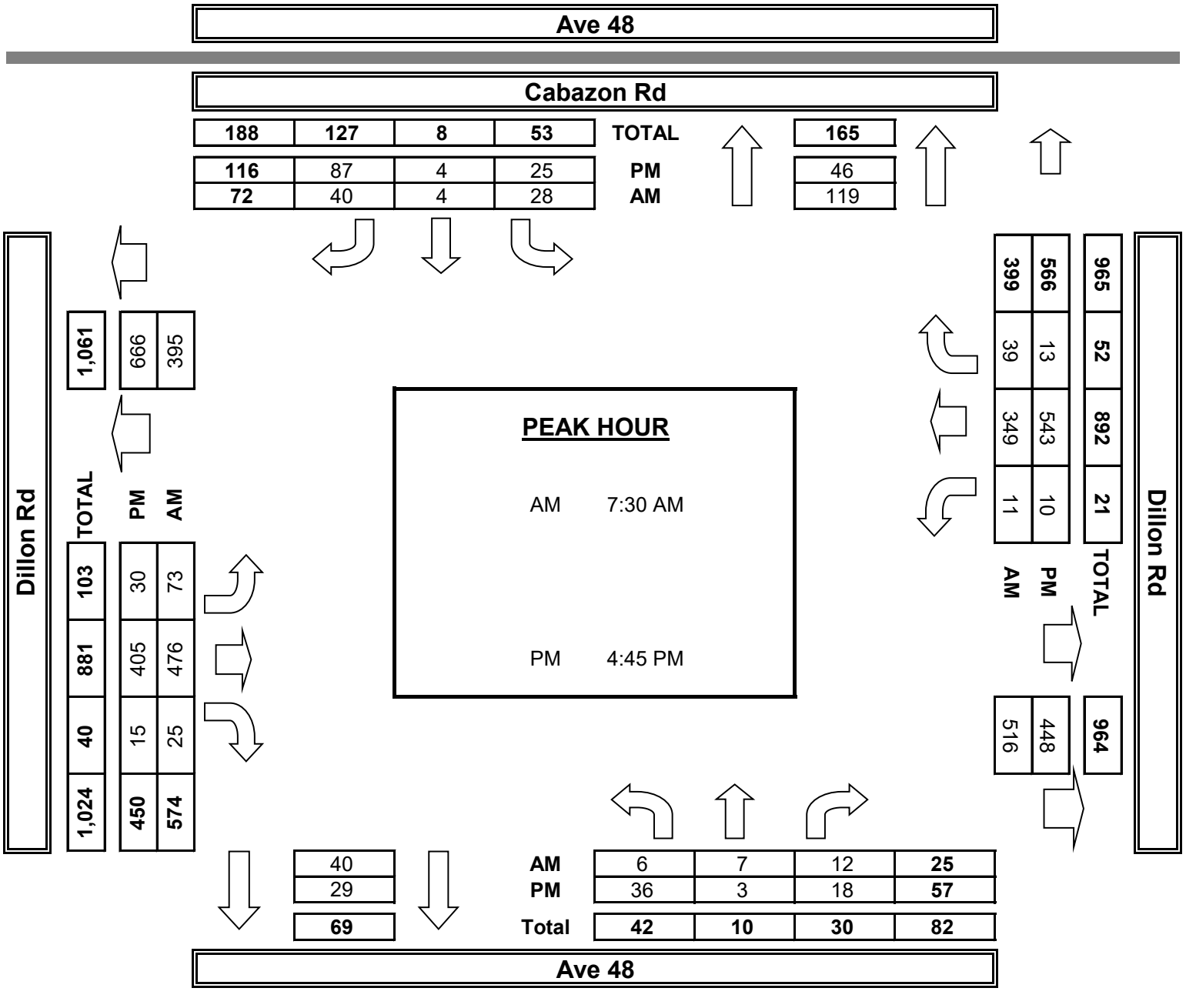
		NORTHBOUND Ave 48			SOUTHBOUND Cabazon Rd			EASTBOUND Dillon Rd			WESTBOUND Dillon Rd				U-TURNS				
	LANES:	NL 1	NT 1	NR 0	SL 1	ST 1	SR 0	EL 1	ET 2	ER 1	WL 1	WT 2	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	1	0	0	2	0	9	20	97	2	7	69	13	220	0	0	0	0	0
	7:15 AM	1	1	0	1	0	5	19	109	2	2	68	7	215	0	0	0	0	0
	7:30 AM	2	0	4	6	1	12	14	146	7	4	96	14	306	0	0	0	0	0
	7:45 AM	0	1	1	9	0	4	24	136	4	3	97	12	291	0	0	0	0	0
	8:00 AM	2	2	2	10	1	10	20	106	5	3	77	8	246	0	0	0	0	0
	8:15 AM	2	4	5	3	2	14	15	88	9	1	79	5	227	0	0	0	0	0
	8:30 AM	9	1	4	5	3	18	10	72	10	6	67	5	210	0	0	0	0	0
	8:45 AM	3	0	2	3	2	13	19	75	5	5	60	11	198	0	0	0	0	0
	VOLUMES	20	9	18	39	9	85	141	829	44	31	613	75	1,913	0	0	0	0	0
	APPROACH %	43%	19%	38%	29%	7%	64%	14%	82%	4%	4%	85%	10%						
	APP/DEPART	47	/	225	133	/	84	1,014	/	886	719	/	718	0					
	BEGIN PEAK HR		7:30 AM																
	VOLUMES	6	7	12	28	4	40	73	476	25	11	349	39	1,070	0	0	0	0	
	APPROACH %	24%	28%	48%	39%	6%	56%	13%	83%	4%	3%	87%	10%						
	PEAK HR FACTOR		0.568			0.857			0.859			0.875		0.874					
	APP/DEPART	25	/	119	72	/	40	574	/	516	399	/	395	0					
PM	4:00 PM	16	2	9	9	1	25	17	90	4	5	140	6	324	0	0	0	0	0
	4:15 PM	7	2	6	10	1	26	11	69	7	3	126	6	274	0	0	0	0	0
	4:30 PM	10	0	1	4	1	25	11	88	8	0	94	4	246	0	0	0	0	0
	4:45 PM	7	0	1	8	0	23	7	92	1	2	141	8	290	0	0	0	0	0
	5:00 PM	14	0	5	6	0	22	8	110	6	2	126	4	303	0	0	0	0	0
	5:15 PM	7	1	5	4	4	22	6	104	1	2	145	1	302	0	0	0	0	0
	5:30 PM	8	2	7	7	0	20	9	99	7	4	131	0	294	0	0	0	0	0
	5:45 PM	9	0	4	2	1	14	7	106	3	3	127	4	280	0	0	0	0	0
	VOLUMES	78	7	38	50	8	177	76	758	37	21	1,030	33	2,313	0	0	0	0	0
	APPROACH %	63%	6%	31%	21%	3%	75%	9%	87%	4%	2%	95%	3%						
	APP/DEPART	123	/	116	235	/	66	871	/	846	1,084	/	1,285	0					
	BEGIN PEAK HR		4:45 PM																
	VOLUMES	36	3	18	25	4	87	30	405	15	10	543	13	1,189	0	0	0	0	
	APPROACH %	63%	5%	32%	22%	3%	75%	7%	90%	3%	2%	96%	2%						
	PEAK HR FACTOR		0.750			0.935			0.907			0.937		0.981					
	APP/DEPART	57	/	46	116	/	29	450	/	448	566	/	666	0					



AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

T112224

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, May 6, 25

LOCATION: Coachella
NORTH & SOUTH: Van Buren St
EAST & WEST: Ave 53

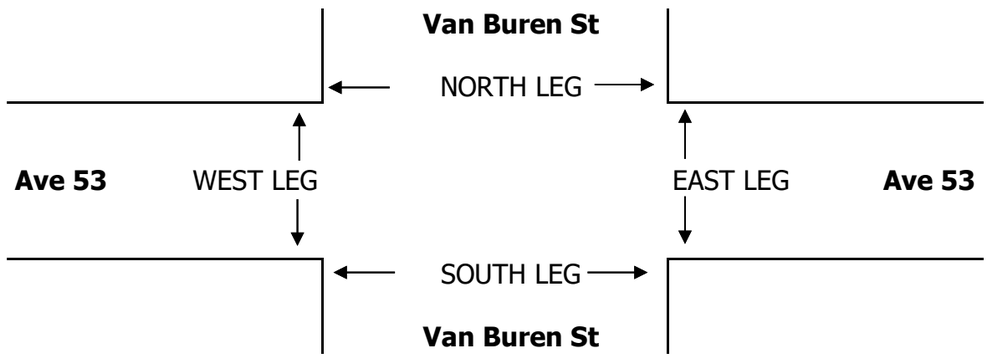
PROJECT #: SC5374
LOCATION #: 14
CONTROL: STOP E

NOTES:

AM PM MD OTHER OTHER

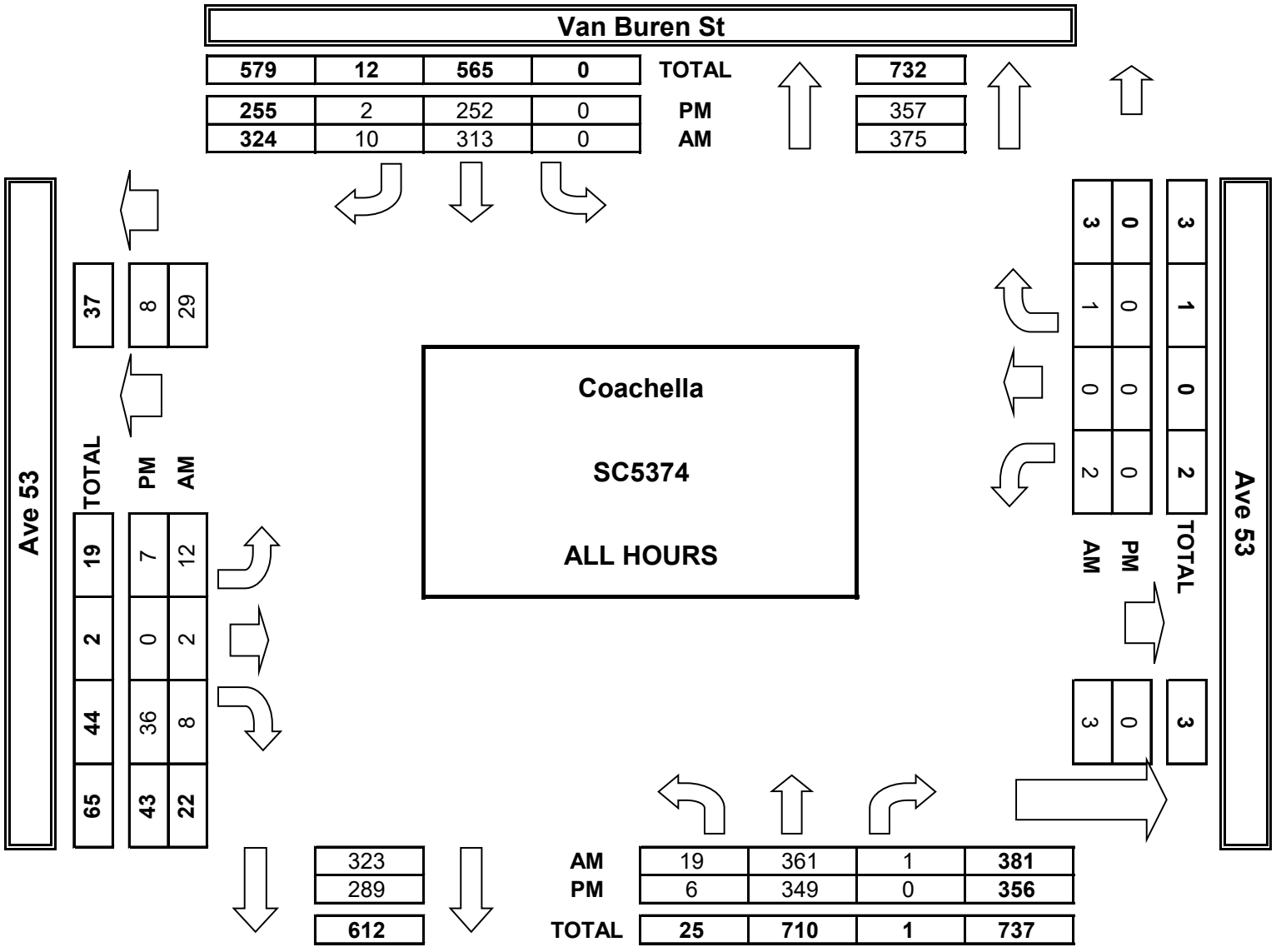
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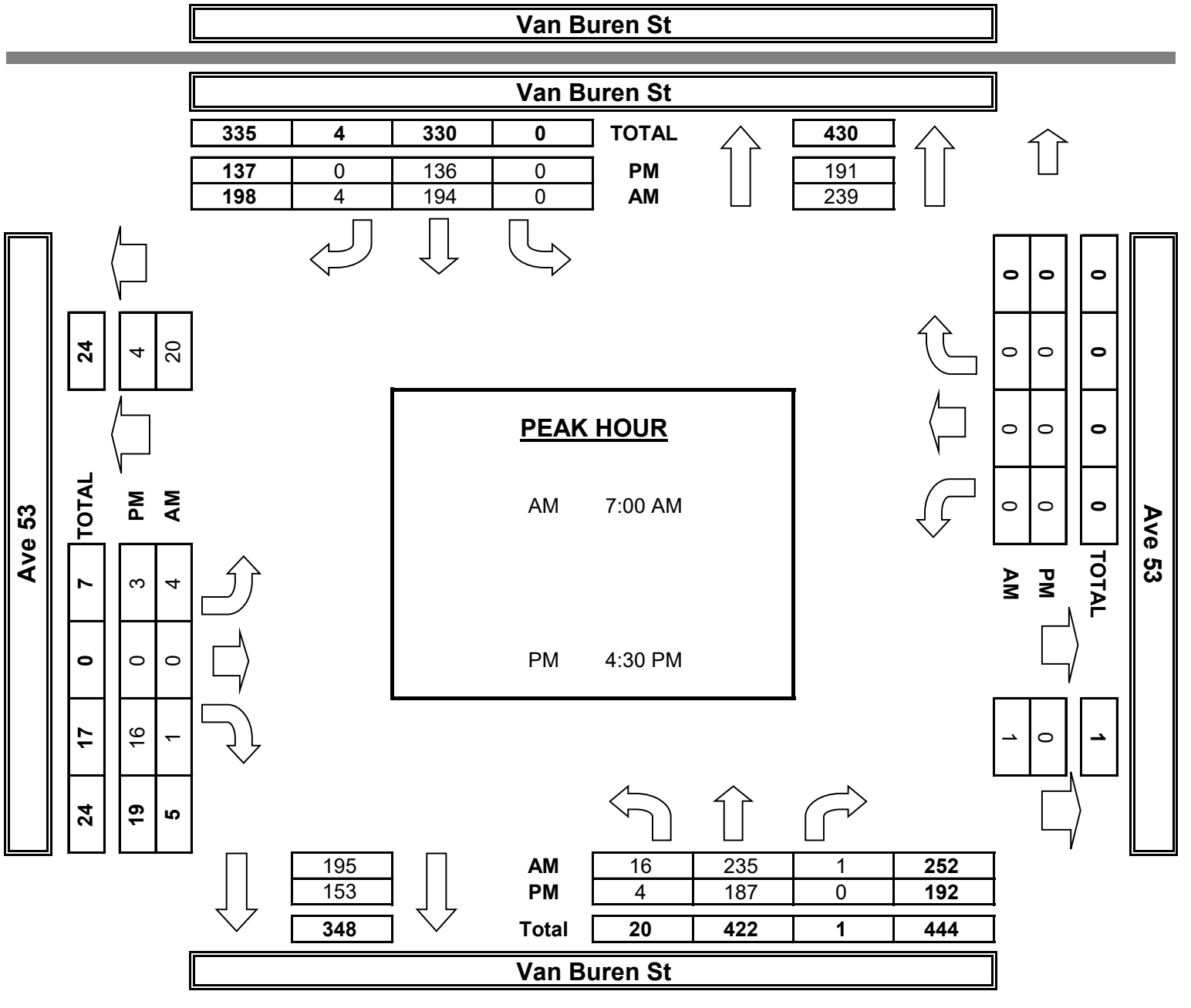
		NORTHBOUND Van Buren St			SOUTHBOUND Van Buren St			EASTBOUND Ave 53			WESTBOUND Ave 53				U-TURNS				
	LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	4	70	0	0	78	2	2	0	0	0	0	0	156	0	0	0	0	0
	7:15 AM	1	70	0	0	52	0	0	0	1	0	0	0	124	0	0	0	0	0
	7:30 AM	5	49	0	0	34	1	2	0	0	0	0	0	91	0	0	0	0	0
	7:45 AM	6	46	1	0	30	1	0	0	0	0	0	0	84	0	0	0	0	0
	8:00 AM	1	40	0	0	31	0	5	0	3	0	0	0	80	0	0	0	0	0
	8:15 AM	0	20	0	0	36	2	3	0	1	2	0	0	64	0	1	0	0	1
	8:30 AM	1	34	0	0	26	3	0	1	2	0	0	1	68	0	0	0	0	0
	8:45 AM	1	32	0	0	26	1	0	1	1	0	0	0	62	0	0	0	0	0
	VOLUMES	19	361	1	0	313	10	12	2	8	2	0	1	730	0	1	0	0	1
	APPROACH %	5%	95%	0%	0%	97%	3%	55%	9%	36%	67%	0%	33%						
	APP/DEPART	381	/	375	324	/	323	22	/	3	3	/	29	0					
	BEGIN PEAK HR		7:00 AM																
	VOLUMES	16	235	1	0	194	4	4	0	1	0	0	0	455	0	0	0	0	
	APPROACH %	6%	93%	0%	0%	98%	2%	80%	0%	20%	0%	0%	0%						
	PEAK HR FACTOR		0.851			0.619			0.625			0.000		0.729					
	APP/DEPART	252	/	239	198	/	195	5	/	1	0	/	20	0					
PM	4:00 PM	0	47	0	0	30	0	1	0	7	0	0	0	85	0	0	0	0	0
	4:15 PM	0	50	0	0	28	1	0	0	3	0	0	0	82	0	0	0	0	0
	4:30 PM	0	37	0	0	33	0	1	0	9	0	0	0	80	1	1	0	0	2
	4:45 PM	2	40	0	0	33	0	1	0	2	0	0	0	78	0	0	0	0	0
	5:00 PM	1	66	0	0	36	0	1	0	2	0	0	0	106	0	0	0	0	0
	5:15 PM	1	44	0	0	34	0	0	0	3	0	0	0	82	0	0	0	0	0
	5:30 PM	2	41	0	0	32	1	3	0	2	0	0	0	81	0	0	0	0	0
	5:45 PM	0	24	0	0	26	0	0	0	8	0	0	0	58	0	0	0	0	0
	VOLUMES	6	349	0	0	252	2	7	0	36	0	0	0	654	1	1	0	0	2
	APPROACH %	2%	98%	0%	0%	99%	1%	16%	0%	84%	0%	0%	0%						
	APP/DEPART	356	/	357	255	/	289	43	/	0	0	/	8	0					
	BEGIN PEAK HR		4:30 PM																
	VOLUMES	4	187	0	0	136	0	3	0	16	0	0	0	348	1	1	0	0	
	APPROACH %	2%	97%	0%	0%	99%	0%	16%	0%	84%	0%	0%	0%						
	PEAK HR FACTOR		0.716			0.951			0.475			0.000		0.821					
	APP/DEPART	192	/	191	137	/	153	19	/	0	0	/	4	0					



AimTD LLC

TURNING MOVEMENT COUNTS





Appendix D: Roadway and Access Assumptions

COVA Roadway and Intersection / Driveway Access Assumptions

Roadway Assumptions

The below roadway assumptions are based on the SCAG RTP/SCS and associated Financially Constrained Projects[1] approved in 2024. The most current roadway buildout designations (SCAG RTP/SCS 2024) are listed as the assumption for the Project analysis. This ensures the Project is consistent with the City's current roadway project funding schedule, which is consistent with SCAG's financially constrained project roadway funding schedule.

Roadways that are immediately adjacent to the Project include Avenue 52, Van Buren Street, and Calhoun Street. It is assumed that half of the roadway's full right-of-way (ROW) that is adjacent to the Project will be built out to the ultimate ROW width by the Project (listed below as "Immediately Adjacent Project Roadways"). The widening of the other half of the road is assumed to not occur in the Project analysis. *Note: Opening Year Plus Project and Cumulative Projects roadway assumptions remain the same as Opening Year Plus Project.*

Immediately Adjacent Project Roadways

- Van Buren Street (52nd Avenue to South City Limit)
    - Existing two-lane undivided with buffered bike lane
    - RTP planned road widening from 2 to 4 lanes (3A01CV087, 2030); project feature will be assumed in assessments
    - Opening Year with Project (2030) – half width widening built as project feature.
        - Three travel lanes on west side (SB), raised median lane, bike lane, and sidewalk
        - One travel lane on east side (NB)
- Calhoun Street (Avenue 52 to Southmost City line)
    - Existing two-lane undivided w/out bike lane
    - No RTP coverage on this segment
    - Opening Year with Project (2030) – half width widening built as a project feature
        - Two travel lanes on east side (NB), center median lane, bike lane, and sidewalk
        - One travel lane on west side (SB)
- Avenue 52 (Calhoun Street to Van Buren Street)
    - Existing two-lane undivided w/out bike lane
    - RTP planned road widening from 2 to 6 lanes (3A01CV014, 2035); RTP buildout (2035) is beyond Opening Year 2030, **thus project feature will only be assumed in assessments**
    - Opening Year with Project (2030) – half width widening built to as a project feature:
        - Two travel lanes on the south side (EB), raised center median, bike lane, and sidewalk
        - One travel lane on north side (WB)

[1] SCAG RTP/SCS 2024 Fiscally Constrained Projects, City of Coachella, P. 275, Table 2.

Peripheral Project Study Roadways

- Van Burent Street (Avenue 52 to North City Limit)
  - Existing two-lane undivided with a bike lane on the east side
  - **RTP planned road widening from 2 to 6 lanes (3A07036 and 3A07037, 2030); RTP buildout assumed in assessments**
  - Opening Year with Project – built to RTP full ROW, not developer obligated
- Avenue 52 (Van Buren Street to Fredrick Street)
  - Existing one and two lanes in each direction undivided with bike lanes
  - RTP planned road widening from 2 to 6 lanes (3A01CV014, 2035); RTP buildout year (2035) is beyond Opening Year (2030), **thus no changes will be assumed in assessments**
- Avenue 52 (Fredrick Street to Harrison Street)
  - Existing four-lanes undivided with bike lanes
  - RTP planned road widening from 4 to 6 lanes (3A01CV015A, 2035); RTP buildout year (2035) is beyond Opening Year (2030), **thus no changes will be assumed in assessments**
- Avenue 52 (Harrison Street to Hwy 111)
  - Existing one lane in each direction with bike sharrows; and two lanes in each direction divided
  - RTP planned road widening from 2 to 6 lanes (3A01CV015B, 2035); RTP buildout year (2035) is beyond Opening Year (2030), **thus no changes will be assumed in assessments**
- Dillon Road
  - Existing two-lane undivided w/out bike lane
  - **RTP planned road widening from 2 to 6 lanes from Cabezon Road to SR-86 interchange (3160028, 2027); RTP buildout assumed in assessments for segment mentions.**
  - Opening Year with Project – built to RTP full ROW, not developer obligated
- Avenue 50
  - Existing four-lane divided with bike lanes
  - **RTP planned road widening from Van Buren St to Harrison St to 6 lanes (3A01CV005, 2024); RTP buildout will not be assumed in assessments for segment mentions because not enough right of away. Recent re-pavement maintained 4 lanes with bike lanes.**
  - Opening Year with Project – will assume existing conditions
- Avenue 48
  - Existing four- to six-lane undivided with bike lanes
  - Planned Major Arterial (4 lanes, divided) with enhanced bike facilities
  - **RTP Planned road widening from 2 to 5 lanes from Van Buren St to W of Highway 111 (3A07108, 2024); RTP buildout assumed in assessments for segment mention**
  - Opening Year with Project – will assumed 2 lanes westbound and 3 lanes eastbound, not developer obligated

Intersection and Driveway Access Assumptions

Intersection / driveway access characteristics are related to the Project site plan shown in **Figure 1**, and input received from the Client.

Public Access Driveways / Intersections

Public guests may utilize the listed intersections / driveways to access the public sector of the Project, but may not access the private sector from these access points.

- Intersection / Driveway #1
  - Full movement, side street stop control.
- Intersection / Driveway #2
  - Typical Right-In / Right-Out operation.
- Intersection / Driveway #7
  - Typical Right-Out, exit only operation.

Private Access Driveways / Intersections

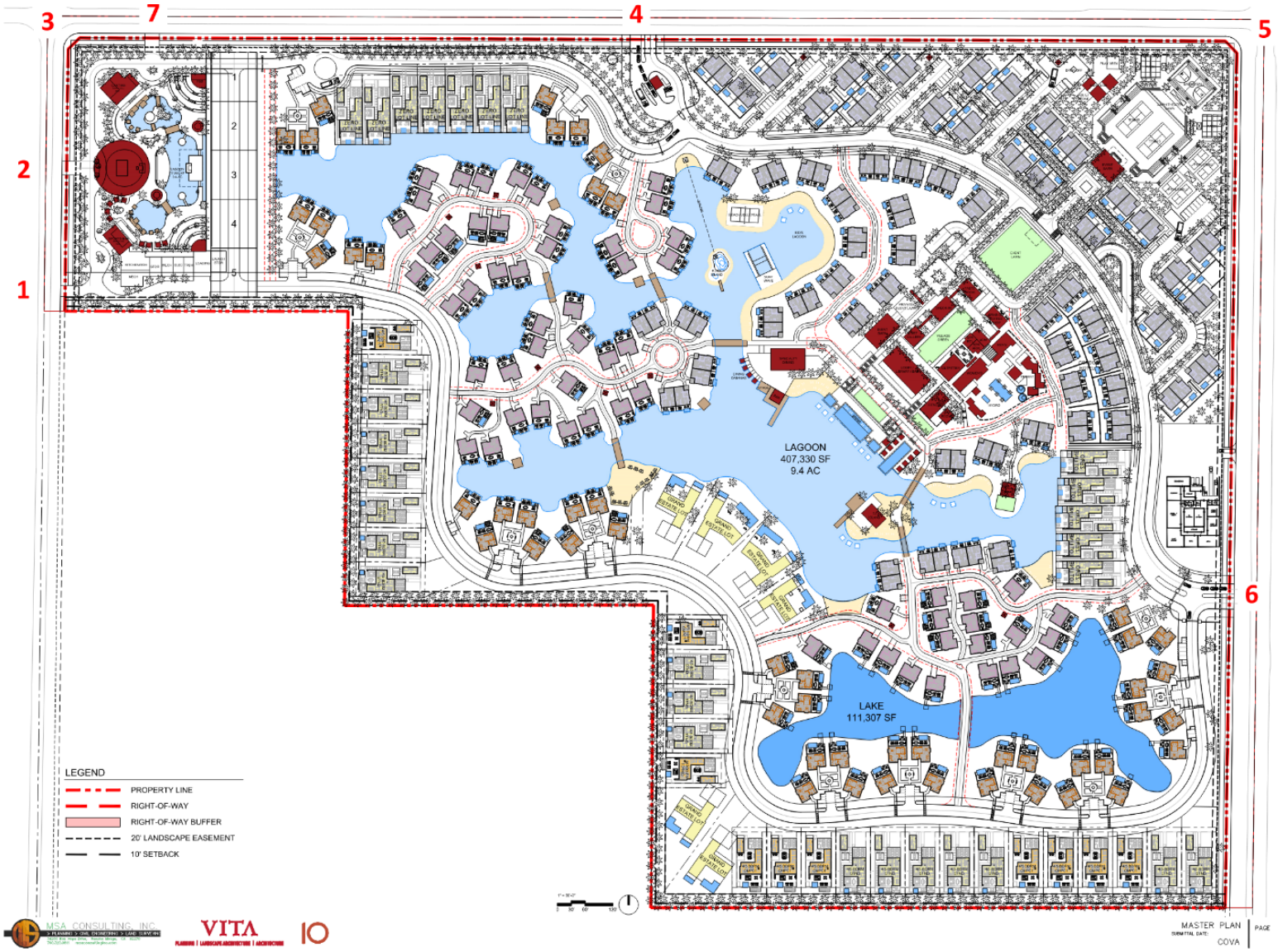
Private guests will use intersections / driveways #4 and #6 to enter the property. The private guests will have access to the parking garage at the Public Beach Club through the streets that pass through that garage, but it will be key card access. No Public Access will be allowable to the resort property through these roads.

- Intersection / Driveway #4
  - Full movement, side street stop control.
- Intersection / Driveway #6
  - Full movement, side street stop control.

Adjacent Intersections Only (Not Driveways)

- Intersection #3
  - Existing All-Way Stop Controlled.
  - Assumed Opening Year with Project and Opening Year with Project and Cumulative Projects will be the same as existing conditions.
- Intersection #5
  - Existing signalized intersection.
  - Assumed Opening Year with Project and Opening Year with Project and Cumulative Projects will be the same as existing conditions.

Figure 1: New Site Plan – Intersection / Driveway Access



Appendix E: LOS Worksheets

Intersection	
Intersection Delay, s/veh	42.7
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	190	6	3	442	79	14	211	30	75	148	43
Future Vol, veh/h	11	190	6	3	442	79	14	211	30	75	148	43
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	204	6	3	475	85	15	227	32	81	159	46
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	17.1	74.8	20.1	20.9
HCM LOS	C	F	C	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	5%	5%	1%	28%
Vol Thru, %	83%	92%	84%	56%
Vol Right, %	12%	3%	15%	16%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	255	207	524	266
LT Vol	14	11	3	75
Through Vol	211	190	442	148
RT Vol	30	6	79	43
Lane Flow Rate	274	223	563	286
Geometry Grp	1	1	1	1
Degree of Util (X)	0.566	0.462	1.039	0.588
Departure Headway (Hd)	7.629	7.68	6.64	7.606
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	477	472	552	478
Service Time	5.629	5.68	4.64	5.606
HCM Lane V/C Ratio	0.574	0.472	1.02	0.598
HCM Control Delay, s/veh	20.1	17.1	74.8	20.9
HCM Lane LOS	C	C	F	C
HCM 95th-tile Q	3.4	2.4	15.9	3.7

HCM 7th Signalized Intersection Summary
6: Van Buren St & Avenue 52

The Ranch at Coachella



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	259	7	18	457	173	9	210	32	114	137	75
Future Volume (veh/h)	36	259	7	18	457	173	9	210	32	114	137	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	40	285	8	20	502	181	10	231	32	125	151	70
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	77	788	22	47	532	192	26	305	42	158	319	148
Arrive On Green	0.04	0.44	0.44	0.03	0.41	0.41	0.01	0.19	0.19	0.09	0.26	0.26
Sat Flow, veh/h	1781	1810	51	1781	1312	473	1781	1608	223	1781	1209	560
Grp Volume(v), veh/h	40	0	293	20	0	683	10	0	263	125	0	221
Grp Sat Flow(s),veh/h/ln	1781	0	1861	1781	0	1785	1781	0	1830	1781	0	1769
Q Serve(g_s), s	1.8	0.0	8.9	0.9	0.0	31.0	0.5	0.0	11.4	5.8	0.0	8.8
Cycle Q Clear(g_c), s	1.8	0.0	8.9	0.9	0.0	31.0	0.5	0.0	11.4	5.8	0.0	8.8
Prop In Lane	1.00		0.03	1.00		0.27	1.00		0.12	1.00		0.32
Lane Grp Cap(c), veh/h	77	0	811	47	0	724	26	0	348	158	0	467
V/C Ratio(X)	0.52	0.00	0.36	0.42	0.00	0.94	0.38	0.00	0.76	0.79	0.00	0.47
Avail Cap(c_a), veh/h	424	0	811	424	0	743	424	0	762	424	0	736
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	39.4	0.0	15.9	40.3	0.0	24.1	41.0	0.0	32.2	37.6	0.0	26.0
Incr Delay (d2), s/veh	2.0	0.0	0.5	2.2	0.0	20.5	3.3	0.0	7.0	3.3	0.0	1.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	3.4	0.4	0.0	15.3	0.2	0.0	5.4	2.5	0.0	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	41.4	0.0	16.4	42.5	0.0	44.6	44.3	0.0	39.2	40.9	0.0	27.6
LnGrp LOS	D		B	D		D	D		D	D		C
Approach Vol, veh/h		333			703			273			346	
Approach Delay, s/veh		19.4			44.5			39.4			32.4	
Approach LOS		B			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	21.8	7.3	42.8	6.0	28.0	9.8	40.3
Change Period (Y+Rc), s	4.7	5.8	5.1	6.2	4.7	5.8	6.2	* 6.2
Max Green Setting (Gmax), s	20.0	35.0	20.0	35.0	20.0	35.0	20.0	* 35
Max Q Clear Time (g_c+I1), s	7.8	13.4	2.9	10.9	2.5	10.8	3.8	33.0
Green Ext Time (p_c), s	0.1	2.5	0.0	2.5	0.0	2.2	0.0	1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	36.1
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 7th Signalized Intersection Summary
8: Calhoun St & Avenue 50 — The Ranch at Coachella



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	179	17	37	417	145	91	386	159	121	258	64
Future Volume (veh/h)	30	179	17	37	417	145	91	386	159	121	258	64
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	35	208	15	43	485	143	106	449	152	141	300	60
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	109	959	69	124	750	220	184	679	228	195	788	155
Arrive On Green	0.06	0.29	0.29	0.07	0.28	0.28	0.10	0.26	0.26	0.11	0.27	0.27
Sat Flow, veh/h	1781	3362	241	1781	2707	793	1781	2608	875	1781	2955	583
Grp Volume(v), veh/h	35	109	114	43	317	311	106	305	296	141	179	181
Grp Sat Flow(s),veh/h/ln	1781	1777	1826	1781	1777	1723	1781	1777	1707	1781	1777	1762
Q Serve(g_s), s	1.5	3.7	3.7	1.8	12.3	12.5	4.5	12.0	12.2	6.0	6.4	6.6
Cycle Q Clear(g_c), s	1.5	3.7	3.7	1.8	12.3	12.5	4.5	12.0	12.2	6.0	6.4	6.6
Prop In Lane	1.00		0.13	1.00		0.46	1.00		0.51	1.00		0.33
Lane Grp Cap(c), veh/h	109	507	521	124	492	477	184	463	445	195	474	470
V/C Ratio(X)	0.32	0.22	0.22	0.35	0.64	0.65	0.58	0.66	0.67	0.72	0.38	0.39
Avail Cap(c_a), veh/h	454	792	814	454	792	768	454	792	761	454	792	786
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.3	21.4	21.4	34.8	25.0	25.0	33.5	25.9	26.0	33.8	23.5	23.5
Incr Delay (d2), s/veh	0.6	0.4	0.4	0.6	2.4	2.6	1.1	2.7	2.9	1.9	0.9	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	1.5	1.5	0.8	5.0	5.0	1.9	5.0	4.9	2.5	2.6	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.9	21.7	21.7	35.4	27.4	27.6	34.6	28.6	28.9	35.7	24.3	24.4
LnGrp LOS	D	C	C	D	C	C	C	C	C	D	C	C
Approach Vol, veh/h		258			671			707			501	
Approach Delay, s/veh		23.7			28.0			29.6			27.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.3	26.6	10.2	28.4	12.8	27.1	10.8	27.7
Change Period (Y+Rc), s	4.7	6.2	4.7	6.0	4.7	6.2	6.0	* 6
Max Green Setting (Gmax), s	20.0	35.0	20.0	35.0	20.0	35.0	20.0	* 35
Max Q Clear Time (g_c+I1), s	8.6	14.2	3.8	5.7	6.5	8.6	3.5	14.5
Green Ext Time (p_c), s	0.1	5.5	0.0	2.0	0.1	3.3	0.0	5.7

Intersection Summary	
HCM 7th Control Delay, s/veh	27.9
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 7th Signalized Intersection Summary
9: Van Buren St & Avenue 50

The Ranch at Coachella



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	332	99	97	389	149	86	395	57	73	280	65
Future Volume (veh/h)	59	332	99	97	389	149	86	395	57	73	280	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	71	400	114	117	469	153	104	476	35	88	337	64
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	123	1031	291	171	1068	346	168	756	55	163	415	350
Arrive On Green	0.07	0.38	0.38	0.10	0.40	0.40	0.09	0.23	0.23	0.09	0.22	0.22
Sat Flow, veh/h	1781	2732	770	1781	2639	855	1781	3357	246	1781	1870	1574
Grp Volume(v), veh/h	71	259	255	117	315	307	104	251	260	88	337	64
Grp Sat Flow(s),veh/h/ln	1781	1777	1726	1781	1777	1717	1781	1777	1826	1781	1870	1574
Q Serve(g_s), s	3.9	10.6	10.8	6.4	12.8	13.0	5.6	12.8	12.8	4.7	17.1	3.3
Cycle Q Clear(g_c), s	3.9	10.6	10.8	6.4	12.8	13.0	5.6	12.8	12.8	4.7	17.1	3.3
Prop In Lane	1.00		0.45	1.00		0.50	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	123	671	651	171	719	695	168	400	411	163	415	350
V/C Ratio(X)	0.58	0.39	0.39	0.68	0.44	0.44	0.62	0.63	0.63	0.54	0.81	0.18
Avail Cap(c_a), veh/h	164	671	651	182	719	695	182	521	535	182	548	461
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.1	22.7	22.8	43.7	21.5	21.6	43.5	35.0	35.0	43.4	36.9	31.5
Incr Delay (d2), s/veh	1.5	1.6	1.7	7.4	1.9	2.0	3.6	3.4	3.4	1.0	9.8	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	4.4	4.4	3.1	5.4	5.3	2.6	5.6	5.8	2.1	8.5	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	46.7	24.3	24.4	51.2	23.5	23.6	47.2	38.4	38.4	44.5	46.7	32.1
LnGrp LOS	D	C	C	D	C	C	D	D	D	D	D	C
Approach Vol, veh/h		585			739			615			489	
Approach Delay, s/veh		27.1			27.9			39.9			44.4	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.8	28.3	14.3	43.5	14.1	28.0	11.6	46.3
Change Period (Y+Rc), s	4.7	5.8	4.7	5.8	4.7	5.8	4.7	5.8
Max Green Setting (Gmax), s	10.2	29.3	10.2	29.3	10.2	29.3	9.2	30.3
Max Q Clear Time (g_c+I1), s	6.7	14.8	8.4	12.8	7.6	19.1	5.9	15.0
Green Ext Time (p_c), s	0.0	4.2	0.0	3.6	0.0	2.6	0.0	4.4

Intersection Summary	
HCM 7th Control Delay, s/veh	34.1
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	431	97	32	738	87	236	466	81	68	202	81
Future Volume (veh/h)	65	431	97	32	738	87	236	466	81	68	202	81
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	73	484	89	36	829	90	265	524	80	76	227	51
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	93	2315	416	52	2380	257	282	673	102	97	329	72
Arrive On Green	0.05	0.53	0.53	0.03	0.51	0.51	0.16	0.22	0.22	0.05	0.11	0.11
Sat Flow, veh/h	1781	4349	782	1781	4677	505	1781	3089	470	1781	2892	637
Grp Volume(v), veh/h	73	376	197	36	602	317	265	301	303	76	138	140
Grp Sat Flow(s),veh/h/ln	1781	1702	1727	1781	1702	1778	1781	1777	1782	1781	1777	1752
Q Serve(g_s), s	4.9	7.0	7.2	2.4	12.7	12.8	17.7	19.1	19.3	5.1	8.9	9.3
Cycle Q Clear(g_c), s	4.9	7.0	7.2	2.4	12.7	12.8	17.7	19.1	19.3	5.1	8.9	9.3
Prop In Lane	1.00		0.45	1.00		0.28	1.00		0.26	1.00		0.36
Lane Grp Cap(c), veh/h	93	1812	919	52	1733	905	282	387	388	97	202	199
V/C Ratio(X)	0.78	0.21	0.21	0.69	0.35	0.35	0.94	0.78	0.78	0.79	0.68	0.70
Avail Cap(c_a), veh/h	282	1812	919	282	1733	905	282	459	460	282	459	453
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.2	14.8	14.8	57.7	17.6	17.6	49.9	44.2	44.2	56.1	51.1	51.2
Incr Delay (d2), s/veh	5.3	0.3	0.5	6.0	0.6	1.1	37.2	5.6	5.9	5.2	1.5	1.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	2.6	2.8	1.1	4.7	5.1	10.5	8.7	8.9	2.4	4.0	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	61.5	15.0	15.3	63.8	18.1	18.7	87.2	49.8	50.1	61.3	52.6	52.9
LnGrp LOS	E	B	B	E	B	B	F	D	D	E	D	D
Approach Vol, veh/h		646			955			869			354	
Approach Delay, s/veh		20.4			20.0			61.3			54.6	
Approach LOS		C			C			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.5	68.9	24.0	18.6	11.3	66.1	11.5	31.1
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	19.6	31.0	19.0	31.0	19.0	31.0	19.0	31.0
Max Q Clear Time (g_c+I1), s	14.4	9.2	19.7	11.3	6.9	14.8	7.1	21.3
Green Ext Time (p_c), s	0.0	0.5	0.0	0.2	0.0	0.8	0.0	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	37.1
HCM 7th LOS	D

HCM 7th Signalized Intersection Summary
11: Van Buren St & Avenue 48

The Ranch at Coachella



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	352	175	90	374	74	239	413	302	82	184	189
Future Volume (veh/h)	106	352	175	90	374	74	239	413	302	82	184	189
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	116	387	56	99	411	22	263	454	258	90	202	43
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	202	494	414	194	924	408	313	568	320	189	358	299
Arrive On Green	0.11	0.26	0.26	0.11	0.26	0.26	0.18	0.26	0.26	0.11	0.19	0.19
Sat Flow, veh/h	1781	1870	1567	1781	3554	1567	1781	2180	1229	1781	1870	1560
Grp Volume(v), veh/h	116	387	56	99	411	22	263	369	343	90	202	43
Grp Sat Flow(s),veh/h/ln	1781	1870	1567	1781	1777	1567	1781	1777	1632	1781	1870	1560
Q Serve(g_s), s	5.1	15.7	2.2	4.3	7.9	0.9	11.7	15.9	16.1	3.9	8.0	1.9
Cycle Q Clear(g_c), s	5.1	15.7	2.2	4.3	7.9	0.9	11.7	15.9	16.1	3.9	8.0	1.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.75	1.00		1.00
Lane Grp Cap(c), veh/h	202	494	414	194	924	408	313	463	425	189	358	299
V/C Ratio(X)	0.58	0.78	0.14	0.51	0.44	0.05	0.84	0.80	0.81	0.48	0.56	0.14
Avail Cap(c_a), veh/h	434	912	764	434	1733	764	869	542	498	869	570	476
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.5	28.0	23.0	34.5	25.4	22.8	32.7	28.3	28.4	34.5	30.1	27.6
Incr Delay (d2), s/veh	2.6	2.8	0.1	2.1	0.3	0.1	6.1	7.1	8.2	1.8	1.4	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	6.7	0.8	1.8	3.1	0.3	5.2	7.1	6.7	1.7	3.5	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	37.1	30.8	23.2	36.5	25.7	22.8	38.8	35.4	36.5	36.3	31.5	27.8
LnGrp LOS	D	C	C	D	C	C	D	D	D	D	C	C
Approach Vol, veh/h		559			532			975			335	
Approach Delay, s/veh		31.3			27.6			36.7			32.3	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	27.7	19.4	21.0	14.3	27.3	13.7	26.7
Change Period (Y+Rc), s	5.0	6.0	5.0	5.3	5.0	6.0	5.0	5.3
Max Green Setting (Gmax), s	20.0	40.0	40.0	25.0	20.0	40.0	40.0	25.0
Max Q Clear Time (g_c+I1), s	16.3	17.7	13.7	10.0	7.1	9.9	5.9	18.1
Green Ext Time (p_c), s	0.2	2.2	0.7	0.9	0.2	2.5	0.2	2.3

Intersection Summary	
HCM 7th Control Delay, s/veh	32.8
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

HCM 7th Signalized Intersection Summary
12: Dillon Rd/Driveway & Avenue 48

The Ranch at Coachella



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	199	517	149	204	0	298	11	127	5	14	25
Future Volume (veh/h)	25	199	517	149	204	0	298	11	127	5	14	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	28	224	228	167	229	0	335	41	31	6	16	7
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	33	563	442	208	914	0	439	654	554	8	569	232
Arrive On Green	0.02	0.16	0.16	0.12	0.26	0.00	0.12	0.35	0.35	0.00	0.23	0.23
Sat Flow, veh/h	1781	3554	1555	1781	3647	0	3563	1870	1585	1781	2461	1005
Grp Volume(v), veh/h	28	224	228	167	229	0	335	41	31	6	11	12
Grp Sat Flow(s),veh/h/ln	1781	1777	1555	1781	1777	0	1781	1870	1585	1781	1777	1689
Q Serve(g_s), s	1.0	3.6	7.8	5.7	3.2	0.0	5.7	0.9	0.8	0.2	0.3	0.3
Cycle Q Clear(g_c), s	1.0	3.6	7.8	5.7	3.2	0.0	5.7	0.9	0.8	0.2	0.3	0.3
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		0.59
Lane Grp Cap(c), veh/h	33	563	442	208	914	0	439	654	554	8	410	390
V/C Ratio(X)	0.85	0.40	0.52	0.80	0.25	0.00	0.76	0.06	0.06	0.71	0.03	0.03
Avail Cap(c_a), veh/h	906	2879	1455	906	2879	0	1415	654	554	425	410	390
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.8	23.8	19.0	27.1	18.6	0.0	26.7	13.6	13.6	31.3	18.7	18.7
Incr Delay (d2), s/veh	19.5	0.2	0.3	2.7	0.1	0.0	1.0	0.2	0.2	72.3	0.1	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	1.4	2.6	2.4	1.2	0.0	2.4	0.4	0.3	0.3	0.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	50.3	24.0	19.4	29.8	18.6	0.0	27.7	13.8	13.8	103.6	18.9	18.9
LnGrp LOS	D	C	B	C	B		C	B	B	F	B	B
Approach Vol, veh/h		480			396			407			29	
Approach Delay, s/veh		23.3			23.3			25.3			36.4	
Approach LOS		C			C			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	16.4	13.0	20.6	6.8	22.6	5.5	28.1
Change Period (Y+Rc), s	5.6	6.4	5.2	6.1	5.6	6.4	5.2	6.1
Max Green Setting (Gmax), s	32.0	51.0	25.0	12.0	32.0	51.0	15.0	22.0
Max Q Clear Time (g_c+I1), s	7.7	9.8	7.7	2.3	3.0	5.2	2.2	2.9
Green Ext Time (p_c), s	0.0	0.2	0.1	0.0	0.0	0.2	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	24.2
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

HCM 7th Signalized Intersection Summary
13: SR-86 SB Ramps & Dillon Rd — The Ranch at Coachella



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	533	61	114	314	0	0	0	0	117	0	155
Future Volume (veh/h)	0	533	61	114	314	0	0	0	0	117	0	155
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	599	65	128	353	0				131	0	25
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89				0.89	0.89	0.89
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	919	100	165	1344	0				178	0	158
Arrive On Green	0.00	0.55	0.55	0.09	0.72	0.00				0.10	0.00	0.10
Sat Flow, veh/h	0	1658	180	1781	1870	0				1781	0	1585
Grp Volume(v), veh/h	0	0	664	128	353	0				131	0	25
Grp Sat Flow(s),veh/h/ln	0	0	1838	1781	1870	0				1781	0	1585
Q Serve(g_s), s	0.0	0.0	16.4	4.6	4.3	0.0				4.6	0.0	0.9
Cycle Q Clear(g_c), s	0.0	0.0	16.4	4.6	4.3	0.0				4.6	0.0	0.9
Prop In Lane	0.00		0.10	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	0	1018	165	1344	0				178	0	158
V/C Ratio(X)	0.00	0.00	0.65	0.78	0.26	0.00				0.74	0.00	0.16
Avail Cap(c_a), veh/h	0	0	1018	493	1344	0				384	0	341
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.97	0.97	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	10.1	28.8	3.2	0.0				28.4	0.0	26.8
Incr Delay (d2), s/veh	0.0	0.0	3.2	2.9	0.5	0.0				2.2	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	5.1	1.8	0.6	0.0				2.0	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	13.4	31.7	3.6	0.0				30.7	0.0	26.9
LnGrp LOS			B	C	A					C		C
Approach Vol, veh/h		664			481						156	
Approach Delay, s/veh		13.4			11.1						30.1	
Approach LOS		B			B						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	10.7	42.0		12.3		52.7
Change Period (Y+Rc), s	4.7	6.0		5.8		6.0
Max Green Setting (Gmax), s	18.3	16.2		14.0		39.2
Max Q Clear Time (g_c+I1), s	6.6	18.4		6.6		6.3
Green Ext Time (p_c), s	0.1	0.0		0.2		1.1

Intersection Summary	
HCM 7th Control Delay, s/veh	14.5
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	327	322	0	0	310	137	125	2	144	0	0	0
Future Volume (veh/h)	327	322	0	0	310	137	125	2	144	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	355	350	0	0	337	50	136	2	87			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	559	1226	0	0	886	395	168	2	107			
Arrive On Green	0.31	0.66	0.00	0.00	0.25	0.25	0.16	0.16	0.16			
Sat Flow, veh/h	1781	1870	0	0	3647	1585	1028	15	658			
Grp Volume(v), veh/h	355	350	0	0	337	50	225	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1870	0	0	1777	1585	1701	0	0			
Q Serve(g_s), s	11.1	5.2	0.0	0.0	5.1	1.6	8.3	0.0	0.0			
Cycle Q Clear(g_c), s	11.1	5.2	0.0	0.0	5.1	1.6	8.3	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.60		0.39			
Lane Grp Cap(c), veh/h	559	1226	0	0	886	395	277	0	0			
V/C Ratio(X)	0.63	0.29	0.00	0.00	0.38	0.13	0.81	0.00	0.00			
Avail Cap(c_a), veh/h	559	1226	0	0	886	395	471	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.61	0.61	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	19.1	4.7	0.0	0.0	20.2	18.9	26.2	0.0	0.0			
Incr Delay (d2), s/veh	1.1	0.4	0.0	0.0	1.2	0.7	2.2	0.0	0.0			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	8.9	1.1	0.0	0.0	1.9	0.6	3.3	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.2	5.1	0.0	0.0	21.5	19.6	28.4	0.0	0.0			
LnGrp LOS	C	A			C	B	C					
Approach Vol, veh/h		705			387			225				
Approach Delay, s/veh		12.7			21.2			28.4				
Approach LOS		B			C			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		48.6			26.4	22.2		16.4				
Change Period (Y+Rc), s		6.0			6.0	* 6		5.8				
Max Green Setting (Gmax), s		35.2			14.0	* 16		18.0				
Max Q Clear Time (g_c+I1), s		7.2			13.1	7.1		10.3				
Green Ext Time (p_c), s		1.0			0.1	0.9		0.5				

Intersection Summary	
HCM 7th Control Delay, s/veh	17.9
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑↑			↱
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	1
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.93
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.319
Pot Cap-1 Maneuver	0	-	-	0	0	1084
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	-	-	-	-	-	1084
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	SBLn1
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Ctrl Dly (s/v)	-	-	0
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	80	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1	0	-	0	1	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	0	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1622	-	-	0	1022	1083
Stage 1	-	-	-	0	1022	-
Stage 2	-	-	-	0	-	-
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	1622	-	-	-	1022	1083
Mov Cap-2 Maneuver	-	-	-	-	933	-
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	SBLn1
Capacity (veh/h)	1622	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Ctrl Dly (s/v)	0	-	-	0
HCM Lane LOS	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-

Intersection	
Intersection Delay, s/veh	71.1
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	29	436	6	6	296	61	11	118	13	111	127	20
Future Vol, veh/h	29	436	6	6	296	61	11	118	13	111	127	20
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	36	538	7	7	365	75	14	146	16	137	157	25
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	127.9	48	18.6	28.9
HCM LOS	F	E	C	D

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	8%	6%	2%	43%
Vol Thru, %	83%	93%	82%	49%
Vol Right, %	9%	1%	17%	8%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	142	471	363	258
LT Vol	11	29	6	111
Through Vol	118	436	296	127
RT Vol	13	6	61	20
Lane Flow Rate	175	581	448	319
Geometry Grp	1	1	1	1
Degree of Util (X)	0.418	1.187	0.897	0.698
Departure Headway (Hd)	9.171	7.348	7.718	8.48
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	394	500	475	430
Service Time	7.171	5.36	5.718	6.48
HCM Lane V/C Ratio	0.444	1.162	0.943	0.742
HCM Control Delay, s/veh	18.6	127.9	48	28.9
HCM Lane LOS	C	F	E	D
HCM 95th-tile Q	2	21.5	9.9	5.2

HCM 7th Signalized Intersection Summary
6: Van Buren St & Avenue 52

The Ranch at Coachella



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	512	4	14	325	105	10	187	29	156	140	13
Future Volume (veh/h)	30	512	4	14	325	105	10	187	29	156	140	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	32	539	4	15	342	104	11	197	27	164	147	12
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	90	665	5	39	432	131	30	286	39	207	473	39
Arrive On Green	0.05	0.36	0.36	0.02	0.31	0.31	0.02	0.18	0.18	0.12	0.28	0.28
Sat Flow, veh/h	1781	1854	14	1781	1376	419	1781	1610	221	1781	1706	139
Grp Volume(v), veh/h	32	0	543	15	0	446	11	0	224	164	0	159
Grp Sat Flow(s),veh/h/ln	1781	0	1868	1781	0	1795	1781	0	1831	1781	0	1845
Q Serve(g_s), s	1.2	0.0	17.6	0.6	0.0	15.2	0.4	0.0	7.7	6.0	0.0	4.6
Cycle Q Clear(g_c), s	1.2	0.0	17.6	0.6	0.0	15.2	0.4	0.0	7.7	6.0	0.0	4.6
Prop In Lane	1.00		0.01	1.00		0.23	1.00		0.12	1.00		0.08
Lane Grp Cap(c), veh/h	90	0	670	39	0	563	30	0	326	207	0	512
V/C Ratio(X)	0.36	0.00	0.81	0.39	0.00	0.79	0.37	0.00	0.69	0.79	0.00	0.31
Avail Cap(c_a), veh/h	532	0	977	532	0	939	532	0	957	532	0	965
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.7	0.0	19.4	32.3	0.0	21.0	32.6	0.0	25.8	28.8	0.0	19.1
Incr Delay (d2), s/veh	0.9	0.0	4.8	2.3	0.0	4.3	2.9	0.0	5.4	2.6	0.0	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	7.1	0.2	0.0	6.0	0.2	0.0	3.5	2.5	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	31.6	0.0	24.2	34.6	0.0	25.3	35.4	0.0	31.2	31.4	0.0	19.9
LnGrp LOS	C		C	C		C	D		C	C		B
Approach Vol, veh/h		575			461			235			323	
Approach Delay, s/veh		24.6			25.6			31.4			25.7	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.5	17.7	6.6	30.2	5.8	24.4	9.6	27.2
Change Period (Y+Rc), s	4.7	5.8	5.1	6.2	4.7	5.8	6.2	* 6.2
Max Green Setting (Gmax), s	20.0	35.0	20.0	35.0	20.0	35.0	20.0	* 35
Max Q Clear Time (g_c+I1), s	8.0	9.7	2.6	19.6	2.4	6.6	3.2	17.2
Green Ext Time (p_c), s	0.2	2.2	0.0	4.4	0.0	1.5	0.0	3.8

Intersection Summary	
HCM 7th Control Delay, s/veh	26.1
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	385	32	18	279	126	43	249	80	182	272	45
Future Volume (veh/h)	45	385	32	18	279	126	43	249	80	182	272	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	51	433	33	21	313	100	48	280	66	204	306	42
Peak Hour Factor	0.89	0.89	0.89	0.86	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	149	960	73	78	603	189	144	548	127	252	793	108
Arrive On Green	0.08	0.29	0.29	0.04	0.23	0.23	0.08	0.19	0.19	0.14	0.25	0.25
Sat Flow, veh/h	1781	3346	254	1781	2657	833	1781	2859	662	1781	3141	427
Grp Volume(v), veh/h	51	229	237	21	207	206	48	172	174	204	172	176
Grp Sat Flow(s),veh/h/ln	1781	1777	1823	1781	1777	1714	1781	1777	1745	1781	1777	1791
Q Serve(g_s), s	1.7	6.8	6.8	0.7	6.6	6.8	1.6	5.6	5.7	7.1	5.1	5.2
Cycle Q Clear(g_c), s	1.7	6.8	6.8	0.7	6.6	6.8	1.6	5.6	5.7	7.1	5.1	5.2
Prop In Lane	1.00		0.14	1.00		0.49	1.00		0.38	1.00		0.24
Lane Grp Cap(c), veh/h	149	510	523	78	403	389	144	341	335	252	449	452
V/C Ratio(X)	0.34	0.45	0.45	0.27	0.51	0.53	0.33	0.51	0.52	0.81	0.38	0.39
Avail Cap(c_a), veh/h	554	968	993	554	968	933	554	968	950	554	968	975
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.8	18.8	18.8	29.7	21.7	21.8	27.9	23.2	23.3	26.8	19.9	19.9
Incr Delay (d2), s/veh	0.5	1.1	1.0	0.7	1.7	1.9	0.5	2.0	2.1	2.4	0.9	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	2.6	2.7	0.3	2.6	2.6	0.7	2.3	2.3	2.9	2.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.3	19.8	19.8	30.4	23.5	23.7	28.4	25.2	25.5	29.1	20.8	20.9
LnGrp LOS	C	B	B	C	C	C	C	C	C	C	C	C
Approach Vol, veh/h		517			434			394			552	
Approach Delay, s/veh		20.7			23.9			25.7			23.9	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.8	18.5	7.5	24.5	9.9	22.4	11.4	20.6
Change Period (Y+Rc), s	4.7	6.2	4.7	6.0	4.7	6.2	6.0	* 6
Max Green Setting (Gmax), s	20.0	35.0	20.0	35.0	20.0	35.0	20.0	* 35
Max Q Clear Time (g_c+I1), s	9.1	7.7	2.7	8.8	3.6	7.2	3.7	8.8
Green Ext Time (p_c), s	0.2	3.2	0.0	4.5	0.0	3.2	0.0	3.9

Intersection Summary	
HCM 7th Control Delay, s/veh	23.4
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 7th Signalized Intersection Summary
9: Van Buren St & Avenue 50

The Ranch at Coachella



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	479	68	56	342	95	53	250	58	144	370	52
Future Volume (veh/h)	83	479	68	56	342	95	53	250	58	144	370	52
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	88	510	62	60	364	79	56	266	42	153	394	16
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	130	1224	148	144	1140	245	141	687	107	182	460	388
Arrive On Green	0.07	0.38	0.38	0.08	0.39	0.39	0.08	0.22	0.22	0.10	0.25	0.25
Sat Flow, veh/h	1781	3188	386	1781	2910	625	1781	3080	480	1781	1870	1575
Grp Volume(v), veh/h	88	283	289	60	221	222	56	152	156	153	394	16
Grp Sat Flow(s),veh/h/ln	1781	1777	1798	1781	1777	1758	1781	1777	1784	1781	1870	1575
Q Serve(g_s), s	4.8	11.7	11.8	3.2	8.6	8.8	3.0	7.3	7.4	8.4	20.1	0.8
Cycle Q Clear(g_c), s	4.8	11.7	11.8	3.2	8.6	8.8	3.0	7.3	7.4	8.4	20.1	0.8
Prop In Lane	1.00		0.21	1.00		0.36	1.00		0.27	1.00		1.00
Lane Grp Cap(c), veh/h	130	682	690	144	696	689	141	396	398	182	460	388
V/C Ratio(X)	0.68	0.42	0.42	0.42	0.32	0.32	0.40	0.38	0.39	0.84	0.86	0.04
Avail Cap(c_a), veh/h	164	682	690	182	696	689	182	521	523	182	548	462
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.86	0.86	0.86	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.2	22.6	22.6	43.7	21.1	21.2	43.8	33.0	33.1	44.1	36.0	28.7
Incr Delay (d2), s/veh	3.6	1.6	1.6	0.7	1.2	1.2	0.7	1.3	1.3	27.1	13.4	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	4.9	5.0	1.4	3.6	3.7	1.3	3.1	3.2	4.9	10.4	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	48.8	24.2	24.2	44.4	22.3	22.4	44.5	34.3	34.4	71.2	49.4	28.8
LnGrp LOS	D	C	C	D	C	C	D	C	C	E	D	C
Approach Vol, veh/h		660			503			364			563	
Approach Delay, s/veh		27.5			25.0			35.9			54.8	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.9	28.1	12.8	44.2	12.6	30.4	12.0	45.0
Change Period (Y+Rc), s	4.7	5.8	4.7	5.8	4.7	5.8	4.7	5.8
Max Green Setting (Gmax), s	10.2	29.3	10.2	29.3	10.2	29.3	9.2	30.3
Max Q Clear Time (g_c+I1), s	10.4	9.4	5.2	13.8	5.0	22.1	6.8	10.8
Green Ext Time (p_c), s	0.0	2.8	0.0	3.9	0.0	2.2	0.0	3.3

Intersection Summary	
HCM 7th Control Delay, s/veh	35.7
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

HCM 7th Signalized Intersection Summary
10: Calhoun St & Avenue 48

The Ranch at Coachella



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	745	248	51	574	59	130	252	35	99	412	95
Future Volume (veh/h)	68	745	248	51	574	59	130	252	35	99	412	95
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	71	776	225	53	598	55	135	262	27	103	429	81
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	91	2101	603	68	2481	226	161	618	63	127	510	96
Arrive On Green	0.05	0.53	0.53	0.04	0.52	0.52	0.09	0.19	0.19	0.07	0.17	0.17
Sat Flow, veh/h	1781	3937	1131	1781	4761	434	1781	3252	332	1781	2985	559
Grp Volume(v), veh/h	71	670	331	53	426	227	135	142	147	103	254	256
Grp Sat Flow(s),veh/h/ln	1781	1702	1663	1781	1702	1791	1781	1777	1807	1781	1777	1767
Q Serve(g_s), s	4.7	13.7	13.9	3.5	8.2	8.3	9.0	8.4	8.6	6.8	16.6	16.8
Cycle Q Clear(g_c), s	4.7	13.7	13.9	3.5	8.2	8.3	9.0	8.4	8.6	6.8	16.6	16.8
Prop In Lane	1.00		0.68	1.00		0.24	1.00		0.18	1.00		0.32
Lane Grp Cap(c), veh/h	91	1816	887	68	1774	933	161	337	343	127	304	302
V/C Ratio(X)	0.78	0.37	0.37	0.77	0.24	0.24	0.84	0.42	0.43	0.81	0.84	0.85
Avail Cap(c_a), veh/h	282	1816	887	282	1774	933	282	459	467	282	459	457
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.3	16.2	16.3	57.2	15.7	15.8	53.7	42.8	42.9	54.9	48.1	48.2
Incr Delay (d2), s/veh	5.4	0.6	1.2	6.8	0.3	0.6	4.4	0.3	0.3	4.6	5.1	5.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	5.0	5.2	1.7	3.0	3.3	4.1	3.7	3.8	3.2	7.6	7.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	61.6	16.8	17.5	64.0	16.1	16.4	58.1	43.1	43.2	59.5	53.2	54.1
LnGrp LOS	E	B	B	E	B	B	E	D	D	E	D	D
Approach Vol, veh/h		1072			706			424			613	
Approach Delay, s/veh		20.0			19.8			47.9			54.6	
Approach LOS		C			B			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	69.0	15.8	25.5	11.1	67.5	13.6	27.8
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	19.6	31.0	19.0	31.0	19.0	31.0	19.0	31.0
Max Q Clear Time (g_c+I1), s	5.5	15.9	11.0	18.8	6.7	10.3	8.8	10.6
Green Ext Time (p_c), s	0.0	0.9	0.0	0.3	0.0	0.5	0.0	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	31.7
HCM 7th LOS	C

HCM 7th Signalized Intersection Summary
11: Van Buren St & Avenue 48

The Ranch at Coachella



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	420	371	213	424	61	186	270	163	65	370	75
Future Volume (veh/h)	45	420	371	213	424	61	186	270	163	65	370	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	47	442	155	224	446	24	196	284	121	68	389	19
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	129	524	439	259	1253	554	235	682	283	150	434	363
Arrive On Green	0.07	0.28	0.28	0.15	0.35	0.35	0.13	0.28	0.28	0.08	0.23	0.23
Sat Flow, veh/h	1781	1870	1568	1781	3554	1572	1781	2440	1012	1781	1870	1565
Grp Volume(v), veh/h	47	442	155	224	446	24	196	205	200	68	389	19
Grp Sat Flow(s),veh/h/ln	1781	1870	1568	1781	1777	1572	1781	1777	1675	1781	1870	1565
Q Serve(g_s), s	2.5	22.5	8.0	12.4	9.4	1.0	10.8	9.5	9.9	3.7	20.4	1.0
Cycle Q Clear(g_c), s	2.5	22.5	8.0	12.4	9.4	1.0	10.8	9.5	9.9	3.7	20.4	1.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.60	1.00		1.00
Lane Grp Cap(c), veh/h	129	524	439	259	1253	554	235	497	468	150	434	363
V/C Ratio(X)	0.36	0.84	0.35	0.87	0.36	0.04	0.84	0.41	0.43	0.45	0.90	0.05
Avail Cap(c_a), veh/h	353	741	621	353	1408	623	706	497	468	706	463	387
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.6	34.3	29.1	42.2	24.2	21.5	42.8	29.6	29.8	44.0	37.6	30.1
Incr Delay (d2), s/veh	1.7	6.3	0.5	15.3	0.2	0.0	7.6	0.5	0.6	2.1	19.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	10.4	2.9	6.3	3.7	0.4	5.1	3.9	3.9	1.7	11.1	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	46.3	40.6	29.5	57.5	24.4	21.5	50.4	30.2	30.4	46.1	56.6	30.2
LnGrp LOS	D	D	C	E	C	C	D	C	C	D	E	C
Approach Vol, veh/h		644			694			601			476	
Approach Delay, s/veh		38.3			35.0			36.8			54.0	
Approach LOS		D			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.7	34.3	18.3	28.7	12.3	41.6	13.5	33.5
Change Period (Y+Rc), s	5.0	6.0	5.0	5.3	5.0	6.0	5.0	5.3
Max Green Setting (Gmax), s	20.0	40.0	40.0	25.0	20.0	40.0	40.0	25.0
Max Q Clear Time (g_c+I1), s	14.4	24.5	12.8	22.4	4.5	11.4	5.7	11.9
Green Ext Time (p_c), s	0.3	2.6	0.5	0.6	0.1	2.7	0.2	1.8

Intersection Summary	
HCM 7th Control Delay, s/veh	40.1
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

HCM 7th Signalized Intersection Summary
12: Dillon Rd/Driveway & Avenue 48

The Ranch at Coachella



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	247	374	148	229	2	472	6	289	2	9	23
Future Volume (veh/h)	13	247	374	148	229	2	472	6	289	2	9	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	13	252	149	151	234	2	482	0	116	2	9	6
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	17	408	441	191	767	7	592	0	1195	3	454	272
Arrive On Green	0.01	0.11	0.11	0.11	0.21	0.21	0.17	0.00	0.38	0.00	0.21	0.21
Sat Flow, veh/h	1781	3554	1551	1781	3610	31	3563	0	3170	1781	2135	1282
Grp Volume(v), veh/h	13	252	149	151	115	121	482	0	116	2	7	8
Grp Sat Flow(s),veh/h/ln	1781	1777	1551	1781	1777	1864	1781	0	1585	1781	1777	1640
Q Serve(g_s), s	0.4	3.9	4.5	4.8	3.2	3.2	7.6	0.0	1.4	0.1	0.2	0.2
Cycle Q Clear(g_c), s	0.4	3.9	4.5	4.8	3.2	3.2	7.6	0.0	1.4	0.1	0.2	0.2
Prop In Lane	1.00		1.00	1.00		0.02	1.00		1.00	1.00		0.78
Lane Grp Cap(c), veh/h	17	408	441	191	378	396	592	0	1195	3	378	348
V/C Ratio(X)	0.75	0.62	0.34	0.79	0.30	0.31	0.81	0.00	0.10	0.66	0.02	0.02
Avail Cap(c_a), veh/h	977	3105	1618	977	1553	1629	1526	0	1195	458	378	348
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.8	24.6	16.7	25.4	19.4	19.4	23.5	0.0	11.8	29.1	18.2	18.2
Incr Delay (d2), s/veh	20.7	0.6	0.2	2.7	0.2	0.2	1.1	0.0	0.2	131.2	0.1	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.5	1.5	2.0	1.2	1.2	3.0	0.0	0.5	0.1	0.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	49.5	25.2	16.9	28.2	19.5	19.5	24.5	0.0	11.9	160.4	18.3	18.3
LnGrp LOS	D	C	B	C	B	B	C		B	F	B	B
Approach Vol, veh/h		414			387			598			17	
Approach Delay, s/veh		22.9			22.9			22.1			35.0	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.9	13.1	14.9	18.5	6.2	18.8	5.3	28.1
Change Period (Y+Rc), s	5.6	6.4	5.2	6.1	5.6	6.4	5.2	6.1
Max Green Setting (Gmax), s	32.0	51.0	25.0	12.0	32.0	51.0	15.0	22.0
Max Q Clear Time (g_c+I1), s	6.8	6.5	9.6	2.2	2.4	5.2	2.1	3.4
Green Ext Time (p_c), s	0.0	0.2	0.1	0.0	0.0	0.2	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	22.7
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	406	110	173	349	0	0	0	0	137	5	311
Future Volume (veh/h)	0	406	110	173	349	0	0	0	0	137	5	311
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	427	104	182	367	0				144	5	49
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	735	179	226	1319	0				195	7	179
Arrive On Green	0.00	0.51	0.51	0.13	0.71	0.00				0.11	0.11	0.11
Sat Flow, veh/h	0	1453	354	1781	1870	0				1724	60	1585
Grp Volume(v), veh/h	0	0	531	182	367	0				149	0	49
Grp Sat Flow(s),veh/h/ln	0	0	1807	1781	1870	0				1784	0	1585
Q Serve(g_s), s	0.0	0.0	13.4	6.5	4.7	0.0				5.3	0.0	1.8
Cycle Q Clear(g_c), s	0.0	0.0	13.4	6.5	4.7	0.0				5.3	0.0	1.8
Prop In Lane	0.00		0.20	1.00		0.00				0.97		1.00
Lane Grp Cap(c), veh/h	0	0	914	226	1319	0				202	0	179
V/C Ratio(X)	0.00	0.00	0.58	0.80	0.28	0.00				0.74	0.00	0.27
Avail Cap(c_a), veh/h	0	0	914	438	1319	0				384	0	341
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.95	0.95	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	11.2	27.6	3.5	0.0				27.9	0.0	26.4
Incr Delay (d2), s/veh	0.0	0.0	2.7	2.4	0.5	0.0				2.0	0.0	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	4.4	2.5	0.8	0.0				2.2	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	13.9	30.0	4.0	0.0				29.9	0.0	26.7
LnGrp LOS			B	C	A					C		C
Approach Vol, veh/h		531			549						198	
Approach Delay, s/veh		13.9			12.6						29.1	
Approach LOS		B			B						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	13.0	38.9		13.1		51.9
Change Period (Y+Rc), s	4.7	6.0		5.8		6.0
Max Green Setting (Gmax), s	16.3	18.2		14.0		39.2
Max Q Clear Time (g_c+I1), s	8.5	15.4		7.3		6.7
Green Ext Time (p_c), s	0.1	0.6		0.3		1.1

Intersection Summary	
HCM 7th Control Delay, s/veh	15.7
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	174	375	0	0	444	233	79	2	161	0	0	0
Future Volume (veh/h)	174	375	0	0	444	233	79	2	161	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	189	408	0	0	483	104	86	2	55			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	494	1330	0	0	1214	541	110	3	70			
Arrive On Green	0.28	0.71	0.00	0.00	0.34	0.34	0.11	0.11	0.11			
Sat Flow, veh/h	1781	1870	0	0	3647	1585	1023	24	654			
Grp Volume(v), veh/h	189	408	0	0	483	104	143	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1870	0	0	1777	1585	1701	0	0			
Q Serve(g_s), s	5.6	5.2	0.0	0.0	6.7	3.0	5.3	0.0	0.0			
Cycle Q Clear(g_c), s	5.6	5.2	0.0	0.0	6.7	3.0	5.3	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.60		0.38			
Lane Grp Cap(c), veh/h	494	1330	0	0	1214	541	183	0	0			
V/C Ratio(X)	0.38	0.31	0.00	0.00	0.40	0.19	0.78	0.00	0.00			
Avail Cap(c_a), veh/h	494	1330	0	0	1214	541	366	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.66	0.66	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	19.0	3.5	0.0	0.0	16.3	15.1	28.3	0.0	0.0			
Incr Delay (d2), s/veh	0.1	0.4	0.0	0.0	1.0	0.8	2.8	0.0	0.0			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.9	0.8	0.0	0.0	2.4	1.0	2.2	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	19.1	3.9	0.0	0.0	17.3	15.9	31.0	0.0	0.0			
LnGrp LOS	B	A			B	B	C					
Approach Vol, veh/h		597			587			143				
Approach Delay, s/veh		8.7			17.0			31.0				
Approach LOS		A			B			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		52.2			24.0	28.2		12.8				
Change Period (Y+Rc), s		6.0			6.0	* 6		5.8				
Max Green Setting (Gmax), s		39.2			12.0	* 22		14.0				
Max Q Clear Time (g_c+I1), s		7.2			7.6	8.7		7.3				
Green Ext Time (p_c), s		1.2			0.1	1.6		0.2				

Intersection Summary	
HCM 7th Control Delay, s/veh	14.8
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑↑			↱
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	1
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.93
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.319
Pot Cap-1 Maneuver	0	-	-	0	0	1084
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	-	-	-	-	-	1084
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	SBLn1
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Ctrl Dly (s/v)	-	-	0
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	80	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1	0	-	0	1	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	0	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1622	-	-	0	1022	1083
Stage 1	-	-	-	0	1022	-
Stage 2	-	-	-	0	-	-
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	1622	-	-	-	1022	1083
Mov Cap-2 Maneuver	-	-	-	-	933	-
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	SBLn1
Capacity (veh/h)	1622	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Ctrl Dly (s/v)	0	-	-	0
HCM Lane LOS	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	3	281	1	25	174
Future Vol, veh/h	1	3	281	1	25	174
Conflicting Peds, #/hr	0	3	0	3	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	3	305	1	27	189

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	552	159	0	0	310	0
Stage 1	309	-	-	-	-	-
Stage 2	243	-	-	-	-	-
Critical Hdwy	6.63	6.93	-	-	4.13	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	2.219	-
Pot Cap-1 Maneuver	479	858	-	-	1249	-
Stage 1	719	-	-	-	-	-
Stage 2	796	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	466	853	-	-	1246	-
Mov Cap-2 Maneuver	466	-	-	-	-	-
Stage 1	717	-	-	-	-	-
Stage 2	777	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	10.13	0	1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	706	226	-
HCM Lane V/C Ratio	-	-	0.006	0.022	-
HCM Ctrl Dly (s/v)	-	-	10.1	8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0	0.1	-

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	5	284	0	0	199
Future Vol, veh/h	0	5	284	0	0	199
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	5	309	0	0	216

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	154	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.93	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.319	-	-	-	-
Pot Cap-1 Maneuver	0	865	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	865	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	9.19	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	865	-
HCM Lane V/C Ratio	-	-	0.006	-
HCM Ctrl Dly (s/v)	-	-	9.2	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	0	-

Intersection	
Intersection Delay, s/veh	95
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	221	8	14	508	93	17	238	34	86	177	48
Future Vol, veh/h	13	221	8	14	508	93	17	238	34	86	177	48
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	238	9	15	546	100	18	256	37	92	190	52
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay, s/veh	23.5	187.5	25.3	32.5
HCM LOS	C	F	D	D

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	7%	0%	5%	2%	28%
Vol Thru, %	93%	0%	91%	83%	57%
Vol Right, %	0%	100%	3%	15%	15%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	255	34	242	615	311
LT Vol	17	0	13	14	86
Through Vol	238	0	221	508	177
RT Vol	0	34	8	93	48
Lane Flow Rate	274	37	260	661	334
Geometry Grp	5	5	2	2	4a
Degree of Util (X)	0.638	0.078	0.581	1.338	0.732
Departure Headway (Hd)	9.333	8.568	8.896	7.286	8.864
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	389	421	409	496	411
Service Time	7.033	6.268	6.896	5.357	6.864
HCM Lane V/C Ratio	0.704	0.088	0.636	1.333	0.813
HCM Control Delay, s/veh	27.1	12	23.5	187.5	32.5
HCM Lane LOS	D	B	C	F	D
HCM 95th-tile Q	4.3	0.3	3.6	29.1	5.8

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	341	0	0	615	0	3
Future Vol, veh/h	341	0	0	615	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	371	0	0	668	0	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	-	185
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.93
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.319
Pot Cap-1 Maneuver	-	0	0	-	0	826
Stage 1	-	0	0	-	0	-
Stage 2	-	0	0	-	0	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	-	826
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0	9.38
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	WBT
Capacity (veh/h)	826	-	-
HCM Lane V/C Ratio	0.004	-	-
HCM Ctrl Dly (s/v)	9.4	-	-
HCM Lane LOS	A	-	-
HCM 95th %tile Q(veh)	0	-	-

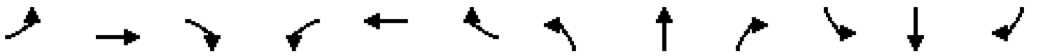
Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	341	3	19	610	5	9
Future Vol, veh/h	341	3	19	610	5	9
Conflicting Peds, #/hr	0	3	3	0	0	3
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	371	3	21	663	5	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	377	0	1080	193
Stage 1	-	-	-	-	375	-
Stage 2	-	-	-	-	704	-
Critical Hdwy	-	-	4.13	-	6.63	6.93
Critical Hdwy Stg 1	-	-	-	-	5.83	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.219	-	3.519	3.319
Pot Cap-1 Maneuver	-	-	1180	-	227	817
Stage 1	-	-	-	-	666	-
Stage 2	-	-	-	-	489	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1176	-	220	812
Mov Cap-2 Maneuver	-	-	-	-	220	-
Stage 1	-	-	-	-	664	-
Stage 2	-	-	-	-	476	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0.25	14.03
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	414	-	-	54	-
HCM Lane V/C Ratio	0.037	-	-	0.018	-
HCM Ctrl Dly (s/v)	14	-	-	8.1	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	290	13	22	508	191	15	277	40	126	167	106
Future Volume (veh/h)	47	290	13	22	508	191	15	277	40	126	167	106
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	52	319	13	24	558	183	16	304	41	138	184	47
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	85	760	644	53	508	167	39	376	51	171	1261	304
Arrive On Green	0.05	0.41	0.41	0.03	0.38	0.38	0.02	0.23	0.23	0.10	0.31	0.31
Sat Flow, veh/h	1781	1870	1585	1781	1349	442	1781	1614	218	1781	4106	990
Grp Volume(v), veh/h	52	319	13	24	0	741	16	0	345	138	151	80
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1791	1781	0	1831	1781	1702	1692
Q Serve(g_s), s	2.7	11.3	0.5	1.2	0.0	35.0	0.8	0.0	16.5	7.1	3.0	3.2
Cycle Q Clear(g_c), s	2.7	11.3	0.5	1.2	0.0	35.0	0.8	0.0	16.5	7.1	3.0	3.2
Prop In Lane	1.00		1.00	1.00		0.25	1.00		0.12	1.00		0.59
Lane Grp Cap(c), veh/h	85	760	644	53	0	675	39	0	427	171	1045	520
V/C Ratio(X)	0.61	0.42	0.02	0.45	0.00	1.10	0.41	0.00	0.81	0.81	0.14	0.15
Avail Cap(c_a), veh/h	384	760	644	384	0	675	384	0	690	384	1283	638
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.4	19.7	16.5	44.3	0.0	28.9	44.8	0.0	33.7	41.1	23.3	23.4
Incr Delay (d2), s/veh	2.6	0.6	0.0	2.2	0.0	64.5	2.6	0.0	7.6	3.4	0.1	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	4.6	0.2	0.5	0.0	25.4	0.4	0.0	7.8	3.1	1.1	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	46.0	20.3	16.5	46.5	0.0	93.5	47.4	0.0	41.2	44.6	23.5	23.7
LnGrp LOS	D	C	B	D		F	D		D	D	C	C
Approach Vol, veh/h		384			765			361			369	
Approach Delay, s/veh		23.7			92.0			41.5			31.4	
Approach LOS		C			F			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.6	27.4	7.9	44.0	6.7	34.3	10.6	41.2
Change Period (Y+Rc), s	4.7	5.8	5.1	6.2	4.7	5.8	6.2	* 6.2
Max Green Setting (Gmax), s	20.0	35.0	20.0	35.0	20.0	35.0	20.0	* 35
Max Q Clear Time (g_c+I1), s	9.1	18.5	3.2	13.3	2.8	5.2	4.7	37.0
Green Ext Time (p_c), s	0.1	3.1	0.0	2.8	0.0	2.5	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	56.4
HCM 7th LOS	E

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

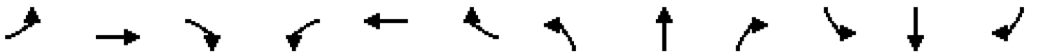
Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	54	2	1	278	182	20
Future Vol, veh/h	54	2	1	278	182	20
Conflicting Peds, #/hr	0	3	0	0	0	3
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	59	2	1	302	198	22

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	516	116	223	0	-	0
Stage 1	212	-	-	-	-	-
Stage 2	304	-	-	-	-	-
Critical Hdwy	6.08	7.13	5.33	-	-	-
Critical Hdwy Stg 1	6.63	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.669	3.919	3.119	-	-	-
Pot Cap-1 Maneuver	528	777	913	-	-	-
Stage 1	739	-	-	-	-	-
Stage 2	721	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	524	773	910	-	-	-
Mov Cap-2 Maneuver	524	-	-	-	-	-
Stage 1	735	-	-	-	-	-
Stage 2	719	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	12.67	0.03	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	6	-	530	-	-
HCM Lane V/C Ratio	0.001	-	0.115	-	-
HCM Ctrl Dly (s/v)	9	0	12.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	198	21	44	461	162	104	432	176	135	295	71
Future Volume (veh/h)	33	198	21	44	461	162	104	432	176	135	295	71
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	38	230	15	51	536	51	121	502	174	157	343	69
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	114	889	58	136	847	80	187	728	251	195	843	168
Arrive On Green	0.06	0.26	0.26	0.08	0.26	0.26	0.10	0.28	0.28	0.11	0.29	0.29
Sat Flow, veh/h	1781	3387	219	1781	3278	311	1781	2589	892	1781	2951	587
Grp Volume(v), veh/h	38	120	125	51	290	297	121	344	332	157	205	207
Grp Sat Flow(s),veh/h/ln	1781	1777	1829	1781	1777	1812	1781	1777	1704	1781	1777	1761
Q Serve(g_s), s	1.6	4.3	4.3	2.2	11.5	11.6	5.2	13.8	13.9	6.9	7.4	7.6
Cycle Q Clear(g_c), s	1.6	4.3	4.3	2.2	11.5	11.6	5.2	13.8	13.9	6.9	7.4	7.6
Prop In Lane	1.00		0.12	1.00		0.17	1.00		0.52	1.00		0.33
Lane Grp Cap(c), veh/h	114	466	480	136	459	468	187	500	479	195	508	503
V/C Ratio(X)	0.33	0.26	0.26	0.38	0.63	0.63	0.65	0.69	0.69	0.81	0.40	0.41
Avail Cap(c_a), veh/h	446	779	802	446	779	794	446	779	747	446	779	772
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.7	23.3	23.3	35.1	26.2	26.3	34.3	25.6	25.6	34.7	23.0	23.1
Incr Delay (d2), s/veh	0.6	0.5	0.5	0.6	2.5	2.4	1.4	2.9	3.1	3.0	0.9	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	1.7	1.8	0.9	4.8	4.9	2.2	5.7	5.5	3.0	3.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.4	23.8	23.8	35.7	28.7	28.7	35.7	28.4	28.7	37.7	23.9	24.0
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		283			638			797			569	
Approach Delay, s/veh		25.5			29.3			29.7			27.8	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.4	28.7	10.8	27.0	13.1	29.0	11.1	26.6
Change Period (Y+Rc), s	4.7	6.2	4.7	6.0	4.7	6.2	6.0	* 6
Max Green Setting (Gmax), s	20.0	35.0	20.0	35.0	20.0	35.0	20.0	* 35
Max Q Clear Time (g_c+I1), s	8.9	15.9	4.2	6.3	7.2	9.6	3.6	13.6
Green Ext Time (p_c), s	0.1	6.0	0.0	2.2	0.1	3.8	0.0	5.3

Intersection Summary	
HCM 7th Control Delay, s/veh	28.6
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	366	111	107	428	164	99	484	63	81	344	75
Future Volume (veh/h)	66	366	111	107	428	164	99	484	63	81	344	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	80	441	48	129	516	78	119	583	59	98	414	54
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	127	1312	142	173	1337	201	172	912	91	166	872	111
Arrive On Green	0.07	0.41	0.41	0.10	0.43	0.43	0.10	0.19	0.19	0.09	0.19	0.19
Sat Flow, veh/h	1781	3232	350	1781	3097	466	1781	4717	472	1781	4579	585
Grp Volume(v), veh/h	80	241	248	129	295	299	119	419	223	98	306	162
Grp Sat Flow(s),veh/h/ln	1781	1777	1806	1781	1777	1786	1781	1702	1785	1781	1702	1760
Q Serve(g_s), s	4.4	9.3	9.4	7.0	11.3	11.4	6.5	11.3	11.5	5.3	8.0	8.2
Cycle Q Clear(g_c), s	4.4	9.3	9.4	7.0	11.3	11.4	6.5	11.3	11.5	5.3	8.0	8.2
Prop In Lane	1.00		0.19	1.00		0.26	1.00		0.26	1.00		0.33
Lane Grp Cap(c), veh/h	127	721	733	173	767	771	172	658	345	166	649	335
V/C Ratio(X)	0.63	0.33	0.34	0.74	0.38	0.39	0.69	0.64	0.65	0.59	0.47	0.48
Avail Cap(c_a), veh/h	164	721	733	182	767	771	182	997	523	182	997	516
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	0.92	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.1	20.4	20.4	43.9	19.4	19.4	43.8	37.1	37.2	43.5	36.0	36.1
Incr Delay (d2), s/veh	1.8	1.2	1.1	12.7	1.5	1.5	8.2	2.2	4.3	2.3	1.1	2.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	3.9	3.9	3.6	4.7	4.8	3.1	4.7	5.2	2.4	3.3	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	46.9	21.6	21.6	56.7	20.8	20.9	51.9	39.3	41.4	45.8	37.1	38.4
LnGrp LOS	D	C	C	E	C	C	D	D	D	D	D	D
Approach Vol, veh/h		569			723			761			566	
Approach Delay, s/veh		25.1			27.2			41.9			39.0	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	25.1	14.4	46.4	14.3	24.9	11.8	49.0
Change Period (Y+Rc), s	4.7	5.8	4.7	5.8	4.7	5.8	4.7	5.8
Max Green Setting (Gmax), s	10.3	29.3	10.2	29.3	10.2	29.3	9.2	30.3
Max Q Clear Time (g_c+I1), s	7.3	13.5	9.0	11.4	8.5	10.2	6.4	13.4
Green Ext Time (p_c), s	0.0	5.8	0.0	3.4	0.0	4.6	0.0	4.3

Intersection Summary	
HCM 7th Control Delay, s/veh	33.6
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	476	109	42	814	98	263	517	92	76	227	90
Future Volume (veh/h)	72	476	109	42	814	98	263	517	92	76	227	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	81	535	101	47	915	101	296	581	92	85	255	61
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	103	2240	414	61	2305	254	282	681	107	107	352	83
Arrive On Green	0.06	0.52	0.52	0.03	0.49	0.49	0.16	0.22	0.22	0.06	0.12	0.12
Sat Flow, veh/h	1781	4327	801	1781	4667	513	1781	3071	485	1781	2853	670
Grp Volume(v), veh/h	81	419	217	47	667	349	296	335	338	85	157	159
Grp Sat Flow(s),veh/h/ln	1781	1702	1723	1781	1702	1776	1781	1777	1779	1781	1777	1746
Q Serve(g_s), s	5.4	8.1	8.4	3.1	14.8	14.9	19.0	21.7	21.9	5.7	10.2	10.5
Cycle Q Clear(g_c), s	5.4	8.1	8.4	3.1	14.8	14.9	19.0	21.7	21.9	5.7	10.2	10.5
Prop In Lane	1.00		0.46	1.00		0.29	1.00		0.27	1.00		0.38
Lane Grp Cap(c), veh/h	103	1762	892	61	1681	877	282	394	394	107	219	215
V/C Ratio(X)	0.79	0.24	0.24	0.78	0.40	0.40	1.05	0.85	0.86	0.79	0.72	0.74
Avail Cap(c_a), veh/h	282	1762	892	282	1681	877	282	459	460	282	459	451
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.8	15.9	16.0	57.5	19.1	19.1	50.5	44.8	44.9	55.7	50.6	50.7
Incr Delay (d2), s/veh	5.0	0.3	0.6	7.6	0.7	1.4	67.2	11.4	11.7	4.9	1.6	1.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	3.0	3.2	1.5	5.6	6.0	13.5	10.5	10.6	2.6	4.5	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	60.8	16.2	16.6	65.2	19.8	20.5	117.7	56.2	56.6	60.6	52.2	52.6
LnGrp LOS	E	B	B	E	B	C	F	E	E	E	D	D
Approach Vol, veh/h		717			1063			969			401	
Approach Delay, s/veh		21.4			22.0			75.1			54.1	
Approach LOS		C			C			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.1	67.1	24.0	19.8	11.9	64.3	12.2	31.6
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	19.6	31.0	19.0	31.0	19.0	31.0	19.0	31.0
Max Q Clear Time (g_c+I1), s	5.1	10.4	21.0	12.5	7.4	16.9	7.7	23.9
Green Ext Time (p_c), s	0.0	0.5	0.0	0.2	0.0	0.9	0.0	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	42.3
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	117	390	195	135	418	82	266	457	377	91	205	208
Future Volume (veh/h)	117	390	195	135	418	82	266	457	377	91	205	208
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	129	429	81	148	459	26	292	502	326	100	225	107
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	219	899	165	225	749	330	347	957	422	206	356	297
Arrive On Green	0.12	0.21	0.21	0.13	0.21	0.21	0.19	0.27	0.27	0.12	0.19	0.19
Sat Flow, veh/h	1781	4324	794	1781	3554	1563	1781	3554	1567	1781	1870	1560
Grp Volume(v), veh/h	129	335	175	148	459	26	292	502	326	100	225	107
Grp Sat Flow(s),veh/h/ln	1781	1702	1714	1781	1777	1563	1781	1777	1567	1781	1870	1560
Q Serve(g_s), s	5.2	6.6	6.8	6.0	8.9	1.0	12.0	9.1	14.6	4.0	8.4	4.5
Cycle Q Clear(g_c), s	5.2	6.6	6.8	6.0	8.9	1.0	12.0	9.1	14.6	4.0	8.4	4.5
Prop In Lane	1.00		0.46	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	219	708	356	225	749	330	347	957	422	206	356	297
V/C Ratio(X)	0.59	0.47	0.49	0.66	0.61	0.08	0.84	0.52	0.77	0.48	0.63	0.36
Avail Cap(c_a), veh/h	470	1796	904	470	1875	824	940	1172	517	940	617	514
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.4	26.4	26.5	31.6	27.1	24.0	29.4	23.6	25.6	31.4	28.2	26.7
Incr Delay (d2), s/veh	2.5	0.5	1.0	3.3	0.8	0.1	5.6	0.4	5.8	1.8	1.9	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	2.4	2.6	2.6	3.5	0.4	5.2	3.5	5.5	1.7	3.6	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.9	26.9	27.5	34.9	27.9	24.1	35.0	24.0	31.3	33.2	30.1	27.4
LnGrp LOS	C	C	C	C	C	C	C	C	C	C	C	C
Approach Vol, veh/h		639			633			1120			432	
Approach Delay, s/veh		28.5			29.4			29.0			30.1	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.6	21.8	19.8	19.7	14.3	22.0	13.8	25.7
Change Period (Y+Rc), s	5.0	6.0	5.0	5.3	5.0	6.0	5.0	5.3
Max Green Setting (Gmax), s	20.0	40.0	40.0	25.0	20.0	40.0	40.0	25.0
Max Q Clear Time (g_c+I1), s	8.0	8.8	14.0	10.4	7.2	10.9	6.0	16.6
Green Ext Time (p_c), s	0.3	3.0	0.8	1.2	0.2	2.8	0.2	2.8

Intersection Summary	
HCM 7th Control Delay, s/veh	29.1
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	219	615	164	225	0	370	13	140	6	16	28
Future Volume (veh/h)	28	219	615	164	225	0	370	13	140	6	16	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	31	246	366	184	253	0	416	47	37	7	18	7
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	37	1153	578	225	1176	0	508	584	495	10	446	163
Arrive On Green	0.02	0.23	0.23	0.13	0.33	0.00	0.14	0.31	0.31	0.01	0.17	0.17
Sat Flow, veh/h	1781	5106	1558	1781	3647	0	3563	1870	1585	1781	2548	932
Grp Volume(v), veh/h	31	246	366	184	253	0	416	47	37	7	12	13
Grp Sat Flow(s),veh/h/ln	1781	1702	1558	1781	1777	0	1781	1870	1585	1781	1777	1703
Q Serve(g_s), s	1.2	2.8	13.7	7.1	3.6	0.0	8.0	1.2	1.2	0.3	0.4	0.4
Cycle Q Clear(g_c), s	1.2	2.8	13.7	7.1	3.6	0.0	8.0	1.2	1.2	0.3	0.4	0.4
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		0.55
Lane Grp Cap(c), veh/h	37	1153	578	225	1176	0	508	584	495	10	311	298
V/C Ratio(X)	0.84	0.21	0.63	0.82	0.22	0.00	0.82	0.08	0.07	0.72	0.04	0.04
Avail Cap(c_a), veh/h	809	3694	1354	809	2571	0	1264	584	495	379	311	298
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.4	22.2	18.4	30.0	17.0	0.0	29.3	17.1	17.1	35.0	24.2	24.2
Incr Delay (d2), s/veh	16.2	0.0	0.4	2.8	0.0	0.0	1.3	0.3	0.3	67.3	0.2	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	1.0	4.6	3.0	1.3	0.0	3.4	0.6	0.4	0.3	0.2	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	50.6	22.2	18.8	32.8	17.0	0.0	30.6	17.4	17.4	102.3	24.4	24.4
LnGrp LOS	D	C	B	C	B		C	B	B	F	C	C
Approach Vol, veh/h		643			437			500			32	
Approach Delay, s/veh		21.6			23.7			28.4			41.5	
Approach LOS		C			C			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.5	22.3	15.3	18.4	7.1	29.7	5.6	28.1
Change Period (Y+Rc), s	5.6	6.4	5.2	6.1	5.6	6.4	5.2	6.1
Max Green Setting (Gmax), s	32.6	51.0	25.0	12.0	32.0	51.0	15.0	22.0
Max Q Clear Time (g_c+I1), s	9.1	15.7	10.0	2.4	3.2	5.6	2.3	3.2
Green Ext Time (p_c), s	0.0	0.2	0.1	0.0	0.0	0.3	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	24.7
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	633	68	126	362	0	0	0	0	129	0	197
Future Volume (veh/h)	0	633	68	126	362	0	0	0	0	129	0	197
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	711	63	142	407	0				145	0	33
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89				0.89	0.89	0.89
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1901	848	181	1326	0				195	0	173
Arrive On Green	0.00	0.53	0.53	0.10	0.71	0.00				0.11	0.00	0.11
Sat Flow, veh/h	0	3647	1585	1781	1870	0				1781	0	1585
Grp Volume(v), veh/h	0	711	63	142	407	0				145	0	33
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1781	1870	0				1781	0	1585
Q Serve(g_s), s	0.0	7.6	1.3	5.1	5.3	0.0				5.1	0.0	1.2
Cycle Q Clear(g_c), s	0.0	7.6	1.3	5.1	5.3	0.0				5.1	0.0	1.2
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1901	848	181	1326	0				195	0	173
V/C Ratio(X)	0.00	0.37	0.07	0.78	0.31	0.00				0.74	0.00	0.19
Avail Cap(c_a), veh/h	0	1901	848	493	1326	0				384	0	341
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.95	0.95	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	8.8	7.3	28.5	3.5	0.0				28.1	0.0	26.3
Incr Delay (d2), s/veh	0.0	0.6	0.2	2.7	0.6	0.0				2.1	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.1	0.3	2.0	0.9	0.0				2.2	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	9.3	7.5	31.1	4.1	0.0				30.2	0.0	26.5
LnGrp LOS		A	A	C	A					C		C
Approach Vol, veh/h		774			549						178	
Approach Delay, s/veh		9.2			11.1						29.5	
Approach LOS		A			B						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	11.3	40.8		12.9		52.1
Change Period (Y+Rc), s	4.7	6.0		5.8		6.0
Max Green Setting (Gmax), s	18.6	16.2		14.0		39.2
Max Q Clear Time (g_c+I1), s	7.1	9.6		7.1		7.3
Green Ext Time (p_c), s	0.1	1.7		0.3		1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	12.3
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	406	355	0	0	341	151	138	3	159	0	0	0
Future Volume (veh/h)	406	355	0	0	341	151	138	3	159	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	441	386	0	0	371	52	150	3	105			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	523	1188	0	0	886	395	181	4	127			
Arrive On Green	0.29	0.64	0.00	0.00	0.25	0.25	0.18	0.18	0.18			
Sat Flow, veh/h	1781	1870	0	0	3647	1585	986	20	691			
Grp Volume(v), veh/h	441	386	0	0	371	52	258	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1870	0	0	1777	1585	1697	0	0			
Q Serve(g_s), s	15.1	6.2	0.0	0.0	5.7	1.7	9.5	0.0	0.0			
Cycle Q Clear(g_c), s	15.1	6.2	0.0	0.0	5.7	1.7	9.5	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.58		0.41			
Lane Grp Cap(c), veh/h	523	1188	0	0	886	395	311	0	0			
V/C Ratio(X)	0.84	0.32	0.00	0.00	0.42	0.13	0.83	0.00	0.00			
Avail Cap(c_a), veh/h	523	1188	0	0	886	395	470	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.91	0.91	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	21.6	5.5	0.0	0.0	20.5	18.9	25.6	0.0	0.0			
Incr Delay (d2), s/veh	10.5	0.7	0.0	0.0	1.5	0.7	4.5	0.0	0.0			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	6.6	1.5	0.0	0.0	2.2	0.6	3.9	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	32.0	6.1	0.0	0.0	21.9	19.6	30.1	0.0	0.0			
LnGrp LOS	C	A			C	B	C					
Approach Vol, veh/h		827			423			258				
Approach Delay, s/veh		19.9			21.6			30.1				
Approach LOS		B			C			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		47.3			25.1	22.2		17.7				
Change Period (Y+Rc), s		6.0			6.0	* 6		5.8				
Max Green Setting (Gmax), s		35.2			14.0	* 16		18.0				
Max Q Clear Time (g_c+I1), s		8.2			17.1	7.7		11.5				
Green Ext Time (p_c), s		1.2			0.0	0.9		0.5				

Intersection Summary	
HCM 7th Control Delay, s/veh	22.1
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	1
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	0	0	1083
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	-	-	-	-	-	1083
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	SBLn1
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Ctrl Dly (s/v)	-	-	0
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	80	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1	0	-	0	1	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	0	-
Critical Hdwy	4.14	-	-	-	6.29	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	2.22	-	-	-	3.67	3.32
Pot Cap-1 Maneuver	1620	-	-	0	980	1083
Stage 1	-	-	-	0	980	-
Stage 2	-	-	-	0	-	-
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	1620	-	-	-	980	1083
Mov Cap-2 Maneuver	-	-	-	-	894	-
Stage 1	-	-	-	-	980	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	SBLn1
Capacity (veh/h)	1620	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Ctrl Dly (s/v)	0	-	-	0
HCM Lane LOS	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	7	159	2	56	154
Future Vol, veh/h	1	7	159	2	56	154
Conflicting Peds, #/hr	0	3	0	3	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	8	173	2	61	167

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	466	93	0	0	178	0
Stage 1	177	-	-	-	-	-
Stage 2	289	-	-	-	-	-
Critical Hdwy	6.63	6.93	-	-	4.13	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	2.219	-
Pot Cap-1 Maneuver	540	946	-	-	1397	-
Stage 1	837	-	-	-	-	-
Stage 2	759	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	512	940	-	-	1393	-
Mov Cap-2 Maneuver	512	-	-	-	-	-
Stage 1	834	-	-	-	-	-
Stage 2	723	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	9.27	0	2.05
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	851	480	-
HCM Lane V/C Ratio	-	-	0.01	0.044	-
HCM Ctrl Dly (s/v)	-	-	9.3	7.7	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0.1	-

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	15	165	1	0	210
Future Vol, veh/h	0	15	165	1	0	210
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	16	179	1	0	228

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	90	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.93	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.319	-	-	-	-
Pot Cap-1 Maneuver	0	950	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	950	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	8.85	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	950	-
HCM Lane V/C Ratio	-	-	0.017	-
HCM Ctrl Dly (s/v)	-	-	8.9	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	0.1	-

Intersection	
Intersection Delay, s/veh	156.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	32	484	10	29	329	73	15	146	19	128	171	22
Future Vol, veh/h	32	484	10	29	329	73	15	146	19	128	171	22
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	40	598	12	36	406	90	19	180	23	158	211	27
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay, s/veh	262.4	148.5	25	66.7
HCM LOS	F	F	C	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	9%	0%	6%	7%	40%
Vol Thru, %	91%	0%	92%	76%	53%
Vol Right, %	0%	100%	2%	17%	7%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	161	19	526	431	321
LT Vol	15	0	32	29	128
Through Vol	146	0	484	329	171
RT Vol	0	19	10	73	22
Lane Flow Rate	199	23	649	532	396
Geometry Grp	5	5	2	2	4a
Degree of Util (X)	0.533	0.058	1.503	1.218	0.938
Departure Headway (Hd)	11.333	10.545	8.942	9.421	10.299
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	320	342	409	388	357
Service Time	9.033	8.245	6.942	7.421	8.299
HCM Lane V/C Ratio	0.622	0.067	1.587	1.371	1.109
HCM Control Delay, s/veh	26.3	13.9	262.4	148.5	66.7
HCM Lane LOS	D	B	F	F	F
HCM 95th-tile Q	3	0.2	32.3	19.4	9.8

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	631	0	0	431	0	9
Future Vol, veh/h	631	0	0	431	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	686	0	0	468	0	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	-	343
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.93
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.319
Pot Cap-1 Maneuver	-	0	0	-	0	654
Stage 1	-	0	0	-	0	-
Stage 2	-	0	0	-	0	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	-	654
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0	10.59
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	WBT
Capacity (veh/h)	654	-	-
HCM Lane V/C Ratio	0.015	-	-
HCM Ctrl Dly (s/v)	10.6	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0	-	-

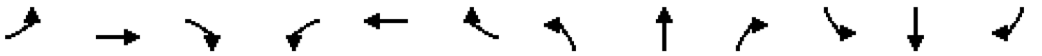
Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	635	5	32	427	4	8
Future Vol, veh/h	635	5	32	427	4	8
Conflicting Peds, #/hr	0	3	3	0	0	3
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	690	5	35	464	4	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	699	0	1230	354
Stage 1	-	-	-	-	696	-
Stage 2	-	-	-	-	534	-
Critical Hdwy	-	-	4.13	-	6.63	6.93
Critical Hdwy Stg 1	-	-	-	-	5.83	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.219	-	3.519	3.319
Pot Cap-1 Maneuver	-	-	896	-	183	643
Stage 1	-	-	-	-	457	-
Stage 2	-	-	-	-	587	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	893	-	173	640
Mov Cap-2 Maneuver	-	-	-	-	173	-
Stage 1	-	-	-	-	456	-
Stage 2	-	-	-	-	556	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0.64	16.14
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	336	-	-	125	-
HCM Lane V/C Ratio	0.039	-	-	0.039	-
HCM Ctrl Dly (s/v)	16.1	-	-	9.2	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	586	12	20	386	116	16	241	35	172	181	57
Future Volume (veh/h)	45	586	12	20	386	116	16	241	35	172	181	57
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	47	617	13	21	406	101	17	254	34	181	191	25
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	105	699	593	50	476	119	42	334	45	220	1091	487
Arrive On Green	0.06	0.37	0.37	0.03	0.33	0.33	0.02	0.21	0.21	0.12	0.31	0.31
Sat Flow, veh/h	1781	1870	1585	1781	1446	360	1781	1615	216	1781	3554	1585
Grp Volume(v), veh/h	47	617	13	21	0	507	17	0	288	181	191	25
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1806	1781	0	1831	1781	1777	1585
Q Serve(g_s), s	2.1	25.1	0.4	0.9	0.0	21.3	0.8	0.0	12.1	8.1	3.2	0.6
Cycle Q Clear(g_c), s	2.1	25.1	0.4	0.9	0.0	21.3	0.8	0.0	12.1	8.1	3.2	0.6
Prop In Lane	1.00		1.00	1.00		0.20	1.00		0.12	1.00		1.00
Lane Grp Cap(c), veh/h	105	699	593	50	0	595	42	0	379	220	1091	487
V/C Ratio(X)	0.45	0.88	0.02	0.42	0.00	0.85	0.41	0.00	0.76	0.82	0.18	0.05
Avail Cap(c_a), veh/h	437	804	681	437	0	776	437	0	787	437	1527	681
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.0	23.8	16.1	38.9	0.0	25.5	39.2	0.0	30.4	34.8	20.7	9.8
Incr Delay (d2), s/veh	1.1	11.2	0.0	2.1	0.0	8.7	2.3	0.0	6.5	2.9	0.2	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	11.7	0.1	0.4	0.0	9.5	0.3	0.0	5.6	3.5	1.2	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	38.2	35.1	16.1	41.1	0.0	34.2	41.5	0.0	36.9	37.8	20.8	9.9
LnGrp LOS	D	D	B	D		C	D		D	D	C	A
Approach Vol, veh/h		677			528			305			397	
Approach Delay, s/veh		34.9			34.4			37.2			27.9	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.8	22.7	7.4	36.7	6.6	30.8	11.0	33.0
Change Period (Y+Rc), s	4.7	5.8	5.1	6.2	4.7	5.8	6.2	* 6.2
Max Green Setting (Gmax), s	20.0	35.0	20.0	35.0	20.0	35.0	20.0	* 35
Max Q Clear Time (g_c+I1), s	10.1	14.1	2.9	27.1	2.8	5.2	4.1	23.3
Green Ext Time (p_c), s	0.2	2.8	0.0	3.4	0.0	2.3	0.0	3.5

Intersection Summary	
HCM 7th Control Delay, s/veh	33.7
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

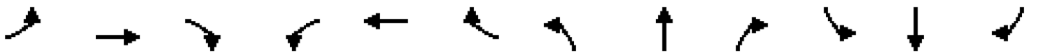
Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	42	2	2	250	178	35
Future Vol, veh/h	42	2	2	250	178	35
Conflicting Peds, #/hr	0	3	3	0	0	3
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	46	2	2	272	193	38

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	492	122	235	0	-	0
Stage 1	216	-	-	-	-	-
Stage 2	276	-	-	-	-	-
Critical Hdwy	6.08	7.13	5.33	-	-	-
Critical Hdwy Stg 1	6.63	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.669	3.919	3.119	-	-	-
Pot Cap-1 Maneuver	544	771	901	-	-	-
Stage 1	735	-	-	-	-	-
Stage 2	742	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	539	766	899	-	-	-
Mov Cap-2 Maneuver	539	-	-	-	-	-
Stage 1	731	-	-	-	-	-
Stage 2	740	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	12.22	0.07	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	14	-	547	-	-
HCM Lane V/C Ratio	0.002	-	0.088	-	-
HCM Ctrl Dly (s/v)	9	0	12.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	426	41	27	309	141	52	287	92	203	325	50
Future Volume (veh/h)	50	426	41	27	309	141	52	287	92	203	325	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	56	479	37	31	347	36	58	322	78	228	365	47
Peak Hour Factor	0.89	0.89	0.89	0.86	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	155	856	66	105	678	70	158	590	141	276	867	111
Arrive On Green	0.09	0.26	0.26	0.06	0.21	0.21	0.09	0.21	0.21	0.15	0.27	0.27
Sat Flow, veh/h	1781	3342	257	1781	3249	335	1781	2841	678	1781	3167	405
Grp Volume(v), veh/h	56	254	262	31	189	194	58	200	200	228	204	208
Grp Sat Flow(s),veh/h/ln	1781	1777	1822	1781	1777	1807	1781	1777	1742	1781	1777	1795
Q Serve(g_s), s	2.0	8.3	8.4	1.1	6.3	6.4	2.1	6.7	6.9	8.3	6.3	6.4
Cycle Q Clear(g_c), s	2.0	8.3	8.4	1.1	6.3	6.4	2.1	6.7	6.9	8.3	6.3	6.4
Prop In Lane	1.00		0.14	1.00		0.19	1.00		0.39	1.00		0.23
Lane Grp Cap(c), veh/h	155	455	467	105	371	377	158	369	362	276	486	491
V/C Ratio(X)	0.36	0.56	0.56	0.30	0.51	0.52	0.37	0.54	0.55	0.83	0.42	0.42
Avail Cap(c_a), veh/h	532	928	952	532	928	944	532	928	911	532	928	938
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.8	21.6	21.6	30.2	23.5	23.5	28.7	23.7	23.8	27.4	20.0	20.0
Incr Delay (d2), s/veh	0.5	1.8	1.8	0.6	1.8	1.9	0.5	2.1	2.3	2.4	1.0	1.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	3.3	3.4	0.5	2.5	2.6	0.8	2.7	2.8	3.4	2.4	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.4	23.5	23.4	30.8	25.3	25.4	29.3	25.8	26.0	29.9	20.9	21.0
LnGrp LOS	C	C	C	C	C	C	C	C	C	C	C	C
Approach Vol, veh/h		572			414			458			640	
Approach Delay, s/veh		24.0			25.7			26.3			24.1	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.1	20.1	8.6	23.2	10.6	24.5	11.8	20.0
Change Period (Y+Rc), s	4.7	6.2	4.7	6.0	4.7	6.2	6.0	* 6
Max Green Setting (Gmax), s	20.0	35.0	20.0	35.0	20.0	35.0	20.0	* 35
Max Q Clear Time (g_c+I1), s	10.3	8.9	3.1	10.4	4.1	8.4	4.0	8.4
Green Ext Time (p_c), s	0.2	3.7	0.0	5.0	0.0	3.8	0.0	3.5

Intersection Summary	
HCM 7th Control Delay, s/veh	24.9
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	96	527	79	62	377	105	62	319	64	159	471	65
Future Volume (veh/h)	96	527	79	62	377	105	62	319	64	159	471	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	102	561	34	66	401	45	66	339	35	169	501	51
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	134	1504	91	150	1453	162	150	763	77	182	848	85
Arrive On Green	0.08	0.44	0.44	0.08	0.45	0.45	0.08	0.16	0.16	0.10	0.18	0.18
Sat Flow, veh/h	1781	3403	206	1781	3223	360	1781	4711	477	1781	4711	473
Grp Volume(v), veh/h	102	292	303	66	220	226	66	243	131	169	360	192
Grp Sat Flow(s),veh/h/ln	1781	1777	1832	1781	1777	1806	1781	1702	1784	1781	1702	1780
Q Serve(g_s), s	5.6	11.0	11.0	3.5	7.8	7.9	3.5	6.4	6.6	9.4	9.7	9.9
Cycle Q Clear(g_c), s	5.6	11.0	11.0	3.5	7.8	7.9	3.5	6.4	6.6	9.4	9.7	9.9
Prop In Lane	1.00		0.11	1.00		0.20	1.00		0.27	1.00		0.27
Lane Grp Cap(c), veh/h	134	785	810	150	801	814	150	551	289	182	613	320
V/C Ratio(X)	0.76	0.37	0.37	0.44	0.27	0.28	0.44	0.44	0.45	0.93	0.59	0.60
Avail Cap(c_a), veh/h	164	785	810	182	801	814	182	997	523	182	997	522
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.81	0.81	0.81	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.4	18.6	18.6	43.6	17.2	17.2	43.6	37.8	37.9	44.5	37.6	37.7
Incr Delay (d2), s/veh	9.7	1.1	1.1	0.8	0.8	0.8	0.8	1.2	2.4	46.4	1.9	3.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	4.4	4.6	1.5	3.2	3.3	1.5	2.7	3.0	6.3	4.0	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.0	19.7	19.7	44.3	18.1	18.1	44.3	39.0	40.3	91.0	39.5	41.5
LnGrp LOS	E	B	B	D	B	B	D	D	D	F	D	D
Approach Vol, veh/h		697			512			440			721	
Approach Delay, s/veh		24.9			21.5			40.2			52.1	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.9	22.0	13.1	50.0	13.1	23.8	12.2	50.9
Change Period (Y+Rc), s	4.7	5.8	4.7	5.8	4.7	5.8	4.7	5.8
Max Green Setting (Gmax), s	10.2	29.3	10.2	29.3	10.2	29.3	9.2	30.3
Max Q Clear Time (g_c+I1), s	11.4	8.6	5.5	13.0	5.5	11.9	7.6	9.9
Green Ext Time (p_c), s	0.0	3.7	0.0	4.1	0.0	5.3	0.0	3.4

Intersection Summary	
HCM 7th Control Delay, s/veh	35.3
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	822	278	71	633	67	147	283	45	111	461	105
Future Volume (veh/h)	75	822	278	71	633	67	147	283	45	111	461	105
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	78	856	254	74	659	63	153	295	37	116	480	91
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	99	1929	569	94	2328	221	179	660	82	141	555	105
Arrive On Green	0.06	0.49	0.49	0.05	0.49	0.49	0.10	0.21	0.21	0.08	0.19	0.19
Sat Flow, veh/h	1781	3909	1153	1781	4742	450	1781	3178	395	1781	2982	562
Grp Volume(v), veh/h	78	745	365	74	472	250	153	164	168	116	285	286
Grp Sat Flow(s),veh/h/ln	1781	1702	1659	1781	1702	1788	1781	1777	1796	1781	1777	1767
Q Serve(g_s), s	5.2	17.0	17.2	4.9	9.8	10.0	10.1	9.6	9.8	7.7	18.7	18.9
Cycle Q Clear(g_c), s	5.2	17.0	17.2	4.9	9.8	10.0	10.1	9.6	9.8	7.7	18.7	18.9
Prop In Lane	1.00		0.70	1.00		0.25	1.00		0.22	1.00		0.32
Lane Grp Cap(c), veh/h	99	1680	818	94	1671	877	179	369	373	141	331	329
V/C Ratio(X)	0.79	0.44	0.45	0.78	0.28	0.29	0.85	0.44	0.45	0.82	0.86	0.87
Avail Cap(c_a), veh/h	282	1680	818	282	1671	877	282	459	464	282	459	456
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.0	19.7	19.7	56.1	18.1	18.1	53.1	41.5	41.6	54.4	47.3	47.4
Incr Delay (d2), s/veh	5.1	0.9	1.8	5.2	0.4	0.8	8.2	0.3	0.3	4.5	9.0	9.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	6.4	6.5	2.3	3.7	4.0	4.8	4.1	4.3	3.5	8.8	8.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	61.0	20.6	21.5	61.4	18.5	18.9	61.3	41.8	41.9	58.9	56.3	57.2
LnGrp LOS	E	C	C	E	B	B	E	D	D	E	E	E
Approach Vol, veh/h		1188			796			485			687	
Approach Delay, s/veh		23.5			22.6			48.0			57.1	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.4	64.2	17.1	27.3	11.7	63.9	14.5	29.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	19.0	31.0	19.0	31.0	19.0	31.0	19.0	31.0
Max Q Clear Time (g_c+I1), s	6.9	19.2	12.1	20.9	7.2	12.0	9.7	11.8
Green Ext Time (p_c), s	0.0	1.0	0.0	0.4	0.0	0.6	0.0	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	34.4
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	468	412	299	481	68	208	300	223	72	411	83
Future Volume (veh/h)	50	468	412	299	481	68	208	300	223	72	411	83
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	53	493	212	315	506	31	219	316	154	76	433	67
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	135	759	313	343	1180	522	258	1030	466	153	452	378
Arrive On Green	0.08	0.21	0.21	0.19	0.33	0.33	0.14	0.30	0.30	0.09	0.24	0.24
Sat Flow, veh/h	1781	3530	1458	1781	3554	1571	1781	3428	1549	1781	1870	1565
Grp Volume(v), veh/h	53	475	230	315	506	31	219	314	156	76	433	67
Grp Sat Flow(s),veh/h/ln	1781	1702	1584	1781	1777	1571	1781	1702	1573	1781	1870	1565
Q Serve(g_s), s	2.9	13.2	13.8	17.9	11.5	1.4	12.4	7.3	8.0	4.2	23.6	3.5
Cycle Q Clear(g_c), s	2.9	13.2	13.8	17.9	11.5	1.4	12.4	7.3	8.0	4.2	23.6	3.5
Prop In Lane	1.00		0.92	1.00		1.00	1.00		0.98	1.00		1.00
Lane Grp Cap(c), veh/h	135	732	340	343	1180	522	258	1023	473	153	452	378
V/C Ratio(X)	0.39	0.65	0.68	0.92	0.43	0.06	0.85	0.31	0.33	0.50	0.96	0.18
Avail Cap(c_a), veh/h	344	1316	612	344	1374	607	689	1023	473	689	452	378
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.5	37.0	37.3	40.9	26.9	23.5	43.1	27.9	28.1	45.1	38.7	31.1
Incr Delay (d2), s/veh	1.9	1.0	2.3	28.5	0.2	0.0	7.7	0.2	0.4	2.5	31.7	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	5.3	5.3	10.1	4.6	0.5	5.8	2.9	2.9	1.9	14.2	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	47.4	38.0	39.6	69.4	27.1	23.6	50.8	28.0	28.5	47.6	70.3	31.3
LnGrp LOS	D	D	D	E	C	C	D	C	C	D	E	C
Approach Vol, veh/h		758			852			689			576	
Approach Delay, s/veh		39.2			42.6			35.4			62.8	
Approach LOS		D			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.9	28.2	20.0	30.3	12.8	40.4	13.9	36.4
Change Period (Y+Rc), s	5.0	6.0	5.0	5.3	5.0	6.0	5.0	5.3
Max Green Setting (Gmax), s	20.0	40.0	40.0	25.0	20.0	40.0	40.0	25.0
Max Q Clear Time (g_c+I1), s	19.9	15.8	14.4	25.6	4.9	13.5	6.2	10.0
Green Ext Time (p_c), s	0.0	4.2	0.6	0.0	0.1	3.1	0.2	2.4

Intersection Summary	
HCM 7th Control Delay, s/veh	44.0
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	272	461	163	252	3	598	7	318	3	10	26
Future Volume (veh/h)	15	272	461	163	252	3	598	7	318	3	10	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	15	278	204	166	257	3	610	0	142	3	10	6
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	20	696	526	207	869	10	707	0	1213	4	414	226
Arrive On Green	0.01	0.14	0.14	0.12	0.24	0.24	0.20	0.00	0.38	0.00	0.19	0.19
Sat Flow, veh/h	1781	5106	1553	1781	3596	42	3563	0	3170	1781	2218	1211
Grp Volume(v), veh/h	15	278	204	166	127	133	610	0	142	3	8	8
Grp Sat Flow(s),veh/h/ln	1781	1702	1553	1781	1777	1861	1781	0	1585	1781	1777	1652
Q Serve(g_s), s	0.5	3.2	6.5	5.8	3.7	3.8	10.6	0.0	1.9	0.1	0.2	0.3
Cycle Q Clear(g_c), s	0.5	3.2	6.5	5.8	3.7	3.8	10.6	0.0	1.9	0.1	0.2	0.3
Prop In Lane	1.00		1.00	1.00		0.02	1.00		1.00	1.00		0.73
Lane Grp Cap(c), veh/h	20	696	526	207	429	450	707	0	1213	4	332	308
V/C Ratio(X)	0.77	0.40	0.39	0.80	0.30	0.30	0.86	0.00	0.12	0.69	0.02	0.03
Avail Cap(c_a), veh/h	887	4051	1547	887	1410	1477	1386	0	1213	416	332	308
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.7	25.4	16.4	27.7	19.9	19.9	24.9	0.0	12.8	32.0	21.4	21.4
Incr Delay (d2), s/veh	20.4	0.1	0.2	2.7	0.1	0.1	1.3	0.0	0.2	111.6	0.1	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.2	2.1	2.4	1.4	1.5	4.3	0.0	0.6	0.2	0.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	52.1	25.5	16.6	30.4	20.1	20.0	26.2	0.0	13.0	143.6	21.5	21.5
LnGrp LOS	D	C	B	C	C	C	C		B	F	C	C
Approach Vol, veh/h		497			426			752			19	
Approach Delay, s/veh		22.6			24.1			23.7			40.8	
Approach LOS		C			C			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.1	15.2	17.9	18.1	6.3	21.9	5.4	30.7
Change Period (Y+Rc), s	5.6	6.4	5.2	6.1	5.6	6.4	5.2	6.1
Max Green Setting (Gmax), s	32.0	51.0	25.0	12.0	32.0	51.0	15.0	22.0
Max Q Clear Time (g_c+I1), s	7.8	8.5	12.6	2.3	2.5	5.8	2.1	3.9
Green Ext Time (p_c), s	0.0	0.3	0.1	0.0	0.0	0.2	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	23.7
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	496	121	191	419	0	0	0	0	151	6	386
Future Volume (veh/h)	0	496	121	191	419	0	0	0	0	151	6	386
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	522	74	201	441	0				159	6	66
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1720	767	247	1300	0				212	8	196
Arrive On Green	0.00	0.48	0.48	0.14	0.70	0.00				0.12	0.12	0.12
Sat Flow, veh/h	0	3647	1585	1781	1870	0				1719	65	1585
Grp Volume(v), veh/h	0	522	74	201	441	0				165	0	66
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1781	1870	0				1784	0	1585
Q Serve(g_s), s	0.0	5.8	1.6	7.1	6.1	0.0				5.8	0.0	2.5
Cycle Q Clear(g_c), s	0.0	5.8	1.6	7.1	6.1	0.0				5.8	0.0	2.5
Prop In Lane	0.00		1.00	1.00		0.00				0.96		1.00
Lane Grp Cap(c), veh/h	0	1720	767	247	1300	0				220	0	196
V/C Ratio(X)	0.00	0.30	0.10	0.81	0.34	0.00				0.75	0.00	0.34
Avail Cap(c_a), veh/h	0	1720	767	438	1300	0				384	0	341
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.93	0.93	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	10.1	9.1	27.2	4.0	0.0				27.5	0.0	26.1
Incr Delay (d2), s/veh	0.0	0.5	0.3	2.3	0.7	0.0				1.9	0.0	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.7	0.5	2.8	1.1	0.0				2.4	0.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	10.6	9.3	29.5	4.6	0.0				29.4	0.0	26.4
LnGrp LOS		B	A	C	A					C		C
Approach Vol, veh/h		596			642						231	
Approach Delay, s/veh		10.4			12.4						28.6	
Approach LOS		B			B						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	13.7	37.5		13.8		51.2
Change Period (Y+Rc), s	4.7	6.0		5.8		6.0
Max Green Setting (Gmax), s	16.0	18.2		14.0		39.2
Max Q Clear Time (g_c+I1), s	9.1	7.8		7.8		8.1
Green Ext Time (p_c), s	0.1	1.5		0.3		1.4

Intersection Summary	
HCM 7th Control Delay, s/veh	14.2
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	241	413	0	0	489	257	87	3	178	0	0	0
Future Volume (veh/h)	241	413	0	0	489	257	87	3	178	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	262	449	0	0	532	112	95	3	77			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	454	1288	0	0	1214	541	119	4	96			
Arrive On Green	0.25	0.69	0.00	0.00	0.34	0.34	0.13	0.13	0.13			
Sat Flow, veh/h	1781	1870	0	0	3647	1585	918	29	744			
Grp Volume(v), veh/h	262	449	0	0	532	112	175	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1870	0	0	1777	1585	1691	0	0			
Q Serve(g_s), s	8.4	6.4	0.0	0.0	7.5	3.3	6.5	0.0	0.0			
Cycle Q Clear(g_c), s	8.4	6.4	0.0	0.0	7.5	3.3	6.5	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.54		0.44			
Lane Grp Cap(c), veh/h	454	1288	0	0	1214	541	219	0	0			
V/C Ratio(X)	0.58	0.35	0.00	0.00	0.44	0.21	0.80	0.00	0.00			
Avail Cap(c_a), veh/h	454	1288	0	0	1214	541	364	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.94	0.94	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	21.1	4.1	0.0	0.0	16.6	15.2	27.5	0.0	0.0			
Incr Delay (d2), s/veh	1.1	0.7	0.0	0.0	1.2	0.9	2.5	0.0	0.0			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	3.0	1.2	0.0	0.0	2.7	1.1	2.6	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	22.3	4.8	0.0	0.0	17.7	16.0	30.0	0.0	0.0			
LnGrp LOS	C	A			B	B	C					
Approach Vol, veh/h		711			644			175				
Approach Delay, s/veh		11.3			17.4			30.0				
Approach LOS		B			B			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		50.8			22.6	28.2		14.2				
Change Period (Y+Rc), s		6.0			6.0	* 6		5.8				
Max Green Setting (Gmax), s		39.2			12.0	* 22		14.0				
Max Q Clear Time (g_c+I1), s		8.4			10.4	9.5		8.5				
Green Ext Time (p_c), s		1.4			0.1	1.8		0.3				

Intersection Summary	
HCM 7th Control Delay, s/veh	16.0
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	1
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	0	0	1083
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	-	-	-	-	-	1083
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	SBLn1
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Ctrl Dly (s/v)	-	-	0
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	80	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1	0	-	0	1	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	0	-
Critical Hdwy	4.14	-	-	-	6.29	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	2.22	-	-	-	3.67	3.32
Pot Cap-1 Maneuver	1620	-	-	0	980	1083
Stage 1	-	-	-	0	980	-
Stage 2	-	-	-	0	-	-
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	1620	-	-	-	980	1083
Mov Cap-2 Maneuver	-	-	-	-	894	-
Stage 1	-	-	-	-	980	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	SBLn1
Capacity (veh/h)	1620	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Ctrl Dly (s/v)	0	-	-	0
HCM Lane LOS	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	3	292	1	25	186
Future Vol, veh/h	1	3	292	1	25	186
Conflicting Peds, #/hr	0	3	0	3	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	3	317	1	27	202

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	577	165	0	0	321	0
Stage 1	321	-	-	-	-	-
Stage 2	257	-	-	-	-	-
Critical Hdwy	6.63	6.93	-	-	4.13	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	2.219	-
Pot Cap-1 Maneuver	462	851	-	-	1237	-
Stage 1	709	-	-	-	-	-
Stage 2	786	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	449	846	-	-	1233	-
Mov Cap-2 Maneuver	449	-	-	-	-	-
Stage 1	707	-	-	-	-	-
Stage 2	766	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	10.23	0	0.95
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	693	213	-
HCM Lane V/C Ratio	-	-	0.006	0.022	-
HCM Ctrl Dly (s/v)	-	-	10.2	8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0	0.1	-

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	5	295	0	0	211
Future Vol, veh/h	0	5	295	0	0	211
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	5	321	0	0	229

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	160	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.93	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.319	-	-	-	-
Pot Cap-1 Maneuver	0	857	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	857	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	9.23	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	857	-
HCM Lane V/C Ratio	-	-	0.006	-
HCM Ctrl Dly (s/v)	-	-	9.2	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	0	-

Intersection	
Intersection Delay, s/veh	186.5
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	28	308	8	15	596	94	17	247	36	88	188	53
Future Vol, veh/h	28	308	8	15	596	94	17	247	36	88	188	53
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	30	331	9	16	641	101	18	266	39	95	202	57
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay, s/veh	56.8	376	35.2	53.8
HCM LOS	F	F	E	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	6%	0%	8%	2%	27%
Vol Thru, %	94%	0%	90%	85%	57%
Vol Right, %	0%	100%	2%	13%	16%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	264	36	344	705	329
LT Vol	17	0	28	15	88
Through Vol	247	0	308	596	188
RT Vol	0	36	8	94	53
Lane Flow Rate	284	39	370	758	354
Geometry Grp	5	5	2	2	4a
Degree of Util (X)	0.725	0.091	0.883	1.769	0.858
Departure Headway (Hd)	11.063	10.29	10.47	8.399	10.772
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	329	350	348	440	340
Service Time	8.763	7.99	8.47	6.468	8.772
HCM Lane V/C Ratio	0.863	0.111	1.063	1.723	1.041
HCM Control Delay, s/veh	38.1	14	56.8	376	53.8
HCM Lane LOS	E	B	F	F	F
HCM 95th-tile Q	5.4	0.3	8.4	46.9	7.8

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	432	0	0	705	0	3
Future Vol, veh/h	432	0	0	705	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	470	0	0	766	0	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	-	235
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.93
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.319
Pot Cap-1 Maneuver	-	0	0	-	0	768
Stage 1	-	0	0	-	0	-
Stage 2	-	0	0	-	0	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	-	768
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0	9.71
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	WBT
Capacity (veh/h)	768	-	-
HCM Lane V/C Ratio	0.004	-	-
HCM Ctrl Dly (s/v)	9.7	-	-
HCM Lane LOS	A	-	-
HCM 95th %tile Q(veh)	0	-	-

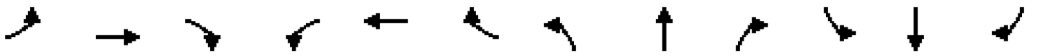
Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	432	3	19	700	5	9
Future Vol, veh/h	432	3	19	700	5	9
Conflicting Peds, #/hr	0	3	3	0	0	3
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	470	3	21	761	5	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	476	0	1276	242
Stage 1	-	-	-	-	474	-
Stage 2	-	-	-	-	802	-
Critical Hdwy	-	-	4.13	-	6.63	6.93
Critical Hdwy Stg 1	-	-	-	-	5.83	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.219	-	3.519	3.319
Pot Cap-1 Maneuver	-	-	1084	-	171	759
Stage 1	-	-	-	-	593	-
Stage 2	-	-	-	-	440	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1081	-	165	755
Mov Cap-2 Maneuver	-	-	-	-	165	-
Stage 1	-	-	-	-	591	-
Stage 2	-	-	-	-	426	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0.22	16.4
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	331	-	-	48	-
HCM Lane V/C Ratio	0.046	-	-	0.019	-
HCM Ctrl Dly (s/v)	16.4	-	-	8.4	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	381	13	32	598	192	15	300	51	128	200	106
Future Volume (veh/h)	47	381	13	32	598	192	15	300	51	128	200	106
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	52	419	14	35	657	190	16	330	45	141	220	39
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	84	725	614	68	512	148	39	400	55	173	1151	513
Arrive On Green	0.05	0.39	0.39	0.04	0.37	0.37	0.02	0.25	0.25	0.10	0.32	0.32
Sat Flow, veh/h	1781	1870	1585	1781	1394	403	1781	1611	220	1781	3554	1585
Grp Volume(v), veh/h	52	419	14	35	0	847	16	0	375	141	220	39
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1798	1781	0	1831	1781	1777	1585
Q Serve(g_s), s	2.7	16.9	0.5	1.8	0.0	35.0	0.8	0.0	18.5	7.4	4.3	1.2
Cycle Q Clear(g_c), s	2.7	16.9	0.5	1.8	0.0	35.0	0.8	0.0	18.5	7.4	4.3	1.2
Prop In Lane	1.00		1.00	1.00		0.22	1.00		0.12	1.00		1.00
Lane Grp Cap(c), veh/h	84	725	614	68	0	660	39	0	454	173	1151	513
V/C Ratio(X)	0.62	0.58	0.02	0.52	0.00	1.28	0.41	0.00	0.83	0.81	0.19	0.08
Avail Cap(c_a), veh/h	374	725	614	374	0	660	374	0	672	374	1305	582
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.6	23.0	18.0	45.0	0.0	30.2	46.0	0.0	33.9	42.2	23.2	12.4
Incr Delay (d2), s/veh	2.8	1.6	0.0	2.3	0.0	138.9	2.6	0.0	8.8	3.5	0.2	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	7.0	0.2	0.8	0.0	39.0	0.4	0.0	8.8	3.3	1.7	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	47.4	24.6	18.1	47.3	0.0	169.0	48.6	0.0	42.7	45.6	23.4	12.5
LnGrp LOS	D	C	B	D		F	D		D	D	C	B
Approach Vol, veh/h		485			882			391			400	
Approach Delay, s/veh		26.9			164.2			42.9			30.2	
Approach LOS		C			F			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	29.5	8.7	43.2	6.8	36.7	10.7	41.2
Change Period (Y+Rc), s	4.7	5.8	5.1	6.2	4.7	5.8	6.2	* 6.2
Max Green Setting (Gmax), s	20.0	35.0	20.0	35.0	20.0	35.0	20.0	* 35
Max Q Clear Time (g_c+I1), s	9.4	20.5	3.8	18.9	2.8	6.3	4.7	37.0
Green Ext Time (p_c), s	0.1	3.2	0.0	3.4	0.0	2.7	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	86.5
HCM 7th LOS	F

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

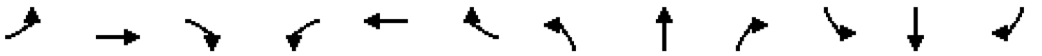
Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	54	2	1	312	225	20
Future Vol, veh/h	54	2	1	312	225	20
Conflicting Peds, #/hr	0	3	3	0	0	3
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	59	2	1	339	245	22

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	600	139	269	0	-	0
Stage 1	258	-	-	-	-	-
Stage 2	341	-	-	-	-	-
Critical Hdwy	6.08	7.13	5.33	-	-	-
Critical Hdwy Stg 1	6.63	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.669	3.919	3.119	-	-	-
Pot Cap-1 Maneuver	476	751	869	-	-	-
Stage 1	693	-	-	-	-	-
Stage 2	694	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	473	747	866	-	-	-
Mov Cap-2 Maneuver	473	-	-	-	-	-
Stage 1	690	-	-	-	-	-
Stage 2	692	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	13.6	0.03	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	6	-	479	-	-
HCM Lane V/C Ratio	0.001	-	0.127	-	-
HCM Ctrl Dly (s/v)	9.2	0	13.6	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	374	25	49	654	184	112	474	186	155	315	82
Future Volume (veh/h)	65	374	25	49	654	184	112	474	186	155	315	82
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	76	435	23	57	760	64	130	551	186	180	366	79
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	142	1089	57	128	982	83	161	710	239	213	878	187
Arrive On Green	0.08	0.32	0.32	0.07	0.30	0.30	0.09	0.27	0.27	0.12	0.30	0.30
Sat Flow, veh/h	1781	3433	181	1781	3316	279	1781	2607	877	1781	2910	621
Grp Volume(v), veh/h	76	225	233	57	407	417	130	375	362	180	222	223
Grp Sat Flow(s),veh/h/ln	1781	1777	1837	1781	1777	1818	1781	1777	1707	1781	1777	1755
Q Serve(g_s), s	4.0	9.8	9.8	3.0	20.6	20.7	7.1	19.2	19.3	9.8	9.8	10.0
Cycle Q Clear(g_c), s	4.0	9.8	9.8	3.0	20.6	20.7	7.1	19.2	19.3	9.8	9.8	10.0
Prop In Lane	1.00		0.10	1.00		0.15	1.00		0.51	1.00		0.35
Lane Grp Cap(c), veh/h	142	564	583	128	526	539	161	484	465	213	536	529
V/C Ratio(X)	0.53	0.40	0.40	0.44	0.77	0.77	0.81	0.78	0.78	0.84	0.41	0.42
Avail Cap(c_a), veh/h	361	630	651	361	630	645	361	630	605	361	630	622
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.6	26.3	26.4	43.9	31.7	31.7	44.1	33.1	33.2	42.5	27.5	27.6
Incr Delay (d2), s/veh	1.2	0.8	0.8	0.9	6.1	6.0	3.6	5.9	6.4	3.5	0.9	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	4.1	4.2	1.3	9.2	9.4	3.2	8.6	8.4	4.3	4.1	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	44.8	27.1	27.1	44.8	37.8	37.7	47.7	39.1	39.5	46.0	28.4	28.5
LnGrp LOS	D	C	C	D	D	D	D	D	D	D	C	C
Approach Vol, veh/h		534			881			867			625	
Approach Delay, s/veh		29.6			38.2			40.6			33.5	
Approach LOS		C			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.5	33.1	11.8	37.3	13.6	36.0	13.9	35.2
Change Period (Y+Rc), s	4.7	6.2	4.7	6.0	4.7	6.2	6.0	* 6
Max Green Setting (Gmax), s	20.0	35.0	20.0	35.0	20.0	35.0	20.0	* 35
Max Q Clear Time (g_c+I1), s	11.8	21.3	5.0	11.8	9.1	12.0	6.0	22.7
Green Ext Time (p_c), s	0.1	5.5	0.0	4.2	0.1	4.0	0.1	5.7

Intersection Summary	
HCM 7th Control Delay, s/veh	36.3
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	97	546	122	111	597	178	121	558	74	96	383	95
Future Volume (veh/h)	97	546	122	111	597	178	121	558	74	96	383	95
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	117	658	51	134	719	75	146	672	72	116	461	69
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	145	1273	99	174	1290	134	176	1010	107	171	956	140
Arrive On Green	0.08	0.38	0.38	0.10	0.40	0.40	0.10	0.22	0.22	0.10	0.21	0.21
Sat Flow, veh/h	1781	3341	259	1781	3248	339	1781	4687	498	1781	4492	659
Grp Volume(v), veh/h	117	350	359	134	393	401	146	487	257	116	347	183
Grp Sat Flow(s),veh/h/ln	1781	1777	1823	1781	1777	1809	1781	1702	1781	1781	1702	1746
Q Serve(g_s), s	6.5	15.2	15.2	7.3	17.1	17.2	8.0	13.1	13.3	6.3	8.9	9.2
Cycle Q Clear(g_c), s	6.5	15.2	15.2	7.3	17.1	17.2	8.0	13.1	13.3	6.3	8.9	9.2
Prop In Lane	1.00		0.14	1.00		0.19	1.00		0.28	1.00		0.38
Lane Grp Cap(c), veh/h	145	677	694	174	706	719	176	733	384	171	724	372
V/C Ratio(X)	0.81	0.52	0.52	0.77	0.56	0.56	0.83	0.66	0.67	0.68	0.48	0.49
Avail Cap(c_a), veh/h	164	677	694	182	706	719	182	997	522	182	997	512
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.86	0.86	0.86	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.2	23.9	23.9	44.0	23.3	23.3	44.2	35.9	36.0	43.7	34.5	34.6
Incr Delay (d2), s/veh	17.6	2.4	2.4	15.6	3.2	3.1	24.2	2.2	4.3	7.1	1.1	2.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	6.4	6.6	3.9	7.4	7.5	4.6	5.4	5.9	3.0	3.6	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	62.8	26.3	26.2	59.7	26.5	26.5	68.5	38.1	40.3	50.8	35.6	36.8
LnGrp LOS	E	C	C	E	C	C	E	D	D	D	D	D
Approach Vol, veh/h		826			928			890			646	
Approach Delay, s/veh		31.4			31.3			43.7			38.6	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.3	27.3	14.5	43.9	14.6	27.1	12.8	45.5
Change Period (Y+Rc), s	4.7	5.8	4.7	5.8	4.7	5.8	4.7	5.8
Max Green Setting (Gmax), s	10.2	29.3	10.2	29.3	10.2	29.3	9.2	30.3
Max Q Clear Time (g_c+I1), s	8.3	15.3	9.3	17.2	10.0	11.2	8.5	19.2
Green Ext Time (p_c), s	0.0	6.3	0.0	4.3	0.0	5.2	0.0	4.7

Intersection Summary	
HCM 7th Control Delay, s/veh	36.1
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	591	109	47	926	107	263	601	103	82	273	90
Future Volume (veh/h)	72	591	109	47	926	107	263	601	103	82	273	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	81	664	106	53	1040	111	296	675	105	92	307	72
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	103	2194	346	68	2222	237	282	729	113	115	409	95
Arrive On Green	0.06	0.49	0.49	0.04	0.47	0.47	0.16	0.24	0.24	0.06	0.14	0.14
Sat Flow, veh/h	1781	4445	701	1781	4684	499	1781	3079	478	1781	2863	661
Grp Volume(v), veh/h	81	507	263	53	755	396	296	389	391	92	189	190
Grp Sat Flow(s),veh/h/ln	1781	1702	1742	1781	1702	1779	1781	1777	1781	1781	1777	1748
Q Serve(g_s), s	5.4	10.6	10.8	3.5	18.0	18.0	19.0	25.7	25.8	6.1	12.2	12.6
Cycle Q Clear(g_c), s	5.4	10.6	10.8	3.5	18.0	18.0	19.0	25.7	25.8	6.1	12.2	12.6
Prop In Lane	1.00		0.40	1.00		0.28	1.00		0.27	1.00		0.38
Lane Grp Cap(c), veh/h	103	1680	860	68	1615	844	282	421	422	115	254	250
V/C Ratio(X)	0.79	0.30	0.31	0.77	0.47	0.47	1.05	0.93	0.93	0.80	0.74	0.76
Avail Cap(c_a), veh/h	282	1680	860	282	1615	844	282	459	460	282	459	452
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.8	18.1	18.1	57.2	21.3	21.3	50.5	44.8	44.8	55.4	49.3	49.5
Incr Delay (d2), s/veh	5.0	0.5	0.9	6.8	1.0	1.9	67.2	22.8	23.1	4.8	1.6	1.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	4.0	4.3	1.7	6.9	7.4	13.5	13.6	13.6	2.8	5.4	5.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	60.8	18.5	19.0	64.0	22.3	23.2	117.7	67.5	67.8	60.1	50.9	51.3
LnGrp LOS	E	B	B	E	C	C	F	E	E	E	D	D
Approach Vol, veh/h		851			1204			1076			471	
Approach Delay, s/veh		22.7			24.4			81.4			52.9	
Approach LOS		C			C			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	64.2	24.0	22.2	11.9	61.9	12.7	33.4
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	19.6	31.0	19.0	31.0	19.0	31.0	19.0	31.0
Max Q Clear Time (g_c+I1), s	5.5	12.8	21.0	14.6	7.4	20.0	8.1	27.8
Green Ext Time (p_c), s	0.0	0.6	0.0	0.3	0.0	1.0	0.0	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	44.8
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	119	521	195	170	540	97	266	501	452	107	243	212
Future Volume (veh/h)	119	521	195	170	540	97	266	501	452	107	243	212
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	131	573	121	187	593	48	292	551	397	118	267	125
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	200	960	199	228	862	380	341	968	446	197	380	317
Arrive On Green	0.11	0.23	0.23	0.13	0.24	0.24	0.19	0.28	0.28	0.11	0.20	0.20
Sat Flow, veh/h	1781	4228	875	1781	3554	1565	1781	3404	1568	1781	1870	1562
Grp Volume(v), veh/h	131	459	235	187	593	48	292	551	397	118	267	125
Grp Sat Flow(s),veh/h/ln	1781	1702	1699	1781	1777	1565	1781	1702	1568	1781	1870	1562
Q Serve(g_s), s	6.0	10.2	10.6	8.7	12.9	2.0	13.5	11.8	20.6	5.4	11.3	5.9
Cycle Q Clear(g_c), s	6.0	10.2	10.6	8.7	12.9	2.0	13.5	11.8	20.6	5.4	11.3	5.9
Prop In Lane	1.00		0.51	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	200	773	386	228	862	380	341	968	446	197	380	317
V/C Ratio(X)	0.66	0.59	0.61	0.82	0.69	0.13	0.86	0.57	0.89	0.60	0.70	0.39
Avail Cap(c_a), veh/h	419	1601	799	419	1672	736	838	1001	461	838	550	459
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.2	29.4	29.5	36.1	29.3	25.2	33.3	26.0	29.2	36.0	31.5	29.3
Incr Delay (d2), s/veh	3.6	0.7	1.6	7.2	1.0	0.1	6.2	0.7	18.6	2.9	2.4	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	3.9	4.1	4.0	5.1	0.7	6.0	4.5	9.4	2.4	5.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.8	30.1	31.0	43.3	30.3	25.3	39.5	26.7	47.8	39.0	33.9	30.1
LnGrp LOS	D	C	C	D	C	C	D	C	D	D	C	C
Approach Vol, veh/h		825			828			1240			510	
Approach Delay, s/veh		31.9			32.9			36.5			34.1	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.9	25.3	21.3	22.6	14.5	26.6	14.4	29.5
Change Period (Y+Rc), s	5.0	6.0	5.0	5.3	5.0	6.0	5.0	5.3
Max Green Setting (Gmax), s	20.0	40.0	40.0	25.0	20.0	40.0	40.0	25.0
Max Q Clear Time (g_c+I1), s	10.7	12.6	15.5	13.3	8.0	14.9	7.4	22.6
Green Ext Time (p_c), s	0.3	4.2	0.8	1.4	0.2	3.8	0.3	1.3

Intersection Summary	
HCM 7th Control Delay, s/veh	34.1
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	243	814	383	248	0	519	13	358	6	16	28
Future Volume (veh/h)	28	243	814	383	248	0	519	13	358	6	16	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	31	273	733	430	279	0	583	0	155	7	18	5
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	40	1817	832	398	1979	0	622	0	802	9	233	62
Arrive On Green	0.02	0.36	0.36	0.22	0.56	0.00	0.17	0.00	0.25	0.01	0.08	0.08
Sat Flow, veh/h	1781	5106	1561	1781	3647	0	3563	0	3170	1781	2777	738
Grp Volume(v), veh/h	31	273	733	430	279	0	583	0	155	7	11	12
Grp Sat Flow(s),veh/h/ln	1781	1702	1561	1781	1777	0	1781	0	1585	1781	1777	1738
Q Serve(g_s), s	2.5	5.2	51.0	32.0	5.4	0.0	23.1	0.0	5.5	0.6	0.8	0.9
Cycle Q Clear(g_c), s	2.5	5.2	51.0	32.0	5.4	0.0	23.1	0.0	5.5	0.6	0.8	0.9
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		0.42
Lane Grp Cap(c), veh/h	40	1817	832	398	1979	0	622	0	802	9	149	146
V/C Ratio(X)	0.78	0.15	0.88	1.08	0.14	0.00	0.94	0.00	0.19	0.77	0.08	0.08
Avail Cap(c_a), veh/h	398	1817	832	398	1979	0	622	0	802	186	149	146
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	69.7	31.4	29.8	55.6	15.3	0.0	58.4	0.0	42.0	71.2	60.5	60.6
Incr Delay (d2), s/veh	11.8	0.0	10.5	68.6	0.0	0.0	21.8	0.0	0.5	81.1	1.0	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	2.1	24.2	21.7	2.2	0.0	12.3	0.0	2.2	0.5	0.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	81.5	31.4	40.2	124.2	15.3	0.0	80.2	0.0	42.6	152.3	61.5	61.6
LnGrp LOS	F	C	D	F	B		F		D	F	E	E
Approach Vol, veh/h		1037			709			738			30	
Approach Delay, s/veh		39.2			81.3			72.3			82.7	
Approach LOS		D			F			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	37.6	57.4	30.2	18.1	8.8	86.2	5.9	42.4
Change Period (Y+Rc), s	5.6	6.4	5.2	6.1	5.6	6.4	5.2	6.1
Max Green Setting (Gmax), s	32.0	51.0	25.0	12.0	32.0	51.0	15.0	22.0
Max Q Clear Time (g_c+I1), s	34.0	53.0	25.1	2.9	4.5	7.4	2.6	7.5
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	61.3
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1042	78	255	677	0	0	0	0	356	0	251
Future Volume (veh/h)	0	1042	78	255	677	0	0	0	0	356	0	251
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	1171	77	287	761	0				400	0	119
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89				0.89	0.89	0.89
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1216	542	336	1128	0				384	0	341
Arrive On Green	0.00	0.34	0.34	0.19	0.60	0.00				0.22	0.00	0.22
Sat Flow, veh/h	0	3647	1585	1781	1870	0				1781	0	1585
Grp Volume(v), veh/h	0	1171	77	287	761	0				400	0	119
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1781	1870	0				1781	0	1585
Q Serve(g_s), s	0.0	21.0	2.2	10.1	17.7	0.0				14.0	0.0	4.1
Cycle Q Clear(g_c), s	0.0	21.0	2.2	10.1	17.7	0.0				14.0	0.0	4.1
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1216	542	336	1128	0				384	0	341
V/C Ratio(X)	0.00	0.96	0.14	0.85	0.67	0.00				1.04	0.00	0.35
Avail Cap(c_a), veh/h	0	1216	542	493	1128	0				384	0	341
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.30	0.30	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	21.0	14.8	25.5	8.6	0.0				25.5	0.0	21.6
Incr Delay (d2), s/veh	0.0	18.4	0.5	2.1	1.0	0.0				57.5	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	10.0	0.7	3.8	4.4	0.0				11.5	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	39.4	15.3	27.6	9.6	0.0				83.0	0.0	21.9
LnGrp LOS		D	B	C	A					F		C
Approach Vol, veh/h		1248			1048						519	
Approach Delay, s/veh		37.9			14.5						69.0	
Approach LOS		D			B						E	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	17.0	28.2		19.8		45.2
Change Period (Y+Rc), s	4.7	6.0		5.8		6.0
Max Green Setting (Gmax), s	18.3	16.2		14.0		39.2
Max Q Clear Time (g_c+I1), s	12.1	23.0		16.0		19.7
Green Ext Time (p_c), s	0.2	0.0		0.0		2.7

Intersection Summary	
HCM 7th Control Delay, s/veh	34.9
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	495	901	0	0	773	383	151	3	285	0	0	0
Future Volume (veh/h)	495	901	0	0	773	383	151	3	285	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	538	979	0	0	840	109	164	3	237			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	757	1434	0	0	886	395	181	3	261			
Arrive On Green	0.42	0.77	0.00	0.00	0.25	0.25	0.27	0.27	0.27			
Sat Flow, veh/h	1781	1870	0	0	3647	1585	674	12	975			
Grp Volume(v), veh/h	538	979	0	0	840	109	404	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1870	0	0	1777	1585	1661	0	0			
Q Serve(g_s), s	16.2	16.7	0.0	0.0	15.1	3.6	15.3	0.0	0.0			
Cycle Q Clear(g_c), s	16.2	16.7	0.0	0.0	15.1	3.6	15.3	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.41		0.59			
Lane Grp Cap(c), veh/h	757	1434	0	0	886	395	445	0	0			
V/C Ratio(X)	0.71	0.68	0.00	0.00	0.95	0.28	0.91	0.00	0.00			
Avail Cap(c_a), veh/h	757	1434	0	0	886	395	460	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	15.4	3.7	0.0	0.0	24.0	19.7	23.0	0.0	0.0			
Incr Delay (d2), s/veh	0.2	0.2	0.0	0.0	20.0	1.7	20.6	0.0	0.0			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	5.0	0.5	0.0	0.0	7.7	1.3	7.9	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	15.6	4.0	0.0	0.0	44.0	21.4	43.6	0.0	0.0			
LnGrp LOS	B	A			D	C	D					
Approach Vol, veh/h		1517			949			404				
Approach Delay, s/veh		8.1			41.4			43.6				
Approach LOS		A			D			D				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		56.2			34.0	22.2		23.2				
Change Period (Y+Rc), s		6.0			6.0	* 6		5.8				
Max Green Setting (Gmax), s		35.2			14.0	* 16		18.0				
Max Q Clear Time (g_c+I1), s		18.7			18.2	17.1		17.3				
Green Ext Time (p_c), s		3.8			0.0	0.0		0.1				

Intersection Summary	
HCM 7th Control Delay, s/veh	24.1
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	1
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	0	0	1083
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	-	-	-	-	-	1083
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	SBLn1
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Ctrl Dly (s/v)	-	-	0
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	80	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1	0	-	0	1	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	0	-
Critical Hdwy	4.14	-	-	-	6.29	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	2.22	-	-	-	3.67	3.32
Pot Cap-1 Maneuver	1620	-	-	0	980	1083
Stage 1	-	-	-	0	980	-
Stage 2	-	-	-	0	-	-
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	1620	-	-	-	980	1083
Mov Cap-2 Maneuver	-	-	-	-	894	-
Stage 1	-	-	-	-	980	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	SBLn1
Capacity (veh/h)	1620	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Ctrl Dly (s/v)	0	-	-	0
HCM Lane LOS	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	7	174	2	56	164
Future Vol, veh/h	1	7	174	2	56	164
Conflicting Peds, #/hr	0	3	0	3	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	8	189	2	61	178

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	493	102	0	0	194	0
Stage 1	193	-	-	-	-	-
Stage 2	300	-	-	-	-	-
Critical Hdwy	6.63	6.93	-	-	4.13	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	2.219	-
Pot Cap-1 Maneuver	520	934	-	-	1377	-
Stage 1	821	-	-	-	-	-
Stage 2	751	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	493	929	-	-	1374	-
Mov Cap-2 Maneuver	493	-	-	-	-	-
Stage 1	819	-	-	-	-	-
Stage 2	714	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	9.35	0	1.97
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	836	458	-
HCM Lane V/C Ratio	-	-	0.01	0.044	-
HCM Ctrl Dly (s/v)	-	-	9.3	7.7	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0.1	-

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	15	180	1	0	220
Future Vol, veh/h	0	15	180	1	0	220
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	16	196	1	0	239

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	98	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.93	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.319	-	-	-	-
Pot Cap-1 Maneuver	0	939	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	939	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	8.9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	939	-
HCM Lane V/C Ratio	-	-	0.017	-
HCM Ctrl Dly (s/v)	-	-	8.9	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	0.1	-

Intersection	
Intersection Delay, s/veh	286.8
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	42	602	10	31	440	76	15	159	21	132	179	38
Future Vol, veh/h	42	602	10	31	440	76	15	159	21	132	179	38
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	52	743	12	38	543	94	19	196	26	163	221	47
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay, s/veh	447	306.2	30.8	99
HCM LOS	F	F	D	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	9%	0%	6%	6%	38%
Vol Thru, %	91%	0%	92%	80%	51%
Vol Right, %	0%	100%	2%	14%	11%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	174	21	654	547	349
LT Vol	15	0	42	31	132
Through Vol	159	0	602	440	179
RT Vol	0	21	10	76	38
Lane Flow Rate	215	26	807	675	431
Geometry Grp	5	5	2	2	4a
Degree of Util (X)	0.583	0.065	1.919	1.591	1.037
Departure Headway (Hd)	13.115	12.325	10.181	10.814	12.093
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	277	292	363	344	306
Service Time	10.815	10.025	8.181	8.814	10.093
HCM Lane V/C Ratio	0.776	0.089	2.223	1.962	1.408
HCM Control Delay, s/veh	32.6	15.9	447	306.2	99
HCM Lane LOS	D	C	F	F	F
HCM 95th-tile Q	3.4	0.2	46.1	31	11.5

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	755	0	0	547	0	9
Future Vol, veh/h	755	0	0	547	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	821	0	0	595	0	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	-	410
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.93
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.319
Pot Cap-1 Maneuver	-	0	0	-	0	591
Stage 1	-	0	0	-	0	-
Stage 2	-	0	0	-	0	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	-	591
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0	11.19
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	WBT
Capacity (veh/h)	591	-	-
HCM Lane V/C Ratio	0.017	-	-
HCM Ctrl Dly (s/v)	11.2	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-

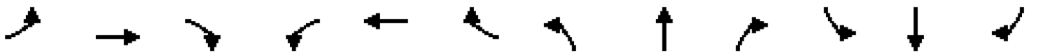
Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	759	5	32	543	4	8
Future Vol, veh/h	759	5	32	543	4	8
Conflicting Peds, #/hr	0	3	3	0	0	3
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	825	5	35	590	4	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	833	0	1491	421
Stage 1	-	-	-	-	831	-
Stage 2	-	-	-	-	660	-
Critical Hdwy	-	-	4.13	-	6.63	6.93
Critical Hdwy Stg 1	-	-	-	-	5.83	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.219	-	3.519	3.319
Pot Cap-1 Maneuver	-	-	797	-	125	582
Stage 1	-	-	-	-	389	-
Stage 2	-	-	-	-	513	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	795	-	116	578
Mov Cap-2 Maneuver	-	-	-	-	116	-
Stage 1	-	-	-	-	388	-
Stage 2	-	-	-	-	480	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0.54	20.26
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	249	-	-	100	-
HCM Lane V/C Ratio	0.052	-	-	0.044	-
HCM Ctrl Dly (s/v)	20.3	-	-	9.7	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	710	12	35	502	120	16	278	51	176	209	57
Future Volume (veh/h)	45	710	12	35	502	120	16	278	51	176	209	57
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	47	747	13	37	528	111	17	293	42	185	220	22
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	80	717	607	70	549	115	41	361	52	219	1159	517
Arrive On Green	0.04	0.38	0.38	0.04	0.37	0.37	0.02	0.23	0.23	0.12	0.33	0.33
Sat Flow, veh/h	1781	1870	1585	1781	1499	315	1781	1600	229	1781	3554	1585
Grp Volume(v), veh/h	47	747	13	37	0	639	17	0	335	185	220	22
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1814	1781	0	1829	1781	1777	1585
Q Serve(g_s), s	2.5	36.6	0.5	1.9	0.0	32.9	0.9	0.0	16.6	9.7	4.2	0.7
Cycle Q Clear(g_c), s	2.5	36.6	0.5	1.9	0.0	32.9	0.9	0.0	16.6	9.7	4.2	0.7
Prop In Lane	1.00		1.00	1.00		0.17	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	80	717	607	70	0	664	41	0	413	219	1159	517
V/C Ratio(X)	0.59	1.04	0.02	0.53	0.00	0.96	0.42	0.00	0.81	0.84	0.19	0.04
Avail Cap(c_a), veh/h	373	717	607	373	0	665	373	0	671	373	1303	581
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.7	29.4	18.3	45.0	0.0	29.6	46.0	0.0	35.0	40.9	23.1	12.3
Incr Delay (d2), s/veh	2.6	45.1	0.0	2.3	0.0	25.9	2.5	0.0	7.9	3.4	0.2	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	23.6	0.2	0.9	0.0	17.6	0.4	0.0	7.8	4.3	1.7	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	47.3	74.5	18.3	47.3	0.0	55.5	48.5	0.0	42.9	44.3	23.3	12.3
LnGrp LOS	D	F	B	D		E	D		D	D	C	B
Approach Vol, veh/h		807			676			352			427	
Approach Delay, s/veh		72.0			55.1			43.2			31.8	
Approach LOS		E			E			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.5	27.4	8.9	42.8	6.9	36.9	10.5	41.2
Change Period (Y+Rc), s	4.7	5.8	5.1	6.2	4.7	5.8	6.2	* 6.2
Max Green Setting (Gmax), s	20.0	35.0	20.0	35.0	20.0	35.0	20.0	* 35
Max Q Clear Time (g_c+I1), s	11.7	18.6	3.9	38.6	2.9	6.2	4.5	34.9
Green Ext Time (p_c), s	0.1	3.0	0.0	0.0	0.0	2.6	0.0	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	54.9
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

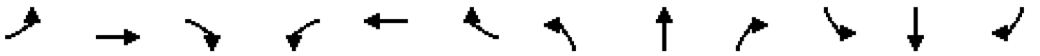
Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	42	2	2	303	221	35
Future Vol, veh/h	42	2	2	303	221	35
Conflicting Peds, #/hr	0	3	3	0	0	3
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	46	2	2	329	240	38

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	596	145	281	0	-	0
Stage 1	262	-	-	-	-	-
Stage 2	334	-	-	-	-	-
Critical Hdwy	6.08	7.13	5.33	-	-	-
Critical Hdwy Stg 1	6.63	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.669	3.919	3.119	-	-	-
Pot Cap-1 Maneuver	479	745	858	-	-	-
Stage 1	690	-	-	-	-	-
Stage 2	700	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	474	741	855	-	-	-
Mov Cap-2 Maneuver	474	-	-	-	-	-
Stage 1	686	-	-	-	-	-
Stage 2	698	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	13.29	0.06	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	12	-	482	-	-
HCM Lane V/C Ratio	0.003	-	0.099	-	-
HCM Ctrl Dly (s/v)	9.2	0	13.3	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	688	50	39	543	167	58	319	101	233	370	74
Future Volume (veh/h)	63	688	50	39	543	167	58	319	101	233	370	74
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	71	773	50	45	610	51	65	358	89	262	416	73
Peak Hour Factor	0.89	0.89	0.89	0.86	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	172	1061	69	122	898	75	146	568	139	300	869	151
Arrive On Green	0.10	0.31	0.31	0.07	0.27	0.27	0.08	0.20	0.20	0.17	0.29	0.29
Sat Flow, veh/h	1781	3387	219	1781	3318	277	1781	2823	693	1781	3023	526
Grp Volume(v), veh/h	71	405	418	45	326	335	65	224	223	262	243	246
Grp Sat Flow(s),veh/h/ln	1781	1777	1830	1781	1777	1819	1781	1777	1740	1781	1777	1772
Q Serve(g_s), s	3.3	17.6	17.7	2.1	14.3	14.3	3.0	10.0	10.2	12.5	9.8	10.0
Cycle Q Clear(g_c), s	3.3	17.6	17.7	2.1	14.3	14.3	3.0	10.0	10.2	12.5	9.8	10.0
Prop In Lane	1.00		0.12	1.00		0.15	1.00		0.40	1.00		0.30
Lane Grp Cap(c), veh/h	172	557	573	122	481	492	146	358	350	300	511	510
V/C Ratio(X)	0.41	0.73	0.73	0.37	0.68	0.68	0.45	0.63	0.64	0.87	0.48	0.48
Avail Cap(c_a), veh/h	410	716	737	410	716	732	410	716	701	410	716	714
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.0	26.5	26.6	38.7	28.3	28.3	38.0	31.7	31.8	35.2	25.6	25.6
Incr Delay (d2), s/veh	0.6	3.8	3.7	0.7	2.9	2.8	0.8	3.1	3.3	11.6	1.2	1.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	7.5	7.8	0.9	6.0	6.1	1.3	4.3	4.3	6.0	4.0	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	37.6	30.4	30.3	39.4	31.2	31.2	38.8	34.8	35.1	46.9	26.7	26.8
LnGrp LOS	D	C	C	D	C	C	D	C	D	D	C	C
Approach Vol, veh/h		894			706			512			751	
Approach Delay, s/veh		30.9			31.7			35.4			33.8	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.3	23.7	10.7	33.2	11.8	31.2	14.4	29.5
Change Period (Y+Rc), s	4.7	6.2	4.7	6.0	4.7	6.2	6.0	* 6
Max Green Setting (Gmax), s	20.0	35.0	20.0	35.0	20.0	35.0	20.0	* 35
Max Q Clear Time (g_c+I1), s	14.5	12.2	4.1	19.7	5.0	12.0	5.3	16.3
Green Ext Time (p_c), s	0.2	4.0	0.0	6.7	0.0	4.4	0.1	5.7

Intersection Summary	
HCM 7th Control Delay, s/veh	32.7
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	762	106	74	604	124	79	381	71	179	557	106
Future Volume (veh/h)	129	762	106	74	604	124	79	381	71	179	557	106
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	137	811	43	79	643	49	84	405	46	190	593	84
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	164	1383	73	158	1338	102	161	915	102	182	940	131
Arrive On Green	0.09	0.40	0.40	0.09	0.40	0.40	0.09	0.20	0.20	0.10	0.21	0.21
Sat Flow, veh/h	1781	3432	182	1781	3347	255	1781	4661	520	1781	4523	632
Grp Volume(v), veh/h	137	420	434	79	341	351	84	294	157	190	444	233
Grp Sat Flow(s),veh/h/ln	1781	1777	1837	1781	1777	1825	1781	1702	1777	1781	1702	1751
Q Serve(g_s), s	7.6	18.5	18.5	4.2	14.3	14.3	4.5	7.6	7.8	10.2	11.9	12.1
Cycle Q Clear(g_c), s	7.6	18.5	18.5	4.2	14.3	14.3	4.5	7.6	7.8	10.2	11.9	12.1
Prop In Lane	1.00		0.10	1.00		0.14	1.00		0.29	1.00		0.36
Lane Grp Cap(c), veh/h	164	716	740	158	710	729	161	668	349	182	708	364
V/C Ratio(X)	0.84	0.59	0.59	0.50	0.48	0.48	0.52	0.44	0.45	1.05	0.63	0.64
Avail Cap(c_a), veh/h	164	716	740	182	710	729	182	997	521	182	997	513
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.59	0.59	0.59	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.7	23.3	23.3	43.4	22.3	22.3	43.4	35.4	35.4	44.9	36.1	36.2
Incr Delay (d2), s/veh	18.5	2.1	2.0	0.9	2.3	2.3	1.0	1.0	1.9	79.3	2.0	4.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	7.6	7.8	1.9	6.1	6.3	2.0	3.1	3.4	8.3	4.9	5.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	63.1	25.4	25.4	44.3	24.6	24.6	44.4	36.3	37.4	124.2	38.0	40.1
LnGrp LOS	E	C	C	D	C	C	D	D	D	F	D	D
Approach Vol, veh/h		991			771			535			867	
Approach Delay, s/veh		30.6			26.6			37.9			57.5	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.9	25.4	13.6	46.1	13.7	26.6	13.9	45.8
Change Period (Y+Rc), s	4.7	5.8	4.7	5.8	4.7	5.8	4.7	5.8
Max Green Setting (Gmax), s	10.2	29.3	10.2	29.3	10.2	29.3	9.2	30.3
Max Q Clear Time (g_c+I1), s	12.2	9.8	6.2	20.5	6.5	14.1	9.6	16.3
Green Ext Time (p_c), s	0.0	4.5	0.0	4.2	0.0	6.0	0.0	4.7

Intersection Summary	
HCM 7th Control Delay, s/veh	38.2
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	984	278	84	787	74	147	345	54	120	547	105
Future Volume (veh/h)	75	984	278	84	787	74	147	345	54	120	547	105
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	78	1025	258	88	820	71	153	359	46	125	570	95
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	99	1876	472	111	2240	193	179	713	91	151	637	106
Arrive On Green	0.06	0.46	0.46	0.06	0.47	0.47	0.10	0.23	0.23	0.08	0.21	0.21
Sat Flow, veh/h	1781	4065	1022	1781	4786	413	1781	3169	403	1781	3048	506
Grp Volume(v), veh/h	78	858	425	88	582	309	153	200	205	125	332	333
Grp Sat Flow(s),veh/h/ln	1781	1702	1682	1781	1702	1795	1781	1777	1795	1781	1777	1777
Q Serve(g_s), s	5.2	21.8	21.8	5.8	13.2	13.3	10.1	11.8	12.0	8.3	21.8	21.9
Cycle Q Clear(g_c), s	5.2	21.8	21.8	5.8	13.2	13.3	10.1	11.8	12.0	8.3	21.8	21.9
Prop In Lane	1.00		0.61	1.00		0.23	1.00		0.22	1.00		0.28
Lane Grp Cap(c), veh/h	99	1571	777	111	1593	840	179	400	404	151	371	371
V/C Ratio(X)	0.79	0.55	0.55	0.79	0.37	0.37	0.85	0.50	0.51	0.83	0.89	0.90
Avail Cap(c_a), veh/h	282	1571	777	282	1593	840	282	459	464	282	459	459
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.0	23.3	23.3	55.5	20.5	20.5	53.1	40.6	40.7	54.1	46.2	46.2
Incr Delay (d2), s/veh	5.1	1.4	2.8	4.8	0.6	1.2	8.2	0.4	0.4	4.4	15.1	15.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	8.4	8.6	2.7	5.0	5.5	4.8	5.1	5.2	3.8	10.9	11.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	61.0	24.6	26.0	60.3	21.1	21.7	61.3	41.0	41.0	58.5	61.3	62.0
LnGrp LOS	E	C	C	E	C	C	E	D	D	E	E	E
Approach Vol, veh/h		1361			979			558			790	
Approach Delay, s/veh		27.2			24.8			46.6			61.1	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.5	60.4	17.1	30.1	11.7	61.2	15.1	32.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	19.6	31.0	19.0	31.0	19.0	31.0	19.0	31.0
Max Q Clear Time (g_c+I1), s	7.8	23.8	12.1	23.9	7.2	15.3	10.3	14.0
Green Ext Time (p_c), s	0.0	1.0	0.0	0.4	0.0	0.7	0.0	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	36.8
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	645	412	390	653	85	208	347	289	90	466	85
Future Volume (veh/h)	53	645	412	390	653	85	208	347	289	90	466	85
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	56	679	275	411	687	38	219	365	210	95	491	72
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	132	920	366	322	1293	572	255	966	445	152	423	354
Arrive On Green	0.07	0.26	0.26	0.18	0.36	0.36	0.14	0.28	0.28	0.09	0.23	0.23
Sat Flow, veh/h	1781	3575	1423	1781	3554	1572	1781	3404	1568	1781	1870	1564
Grp Volume(v), veh/h	56	646	308	411	687	38	219	365	210	95	491	72
Grp Sat Flow(s),veh/h/ln	1781	1702	1594	1781	1777	1572	1781	1702	1568	1781	1870	1564
Q Serve(g_s), s	3.3	19.2	19.7	20.0	16.9	1.7	13.3	9.5	12.2	5.7	25.0	4.1
Cycle Q Clear(g_c), s	3.3	19.2	19.7	20.0	16.9	1.7	13.3	9.5	12.2	5.7	25.0	4.1
Prop In Lane	1.00		0.89	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	132	876	410	322	1293	572	255	966	445	152	423	354
V/C Ratio(X)	0.42	0.74	0.75	1.28	0.53	0.07	0.86	0.38	0.47	0.62	1.16	0.20
Avail Cap(c_a), veh/h	322	1231	577	322	1293	572	644	966	445	644	423	354
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.9	37.6	37.8	45.3	27.7	22.9	46.3	31.8	32.8	48.9	42.8	34.7
Incr Delay (d2), s/veh	2.1	1.5	3.5	146.1	0.4	0.0	8.2	0.2	0.8	4.1	95.8	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	7.8	7.7	21.5	6.8	0.6	6.3	3.8	4.6	2.6	22.3	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	51.1	39.1	41.3	191.4	28.2	23.0	54.5	32.0	33.5	53.0	138.6	35.0
LnGrp LOS	D	D	D	F	C	C	D	C	C	D	F	D
Approach Vol, veh/h		1010			1136			794			658	
Approach Delay, s/veh		40.4			87.1			38.6			114.9	
Approach LOS		D			F			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.0	34.5	20.8	30.3	13.2	46.3	14.5	36.7
Change Period (Y+Rc), s	5.0	6.0	5.0	5.3	5.0	6.0	5.0	5.3
Max Green Setting (Gmax), s	20.0	40.0	40.0	25.0	20.0	40.0	40.0	25.0
Max Q Clear Time (g_c+I1), s	22.0	21.7	15.3	27.0	5.3	18.9	7.7	14.2
Green Ext Time (p_c), s	0.0	5.5	0.6	0.0	0.1	4.2	0.2	2.5

Intersection Summary	
HCM 7th Control Delay, s/veh	68.4
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	309	685	457	286	3	845	7	594	3	10	26
Future Volume (veh/h)	15	309	685	457	286	3	845	7	594	3	10	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	15	315	511	466	292	3	862	0	217	3	10	5
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	18	1407	741	447	1862	19	699	0	913	4	222	103
Arrive On Green	0.01	0.28	0.28	0.25	0.52	0.52	0.20	0.00	0.29	0.00	0.09	0.09
Sat Flow, veh/h	1781	5106	1560	1781	3603	37	3563	0	3170	1781	2361	1090
Grp Volume(v), veh/h	15	315	511	466	144	151	862	0	217	3	7	8
Grp Sat Flow(s),veh/h/ln	1781	1702	1560	1781	1777	1863	1781	0	1585	1781	1777	1674
Q Serve(g_s), s	1.1	6.1	32.8	32.0	5.4	5.4	25.0	0.0	6.7	0.2	0.5	0.5
Cycle Q Clear(g_c), s	1.1	6.1	32.8	32.0	5.4	5.4	25.0	0.0	6.7	0.2	0.5	0.5
Prop In Lane	1.00		1.00	1.00		0.02	1.00		1.00	1.00		0.65
Lane Grp Cap(c), veh/h	18	1407	741	447	918	963	699	0	913	4	167	158
V/C Ratio(X)	0.85	0.22	0.69	1.04	0.16	0.16	1.23	0.00	0.24	0.71	0.04	0.05
Avail Cap(c_a), veh/h	447	2044	935	447	918	963	699	0	913	210	167	158
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.0	35.6	26.4	47.7	16.2	16.2	51.2	0.0	34.7	63.5	52.5	52.5
Incr Delay (d2), s/veh	31.1	0.0	0.9	53.8	0.0	0.0	117.1	0.0	0.6	118.2	0.5	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	2.5	12.2	20.5	2.2	2.3	22.5	0.0	2.7	0.2	0.2	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	94.1	35.7	27.3	101.5	16.2	16.2	168.3	0.0	35.3	181.8	53.0	53.1
LnGrp LOS	F	D	C	F	B	B	F		D	F	D	D
Approach Vol, veh/h		841			761			1079			18	
Approach Delay, s/veh		31.6			68.4			141.6			74.5	
Approach LOS		C			E			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	37.6	41.5	30.2	18.1	6.9	72.2	5.5	42.8
Change Period (Y+Rc), s	5.6	6.4	5.2	6.1	5.6	6.4	5.2	6.1
Max Green Setting (Gmax), s	32.0	51.0	25.0	12.0	32.0	51.0	15.0	22.0
Max Q Clear Time (g_c+I1), s	34.0	34.8	27.0	2.5	3.1	7.4	2.2	8.7
Green Ext Time (p_c), s	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	86.2
HCM 7th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1006	129	358	846	0	0	0	0	471	6	482
Future Volume (veh/h)	0	1006	129	358	846	0	0	0	0	471	6	482
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	1059	112	377	891	0				496	6	386
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1046	467	421	1128	0				379	5	341
Arrive On Green	0.00	0.29	0.29	0.24	0.60	0.00				0.22	0.22	0.22
Sat Flow, veh/h	0	3647	1585	1781	1870	0				1761	21	1585
Grp Volume(v), veh/h	0	1059	112	377	891	0				502	0	386
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1781	1870	0				1782	0	1585
Q Serve(g_s), s	0.0	19.1	3.5	13.3	23.5	0.0				14.0	0.0	14.0
Cycle Q Clear(g_c), s	0.0	19.1	3.5	13.3	23.5	0.0				14.0	0.0	14.0
Prop In Lane	0.00		1.00	1.00		0.00				0.99		1.00
Lane Grp Cap(c), veh/h	0	1046	467	421	1128	0				384	0	341
V/C Ratio(X)	0.00	1.01	0.24	0.90	0.79	0.00				1.31	0.00	1.13
Avail Cap(c_a), veh/h	0	1046	467	438	1128	0				384	0	341
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.16	0.16	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	22.9	17.4	24.0	9.8	0.0				25.5	0.0	25.5
Incr Delay (d2), s/veh	0.0	30.8	1.2	4.0	1.0	0.0				156.1	0.0	89.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	10.9	1.2	5.2	5.6	0.0				22.1	0.0	13.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	53.8	18.6	28.1	10.7	0.0				181.6	0.0	114.5
LnGrp LOS		F	B	C	B					F		F
Approach Vol, veh/h		1171			1268						888	
Approach Delay, s/veh		50.4			15.9						152.4	
Approach LOS		D			B						F	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	20.1	25.1		19.8		45.2
Change Period (Y+Rc), s	4.7	6.0		5.8		6.0
Max Green Setting (Gmax), s	16.0	18.2		14.0		39.2
Max Q Clear Time (g_c+I1), s	15.3	21.1		16.0		25.5
Green Ext Time (p_c), s	0.1	0.0		0.0		3.0

Intersection Summary	
HCM 7th Control Delay, s/veh	64.5
HCM 7th LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	1175	0	0	1076	552	94	3	361	0	0	0
Future Volume (veh/h)	310	1175	0	0	1076	552	94	3	361	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	337	1277	0	0	1170	205	102	3	342			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	729	1576	0	0	1214	541	80	2	268			
Arrive On Green	0.41	0.84	0.00	0.00	0.34	0.34	0.22	0.22	0.22			
Sat Flow, veh/h	1781	1870	0	0	3647	1585	371	11	1245			
Grp Volume(v), veh/h	337	1277	0	0	1170	205	447	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1870	0	0	1777	1585	1628	0	0			
Q Serve(g_s), s	9.0	22.0	0.0	0.0	21.0	6.4	14.0	0.0	0.0			
Cycle Q Clear(g_c), s	9.0	22.0	0.0	0.0	21.0	6.4	14.0	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.23		0.77			
Lane Grp Cap(c), veh/h	729	1576	0	0	1214	541	351	0	0			
V/C Ratio(X)	0.46	0.81	0.00	0.00	0.96	0.38	1.28	0.00	0.00			
Avail Cap(c_a), veh/h	729	1576	0	0	1214	541	351	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	14.0	2.5	0.0	0.0	21.0	16.2	25.5	0.0	0.0			
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.0	18.5	2.0	144.2	0.0	0.0			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.8	0.2	0.0	0.0	10.0	2.2	19.0	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	14.0	3.0	0.0	0.0	39.5	18.2	169.7	0.0	0.0			
LnGrp LOS	B	A			D	B	F					
Approach Vol, veh/h		1614			1375			447				
Approach Delay, s/veh		5.3			36.3			169.7				
Approach LOS		A			D			F				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		60.8			32.6	28.2		19.8				
Change Period (Y+Rc), s		6.0			6.0	* 6		5.8				
Max Green Setting (Gmax), s		39.2			12.0	* 22		14.0				
Max Q Clear Time (g_c+I1), s		24.0			11.0	23.0		16.0				
Green Ext Time (p_c), s		6.0			0.1	0.0		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	39.1
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	1
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	0	0	1083
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	-	-	-	-	-	1083
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	SBLn1
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Ctrl Dly (s/v)	-	-	0
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	80	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1	0	-	0	1	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	0	-
Critical Hdwy	4.14	-	-	-	6.29	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	2.22	-	-	-	3.67	3.32
Pot Cap-1 Maneuver	1620	-	-	0	980	1083
Stage 1	-	-	-	0	980	-
Stage 2	-	-	-	0	-	-
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	1620	-	-	-	980	1083
Mov Cap-2 Maneuver	-	-	-	-	894	-
Stage 1	-	-	-	-	980	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	SBLn1
Capacity (veh/h)	1620	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Ctrl Dly (s/v)	0	-	-	0
HCM Lane LOS	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-

Appendix F: Queuing Sheets



Lane Group	EBT	EBR	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	1171	88	287	761	400	282
v/c Ratio	1.06	0.15	0.74	0.68	1.05	0.56
Control Delay (s/veh)	72.2	2.8	39.7	12.8	89.0	11.8
Queue Delay	15.4	0.0	0.0	0.0	17.9	0.0
Total Delay (s/veh)	87.5	2.8	39.7	12.8	106.8	11.8
Queue Length 50th (ft)	~283	0	116	103	~178	24
Queue Length 95th (ft)	#431	17	m129	m145	#325	85
Internal Link Dist (ft)	3314			338	1598	
Turn Bay Length (ft)						
Base Capacity (vph)	1102	579	490	1123	381	504
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	88	0	0	0	17	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.15	0.15	0.59	0.68	1.10	0.56

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBT	WBR	NBT
Lane Group Flow (vph)	538	979	840	416	477
v/c Ratio	1.38	0.95	0.91	0.59	0.93
Control Delay (s/veh)	196.2	14.9	39.9	7.4	46.1
Queue Delay	0.0	44.1	0.0	0.0	0.0
Total Delay (s/veh)	196.2	59.0	39.9	7.4	46.1
Queue Length 50th (ft)	~293	411	172	8	145
Queue Length 95th (ft)	m#266	m99	#283	75	#313
Internal Link Dist (ft)		338	369		1326
Turn Bay Length (ft)	240			115	
Base Capacity (vph)	389	1032	927	701	534
Starvation Cap Reductn	0	218	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.38	1.20	0.91	0.59	0.89

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBT	EBR	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	1059	136	377	891	502	507
v/c Ratio	1.02	0.24	0.90	0.79	1.31	1.10
Control Delay (s/veh)	59.0	5.1	34.1	7.4	185.4	91.3
Queue Delay	0.0	0.0	0.0	49.8	1.9	0.0
Total Delay (s/veh)	59.0	5.1	34.1	57.1	187.3	91.3
Queue Length 50th (ft)	~247	0	91	99	~264	~179
Queue Length 95th (ft)	#360	35	m95	m91	#430	#353
Internal Link Dist (ft)	3314			338	1598	
Turn Bay Length (ft)						
Base Capacity (vph)	1039	560	435	1123	382	463
Starvation Cap Reductn	0	0	0	337	0	0
Spillback Cap Reductn	0	0	0	0	62	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.02	0.24	0.87	1.13	1.57	1.10

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBT	WBR	NBT
Lane Group Flow (vph)	337	1277	1170	600	497
v/c Ratio	1.01	1.14	0.97	0.71	1.23
Control Delay (s/veh)	43.6	84.8	42.5	10.1	146.8
Queue Delay	0.0	0.1	0.0	0.0	0.0
Total Delay (s/veh)	43.6	84.9	42.5	10.1	146.8
Queue Length 50th (ft)	~95	~564	235	40	~229
Queue Length 95th (ft)	m83	m#382	#368	145	#401
Internal Link Dist (ft)		338	369		1326
Turn Bay Length (ft)	240			115	
Base Capacity (vph)	334	1123	1208	842	405
Starvation Cap Reductn	0	23	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.01	1.16	0.97	0.71	1.23

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Appendix G: Signal Warrants

Fehr & Peers

Intersection	1	Project	Ranch at Coachella (COVA)
Major Street	Calhoun Street	Scenario	Opening Year (2030) with Project and Cumulative Projects
Minor Street	Driveway 1	Peak Hour	AM

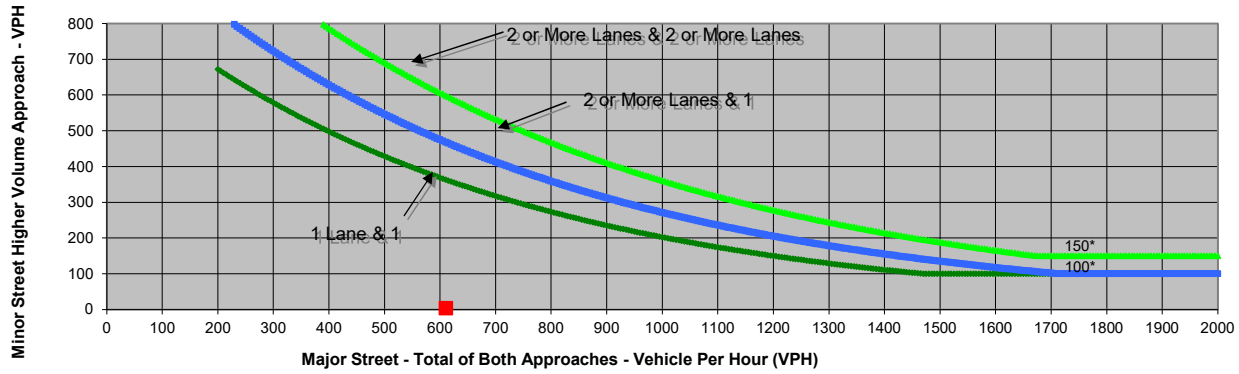
Turn Movement Volumes

	NB	SB	EB	WB
Left		25	1	
Through	292	292	0	
Right	1		3	
Total	293	317	4	0

Major Street Direction

x	North/South
	East/West

Figure 4C-3. Warrant 3, Peak Hour



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

	Major Street Calhoun Street	Minor Street Driveway 1	Warrant Met
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**610**	**4**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

Fehr & Peers

Intersection	1	Project	Ranch at Coachella (COVA)
Major Street	Calhoun Street	Scenario	Opening Year (2030) with Project and Cumulative Projects
Minor Street	Driveway 1	Peak Hour	PM

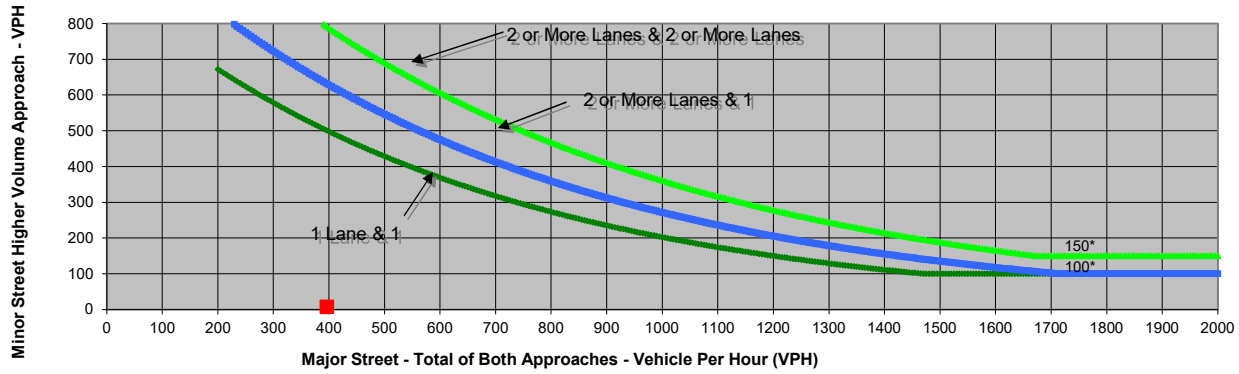
Turn Movement Volumes

	NB	SB	EB	WB
Left		56	1	
Through	174	164	0	
Right	2		7	
Total	176	220	8	0

Major Street Direction

x	North/South
	East/West

Figure 4C-3. Warrant 3, Peak Hour



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

	Major Street Calhoun Street	Minor Street Driveway 1	Warrant Met
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**396**	**8**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

Fehr & Peers

Intersection	2	Project	Ranch at Coachella (COVA)
Major Street	Calhoun Street	Scenario	Opening Year (2030) with Project and Cumulative Projects
Minor Street	Driveway 2	Peak Hour	AM

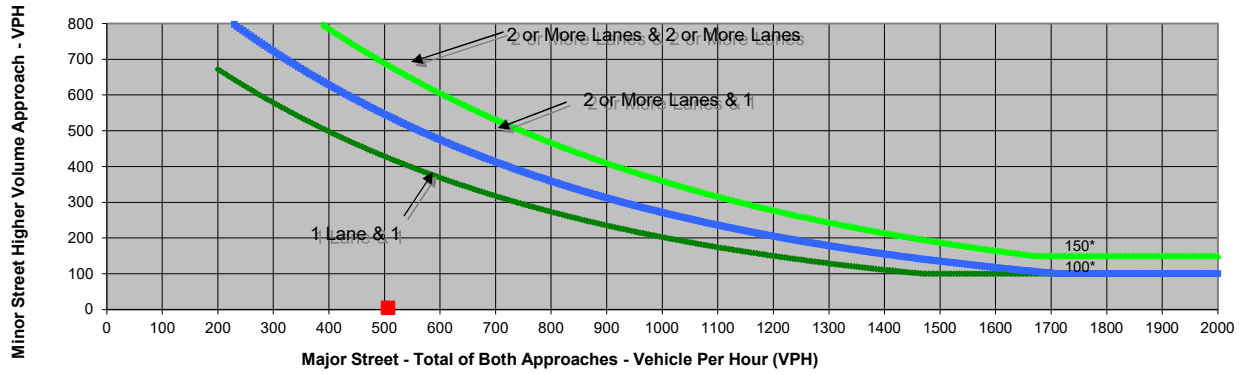
Turn Movement Volumes

	NB	SB	EB	WB
Left			0	
Through	295	211	0	
Right	0		5	
Total	295	211	5	0

Major Street Direction

x	North/South
	East/West

Figure 4C-3. Warrant 3, Peak Hour



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

	Major Street Calhoun Street	Minor Street Driveway 2	Warrant Met
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**506**	**5**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

Fehr & Peers

Intersection	2	Project	Ranch at Coachella (COVA)
Major Street	Calhoun Street	Scenario	Opening Year (2030) with Project and Cumulative Projects
Minor Street	Driveway 2	Peak Hour	PM

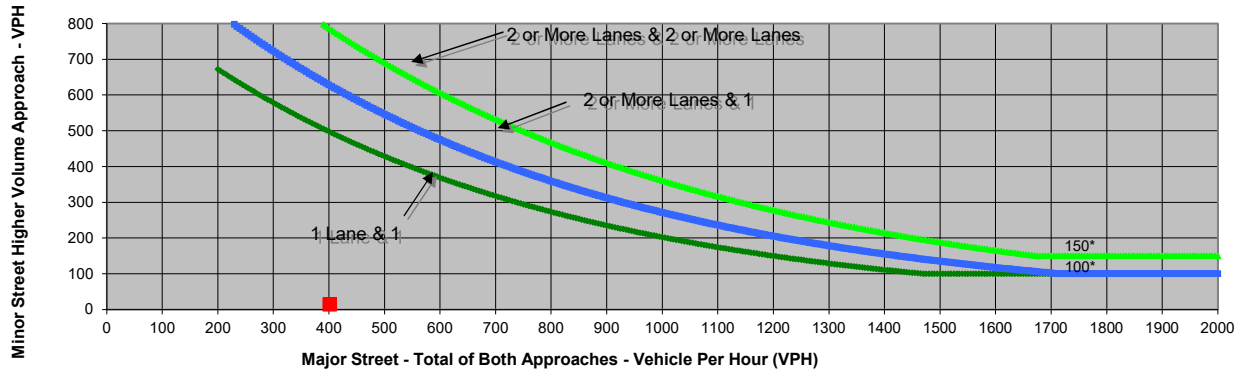
Turn Movement Volumes

	NB	SB	EB	WB
Left			0	
Through	180	220	0	
Right	1		15	
Total	181	220	15	0

Major Street Direction

x	North/South
	East/West

Figure 4C-3. Warrant 3, Peak Hour



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

	Major Street Calhoun Street	Minor Street Driveway 2	Warrant Met
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**401**	**15**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

Fehr & Peers

Intersection	3	Project	Ranch at Coachella (COVA)
Major Street	Avenue 52	Scenario	Existing
Minor Street	Calhoun Street	Peak Hour	AM

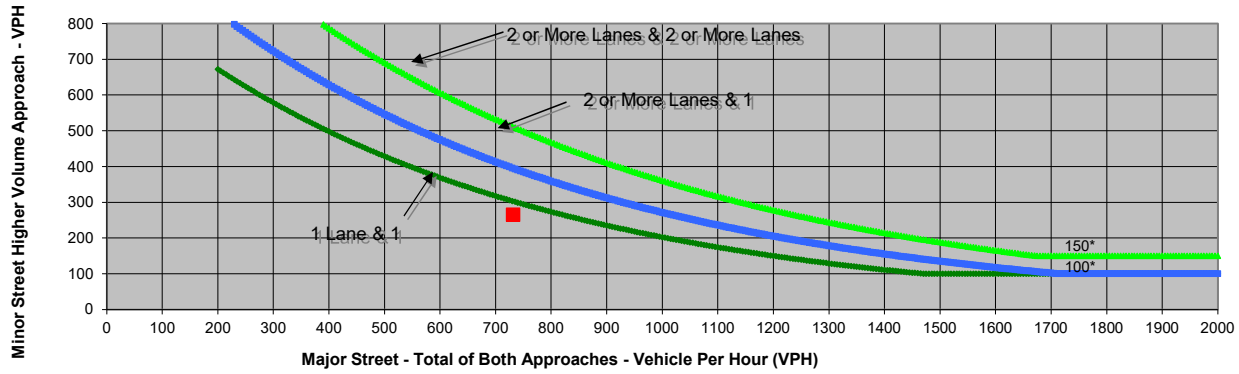
Turn Movement Volumes

	NB	SB	EB	WB
Left	14	75	11	3
Through	211	148	190	442
Right	30	43	6	79
Total	255	266	207	524

Major Street Direction

	North/South
x	East/West

Figure 4C-3. Warrant 3, Peak Hour



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

	Major Street Avenue 52	Minor Street Calhoun Street	Warrant Met
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**731**	**266**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

Fehr & Peers

Intersection	3	Project	Ranch at Coachella (COVA)
Major Street	Avenue 52	Scenario	Existing
Minor Street	Calhoun Street	Peak Hour	PM

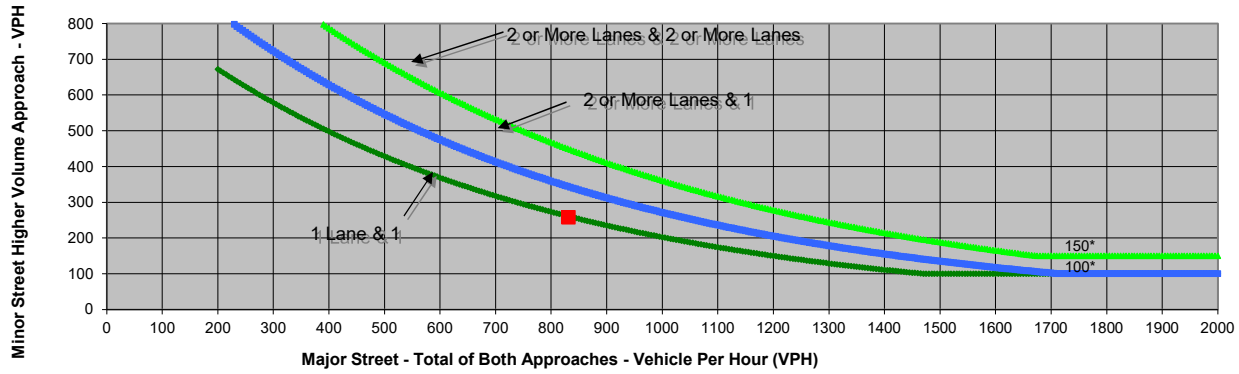
Turn Movement Volumes

	NB	SB	EB	WB
Left	11	111	29	3
Through	118	127	436	296
Right	13	20	6	61
Total	142	258	471	360

Major Street Direction

	North/South
x	East/West

Figure 4C-3. Warrant 3, Peak Hour



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

	Major Street Avenue 52	Minor Street Calhoun Street	Warrant Met
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**831**	**258**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

Fehr & Peers

Intersection	3	Project	Ranch at Coachella (COVA)
Major Street	Avenue 52	Scenario	Opening Year (2030) Plus Project
Minor Street	Calhoun Street	Peak Hour	1

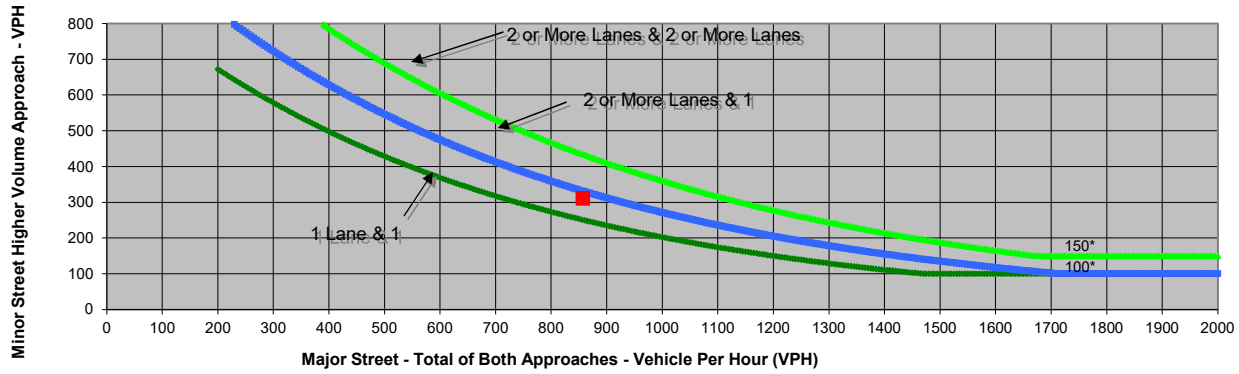
Turn Movement Volumes

	NB	SB	EB	WB
Left	17	86	13	14
Through	238	177	221	508
Right	34	48	8	93
Total	289	311	242	615

Major Street Direction

	North/South
x	East/West

Figure 4C-3. Warrant 3, Peak Hour



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

	Major Street Avenue 52	Minor Street Calhoun Street	Warrant Met
Number of Approach Lanes	**1**	**2**	**NO**
Traffic Volume (VPH) *	**857**	**311**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

Fehr & Peers

Intersection	3	Project	Ranch at Coachella (COVA)
Major Street	Avenue 52	Scenario	Opening Year (2030) Plus Project
Minor Street	Calhoun Street	Peak Hour	1

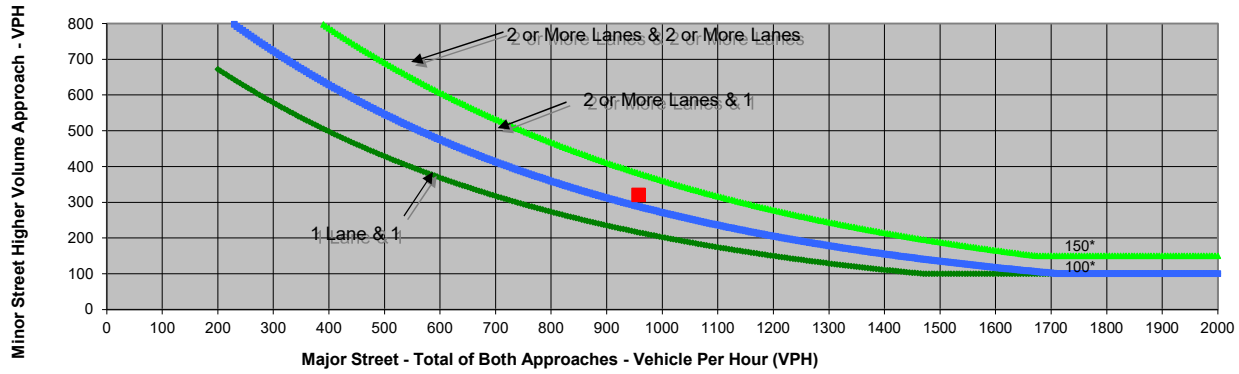
Turn Movement Volumes

	NB	SB	EB	WB
Left	15	128	32	29
Through	146	171	484	329
Right	19	22	10	73
Total	180	321	526	431

Major Street Direction

	North/South
x	East/West

Figure 4C-3. Warrant 3, Peak Hour



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

	Major Street Avenue 52	Minor Street Calhoun Street	Warrant Met
Number of Approach Lanes	**1**	**2**	**YES**
Traffic Volume (VPH) *	**957**	**321**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

Fehr & Peers

Intersection	3	Project	Ranch at Coachella (COVA)
Major Street	Avenue 52	Scenario	Opening Year (2030) Plus Project with Cumulative Projects
Minor Street	Calhoun Street	Peak Hour	AM

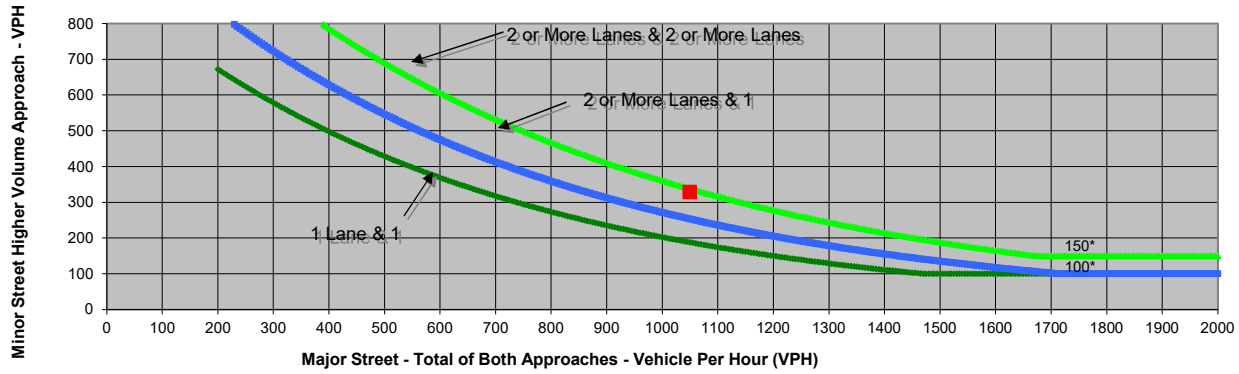
Turn Movement Volumes

	NB	SB	EB	WB
Left	17	88	28	15
Through	247	188	308	596
Right	36	53	8	94
Total	300	329	344	705

Major Street Direction

	North/South
x	East/West

Figure 4C-3. Warrant 3, Peak Hour



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

	Major Street Avenue 52	Minor Street Calhoun Street	Warrant Met
Number of Approach Lanes	**1**	**2**	**YES**
Traffic Volume (VPH) *	**1,049**	**329**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

Fehr & Peers

Intersection	3	Project	Ranch at Coachella (COVA)
Major Street	Avenue 52	Scenario	Opening Year (2030) Plus Project with Cumulative Projects
Minor Street	Calhoun Street	Peak Hour	PM

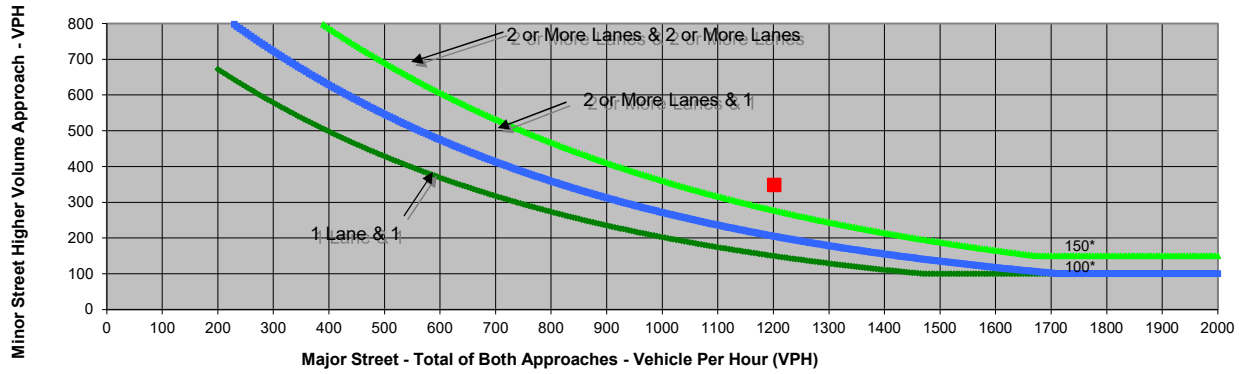
Turn Movement Volumes

	NB	SB	EB	WB
Left	15	132	42	76
Through	159	179	602	440
Right	21	38	10	31
Total	195	349	654	547

Major Street Direction

	North/South
x	East/West

Figure 4C-3. Warrant 3, Peak Hour



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

	Major Street Avenue 52	Minor Street Calhoun Street	Warrant Met
Number of Approach Lanes	**1**	**2**	**YES**
Traffic Volume (VPH) *	**1,201**	**349**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

Fehr & Peers

Intersection	4	Project	Ranch at Coachella (COVA)
Major Street	Avenue 52	Scenario	Opening Year (2030) with Project and Cumulative Projects
Minor Street	Driveway 3	Peak Hour	AM

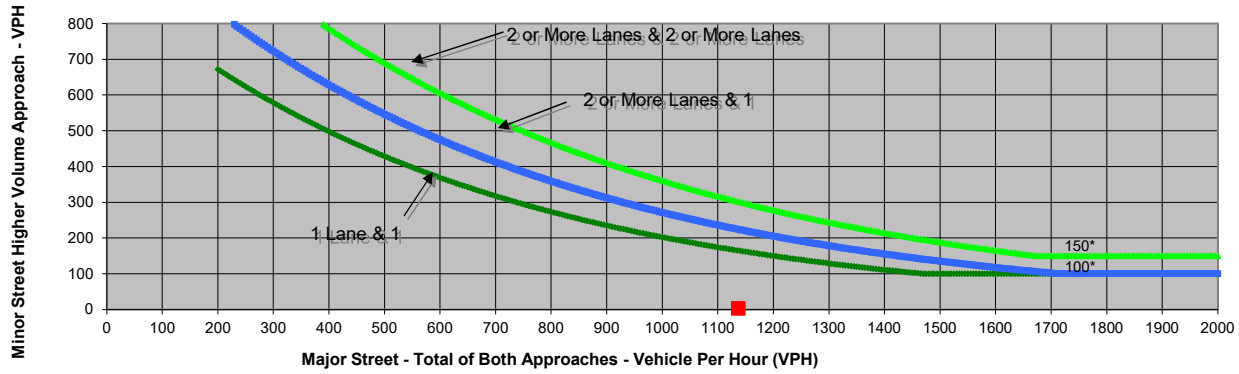
Turn Movement Volumes

	NB	SB	EB	WB
Left			0	
Through	0		432	705
Right	3		0	
Total	3	0	432	705

Major Street Direction

	North/South
x	East/West

Figure 4C-3. Warrant 3, Peak Hour



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

	Major Street Avenue 52	Minor Street Driveway 3	Warrant Met
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**1,137**	**3**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

Fehr & Peers

Intersection	4	Project	Ranch at Coachella (COVA)
Major Street	Avenue 52	Scenario	Opening Year (2030) with Project and Cumulative Projects
Minor Street	Driveway 3	Peak Hour	PM

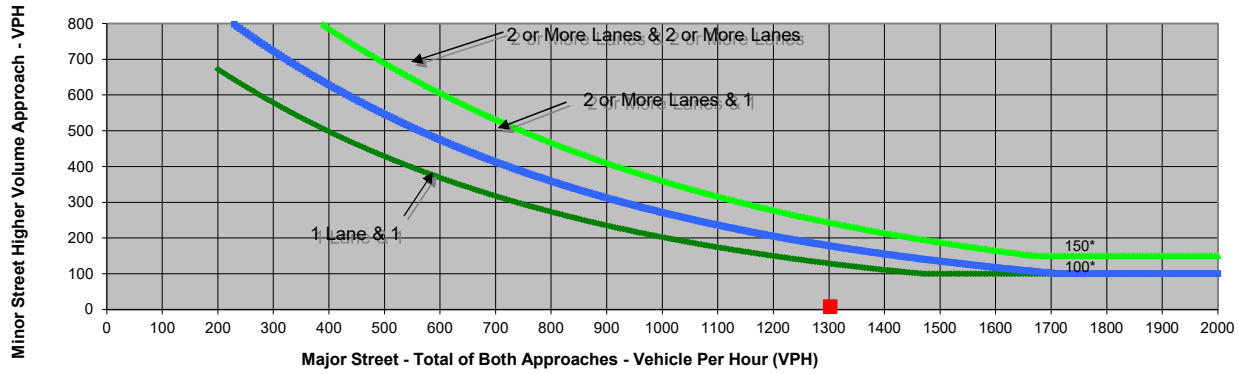
Turn Movement Volumes

	NB	SB	EB	WB
Left			0	
Through	0		755	547
Right	9		0	
Total	9	0	755	547

Major Street Direction

	North/South
x	East/West

Figure 4C-3. Warrant 3, Peak Hour



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

	Major Street Avenue 52	Minor Street Driveway 3	Warrant Met
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**1,302**	**9**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

Fehr & Peers

Intersection	5	Project	Ranch at Coachella (COVA)
Major Street	Avenue 52	Scenario	Opening Year (2030) with Project and Cumulative Projects
Minor Street	Driveway 4	Peak Hour	AM

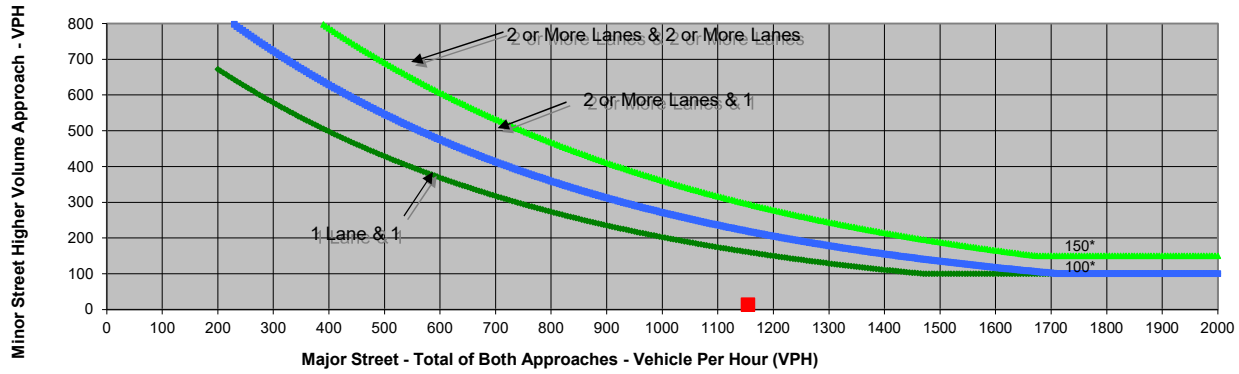
Turn Movement Volumes

	NB	SB	EB	WB
Left	5		0	19
Through	0		432	700
Right	9		3	
Total	14	0	435	719

Major Street Direction

	North/South
x	East/West

Figure 4C-3. Warrant 3, Peak Hour



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

	Major Street Avenue 52	Minor Street Driveway 4	Warrant Met
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**1,154**	**14**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

Fehr & Peers

Intersection	5	Project	Ranch at Coachella (COVA)
Major Street	Avenue 52	Scenario	Opening Year (2030) with Project and Cumulative Projects
Minor Street	Driveway 4	Peak Hour	PM

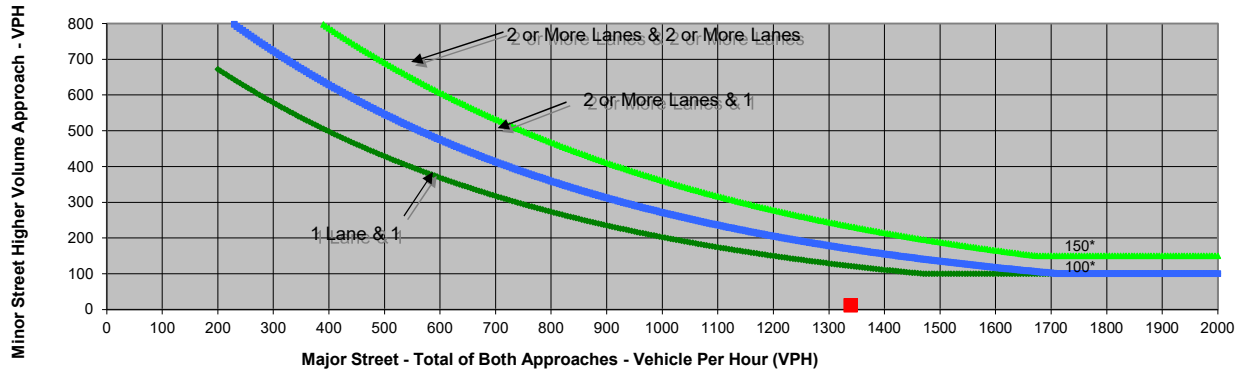
Turn Movement Volumes

	NB	SB	EB	WB
Left	4		0	543
Through	0		759	32
Right	8		5	
Total	12	0	764	575

Major Street Direction

	North/South
x	East/West

Figure 4C-3. Warrant 3, Peak Hour



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

	Major Street Avenue 52	Minor Street Driveway 4	Warrant Met
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**1,339**	**12**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

Fehr & Peers

Intersection	7	Project	Ranch at Coachella (COVA)
Major Street	Van Burent St	Scenario	Opening Year (2030) with Project and Cumulative Projects
Minor Street	Driveway 5	Peak Hour	AM

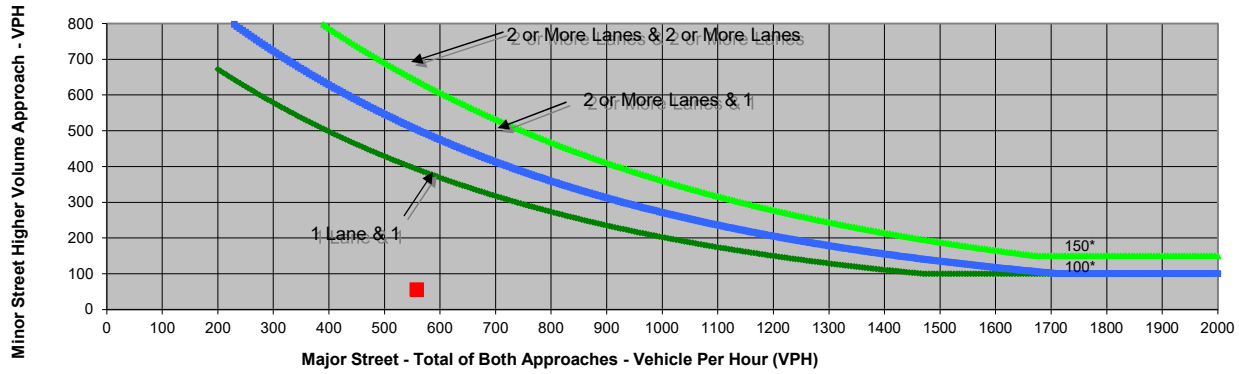
Turn Movement Volumes

	NB	SB	EB	WB
Left	1		54	0
Through	0	225	0	0
Right	312	20	2	
Total	313	245	56	0

Major Street Direction

x	North/South
	East/West

Figure 4C-3. Warrant 3, Peak Hour



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

	Major Street Van Burent St	Minor Street Driveway 5	Warrant Met
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**558**	**56**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

Fehr & Peers

Intersection	7	Project	Ranch at Coachella (COVA)
Major Street	Van Burent St	Scenario	Opening Year (2030) with Project and Cumulative Projects
Minor Street	Driveway 5	Peak Hour	PM

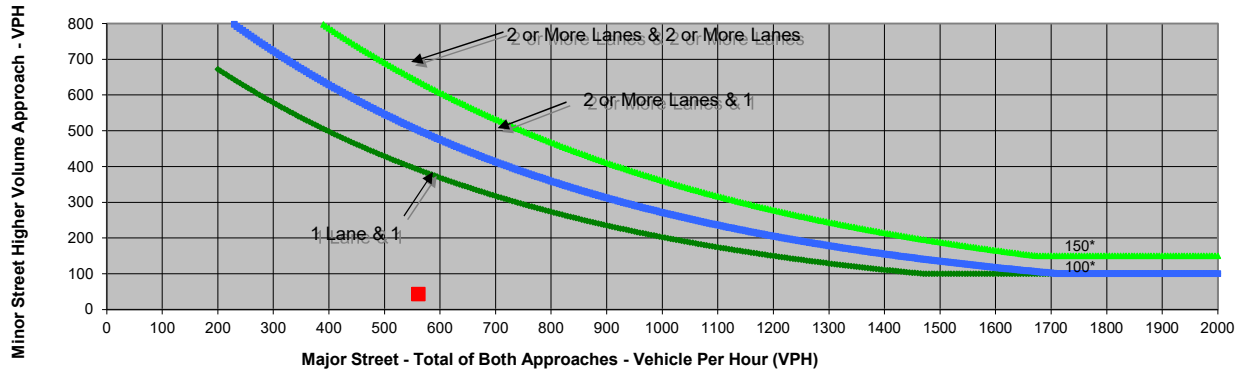
Turn Movement Volumes

	NB	SB	EB	WB
Left	2		42	0
Through	0	221	0	0
Right	303	35	2	
Total	305	256	44	0

Major Street Direction

x	North/South
	East/West

Figure 4C-3. Warrant 3, Peak Hour



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

	Major Street Van Burent St	Minor Street Driveway 5	Warrant Met
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**561**	**44**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

Appendix H: Classic Club Specific Plan Arena Trip Generation Memorandum

FEHR PEERS

Memorandum

Date: December 22, 2023

To: Eva Covarrubias, County of Riverside

From: Paul Herrmann, T.E.
Marsha Phillips

Subject: Classic Club Specific Plan Arena Trip Generation Memorandum

OC23-0962

Fehr & Peers has completed a trip generation assessment in support of the proposed Classic Club Specific Plan Amendment (Project) located in located in Western Coachella Valley within an unincorporated portion of Riverside County, California. This assessment evaluates previous trip generation estimates for the arena as compared to empirically collected data after the opening of the Acrisure Arena (Arena).

The remainder of this memorandum outlines the Project Description, Analysis Description, Data Collection, Trip Generation, Trip Generation Comparison, Classic Club Specific Plan Trip Generation and Next Steps.

Project Description

The Classic Club Specific Plan Area is located north of I-10 and east of the Cook Street interchange. This existing Specific Plan Area is bounded by Cook Street to the west and Varner Road to the south, which provides access directly to the site. The Project is a proposed amendment to the NorthStar Specific Plan, originally approved in 2006 and amended in 2021. The 2021 amendment reconfigured the Planning Areas to allow the addition of a new Planning Area to allow the development of the Arena. This amendment reduced the size of the Business Park Planning Area to accommodate the Arena. An Addendum to the 2006 Specific Plan EIR was prepared for this amendment (2021 Addendum),

The Arena, which opened in December 2022, is 260 KSF Event Center with a 35 KSF training facility for the Coachella Valley Firebirds, an American Hockey League (AHL) team. The Arena

hosts AHL games with a capacity of 9,918 patrons and other events, including concerts, with a maximum capacity of 11,000 patrons.

The Berger Foundation Iceplex, which contains the training center ice sheet is open about nine months of the year (closed in the three summer months between June and August). It is used about 50% of the time by the AHL team for practice. When not in use by the AHL team, the training ice rink is available as a community ice facility on non-event days (approximately 135 days a year). It is open 7 days a week and for 6 to 8 hours per day, with typically 20 to 40 people using it per hour. It is used for public skating sessions, skate/hockey lessons, or hockey leagues.

Analysis Scenarios

The Arena events vary in size, vary in type of event, with events scheduled approximately 180 days out of the year. Project trip counts for a hockey game and a concert were taken in April 2023 to develop custom Arena trip generation rates to compare against the assumptions in traffic study (2021 Traffic Study) prepared for the Arena incorporated into the 2021 Addendum. The following scenarios were analyzed in the 2021 Traffic Study:

- Typical Hockey Game: Represents a typical (average) attendance of 7,500 patrons for a hockey game.
- Sellout Hockey Game: Represents a sellout (maximum) attendance of 9,918 patrons for a hockey game.
- Typical Concert: Represents a typical (average) attendance of 7,500 patrons for a concert or event.
- Sellout Concert: Represents a sellout (maximum) attendance of 11,000 patrons for a concert or an event.

Data Collection

Twenty-four hour driveway counts were collected on April 4, 2023 (during a hockey game) and April 5, 2023 (during a concert) at the arena parking lot. The parking lot for the Arena also provides parking for the Berger Foundation Iceplex, (Iceplex) which was operational during the days when the data was collected. The Iceplex is open from as early as 6:15 AM for figure skating with skating lessons and open public skating sessions continuing throughout the day. **Table 1** and **Table 2** show the counts on the day of a hockey game and a concert, respectively, by the peak arrival and departure time for the events and the peak AM and PM time.

Table 1: Hockey Game Trip Counts

Peak Hour	Time	Trips	In	Out
Daily	24 Hours from Midnight to Midnight	7,133	3,544	3,589
AM Peak	7:45 AM to 8:45 AM	86	57	29
PM Peak	5:00 PM to 6:00 PM	462	398	64
Event Arrival Peak	6:00 PM to 7:00 PM	1,924	1,816	108
Event Departure Peak	9:00 PM to 10:00 PM	2,609	92	2,517

Note: Data was collected on Wednesday April 5th, 2023, on the day of a Coachella Firebirds AHL Game with 6,558 attendees.
Source: Fehr & Peers, 2023.

Table 2: Concert Trip Counts

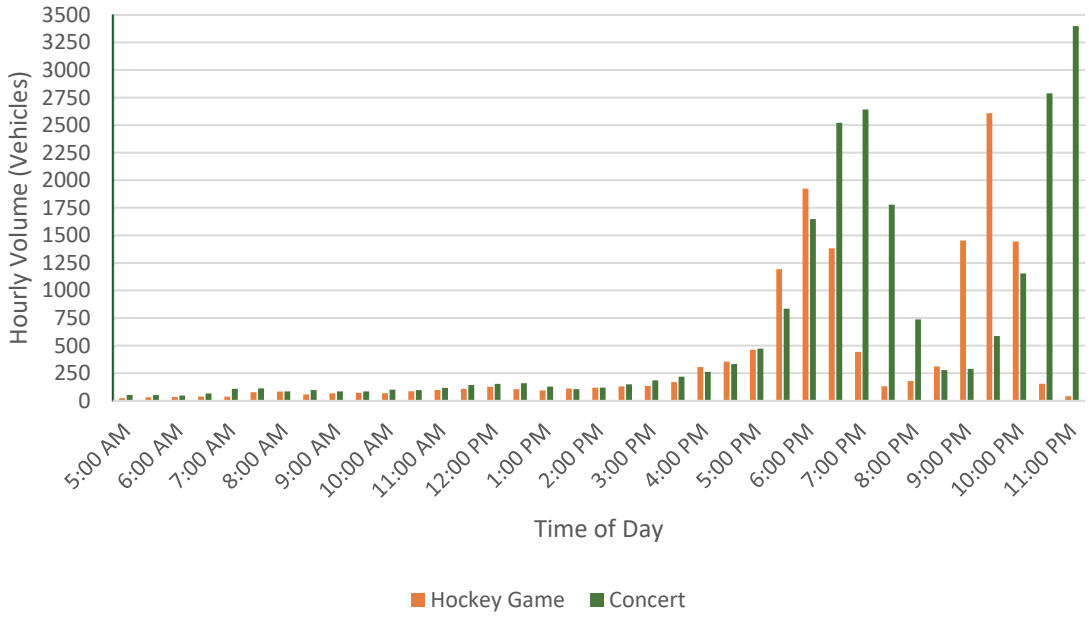
Peak Hour	Time	Trips	In	Out
Daily	24 Hours from Midnight to Midnight	11,811	6,021	5,790
AM Peak	7:30 AM to 8:30 AM	112	90	22
PM Peak	5:00 PM to 6:00 PM	472	364	108
Event Arrival Peak	7:00 PM to 8:00 PM	2,751	2,251	500
Event Departure Peak	11:00 PM to 12:00 PM	3,482	308	3,174

Note: Data was collected on Thursday April 6th, 2023, on the day of a John Mayer Concert with 9,077 attendees.
Source: Fehr & Peers, 2023.

The trip generation pattern for a hockey game and a concert exhibit a similar trend during peak hours. **Figure 1** shows the differences between the trip counts on the day of a hockey game compared to a concert. The observed counts during the AM peak hours can be attributed to the early lessons held during that time at the ice rink. It is observed that trips arrive and depart earlier for a hockey game as compared to a concert, as most hockey games commence between 5:00 PM and 7:00 PM, while a concert usually starts between 7:00 PM and 8:30 PM, and generally

attendees arrive to see the start of a sporting event while they may show up later to a concert for only the headline performance.

Figure 1: Arena Houly Volumes



Source: Fehr & Peers, 2023.

Trip Generation Analysis

Trip generation refers to the process of estimating the amount of vehicular traffic a project would add to the surrounding roadway system. Estimates for the Project were created for the daily condition and for the peak one-hour period during the morning and evening commutes when traffic volumes on the adjacent streets are typically the highest. Custom public ice skating, hockey game, and concert trip generation rates were developed from the traffic counts collected and are described in more detail below.

Public Skating Rink and General Arena Operations Trip Generation

The morning peak hour and much of the daily trips on site are not tied to event attendance as the public ice skating is unrelated to the evening event, and general operational activities occur regularly at the arena, such as maintenance, deliveries and arena office use. A trip generation rate was developed based on the average of the two days of data collection. During the overlap of public ice skating and event arrival time traffic, the hourly average was estimated and extended through the rink's closing time to separate the public skating rink from the event traffic.

Table 3: Typical Arena (Non-Event Related) Generation Estimates

Source	Daily	AM Total Trips	AM In	AM Out	PM Total	PM In	PM Out
Driveway Counts Average	2,626	100	74	26	90	45	45

Source: Fehr & Peers, 2023.

Hockey Game Trip Generation

Table 4 summarizes the trip generation rates used to estimate trip generations for a hockey game, which are summarized in **Table 5** using the total arena trip generation by patron for daily and PM peak hour. These trips are in addition to the typical arena (non-event related) trip estimates.

Table 4: Hockey Game Trip Generation Rates

Source	Unit	Daily Trip Rate	AM Total Rate	AM In	AM Out	PM Total Rate	PM In	PM Out
Driveway Counts	Per Attendee	0.687	0.000	0.000	0.000	0.057	0.054	0.003

Source: Fehr & Peers, 2023.

Table 5: Hockey Game Trip Generation Estimates

Number of Attendees	Daily Trips	AM Total Trips	AM In	AM Out	PM Total	PM In	PM Out
Maximum Number of Attendees							
9,918	6,816	0	0	0	562	534	29
Average Number of Attendees							
7,500	5,154	0	0	0	425	404	22

Source: Fehr & Peers, 2023.

Concert Trip Generation

Table 6 summarizes the trip generation rates used to estimate trip generations per attendee for a concert, which are summarized in **Table 7** using the total arena trip generation by patron.

Table 6: Concert Trip Generation Rates

Source	Unit	Daily Trip Rate	AM Total Rate	AM In	AM Out	PM Total Rate	PM In	PM Out
Driveway Counts	Per Attendee	1.012	0.000	0.000	0.000	0.042	0.035	0.007

Source: Fehr & Peers, 2023.

Table 7: Concert Trip Generation Estimates

Number of Attendees	Daily Trips	AM Total Trips	AM In	AM Out	PM Total	PM In	PM Out
Maximum Number of Attendees							
11,000	11,131	0	0	0	463	386	76
Average Number of Attendees							
7,500	7,589	0	0	0	315	263	52

Source: Fehr & Peers, 2023.

NorthStar Specific Plan EIR Trip Generation Assumptions

The previous EIR trip generation is shown in **Table 8**, which was completed in January 2021. The trip generation of the amended plan will be compared to the trip generation of the original plan.

Table 8: Trip Generation Assumptions

Event Type	Attendance Level	Number of Events	Daily	AM	PM	Arrival Peak	Departure Peak
Concert Sellout	11,000	23	9,384	0	906	3,166	4,199
Concert Average	7,500	22	6,398	0	618	2,160	2,862
Hockey Sellout	9,918	5	8,550	0	822	2,874	3,824
Hockey Average	7,500	41	6,492	0	622	2,175	2,902
Non-Event (Ice Rink)	-	-	760	6	86	86	0

Source: Riverside County Arena Project Transportation Analysis Report (The Mobility Group, January 2021)

Trip Generation Comparison

Table 9 shows a comparison of the previous EIR trip generation and the current trip generation using trip counts from a sellout hockey game and sellout concert with the public skating rink and typical arena operations included.

As compared to the estimates prepared in the EIR, the driveway counts indicate less PM peak hour, and a greater amount of daily and AM trips than estimated in the 2021 Traffic Study. We believe this is attributed to several factors:

- Traffic from typical daily operations at the arena for event set up, standard maintenance and typical daily operations is greater than accounted for in the 2021 Traffic Study
- Public use of the Iceplex is greater than assumed in the 2021 Traffic Study, with more use in the mornings for lessons and throughout the day assumed in the 2021 Traffic Study.
- The events occur later in the evening which results in people arriving later than assumed in the 2021 Traffic Study
- The average vehicle occupancy is higher for the hockey games than the concerts, resulting in less vehicle trips per attendee for hockey game and more vehicle trips per attendee for concerts.

Table 9: Amended Specific Plan Trip Generation Comparison for a Hockey Game

Source	Daily	AM Total	PM Total
Sellout Hockey Game			
Arena Traffic Counts	9,442	100	652
2021 Traffic Study Estimate	9,310	6	908
Net Difference	**132**	**94**	**(256)**
Sellout Concert			
Arena Traffic Counts	13,757	100	553
2021 Traffic Study Estimate	10,144	6	992
Net Difference	**3,613**	**94**	**(439)**

Source: Fehr & Peers, 2023.

Classic Club Specific Plan Trip Generation

Attachment A provides an updated Classic Club Specific Plan trip generation estimate for a weekday, Saturday and Sunday with a sellout concert and **Attachment B** provides an update with an average concert.

Next Steps

Following confirmation of the latest trip generation updates, Fehr & Peers will submit an updated scoping memo on the Project's behalf to determine requirements of the transportation study.

Attachments

Attachment A - Classic Club Specific Plan Amendment No. 3 (Sellout Concert) Trip Generation Rates and Estimates, December 22, 2023

Attachment B - Classic Club Specific Plan Amendment No. 3 (Average Concert) Trip Generation Rates and Estimates, December 22, 2023

Classic Club Specific Plan Amendment No. 3
(Sellout Concert)
Trip Generation Rates and Estimates
December 22, 2023

					Weekday							Saturday				Sunday				Weekday							Saturday				Sunday			
Planning Area	Land Use	ITE Land Use	Units	Quantity	Daily Rate	AM Rate	AM In	AM Out	PM Rate	PM In	PM Out	Daily Rate	Peak Rate	Peak In	Peak Out	Daily Rate	Peak Rate	Peak In	Peak Out	Daily	AM In	AM Out	AM Total	PM In	PM Out	PM Total	Daily	Peak In	Peak Out	Midday Peak	Daily	Peak In	Peak Out	Midday Peak
1	Other	(430) - Golf Course (Adj Streets, 7-9A, 4-6P)	Holes	18	30.38	1.76	79%	21%	2.91	53%	47%	19.89	3.03	49%	51%	18.89	1.39	12%	88%	547	25	7	32	28	24	52	358	27	28	55	340	3	22	25
3	Hotel	(310) Hotel (Adj Streets, 7-9A, 4-6P)	Rooms	366	7.99	0.46	56%	44%	0.59	51%	49%	8.07	0.72	56%	44%	5.94	0.57	48%	52%	2,924	94	74	168	110	106	216	2,954	148	116	264	2,174	100	108	209
4	Hotel	(310) Hotel (Adj Streets, 7-9A, 4-6P)	Rooms	275	7.99	0.46	56%	44%	0.59	51%	49%	8.07	0.72	56%	44%	5.94	0.57	48%	52%	2,197	71	56	127	83	79	162	2,219	111	87	198	1,634	75	82	157
4	Retail	(820) Shopping Center (>150k) (Adj Streets, 7-9A, 4-6P)	1,000 Sq. Ft	250	37.01	0.84	62%	38%	3.4	48%	52%	46.6	4.40	52%	48%	18.97	2.35	49%	51%	9,253	130	80	210	408	442	850	####	572	528	1,100	4,743	288	300	588
4	Residential	(220) Multifamily Housing (Low- Rise) Not Close to Rail Transit (Adj Streets, 7-9A, 4-6P)	Dwelling Units	500	6.74	0.4	24%	76%	0.51	63%	37%	4.55	0.41	50%	50%	3.86	0.36	50%	50%	3,370	48	152	200	161	94	255	2,275	103	103	205	1,930	90	90	180
5	Residential	(220) Multifamily Housing (Low- Rise) Not Close to Rail Transit (Adj Streets, 7-9A, 4-6P)	Dwelling Units	100	6.74	0.4	24%	76%	0.51	63%	37%	4.55	0.41	50%	50%	3.86	0.36	50%	50%	674	10	30	40	32	19	51	455	21	21	41	386	23	23	45
5	Hotel	(310) Hotel (Adj Streets, 7-9A, 4-6P)	Rooms	125	7.99	0.46	56%	44%	0.59	51%	49%	8.07	0.72	56%	44%	5.94	0.57	48%	52%	999	32	26	58	38	36	74	1,009	50	40	90	743	48	52	100
6	Residential	(220) Multifamily Housing (Low- Rise) Not Close to Rail Transit (Adj Streets, 7-9A, 4-6P)	Dwelling Units	205	6.74	0.4	24%	76%	0.51	63%	37%	4.55	0.41	50%	50%	3.86	0.36	50%	50%	1,382	20	62	82	66	39	105	933	42	42	84	791	37	37	74
7	Retail	(820) Shopping Center (>150k) (Adj Streets, 7-9A, 4-6P)	1,000 Sq. Ft	400	37.01	0.84	62%	38%	3.4	48%	52%	46.6	4.40	52%	48%	18.97	2.35	49%	51%	14,804	208	128	336	653	707	1,360	####	915	845	1,760	7,588	461	479	940
7	Residential	(220) Multifamily Housing (Low- Rise) Not Close to Rail Transit (Adj Streets, 7-9A, 4-6P)	Dwelling Units	150	6.74	0.4	24%	76%	0.51	63%	37%	4.55	0.41	50%	50%	3.86	0.36	50%	50%	1,011	14	46	60	49	28	77	683	31	31	62	579	27	27	54
8	Residential	(220) Multifamily Housing (Low- Rise) Not Close to Rail Transit (Adj Streets, 7-9A, 4-6P)	Dwelling Units	150	6.74	0.4	24%	76%	0.51	63%	37%	4.55	0.41	50%	50%	3.86	0.36	50%	50%	1,011	14	46	60	49	28	77	683	31	31	62	579	45	45	90
8	Hotel	(310) Hotel (Adj Streets, 7-9A, 4-6P)	Rooms	125	7.99	0.46	56%	44%	0.59	51%	49%	8.07	0.72	56%	44%	5.94	0.57	48%	52%	999	32	26	58	38	36	74	1,009	50	40	90	743	34	37	71
9	Retail	(820) Shopping Center (>150k) (Adj Streets, 7-9A, 4-6P)	1,000 Sq. Ft	75	37.01	0.84	62%	38%	3.4	48%	52%	46.6	4.40	52%	48%	18.97	2.35	49%	51%	2,776	39	24	63	122	133	255	3,495	172	158	330	1,423	86	90	176
10	Arena/Ice Rink	Typical Arena Operations and the Iceplex	Arenas	1	2626	100	74%	26%	90	50%	50%	#####	90.00	50%	50%	######	90.00	50%	50%	2,626	74	26	100	45	45	90	2,626	45	45	90	2,626	45	45	90
																				44,573	811	783	1,594	1,882	1,816	3,698	48,987	2,316	2,113	4,429	26,277	1,362	1,436	2,798
		Project Land Uses, Except Arena, Internalization Reductions																		15%	-	-	19%	-	-	18%	15%			15%	15%			15%
																				-6,820	(152)	(151)	(303)	(328)	(327)	(655)	(7,495)	(339)	(339)	(678)	(4,020)	(214)	(214)	(428)
		Project Land Uses, Except Arena, net External Vehicle Trips																		37,753	659	632	1,291	1,554	1,489	3,043	####	1,977	1,774	3,751	####	1148	1222	2,370
10	Other	Concert Sell Out	Attendance Level	11,000	1.01		-	-	0.04	84%	16%	1.01	-	-	-	1.01	-	-	-	11,131	0	0	0	387	76	463	####	0	0	0	####	0	0	0
																				33%						33%	33%				33%			
		Arena to Hotel/Retail/Residential Two-Way Trip Internalization Reductions																		(7,346)	0	0	0	-255	-50	-306	(7,346)	0	0	0	(7,346)	0	0	0
																				41,538	**659**	**632**	**1,291**	**1,686**	**1,515**	**3,200**	**45,277**	**1,977**	**1,774**	**3,751**	**26,042**	**1,148**	**1,222**	**2,370**
																				Net External Vehicle Trips															

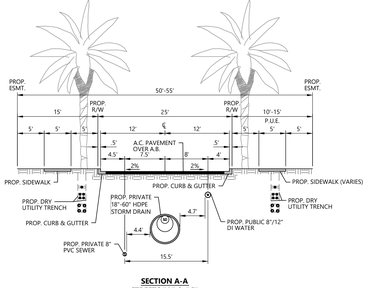
Classic Club Specific Plan Amendment No. 3
(Average Concert)
Trip Generation Rates and Estimates
December 22, 2023

					Weekday							Saturday				Sunday				Weekday							Saturday				Sunday			
Planning Area	Land Use	ITE Land Use	Units	Quantity	Daily Rate	AM Rate	AM In	AM Out	PM Rate	PM In	PM Out	Daily Rate	Peak Rate	Peak In	Peak Out	Daily Rate	Peak Rate	Peak In	Peak Out	Daily	AM In	AM Out	AM Total	PM In	PM Out	PM Total	Daily	Peak In	Peak Out	Midday Peak	Daily	Peak In	Peak Out	Midday Peak
1	Other	(430) - Golf Course (Adj Streets, 7-9A, 4-6P)	Holes	18	30.38	1.76	79%	21%	2.91	53%	47%	19.89	3.03	49%	51%	18.89	1.39	12%	88%	547	25	7	32	28	24	52	358	27	28	55	340	3	22	25
3	Hotel	(310) Hotel (Adj Streets, 7-9A, 4-6P)	Rooms	366	7.99	0.46	56%	44%	0.59	51%	49%	8.07	0.72	56%	44%	5.94	0.57	48%	52%	2,924	94	74	168	110	106	216	2,954	148	116	264	2,174	100	108	209
4	Hotel	(310) Hotel (Adj Streets, 7-9A, 4-6P)	Rooms	275	7.99	0.46	56%	44%	0.59	51%	49%	8.07	0.72	56%	44%	5.94	0.57	48%	52%	2,197	71	56	127	83	79	162	2,219	111	87	198	1,634	75	82	157
4	Retail	(820) Shopping Center (>150k) (Adj Streets, 7-9A, 4-6P)	1,000 Sq. Ft	250	37.01	0.84	62%	38%	3.4	48%	52%	46.6	4.40	52%	48%	18.97	2.35	49%	51%	9,253	130	80	210	408	442	850	####	572	528	1,100	4,743	288	300	588
4	Residential	(220) Multifamily Housing (Low- Rise) Not Close to Rail Transit (Adj Streets, 7-9A, 4-6P)	Dwelling Units	500	6.74	0.4	24%	76%	0.51	63%	37%	4.55	0.41	50%	50%	3.86	0.36	50%	50%	3,370	48	152	200	161	94	255	2,275	103	103	205	1,930	90	90	180
5	Residential	(220) Multifamily Housing (Low- Rise) Not Close to Rail Transit (Adj Streets, 7-9A, 4-6P)	Dwelling Units	100	6.74	0.4	24%	76%	0.51	63%	37%	4.55	0.41	50%	50%	3.86	0.36	50%	50%	674	10	30	40	32	19	51	455	21	21	41	386	23	23	45
5	Hotel	(310) Hotel (Adj Streets, 7-9A, 4-6P)	Rooms	125	7.99	0.46	56%	44%	0.59	51%	49%	8.07	0.72	56%	44%	5.94	0.57	48%	52%	999	32	26	58	38	36	74	1,009	50	40	90	743	48	52	100
6	Residential	(220) Multifamily Housing (Low- Rise) Not Close to Rail Transit (Adj Streets, 7-9A, 4-6P)	Dwelling Units	205	6.74	0.4	24%	76%	0.51	63%	37%	4.55	0.41	50%	50%	3.86	0.36	50%	50%	1,382	20	62	82	66	39	105	933	42	42	84	791	37	37	74
7	Retail	(820) Shopping Center (>150k) (Adj Streets, 7-9A, 4-6P)	1,000 Sq. Ft	400	37.01	0.84	62%	38%	3.4	48%	52%	46.6	4.40	52%	48%	18.97	2.35	49%	51%	14,804	208	128	336	653	707	1,360	####	915	845	1,760	7,588	461	479	940
7	Residential	(220) Multifamily Housing (Low- Rise) Not Close to Rail Transit (Adj Streets, 7-9A, 4-6P)	Dwelling Units	150	6.74	0.4	24%	76%	0.51	63%	37%	4.55	0.41	50%	50%	3.86	0.36	50%	50%	1,011	14	46	60	49	28	77	683	31	31	62	579	27	27	54
8	Residential	(220) Multifamily Housing (Low- Rise) Not Close to Rail Transit (Adj Streets, 7-9A, 4-6P)	Dwelling Units	150	6.74	0.4	24%	76%	0.51	63%	37%	4.55	0.41	50%	50%	3.86	0.36	50%	50%	1,011	14	46	60	49	28	77	683	31	31	62	579	45	45	90
8	Hotel	(310) Hotel (Adj Streets, 7-9A, 4-6P)	Rooms	125	7.99	0.46	56%	44%	0.59	51%	49%	8.07	0.72	56%	44%	5.94	0.57	48%	52%	999	32	26	58	38	36	74	1,009	50	40	90	743	34	37	71
9	Retail	(820) Shopping Center (>150k) (Adj Streets, 7-9A, 4-6P)	1,000 Sq. Ft	75	37.01	0.84	62%	38%	3.4	48%	52%	46.6	4.40	52%	48%	18.97	2.35	49%	51%	2,776	39	24	63	122	133	255	3,495	172	158	330	1,423	86	90	176
10	Arena/Ice Rink	Typical Arena Operations and the Iceplex	Arenas	1	2626	100	74%	26%	90	50%	50%	#####	90.00	50%	50%	######	90.00	50%	50%	2,626	74	26	100	45	45	90	2,626	45	45	90	2,626	45	45	90
																				44,573	811	783	1,594	1,882	1,816	3,698	48,987	2,316	2,113	4,429	26,277	1,362	1,436	2,798
																				15%	-	-	19%	-	-	18%	15%			15%	15%			15%
																				-6,820	(152)	(151)	(303)	(328)	(327)	(655)	(7,495)	(339)	(339)	(678)	(4,020)	(214)	(214)	(428)
																				37,753	659	632	1,291	1,554	1,489	3,043	####	1,977	1,774	3,751	####	1148	1222	2,370
10	Other	Concert Average Attendance	Attendance Level	7,500	1.01		-	-	0.04	84%	16%	1.01	-	-	-	1.01	-	-	-	7,589	0	0	0	263	52	315	7,589	0	0	0	7,589	0	0	0
																				33%						33%	33%				33%			
																				(5,009)	0	0	0	-174	-34	-208	(5,009)	0	0	0	(5,009)	0	0	0
																				40,333	**659**	**632**	**1,291**	**1,643**	**1,507**	**3,150**	**44,072**	**1,977**	**1,774**	**3,751**	**24,837**	**1,148**	**1,222**	**2,370**

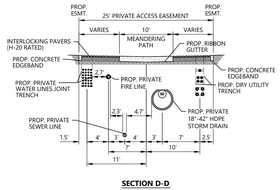


VICINITY MAP
N.T.S.





SECTION A-A
STREETS "A" & "C"
(PRIVATE ROAD)
SCALE: 1" = 10'



SECTION D-D
TYPICAL COMMON ACCESS & EMERGENCY VEHICLE EASEMENT
(PRIVATE DRIVE)
SCALE: 1" = 10'

NORTH
0' 100' 200' 300' 400'
SCALE 1"=100'

SEWER DESIGN NOTE

MULTIPLE GRAVITY SEWER ALIGNMENTS WERE ANALYZED; OPTION #1 IS DETERMINED TO BE THE MOST FEASIBLE SOLUTION:
A PRIVATE GRAVITY SEWER SYSTEM WILL BE INSTALLED WITHIN THE COVA PROJECT LIMITS, CONVEYING FLOWS TO A PRIVATE LIFT STATION LOCATED AT THE SOUTHEAST CORNER OF THE SITE.
THE LIFT STATION WILL CONVEY FLOWS VIA A PRIVATE SEWER FORCEMAIN TO THE EXISTING PUBLIC SANITARY SEWER AT THE INTERSECTION OF 52ND AVENUE AND VAN BUREN STREET.

LEGEND

- PROPOSED PUBLIC 12" PVC WATER MAIN
- PROPOSED PUBLIC 8" PVC WATER MAIN
- PROPOSED PRIVATE 12" PVC FIRE LINE
- PROPOSED PUBLIC 12" PVC SEWER MAIN
- PROPOSED PRIVATE 8" PVC SEWER MAIN
- PROPOSED PRIVATE SEWER FORCEMAIN
- PROPOSED PRIVATE STORM DRAIN

PROJECT NAME:	COVA
MAP NUMBER:	TENTATIVE TRACT MAP NO. 39330
PLAN:	PRELIMINARY UTILITY EXHIBIT
EXHIBIT DATE:	JUNE 2026

MSA CONSULTING, INC.
Civil Engineering • Land Surveying • Landscape Architecture
Planning • Environmental Services • Dry Utility Coordination • GIS
34200 Bob Hope Drive Rancho Mirage, CA 92270 | 760.320.9811 | MSAConsultinginc.com

DESIGN BY	MP
DRAWN BY	MP
CHECK BY	JAD

R:\2811\Land\Improvement Plan\Preliminary\2811 Prelim Water Sewer-SD Exhibit.dwg, 6/11/2026 8:19:05 AM, Mbigonian, MSA Consulting Inc.

PRELIMINARY HYDROLOGY REPORT

For Property Located in a Portion of the Northeast ¼ of Section 12, Township 6 South, Range 7 East, SBM Coachella, California

COVA

Tentative Tract Map 39330



June 2026

Prepared for:

RELEVANT COACHELLA OWNER, LLC

6417 Selma Avenue
Hollywood, CA 90028

JN: 2811

MSA CONSULTING, INC.
> PLANNING > CIVIL ENGINEERING > LAND SURVEYING
34200 Bob Hope Drive, Rancho Mirage, CA 92270
760.320.9811 **msaconsultinginc.com**

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PROJECT DESCRIPTION & LOCATION

The proposed project site, identified as Tentative Tract Map 39330, comprises approximately 81.2 acres located on the south side of Avenue 52 between Calhoun Street and Van Buren Street, in the City of Coachella. The site is located in a portion of Section 12, Township 6 South, Range 7 East, SBM, and is assigned Assessor's Parcel Numbers 780-040-001, -003, 780-060-001 and -002. A vicinity map obtained from the Riverside TLMA website is included as Appendix A.

EXISTING SITE CONDITIONS

Flood Rate Map

The proposed area is covered by the unpublished FIRM Panel Number 06065C2262H, effective March 6, 2018, which indicates the subject property lies within Zone X, defined *as "Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood. Insurance purchase is not required in these areas.*" Refer to the attached NFIP Flood Insurance Rate Map in Appendix B.

Existing Topography

The property is an existing date orchard and grape vinery with associated buildings and irrigation pond. The site is bounded to the north by Avenue 52, to the west by Calhoun Street, to the east by Van Buren Street, and to the south by various agricultural uses and/or single-family homes. Groundwater was encountered at a depth of approximately 35 feet below existing ground surface. The site is generally flat and slopes to the southeast. See the Existing Conditions Exhibit in Appendix H.

PROPOSED FLOOD CONTROL REQUIREMENTS

The purpose of this report is to provide preliminary retention basin analyses for the subject property. The drainage requirements for this project fall under the jurisdiction of the City of Coachella. Storm flows are conveyed through the site via street flow to localized low points where they will be conveyed via underground storm drain lines to the irrigation ponds.

HYDROLOGY ANALYSIS DESIGN CRITERIA

Storm runoff volumes for the 100-year event were obtained utilizing the Synthetic Unit Hydrograph as described in the *RCFC&WCD Hydrology Manual*. The hydrologic data used for the calculations are as follows:

Hydrologic Soil Group

The existing soil is categorized primarily as hydrologic soil group 'B', with a small finger of soil group 'A', for the subject property, as shown per the attached National Cooperative Soil Survey exhibits in Appendix C.

Soil Group 'A' is defined by RCFCD as – "soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission."

Soil Group 'B' is defined by RCFCD as – "soils having moderate infiltration rates when thoroughly wetted and consisting chiefly of moderately deep to deep, moderately well to well drained soils with moderately fine to moderately coarse textures. These soils have a moderate rate of water transmission".

Antecedent Moisture Condition

AMC II – Moderate runoff potential, an intermediate condition. Per RCFC & WCD Hydrology Manual (Dated: April, 1978): "For the purposes of design hydrology using District methods, AMC II should normally be assumed for both the 10 year and 100 year frequency storm".

Land Use Classifications and Runoff Index Numbers

Runoff Index Numbers were obtained from RCFCD Plates E6.1, E6.2 and E6.3 are summarized below:

Condominiums (Soil Group A)	32
Condominiums (Soil Group B)	56
Paving/Hardscape (Soil Group B)	56

Percent of Impervious Cover (RCFCD Plate E-6.3):	
Impervious Areas (Buildings, Pavement, Hardscape)	100%
Open Space (Landscaping & Retention Basins)	10%

Low Loss Rates:	85%

Precipitation Frequency Estimates

Precipitation depths were obtained from NOAA Atlas 14:

100 Year – 1 Hour Precipitation:	1.30	inches
100 Year – 3 Hour Precipitation:	2.08	inches
100 Year - 6 Hour Precipitation	2.75	inches
100 Year – 24 Hour Precipitation	4.38	inches

See Appendix D for the NOAA Atlas 14 Point Precipitation Frequency Estimates and respective RCFCD Plates.

Site Infiltration

A percolation testing was performed by Sladden Engineering, in accordance with Table 1 Infiltration Basin Option 2 of *Appendix A of Riverside County – Low Impact Development BMP Design Handbook*, more specifically in accordance with *Section 2.3 Shallow Percolation Test Method*. Eight percolation tests were performed with a range of 3 to 6.67 inches/hour. Per the City of Coachella design criteria for drywells, "The maximum percolation rate shall be 1" per hour, or half of the engineered percolation test, up to a maximum of 5" per hour", giving an infiltration rate of 1.5 inches/hour based on the lowest infiltration rate. Refer to Appendix E for an excerpt from the geotechnical report.

The irrigation ponds located in the southern part of the project will also be utilized as retention basins. Since the ponds will be lined, only the ground above the pond's nominal water surface elevation will allow infiltration. As such, the 1.5 inches/hour infiltration rate was prorated based on the percentage of the surface area around the pond that allows infiltration versus the total surface area of the ponds/retention basins. An infiltration rate of 0.86 inches/hour was used in the analysis.

SUMMARY of SYNTHETIC UNIT (SHORTCUT METHOD) ANALYSES

The proposed retention basins for the associated drainage areas were sized to retain the 100-year controlling storm event flood volumes and were analyzed utilizing the RCFCD Synthetic Unit (Shortcut Method). Per the manual, for areas of less than 100 – 200 acres, and lag times less than 7 – 8 minutes, the shortcut method is applicable. This method assumes that in a small watershed, response time to effective rainfall is very short. Therefore, runoff rates for a given period of time can be assumed to be directly proportional to effective rain. This method yields only approximate results (on the conservative side) and should be used only for watersheds meeting the criteria noted above.

It should be noted that the peak flow for the 1-hour storm is not necessarily representative for peak flow. Per RCFCD, peak discharges from the 3-hour storm should normally compare well with rational peaks.

The synthetic unit worksheet is included in Appendix F and is summarized on the Preliminary Synthetic Unit Hydrology Exhibit in Appendix J.

PRELIMINARY WQMP ANALYSES

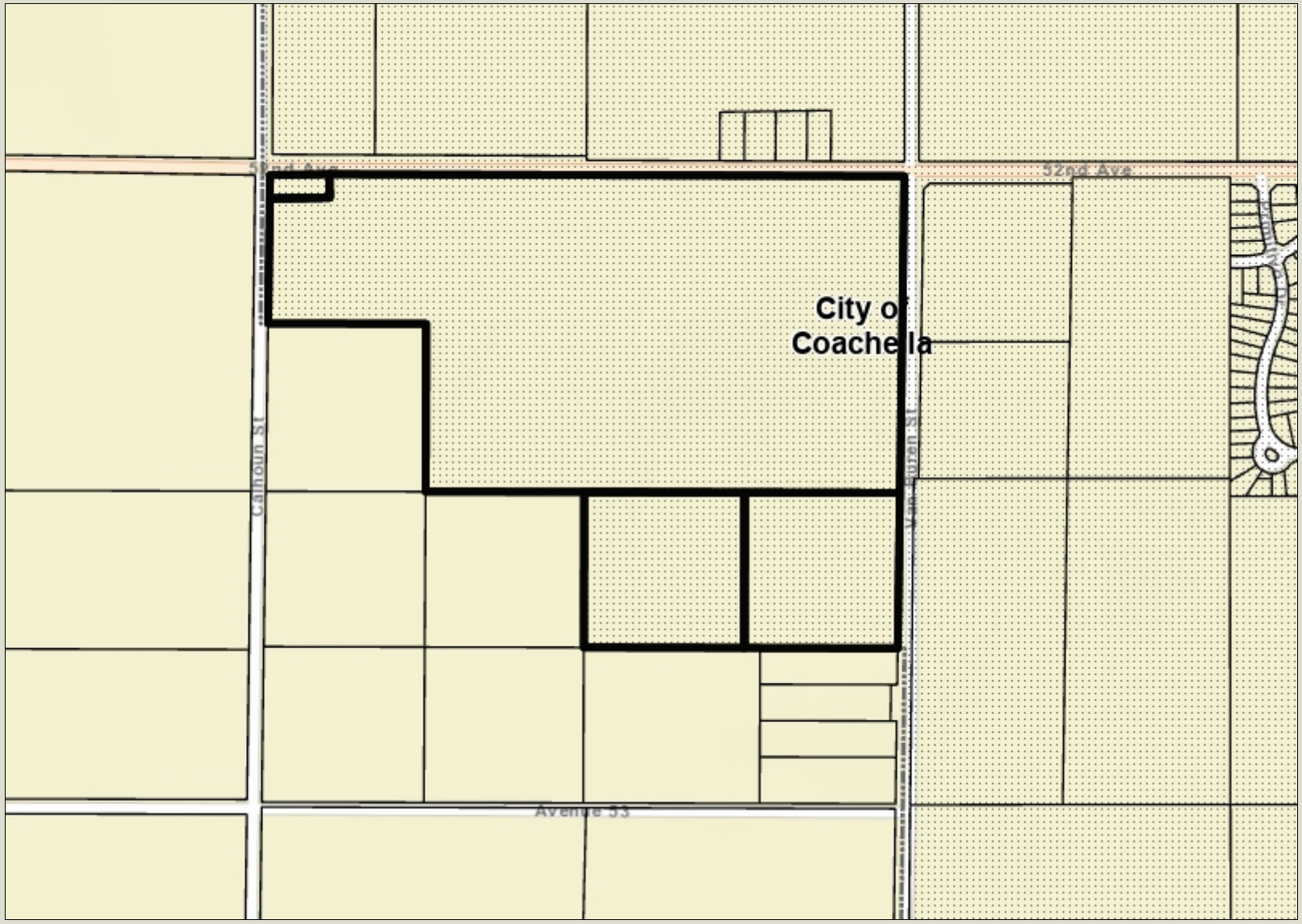
Preliminary design volume and flow for BMP measures were based on Worksheets 1 and 2 from the Riverside County – Whitewater River Region Water Quality Management Plan. Impervious area for the drainage sub-areas are derived from the preliminary land uses. The worksheet is included as Appendix G.

RESULTS AND CONCLUSIONS

As the above narrative and appendices confirm, the proposed retention basins are sufficiently sized to contain the flood volume from the controlling 100-year storm, therefore, meeting the hydrologic requirements established by the City of Coachella. During the final design process, a more detailed hydrology and hydraulics report will be submitted to the City for approval.

Appendix A
Riverside County TLMA Vicinity Map

Map My County Map





Legend

- County Boundary
- City Boundaries
- Parcels, Public
- Blueline Streams
- City Areas
- World_Street_Map

0 752 1,505 Feet

IMPORTANT Maps and data are to be used for reference purposes only. Map features are approximate, and are not necessarily accurate to surveying or engineering standards. The County of Riverside makes no warranty or guarantee as to the content (the source is often third party), accuracy, timeliness, or completeness of any of the data provided, and assumes no legal responsibility for the information contained on this map. Any use of this product with respect to accuracy and precision shall be the sole responsibility of the user.

REPORT PRINTED ON... 7/31/2025 11:09:43 AM

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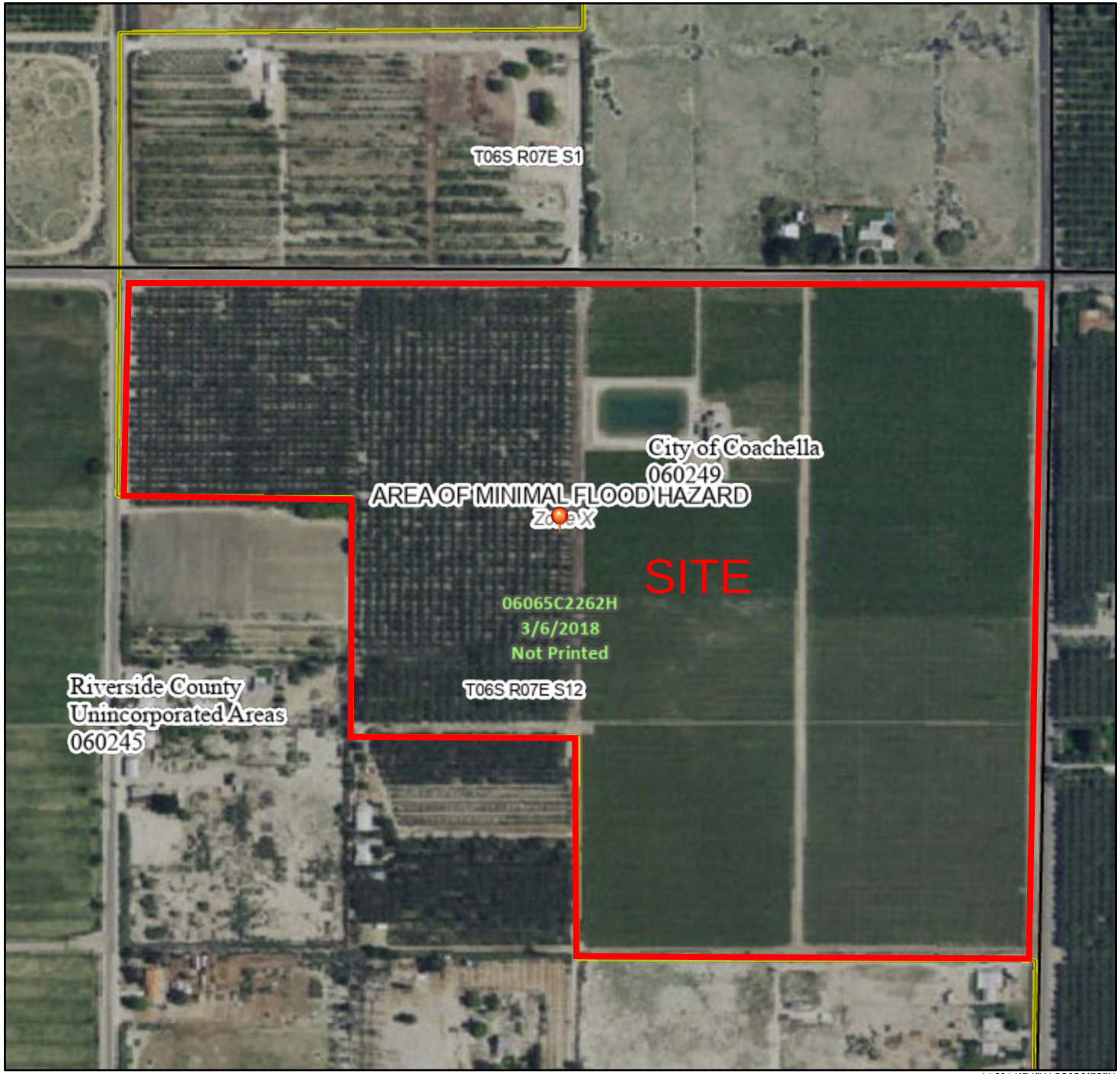
Notes

Appendix B
NFIP Flood Insurance Rate Map

National Flood Hazard Layer FIRMette

FEMA

116°12'32"W 33°40'23"N



116°11'54"W 33°39'53"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR F UT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 9/23/2025 at 6:44 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community i FIRM panel number, and FIRM effective date. Map unmapped and unmodernized areas cannot be us regulatory purposes.

DEFINITIONS OF FEMA FLOOD ZONE DESIGNATIONS

Moderate to Low Risk Areas

In communities that participate in the NFIP, flood insurance is available to all property owners and renters in these zones:

ZONE	DESCRIPTION
X (Shaded)	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood. Insurance purchase is not required in these zones.
X	Areas determined to be outside the 0.2% annual chance floodplain.

High Risk Areas

In communities that participate in the NFIP, mandatory flood insurance purchase requirements apply to all of these zones:

ZONE	DESCRIPTION
A	Areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. Because detailed analyses are not performed for such areas; no depths or base flood elevations are shown within these zones.
AE	Areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. In most instances, base flood elevations derived from detailed analyses are shown at selected intervals within these zones.
AH	Areas with a 1% annual chance of shallow flooding, usually in the form of a pond, with an average depth ranging from 1 to 3 feet. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Base flood elevations derived from detailed analyses are shown at selected intervals within these zones.
AO	River or stream flood hazard areas, and areas with a 1% or greater chance of shallow flooding each year, usually in the form of sheet flow, with an average depth ranging from 1 to 3 feet. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Average flood depths derived from detailed analyses are shown within these zones. For areas of alluvial fan flooding, velocities are also determined.
AR	Areas with a temporarily increased flood risk due to the building or restoration of a flood control system (such as a levee or a dam). Mandatory flood insurance purchase requirements will apply, but rates will not exceed the rates for unnumbered A zones if the structure is built or restored in compliance with Zone AR floodplain management regulations.
A99	Areas with a 1% annual chance of flooding that will be protected by a Federal flood control system where construction has reached specified legal requirements. No depths or base flood elevations are shown within these zones.

High Risk – Coastal Areas

In communities that participate in the NFIP, mandatory flood insurance purchase requirements apply to all of these zones:

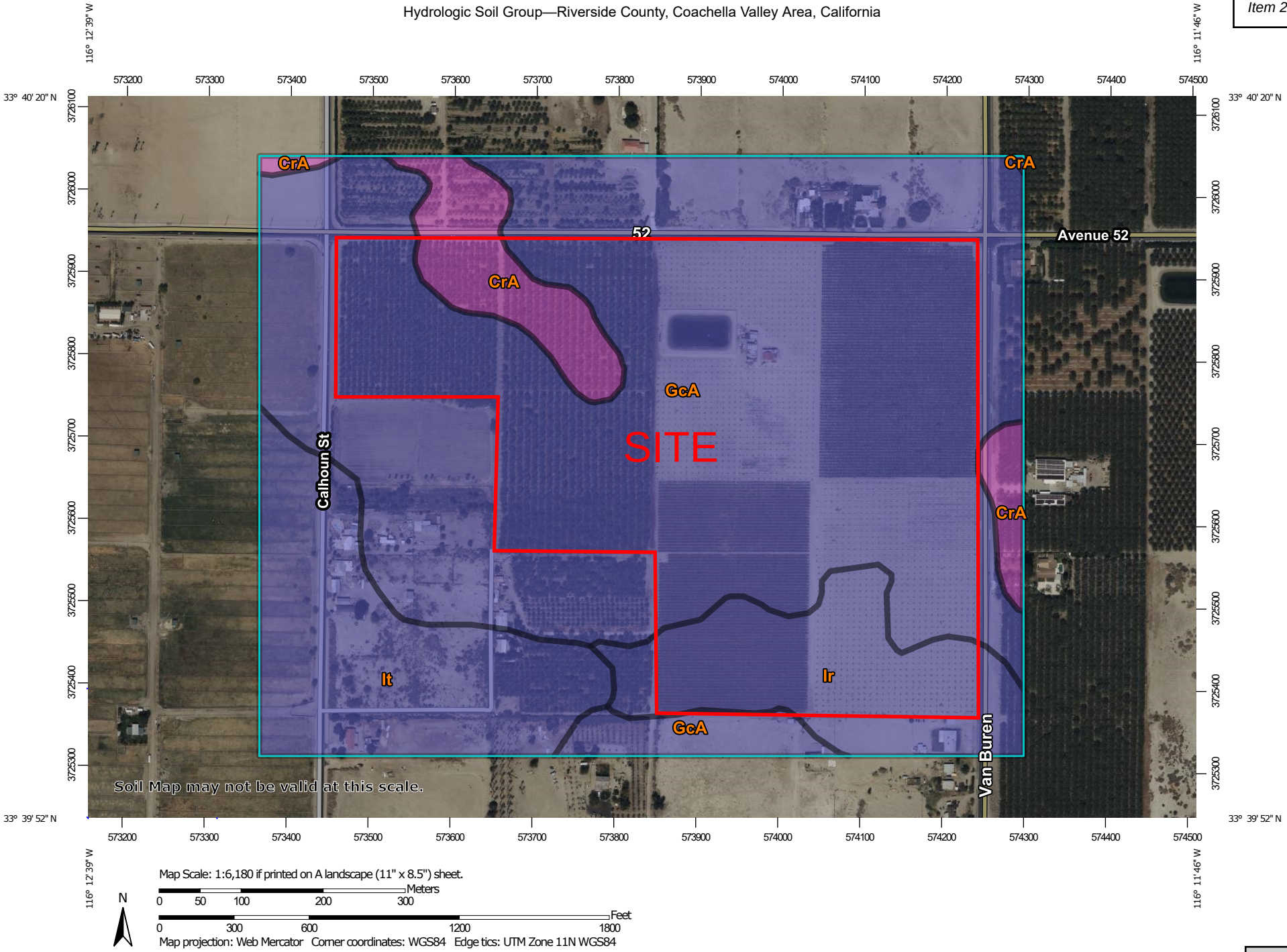
ZONE	DESCRIPTION
V	Coastal areas with a 1% or greater chance of flooding and an additional hazard associated with storm waves. These areas have a 26% chance of flooding over the life of a 30-year mortgage. No base flood elevations are shown within these zones.
VE	Coastal areas with a 1% or greater chance of flooding and an additional hazard associated with storm waves. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Base flood elevations derived from detailed analyses are shown at selected intervals within these zones.

Undetermined Risk Areas

ZONE	DESCRIPTION
D	Areas with possible but undetermined flood hazards. No flood hazard analysis has been conducted. Flood insurance rates are commensurate with the uncertainty of the flood risk.

Appendix C
USDA NCSS Hydrologic Soils Map

Hydrologic Soil Group—Riverside County, Coachella Valley Area, California



MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Soil Rating Lines

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Soil Rating Points

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Riverside County, Coachella Valley Area, California
Survey Area Data: Version 17, Sep 10, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 15, 2022—May 28, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
CrA	Coachella fine sand, wet, 0 to 2 percent slopes	A	10.4	6.2%
GcA	Gilman fine sandy loam, wet, 0 to 2 percent slopes	B	118.2	70.0%
Ir	Indio fine sandy loam, wet	B	17.4	10.3%
It	Indio very fine sandy loam, wet	B	22.7	13.5%
Totals for Area of Interest			**168.7**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Appendix D
NOAA Atlas 14
RCFCD Reference Plates

NOAA Atlas 14, Volume 6, Version 2
Location name: Coachella, California, USA*
Latitude: 33.6694°, Longitude: -116.2039°
Elevation: -54 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	**0.063** (0.052-0.076)	**0.099** (0.082-0.120)	**0.150** (0.125-0.182)	**0.195** (0.160-0.238)	**0.260** (0.208-0.330)	**0.316** (0.246-0.409)	**0.376** (0.286-0.499)	**0.442** (0.327-0.605)	**0.542** (0.384-0.773)	**0.628** (0.429-0.928)
10-min	**0.090** (0.075-0.108)	**0.141** (0.118-0.171)	**0.215** (0.179-0.261)	**0.279** (0.230-0.342)	**0.373** (0.297-0.473)	**0.452** (0.353-0.586)	**0.538** (0.409-0.715)	**0.634** (0.469-0.867)	**0.777** (0.550-1.11)	**0.900** (0.615-1.33)
15-min	**0.108** (0.091-0.131)	**0.171** (0.143-0.207)	**0.260** (0.216-0.316)	**0.337** (0.278-0.413)	**0.451** (0.360-0.572)	**0.547** (0.426-0.708)	**0.651** (0.495-0.865)	**0.767** (0.567-1.05)	**0.939** (0.665-1.34)	**1.09** (0.744-1.61)
30-min	**0.155** (0.130-0.188)	**0.245** (0.204-0.297)	**0.372** (0.309-0.451)	**0.483** (0.398-0.591)	**0.646** (0.515-0.819)	**0.783** (0.610-1.01)	**0.932** (0.709-1.24)	**1.10** (0.811-1.50)	**1.34** (0.952-1.92)	**1.56** (1.06-2.30)
60-min	**0.217** (0.182-0.263)	**0.343** (0.286-0.416)	**0.521** (0.433-0.632)	**0.676** (0.557-0.828)	**0.905** (0.721-1.15)	**1.10** (0.855-1.42)	**1.30** (0.993-1.73)	**1.54** (1.14-2.10)	**1.88** (1.33-2.69)	**2.18** (1.49-3.22)
2-hr	**0.300** (0.251-0.363)	**0.448** (0.374-0.543)	**0.667** (0.554-0.810)	**0.865** (0.713-1.06)	**1.17** (0.932-1.48)	**1.44** (1.12-1.86)	**1.73** (1.32-2.30)	**2.07** (1.53-2.83)	**2.59** (1.84-3.70)	**3.05** (2.09-4.51)
3-hr	**0.363** (0.303-0.439)	**0.531** (0.442-0.643)	**0.784** (0.651-0.952)	**1.02** (0.839-1.25)	**1.38** (1.10-1.75)	**1.71** (1.33-2.21)	**2.08** (1.58-2.76)	**2.51** (1.85-3.43)	**3.18** (2.25-4.53)	**3.77** (2.58-5.57)
6-hr	**0.480** (0.401-0.581)	**0.693** (0.578-0.840)	**1.02** (0.847-1.24)	**1.32** (1.09-1.62)	**1.81** (1.44-2.29)	**2.24** (1.75-2.90)	**2.75** (2.09-3.65)	**3.34** (2.47-4.56)	**4.27** (3.03-6.09)	**5.12** (3.50-7.56)
12-hr	**0.576** (0.481-0.697)	**0.849** (0.708-1.03)	**1.26** (1.05-1.53)	**1.64** (1.36-2.02)	**2.25** (1.79-2.85)	**2.78** (2.17-3.60)	**3.40** (2.58-4.51)	**4.12** (3.04-5.63)	**5.24** (3.71-7.48)	**6.25** (4.27-9.24)
24-hr	**0.727** (0.643-0.838)	**1.10** (0.974-1.27)	**1.66** (1.46-1.92)	**2.16** (1.89-2.52)	**2.94** (2.49-3.54)	**3.62** (3.00-4.44)	**4.38** (3.55-5.51)	**5.25** (4.15-6.79)	**6.59** (5.00-8.86)	**7.77** (5.70-10.8)
2-day	**0.837** (0.741-0.966)	**1.29** (1.14-1.49)	**1.94** (1.71-2.24)	**2.52** (2.20-2.94)	**3.39** (2.88-4.09)	**4.14** (3.43-5.08)	**4.96** (4.02-6.23)	**5.87** (4.64-7.59)	**7.25** (5.50-9.74)	**8.42** (6.18-11.7)
3-day	**0.900** (0.796-1.04)	**1.39** (1.23-1.60)	**2.09** (1.84-2.42)	**2.71** (2.37-3.17)	**3.64** (3.08-4.38)	**4.41** (3.66-5.42)	**5.26** (4.27-6.62)	**6.20** (4.90-8.01)	**7.60** (5.77-10.2)	**8.78** (6.45-12.2)
4-day	**0.951** (0.841-1.10)	**1.47** (1.30-1.70)	**2.21** (1.95-2.56)	**2.86** (2.50-3.34)	**3.82** (3.24-4.60)	**4.62** (3.84-5.68)	**5.50** (4.46-6.92)	**6.47** (5.11-8.35)	**7.89** (5.99-10.6)	**9.10** (6.68-12.6)
7-day	**1.01** (0.897-1.17)	**1.56** (1.38-1.80)	**2.32** (2.05-2.69)	**3.00** (2.62-3.49)	**3.98** (3.37-4.80)	**4.80** (3.99-5.90)	**5.69** (4.62-7.16)	**6.68** (5.27-8.63)	**8.12** (6.16-10.9)	**9.32** (6.84-13.0)
10-day	**1.05** (0.928-1.21)	**1.60** (1.42-1.85)	**2.39** (2.11-2.76)	**3.07** (2.69-3.59)	**4.08** (3.46-4.91)	**4.91** (4.08-6.04)	**5.82** (4.72-7.32)	**6.81** (5.38-8.80)	**8.26** (6.27-11.1)	**9.48** (6.96-13.2)
20-day	**1.12** (0.994-1.30)	**1.73** (1.53-2.00)	**2.58** (2.27-2.99)	**3.32** (2.90-3.87)	**4.40** (3.73-5.30)	**5.29** (4.39-6.50)	**6.25** (5.07-7.86)	**7.30** (5.76-9.43)	**8.82** (6.70-11.9)	**10.1** (7.41-14.0)
30-day	**1.18** (1.04-1.36)	**1.84** (1.62-2.12)	**2.77** (2.44-3.20)	**3.57** (3.13-4.17)	**4.75** (4.02-5.72)	**5.72** (4.75-7.02)	**6.75** (5.48-8.49)	**7.88** (6.22-10.2)	**9.51** (7.22-12.8)	**10.9** (7.97-15.1)
45-day	**1.28** (1.13-1.48)	**2.03** (1.80-2.34)	**3.09** (2.72-3.57)	**4.00** (3.50-4.67)	**5.33** (4.52-6.42)	**6.43** (5.34-7.90)	**7.60** (6.16-9.56)	**8.87** (7.00-11.5)	**10.7** (8.12-14.4)	**12.2** (8.96-17.0)
60-day	**1.35** (1.19-1.56)	**2.17** (1.92-2.50)	**3.32** (2.93-3.84)	**4.32** (3.78-5.04)	**5.77** (4.89-6.95)	**6.96** (5.78-8.55)	**8.24** (6.68-10.4)	**9.61** (7.59-12.4)	**11.6** (8.80-15.6)	**13.2** (9.70-18.4)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

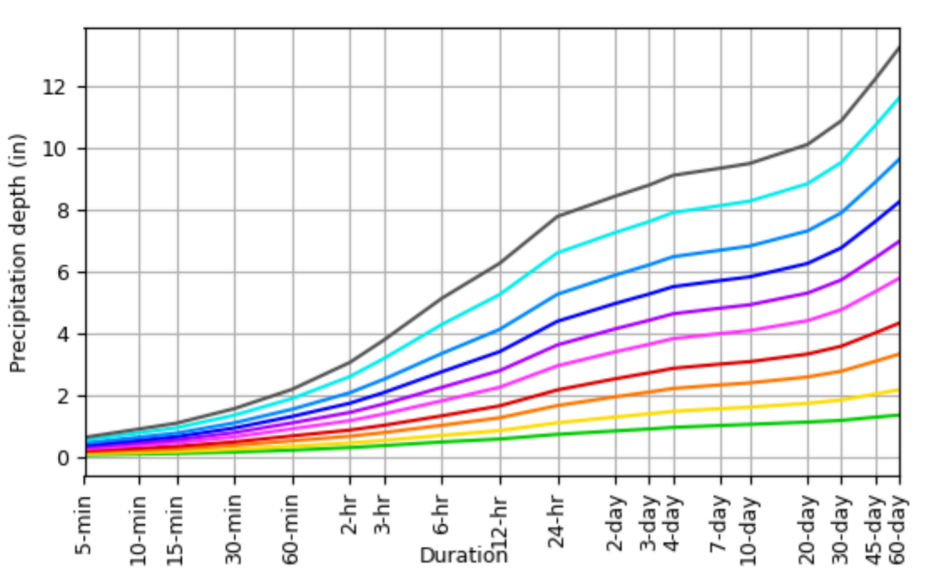
Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

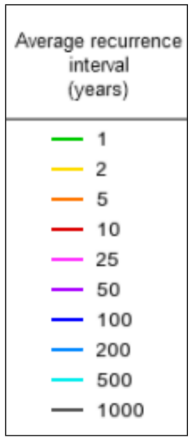
Please refer to NOAA Atlas 14 document for more information.

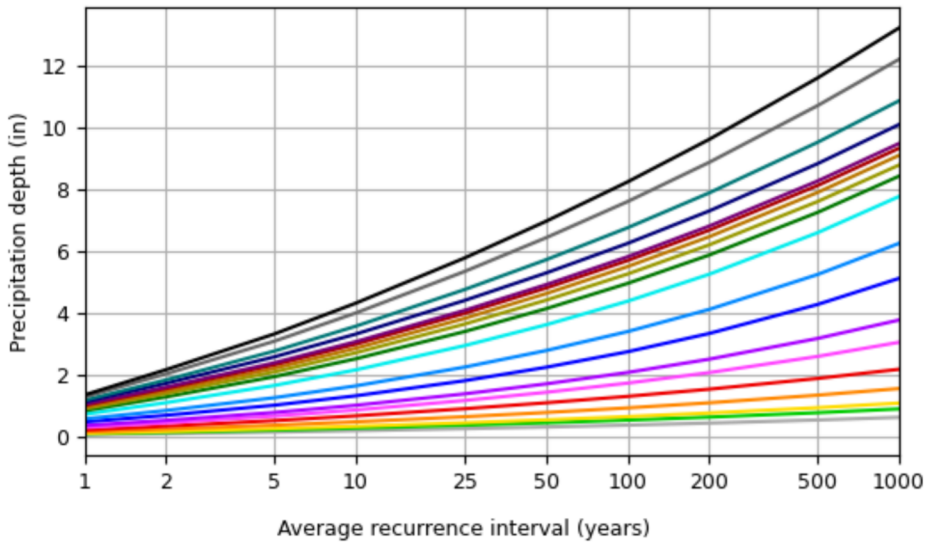
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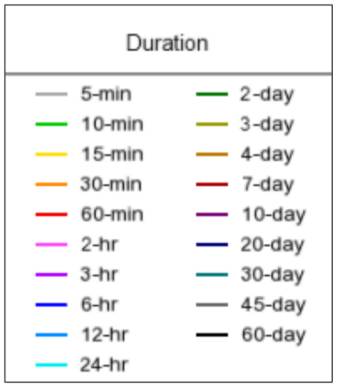
PF graphical

PDS-based depth-duration-frequency (DDF) curves
Latitude: 33.6694°, Longitude: -116.2039°









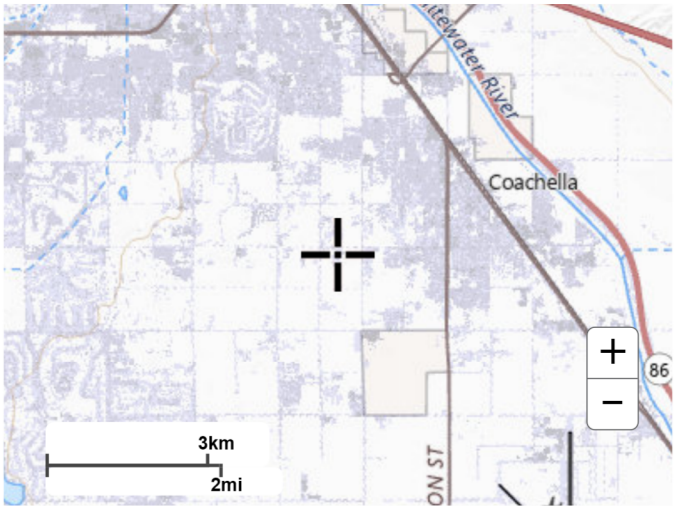
NOAA Atlas 14, Volume 6, Version 2

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Maps & aerials

Small scale terrain



Large scale terrain



Large scale map



Large scale aerial



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US Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service
National Water Center
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

Disclaimer

Appendix E

Sladden Engineering - Percolation Test Results

Sladden Engineering

45090 Golf Center Parkway, Suite F, Indio, California 92201 (760) 863-0713 Fax (760) 863-0847
6782 Stanton Avenue, Suite C, Buena Park, CA 90621 (714) 523-0952 Fax (714) 523-1369
450 Egan Avenue, Beaumont, CA 92223 (951) 845-7743 Fax (951) 845-8863
www.sladdenengineering.com

October 22, 2024

Project No. 544-24159
24-10-561

Relevant Living
6417 Selma Avenue, 2nd Floor
Los Angeles, California 90028

Project: Proposed The Ranch at Coachella
Mixed-Use Development
APN's 780-040-001, 003, 780-060-001 & 002
SWC 52nd Avenue & Van Buren Street
Coachella, California

Subject: Percolation/Infiltration Testing for Stormwater Management

Ref: Geotechnical Investigation report, Proposed "The Ranch at Coachella" Mixed-Use Development, APNs 780-040-001, 003 & 780-060-001 & 002 Coachella, California, Project No. 544-24159, Report No. 24-07-358.

In accordance with your request, we have performed percolation testing on the subject site to evaluate the infiltration potential of the near-surface soil to assist in stormwater management system design. It is our understanding that on-site stormwater retention including infiltration is planned for the proposed project.

Percolation testing has been performed within 8 shallow test holes excavated on the site. Testing was performed at a depth of approximately 4 and 6 feet below the existing ground surface. The approximate locations of the test holes are presented on the attached Test Location Photograph (Figure 3). Proposed testing locations were provided to Sladden Engineering by MSA Consulting, Inc. However, final locations were adjusted based on encountered field conditions and by on site tenant's request.

Testing was performed by placing water within the test bores and recording the drop in the water surface with time. Testing was performed in general accordance with Section 2.3 of Riverside County – Low Impact Development BMP Design Handbook for percolation testing. Test results are summarized in the following table.

PERCOLATION/INFILTRATION TEST RESULTS

Test No.	Depth (Ft)	USCS	Percolation Rate (in/hr)	Infiltration Rate (in/hr)
P-1	6.00	SM	24.00	3.00
P-2	6.00	SM	27.50	3.64
P-3	4.00	SM	40.00	6.67
P-4	6.00	SM	40.00	6.67

P-5	6.00	SM	32.50	4.68
P-6	4.00	SM	40.00	6.67
P-7	4.00	SM	40.00	6.67
P-8	4.00	SM	40.00	6.67

The percolation rates determined represent the ultimate field rates that do not include a safety factor. The corresponding infiltration rates were calculated using the Porchet Method. An appropriate safety factor should be incorporated into stormwater retention/infiltration system design.

If you have any questions regarding this memo, please contact the undersigned.

Respectfully submitted,
SLADDEN ENGINEERING

James W. Minor III
Senior Geologist

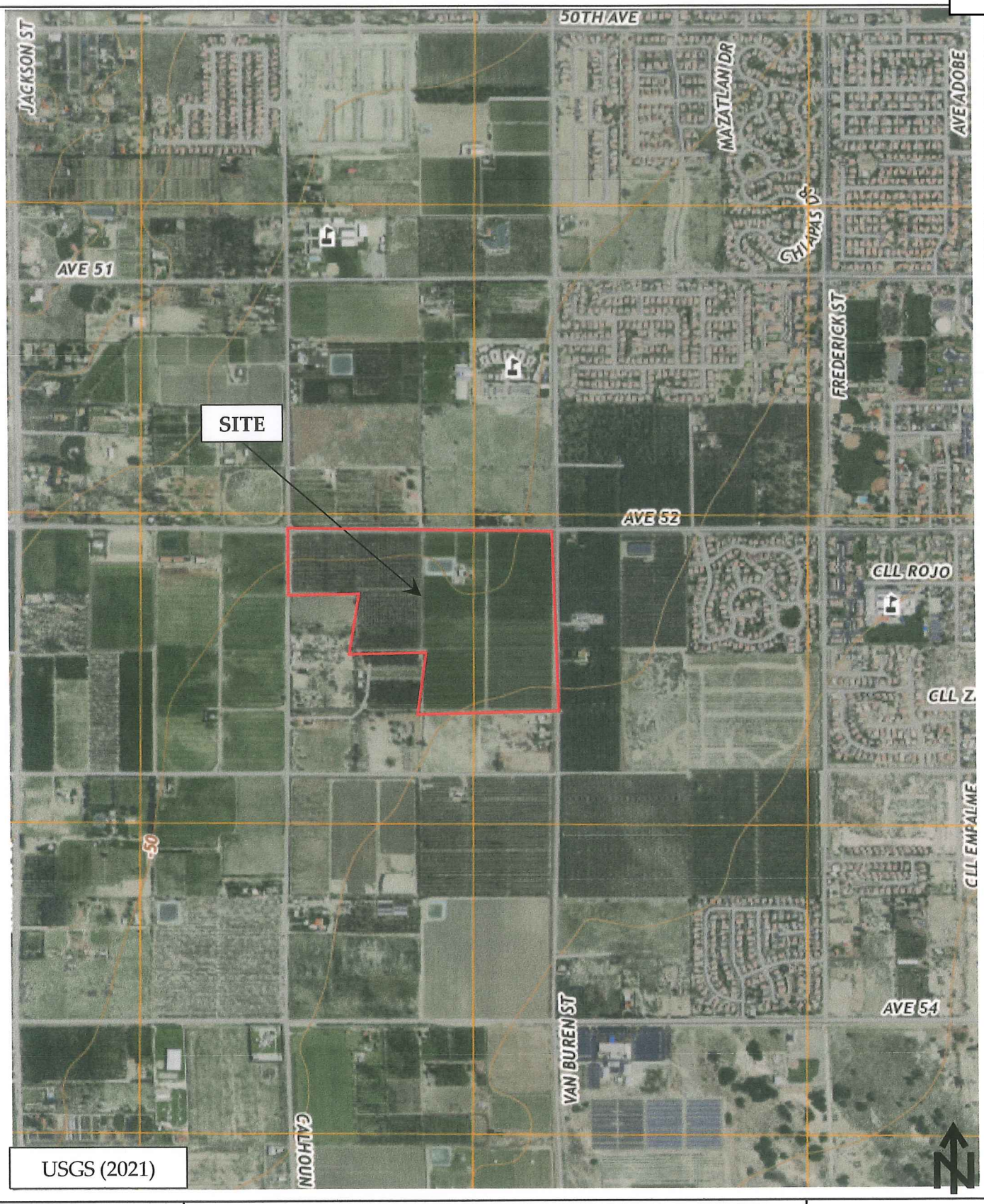
PROFESSIONAL GEOLOGIST
JAMES W. MINOR III
No. 9735
STATE OF CALIFORNIA

Brett L. Anderson
Principal Engineer

REGISTERED PROFESSIONAL ENGINEER
BRETT L. ANDERSON
No. C45389
CIVIL ENGINEERING
STATE OF CALIFORNIA

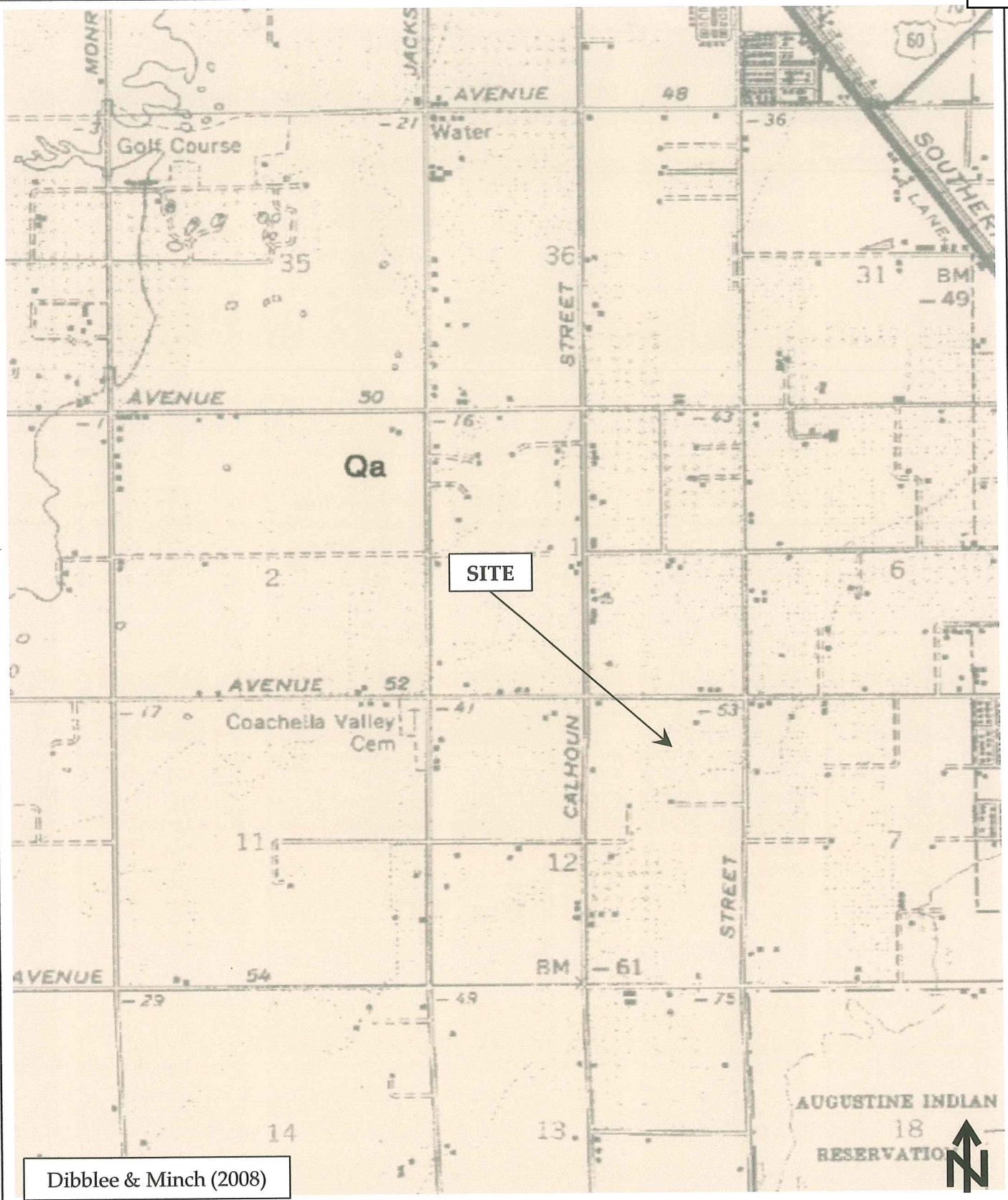
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SITE LOCATION MAP
REGIONAL GEOLOGIC MAP
TEST LOCATION PHOTOGRAPH



USGS (2021)

Sladden Engineering	SITE LOCATION MAP	FIGURE 1
	Project Number: 544-24159	
	Report Number: 24-10-561	
	Date: October 22, 2024	



Dibblee & Minch (2008)

Sladden Engineering	REGIONAL GEOLOGIC MAP		FIGURE 2
	Project Number:	544-24159	
	Report Number:	24-10-561	
	Date:	October 22, 2024	



LEGEND

P-8 Approximate Percolation Testing Location

Google Earth (2024)

Sladden Engineering

TEST LOCATION PHOTOGRAPH

FIGURE 3

Project Number:	544-24159
Report Number:	24-10-561
Date:	October 22, 2024

BORING LOGS
STORMWATER TESTING DATA SHEETS

Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	9/26/2024
Elevation:	-50 FT MSL	Boring No:	P-1

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							2		Silty Sand (SM); grayish brown, moist, fine-to coarse-grained, micaceous, with trace of clay.
							4		
							6		
							8		Terminated at ~ 6 ft bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered. Borehole Cased with Perforated Pipe for Percolation Testing.
							10		
							12		
							14		
							16		
							18		
							20		
							22		
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

MIXED-USE DEVELOPMENT
SWC 52ND AVENUE & VAN BUREN, COACHELLA

Project No:	544-24159	Page	1
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Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	9/26/2024
Elevation:	-50 FT MSL	Boring No:	P-2

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							2		Silty Sand (SM); grayish brown, moist, fine-to coarse-grained, micaceous, with trace of clay.
							4		
							6		
							8		Terminated at ~ 6 ft bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered. Borehole Cased with Perforated Pipe for Percolation Testing.
							10		
							12		
							14		
							16		
							18		
							20		
							22		
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

MIXED-USE DEVELOPMENT
SWC 52ND AVENUE & VAN BUREN, COACHELLA

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Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	9/26/2024
Elevation:	-50 FT MSL	Boring No:	P-3

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							2		Silty Sand (SM); grayish brown, slightly moist, fine-to coarse-grained, micaceous.
							4		
							6		
							8		
							10		Terminated at ~ 4 ft bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered. Borehole Cased with Perforated Pipe for Percolation Testing.
							12		
							14		
							16		
							18		
							20		
							22		
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

MIXED-USE DEVELOPMENT
SWC 52ND AVENUE & VAN BUREN, COACHELLA

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BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	9/26/2024
Elevation:	-50 FT MSL	Boring No:	P-4

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							2		Silty Sand (SM); grayish brown, slightly moist, fine-to coarse-grained, micaceous.
							4		
							6		
							8		Terminated at ~ 6 ft bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered. Borehole Cased with Perforated Pipe for Percolation Testing.
							10		
							12		
							14		
							16		
							18		
							20		
							22		
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

MIXED-USE DEVELOPMENT
SWC 52ND AVENUE & VAN BUREN, COACHELLA

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Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	9/26/2024
Elevation:	-50 FT MSL	Boring No:	P-5

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							2		Silty Sand (SM); grayish brown, slightly moist, fine-to coarse-grained, micaceous.
							4		
							6		
							8		Terminated at ~ 6 ft bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered. Borehole Cased with Perforated Pipe for Percolation Testing.
							10		
							12		
							14		
							16		
							18		
							20		
							22		
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

MIXED-USE DEVELOPMENT
SWC 52ND AVENUE & VAN BUREN, COACHELLA

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Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	9/26/2024
Elevation:	-50 FT MSL	Boring No:	P-6

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							2		Silty Sand (SM); grayish brown, slightly moist, fine-to coarse-grained, micaceous.
							4		
							6		
							8		
							10		Terminated at ~ 4 ft bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered. Borehole Cased with Perforated Pipe for Percolation Testing.
							12		
							14		
							16		
							18		
							20		
							22		
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

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Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	9/26/2024
Elevation:	-50 FT MSL	Boring No:	P-7

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							2		Silty Sand (SM); grayish brown, slightly moist, fine-to coarse-grained, micaceous.
							4		
							6		
							8		
							10		Terminated at ~ 4 ft bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered. Borehole Cased with Perforated Pipe for Percolation Testing.
							12		
							14		
							16		
							18		
							20		
							22		
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

MIXED-USE DEVELOPMENT
SWC 52ND AVENUE & VAN BUREN, COACHELLA

Project No:	544-24159	Page	7
Report No:	24-10-561		

Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	9/26/2024
Elevation:	-50 FT MSL	Boring No:	P-8

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							2		Silty Sand (SM); grayish brown, slightly moist, fine-to coarse-grained, micaceous.
							4		
							6		
							8		
							10		Terminated at ~ 4 ft bgs.
							12		No Bedrock Encountered.
							14		No Groundwater or Seepage Encountered.
							16		Borehole Cased with Perforated Pipe for Percolation Testing.
							18		
							20		
							22		
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

MIXED-USE DEVELOPMENT
SWC 52ND AVENUE & VAN BUREN, COACHELLA

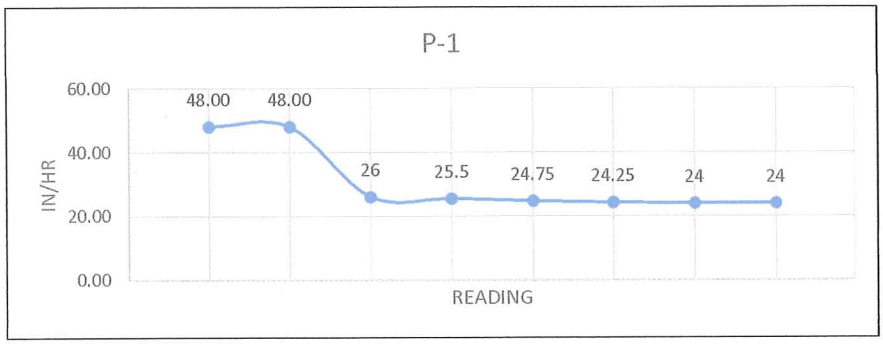
Project No:	544-24159	Page	8
Report No:	24-10-561		

STORMWATER PERCOLATION SHEET (LESS THAN 10 FT)

Project:	Mixed-Use Development	Depth (ft):	6.00
Job No. :	544-24159	USCS Soil Class:	SM
Date:	10/21/2024	Sandy Soil:	Favorable
Test Hole #:	P-1	Tested By:	Robert

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
A	25.00	6.00	20	0	20	48.00
B	25.00	6.00	20	0	20	48.00

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
1	30.00	6.00	20	7	13	26
2	30.00	6.00	20	7 2/8	12 6/8	25.5
3	30.00	6.00	20	7 5/8	12 3/8	24.75
4	30.00	6.00	20	7 7/8	12 1/8	24.25
5	30.00	6.00	20	8	12	24
6	30.00	6.00	20	8	12	24



PERCOLATION RATE CONVERSION (PORCHET METHOD)

$$I_{t=} \quad \frac{\Delta H\ 60\ R}{\Delta t(r+2H_{avg})}$$

Δt =	30.00
D_f =	64.00
r =	4.00
D_0 =	52
D_t =	72.00
H_0 =	20
H_f =	8
ΔH =	12.00
H_{avg} =	14.00

Δt (minutes)
D_f (Final Depth to water)
r (hole radius in inches)
D_0 (Initial Depth to water)
D_t (Total Depth of test hole)
H_0 (initial height of water at selected time interval)

$$H_0 = D_t - D_0$$

H_f (final height of water at the selected time interval)

$$H_f = D_t - D_f$$

ΔH (change in head over the time interval)

$$\Delta H = H_0 - H_f$$

H_{avg} (average head height over the time interval)

$$H_{avg} = (H_0 + H_f)/2$$

Field Rate:	24 in/hr
Infiltration Rate:	3.00 in/hr

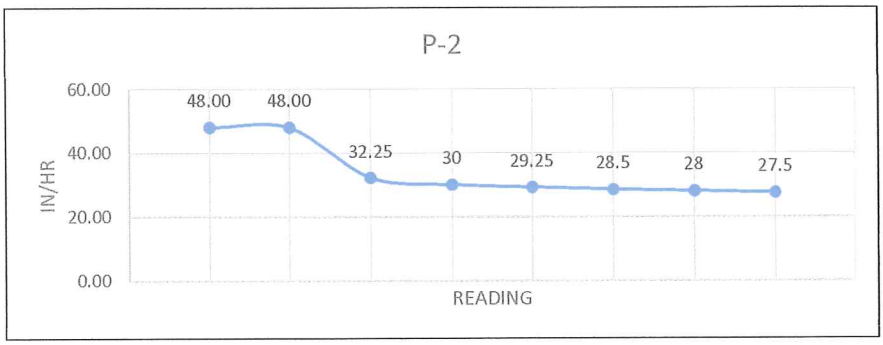
SLADDEN ENGINEERING

STORMWATER PERCOLATION SHEET (LESS THAN 10 FT)

Project:	Mixed-Use Development	Depth (ft):	6.00
Job No. :	544-24159	USCS Soil Class:	SM
Date:	10/21/2024	Sandy Soil:	Favorable
Test Hole #:	P-2	Tested By:	Robert

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
A	25.00	6.00	20	0	20	48.00
B	25.00	6.00	20	0	20	48.00

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
1	30.00	6.00	20	3 7/8	16 1/8	32.25
2	30.00	6.00	20	5	15	30
3	30.00	6.00	20	5 3/8	14 5/8	29.25
4	30.00	6.00	20	5 6/8	14 2/8	28.5
5	30.00	6.00	20	6	14	28
6	30.00	6.00	20	6 2/8	13 6/8	27.5



PERCOLATION RATE CONVERSION (PORCHET METHOD)

$$I_{t=} \quad \frac{\Delta H \; 60 \; R}{\Delta t(r+2H_{avg})}$$

Δt =	30.00
D_f =	65.75
r =	4.00
D_0 =	52
D_t =	72.00
H_0 =	20
H_f =	6.25
ΔH =	13.75
H_{avg} =	13.13

Δt (minutes)

D_f (Final Depth to water)

r (hole radius in inches)

D_0 (Initial Depth to water)

D_t (Total Depth of test hole)

H_0 (initial height of water at selected time interval)

$$H_0 = D_t - D_0$$

H_f (final height of water at the selected time interval)

$$H_f = D_t - D_f$$

ΔH (change in head over the time interval)

$$\Delta H = H_0 - H_f$$

H_{avg} (average head height over the time interval)

$$H_{avg} = (H_0 + H_f)/2$$

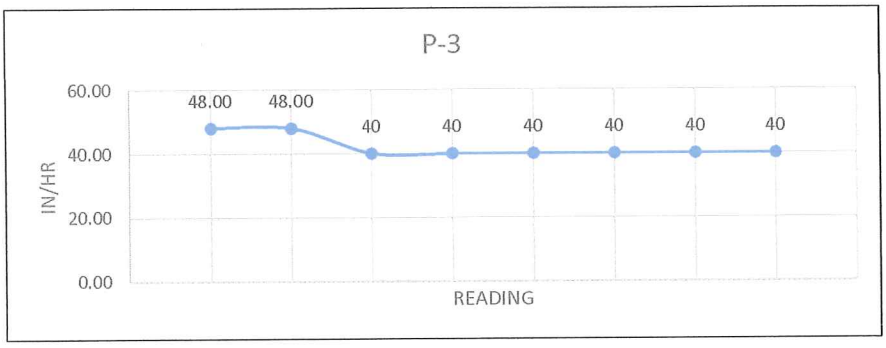
Field Rate:	27.5 in/hr
Infiltration Rate:	3.64 in/hr

STORMWATER PERCOLATION SHEET (LESS THAN 10 FT)

Project:	Mixed-Use Development	Depth (ft):	4.00
Job No. :	544-24159	USCS Soil Class:	SM
Date:	10/21/2024	Sandy Soil:	Favorable
Test Hole #:	P-3	Tested By:	Robert

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
A	25.00	4.00	20	0	20	48.00
B	25.00	4.00	20	0	20	48.00

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
1	30.00	4.00	20	0	20	40
2	30.00	4.00	20	0	20	40
3	30.00	4.00	20	0	20	40
4	30.00	4.00	20	0	20	40
5	30.00	4.00	20	0	20	40
6	30.00	4.00	20	0	20	40



PERCOLATION RATE CONVERSION (PORCHET METHOD)

$$I_{t=} \quad \frac{\Delta H\ 60\ R}{\Delta t(r+2H_{avg})}$$

Δt =	30.00
D_f =	48.00
r =	4.00
D_0 =	28
D_t =	48.00
H_0 =	20
H_f =	0
ΔH =	20.00
H_{avg} =	10.00

Δt (minutes)
D_f (Final Depth to water)
r (hole radius in inches)
D_0 (Initial Depth to water)
D_t (Total Depth of test hole)
H_0 (initial height of water at selected time interval)

$$H_0 = D_t - D_0$$

H_f (final height of water at the selected time interval)

$$H_f = D_t - D_f$$

ΔH (change in head over the time interval)

$$\Delta H = H_0 - H_f$$

H_{avg} (average head height over the time interval)

$$H_{avg} = (H_0 + H_f)/2$$

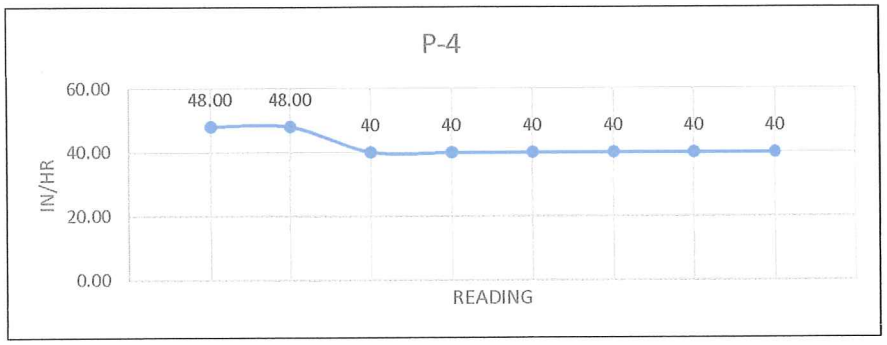
Field Rate:	40 in/hr
Infiltration Rate:	6.67 in/hr

STORMWATER PERCOLATION SHEET (LESS THAN 10 FT)

Project:	Mixed-Use Development	Depth (ft):	6.00
Job No. :	544-24159	USCS Soil Class:	SM
Date:	10/21/2024	Sandy Soil:	Favorable
Test Hole #:	P-4	Tested By:	Robert

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
A	25.00	6.00	20	0	20	48.00
B	25.00	6.00	20	0	20	48.00

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
1	30.00	6.00	20	0	20	40
2	30.00	6.00	20	0	20	40
3	30.00	6.00	20	0	20	40
4	30.00	6.00	20	0	20	40
5	30.00	6.00	20	0	20	40
6	30.00	6.00	20	0	20	40



PERCOLATION RATE CONVERSION (PORCHET METHOD)

$$I_{t=} \quad \frac{\Delta H\ 60\ R}{\Delta t(r+2H_{avg})}$$

Δt =	30.00
D_f =	72.00
r =	4.00
D_0 =	52
D_t =	72.00
H_0 =	20
H_f =	0
ΔH =	20.00
H_{avg} =	10.00

Δt (minutes)

D_f (Final Depth to water)

r (hole radius in inches)

D_0 (Initial Depth to water)

D_t (Total Depth of test hole)

H_0 (initial height of water at selected time interval)

$$H_0 = D_t - D_0$$

H_f (final height of water at the selected time interval)

$$H_f = D_t - D_f$$

ΔH (change in head over the time interval)

$$\Delta H = H_0 - H_f$$

H_{avg} (average head height over the time interval)

$$H_{avg} = (H_0 + H_f)/2$$

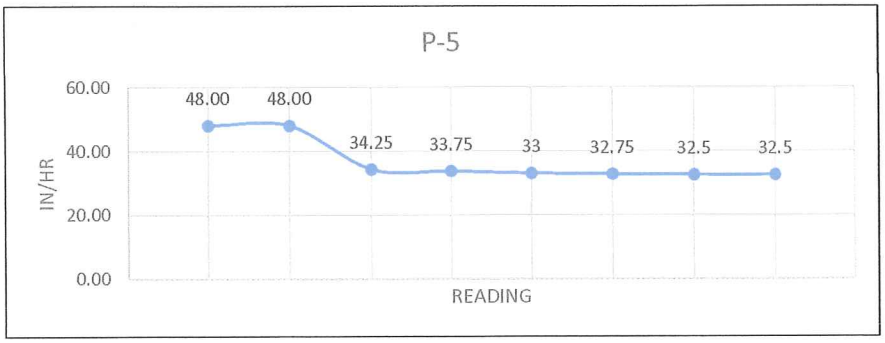
Field Rate:	40 in/hr
Infiltration Rate:	6.67 in/hr

STORMWATER PERCOLATION SHEET (LESS THAN 10 FT)

Project:	Mixed-Use Development	Depth (ft):	6.00
Job No. :	544-24159	USCS Soil Class:	SM
Date:	10/21/2024	Sandy Soil:	Favorable
Test Hole #:	P-5	Tested By:	Robert

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
A	25.00	6.00	20	0	20	48.00
B	25.00	6.00	20	0	20	48.00

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
1	30.00	6.00	20	2 7/8	17 1/8	34.25
2	30.00	6.00	20	3 1/8	16 7/8	33.75
3	30.00	6.00	20	3 4/8	16 4/8	33
4	30.00	6.00	20	3 5/8	16 3/8	32.75
5	30.00	6.00	20	3 6/8	16 2/8	32.5
6	30.00	6.00	20	3 6/8	16 2/8	32.5



PERCOLATION RATE CONVERSION (PORCHET METHOD)

$$I_{t=} \quad \frac{\Delta H\ 60\ R}{\Delta t(r+2H_{avg})}$$

Δt =	30.00
D_f =	68.25
r =	4.00
D_0 =	52
D_t =	72.00
H_0 =	20
H_f =	3.75
ΔH =	16.25
H_{avg} =	11.88

Δt (minutes)
D_f (Final Depth to water)
r (hole radius in inches)
D_0 (Initial Depth to water)
D_t (Total Depth of test hole)
H_0 (initial height of water at selected time interval)

$$H_0 = D_t - D_0$$

H_f (final height of water at the selected time interval)

$$H_f = D_t - D_f$$

ΔH (change in head over the time interval)

$$\Delta H = H_0 - H_f$$

H_{avg} (average head height over the time interval)

$$H_{avg} = (H_0 + H_f)/2$$

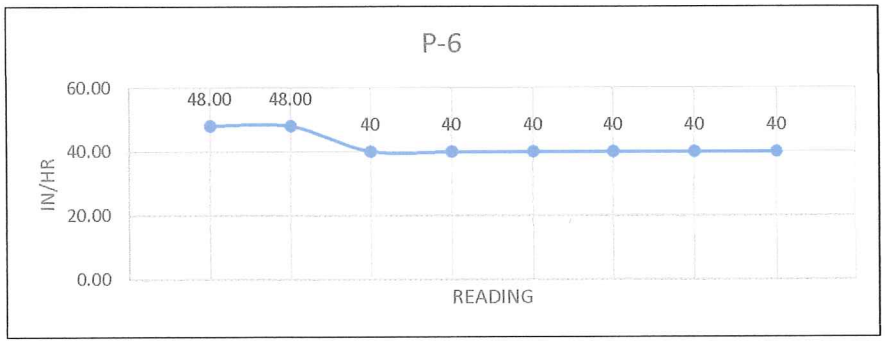
Field Rate:	32.5 in/hr
Infiltration Rate:	4.68 in/hr

STORMWATER PERCOLATION SHEET (LESS THAN 10 FT)

Project:	Mixed-Use Development	Depth (ft):	4.00
Job No. :	544-24159	USCS Soil Class:	SM
Date:	10/21/2024	Sandy Soil:	Favorable
Test Hole #:	P-6	Tested By:	Robert

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
A	25.00	4.00	20	0	20	48.00
B	25.00	4.00	20	0	20	48.00

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
1	30.00	4.00	20	0	20	40
2	30.00	4.00	20	0	20	40
3	30.00	4.00	20	0	20	40
4	30.00	4.00	20	0	20	40
5	30.00	4.00	20	0	20	40
6	30.00	4.00	20	0	20	40



PERCOLATION RATE CONVERSION (PORCHET METHOD)

$$I_{t=} \quad \frac{\Delta H\ 60\ R}{\Delta t(r+2H_{avg})}$$

Δt =	30.00
D_f =	48.00
r =	4.00
D_0 =	28
D_t =	48.00
H_0 =	20
H_f =	0
ΔH =	20.00
H_{avg} =	10.00

Δt (minutes)

D_f (Final Depth to water)

r (hole radius in inches)

D_0 (Initial Depth to water)

D_t (Total Depth of test hole)

H_0 (initial height of water at selected time interval)

$$H_0 = D_t - D_0$$

H_f (final height of water at the selected time interval)

$$H_f = D_t - D_f$$

ΔH (change in head over the time interval)

$$\Delta H = H_0 - H_f$$

H_{avg} (average head height over the time interval)

$$H_{avg} = (H_0 + H_f)/2$$

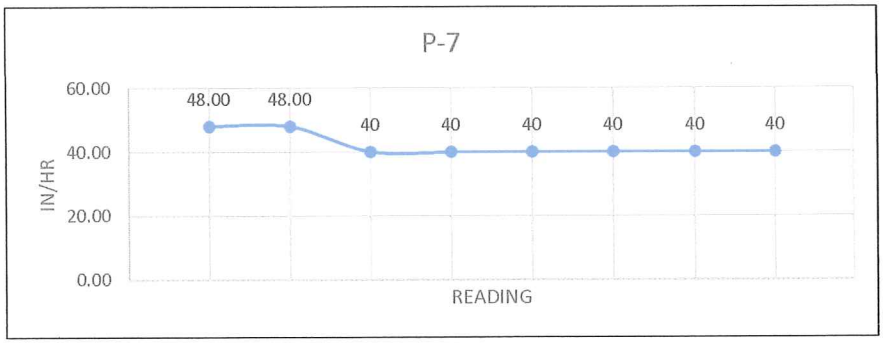
Field Rate:	40 in/hr
Infiltration Rate:	6.67 in/hr

STORMWATER PERCOLATION SHEET (LESS THAN 10 FT)

Project:	Mixed-Use Development	Depth (ft):	4.00
Job No. :	544-24159	USCS Soil Class:	SM
Date:	10/21/2024	Sandy Soil:	Favorable
Test Hole #:	P-7	Tested By:	Robert

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
A	25.00	4.00	20	0	20	48.00
B	25.00	4.00	20	0	20	48.00

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
1	30.00	4.00	20	0	20	40
2	30.00	4.00	20	0	20	40
3	30.00	4.00	20	0	20	40
4	30.00	4.00	20	0	20	40
5	30.00	4.00	20	0	20	40
6	30.00	4.00	20	0	20	40



PERCOLATION RATE CONVERSION (PORCHET METHOD)

$$I_{t=} \quad \frac{\Delta H\ 60\ R}{\Delta t(r+2H_{avg})}$$

Δt =	30.00
D_f =	48.00
r =	4.00
D_0 =	28
D_t =	48.00
H_0 =	20
H_f =	0
ΔH =	20.00
H_{avg} =	10.00

Δt (minutes)
D_f (Final Depth to water)
r (hole radius in inches)
D_0 (Initial Depth to water)
D_t (Total Depth of test hole)
H_0 (initial height of water at selected time interval)

$$H_0 = D_t - D_0$$

H_f (final height of water at the selected time interval)

$$H_f = D_t - D_f$$

ΔH (change in head over the time interval)

$$\Delta H = H_0 - H_f$$

H_{avg} (average head height over the time interval)

$$H_{avg} = (H_0 + H_f)/2$$

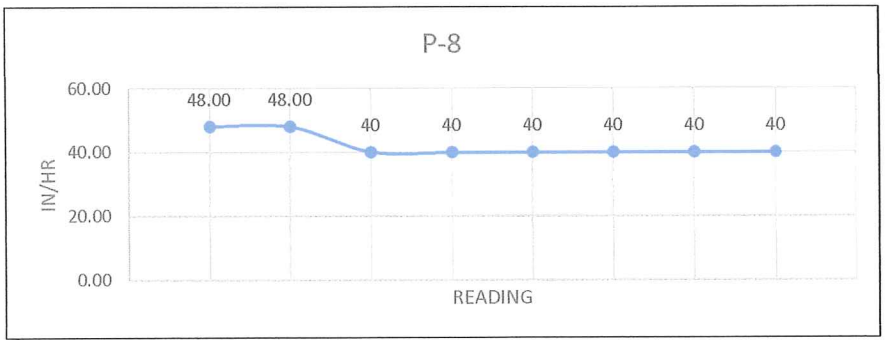
Field Rate:	40 in/hr
Infiltration Rate:	6.67 in/hr

STORMWATER PERCOLATION SHEET (LESS THAN 10 FT)

Project:	Mixed-Use Development	Depth (ft):	4.00
Job No. :	544-24159	USCS Soil Class:	SM
Date:	10/21/2024	Sandy Soil:	Favorable
Test Hole #:	P-8	Tested By:	Robert

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
A	25.00	4.00	20	0	20	48.00
B	25.00	4.00	20	0	20	48.00

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
1	30.00	4.00	20	0	20	40
2	30.00	4.00	20	0	20	40
3	30.00	4.00	20	0	20	40
4	30.00	4.00	20	0	20	40
5	30.00	4.00	20	0	20	40
6	30.00	4.00	20	0	20	40



PERCOLATION RATE CONVERSION (PORCHET METHOD)

$$I_{t=} \quad \frac{\Delta H\ 60\ R}{\Delta t(r+2H_{avg})}$$

Δt =	30.00
D_f =	48.00
r =	4.00
D_0 =	28
D_t =	48.00
H_0 =	20
H_f =	0
ΔH =	20.00
H_{avg} =	10.00

Δt (minutes)

D_f (Final Depth to water)

r (hole radius in inches)

D_0 (Initial Depth to water)

D_t (Total Depth of test hole)

H_0 (initial height of water at selected time interval)

$$H_0 = D_t - D_0$$

H_f (final height of water at the selected time interval)

$$H_f = D_t - D_f$$

ΔH (change in head over the time interval)

$$\Delta H = H_0 - H_f$$

H_{avg} (average head height over the time interval)

$$H_{avg} = (H_0 + H_f)/2$$

Field Rate:	40 in/hr
Infiltration Rate:	6.67 in/hr

Appendix F

RCFCD Synthetic Unit Hydrograph Worksheets

RCFCD SYNTHETIC UNIT HYDROGRAPH - SHORTCUT METHOD

DATA INPUT SHEET

DATE	December 10, 2025
WORKSHEET PREPARED BY:	saw
PROJECT NAME	COVA
PROJECT NUMBER	2811
CONCENTRATION POINT DESIGNATION	Retention Basin
AREA DESIGNATION	Site
AMC NUMBER	2

Low Loss Conditions: X=Existing; D=Developed; BS=Retention

AREA DESIG	SOIL GROUP	TRIBUTARY AREAS	ACRES	LOW LOSS CONDITION	RI NUMBER	AMC II INFILTRATION RATE	IMPERVIOUS PERCENT
2	A	PAVING/HARDSCAPE	1.04	D	32	0.74	1.00
6	A	MF - CONDIMINIUMS	4.03	D	32	0.74	0.65
2	B	PAVING/HARDSCAPE	9.42	D	56	0.51	1.00
6	B	MF - CONDIMINIUMS	66.65	D	56	0.51	0.65

LENGTH OF WATERCOURSE (L)	2,675 ft
LENGTH TO POINT OPPOSITE CENTROID (Lca)	1,120 ft
ELEVATION OF HEADWATER	449.9 ft
ELEVATION OF CONCENTRATION POINT	440.4 ft
AVERAGE MANNINGS 'N' VALUE	0.015
STORM FREQUENCY (YEAR)	100
LOW LOSS RATE (Storm Events > 10 Years)	**85%**
POINT RAIN FROM NOAA ATLAS	**14**
1-HOUR	1.30 in
3-HOUR	2.08 in
6-HOUR	2.75 in
24-HOUR	4.38 in

BASIN CHARACTERISTICS:

ELEVATION	AREA
434.0 ft	60,573 sf
434.5 ft	64,163 sf
435.5 ft	71,428 sf
436.5 ft	78,807 sf
437.5 ft	86,298 sf
438.5 ft	93,903 sf
439.5 ft	101,621 sf

PERCOLATION RATE (in/hr)	0.9 in/hr
DRYWELL DATA	
NUMBER USED	0
PERCOLATION RATE	0.00 cfs
LOWEST FLOWLINE ELEVATION	440
LOWEST PAD ELEVATION	442

RCFC & WCD HYDROLOGY MANUAL	SYNTHETIC UNIT HYDROGRAPH METHOD BASIC DATA CALCULATION FORM	PROJECT: COVA Job No.: 2811 BY: saw DATE: 12/10/25

PHYSICAL DATA

[1] CONCENTRATION POINT	Retention Basin
[2] AREA DESIGNATION	Site
[3] AREA - ACRES	81.14
[4] L-FEET	2675
[5] L-MILES	0.507
[6] La-FEET	1120.00
[7] La-MILES	0.212
[8] ELEVATION OF HEADWATER	449.87
[9] ELEVATION OF CONCENTRATION POINT	440.39
[10] H-FEET	9.48
[11] S-FEET/MILE	18.7
[12] S^0.5	4.33
[13] L*LCA/S^0.5	0.025
[14] AVERAGE MANNINGS 'N'	0.015
[15] LAG TIME-HOURS	0.09
[16] LAG TIME-MINUTES	5.3
[17] 100% OF LAG-MINUTES	5.3
[18] 200% OF LAG-MINUTES	10.6

RAINFALL DATA

[1] AMC	II
[2] FREQUENCY-YEARS	100
FROM NOAA ATLAS	**14**
[3] STORM DURATION:	Point Rain
1-HOUR	1.30 in
3-HOUR	2.08 in
6-HOUR	2.75 in
24-HOUR	4.38 in

STORM EVENT SUMMARY

STORM DURATION		1-HOUR	3-HOUR	6-HOUR	24-HOUR
EFFECTIVE RAIN	(in)	1.10	1.50	1.60	1.78
FLOOD VOLUME	(cu-ft)	325,179	441,160	472,562	**524,686**
	(acre-ft)	7.47	10.13	10.85	**12.05**
REQUIRED STORAGE	(cu-ft)	319,900	424,813	**443,609**	431,345
	(acre-ft)	7.34	9.75	**10.18**	9.90
FACTOR OF SAFETY		1.39	1.05	1.00	1.03
STORAGE PROVIDED	(cu-ft)	444,365			
	(acre-ft)	10.20			
PEAK FLOW	(cfs)	n/a	151.42	135.16	34.93
MAXIMUM WSEL	(ft)	438.20	439.30	**439.49**	439.37
DEPTH	(ft)	4.20	5.30	**5.49**	5.37
LOWEST FLOWLINE ELEVATION		440.00			
DIFFERENCE	(ft)	1.80	0.70	0.51	0.63
LOWEST PAD ELEVATION		442.00			
DIFFERENCE	(ft)	3.80	2.70	2.51	2.63
ESTIMATED TIME TO DEWATER BASIN Based on Total Flood Volume & Average Percolation Rate	(days)	2.6	3.4	3.9	4.0

NOTE: PEAK FLOW FOR THE 1-HOUR STORM IS NOT REPRESENTATIVE. PER RCFCD PEAK DISCHARGES FROM THE 3-HOUR STORM SHOULD NORMALLY COMPARE WELL WITH RATIONAL PEAKS.

RCFC & WCD HYDROLOGY MANUAL	SYNTHETIC UNIT HYDROGRAPH METHOD BASIC DATA CALCULATION FORM AMC II	PROJECT: COVA Job No.: 2811 BY: saw DATE: 12/10/25

AVERAGE ADJUSTED LOSS RATE

SOIL GROUP [Plate C-1]	LAND USE	RI NUMBER [Plate E-6.1]	PERVIOUS AREA INFILTRATION RATE (in/hr) [Plate E-6.2]	DECIMAL PERCENT OF AREA IMPERVIOUS [Plate E-6.3]	ADJUSTED INFILTRATION RATE (in/hr)	AREA	AREA WEIGHTED AVERAGE	MAX AVERAGE ADJUSTED INFILTRATION RATE (in/hr)	LOW LOSS CONDITION	LOW LOSS RATE PER RCFC/2322	MIN AVERAGE ADJUSTED INFILTRATION RATE
A	PAVING/HARDSCAPE	32	0.74	100%	0.07	1.04	0.013	0.0009	DEVELOPED	0.1000	0.0013
A	MF - CONDIMINIUMS	32	0.74	65%	0.31	4.03	0.050	0.0153	DEVELOPED	0.3800	0.0189
B	PAVING/HARDSCAPE	56	0.51	100%	0.05	9.42	0.116	0.0059	DEVELOPED	0.1000	0.0116
B	MF - CONDIMINIUMS	56	0.51	65%	0.21	66.65	0.821	0.1739	DEVELOPED	0.3800	0.3121
					SUM	81.14	SUM	0.1960			0.3439

VARIABLE LOSS RATE CURVE (24-HOUR STORM ONLY)

Fm= 0.097987833

C= 0.00181

$F_t=C(24-(T/60))^{1.55}+F_m$ = 0.00181 (24-(T/60))^1.55 + 0.10 in/hr

CONSTANT LOSS RATE (3 & 6 HOUR STORMS) = **0.1960**

LOW LOSS RATE = **0.8500**

Where:

T=Time in minutes. To get an average value for each unit time period, Use T=1/2 the unit time for the first time period, T=1 1/2 unit time for the second period, etc.

NOTE: Low loss rates established per RCFC/2322 (Dated: May-30-95)
For 10 Year Storms or Less
Undeveloped Condition: Low Loss = 90%
Developed Condition: Low Loss = 0.9 - (0.8 * %impervious)
Basin Site: Low Loss = 10%
For 100 Year Storm - Low Loss should be between 80% & 90% of the Rainfall Rate

RCFC & WCD
HYDROLOGY MANUAL

SYNTHETIC UNIT HYDROGRAPH METHOD

SHORTCUT METHOD

1-HOUR STORM

UNIT HYDROGRAPH and EFFECTIVE RAIN CALCULATION FORM

PROJECT: COVA
Job No.: 2811
BY: saw DATE 12/10/25

DRAINAGE AREA-ACRES	81.14
UNIT TIME-MINUTES	5
LAG TIME - MINUTES	5.30
UNIT TIME-PERCENT OF LAG	94.3
TOTAL ADJUSTED STORM RAIN-INCHES	1.30
CONSTANT LOSS RATE-in/hr	0.20
LOW LOSS RATE - PERCENT	85.00%

Basin Percolation Rate	0.9 in/hr	
Maxwell Drywells		
Number	0	
Drywell Percolation Rate	0.00 cfs	0.00 cfm

Unit Time Period	Time Minutes	Time Hours	Pattern Percent (Plate E-5.9)	Storm Rain in/hr	Loss Rate in/hr Max	Loss Rate in/hr Low	Effective Rain in/hr	Flood Hydrograph Flow cfs	Volume In cu-ft	Basin Volume cu-ft	Basin Losses Percolation Area sf	Basin Losses Maximum Percolation cu-ft	Basin Losses Percolation Out cu-ft	Total In Basin cu-ft	Total In Basin ac-ft	Basin WSEL ft
1	5	0.08	3.6	0.56	0.20	0.48	0.37	29.91	8,974	8,974	61,606	368	368	8,606	0.20	434.14
2	10	0.17	4.2	0.66	0.20	0.56	0.46	37.57	11,272	19,878	62,862	375	375	19,503	0.45	434.31
3	15	0.25	4.4	0.69	0.20	0.58	0.49	40.12	12,037	31,540	64,202	383	383	31,157	0.72	434.50
4	20	0.33	4.6	0.72	0.20	0.61	0.52	42.68	12,803	43,960	65,533	391	391	43,568	1.00	434.68
5	25	0.42	5.0	0.78	0.20	0.66	0.58	47.78	14,335	57,903	67,028	400	400	57,503	1.32	434.89
6	30	0.50	5.6	0.87	0.20	0.74	0.68	55.44	16,632	74,135	68,768	411	411	73,724	1.69	435.13
7	35	0.58	6.4	1.00	0.20	0.85	0.80	65.65	19,695	93,420	70,836	423	423	92,997	2.13	435.41
8	40	0.67	8.1	1.26	0.20	1.07	1.07	87.35	26,205	119,202	73,419	438	438	118,763	2.73	435.76
9	45	0.75	13.1	2.04	0.20	1.74	1.85	151.17	45,350	164,113	77,832	465	465	163,648	3.76	436.36
10	50	0.83	34.5	5.38	0.20	4.57	5.19	**424.30**	**127,291**	290,939	89,201	533	533	290,406	6.67	437.88
11	55	0.92	6.7	1.05	0.20	0.89	0.85	69.48	20,844	311,250	90,916	543	543	310,707	7.13	438.10
12	60	1.00	3.8	0.59	0.20	0.50	0.40	32.47	9,740	320,447	91,693	548	548	**319,900**	**7.34**	**438.20**

EFFECTIVE RAIN & FLOOD VOLUMES SUMMARY

EFFECTIVE RAIN	1.10 in
FLOOD VOLUME	7.47 acft
FLOOD VOLUME	325,179 cu-ft
REQUIRED STORAGE	7.34
REQUIRED STORAGE	319,900 cu-ft
MAX WSEL	438.20 ft
PEAK FLOW RATE	424.30 cfs
TOTAL BASIN LOSSES	5,279 cu-ft
AVERAGE PERCOLATION RATE	87.98 cf/min

RCFC & WCD
HYDROLOGY MANUAL

SYNTHETIC UNIT HYDROGRAPH METHOD

SHORTCUT METHOD

3-HOUR STORM

UNIT HYDROGRAPH and EFFECTIVE RAIN CALCULATION FORM

PROJECT: COVA
Job No.: 2811
BY: saw DATE

DRAINAGE AREA-ACRES	81.14
UNIT TIME-MINUTES	5
LAG TIME - MINUTES	5.30
UNIT TIME-PERCENT OF LAG	94.3
TOTAL ADJUSTED STORM RAIN (in)	2.08
CONSTANT LOSS RATE (in/hr)	0.20
LOW LOSS RATE - PERCENT	85.00%

Basin Percolation Rate	0.9 in/hr	
Maxwell Drywells		
Number	0	
Drywell Percolation Rate	0.00 cfs	0.00 cfm

Unit Time Period	Time		Pattern Percent	Storm Rain	Loss Rate in/hr		Effective Rain	Flood Hydrograph Flow	Volume In	Basin Volume	Basin Losses			Total In Basin		Basin WSEL
	Minutes	Hours	(Plate E-5.9)	in/hr	Max	Low	in/hr	cfs	cu-ft	cu-ft	Percolation Area sf	Maximum Percolation cu-ft	Percolation Out cu-ft	cu-ft	ac-ft	ft
1	5	0.08	1.3	0.32	0.20	0.28	0.13	10.51	3,154	3,154	60,936	364	364	2,790	0.06	434.04
2	10	0.17	1.3	0.32	0.20	0.28	0.13	10.51	3,154	5,944	61,257	366	366	5,578	0.13	434.09
3	15	0.25	1.1	0.27	0.20	0.23	0.08	6.43	1,929	7,507	61,437	367	367	7,140	0.16	434.11
4	20	0.33	1.5	0.37	0.20	0.32	0.18	14.60	4,379	11,520	61,899	370	370	11,150	0.26	434.18
5	25	0.42	1.5	0.37	0.20	0.32	0.18	14.60	4,379	15,530	62,361	372	372	15,157	0.35	434.24
6	30	0.50	1.8	0.45	0.20	0.38	0.25	20.72	6,217	21,374	63,034	376	376	20,998	0.48	434.34
7	35	0.58	1.5	0.37	0.20	0.32	0.18	14.60	4,379	25,377	63,495	379	379	24,998	0.57	434.40
8	40	0.67	1.8	0.45	0.20	0.38	0.25	20.72	6,217	31,216	64,167	383	383	30,832	0.71	434.49
9	45	0.75	1.8	0.45	0.20	0.38	0.25	20.72	6,217	37,050	64,792	387	387	36,663	0.84	434.58
10	50	0.83	1.5	0.37	0.20	0.32	0.18	14.60	4,379	41,042	65,220	390	390	40,653	0.93	434.64
11	55	0.92	1.6	0.40	0.20	0.34	0.20	16.64	4,992	45,645	65,714	392	392	45,252	1.04	434.71
12	60	1.00	1.8	0.45	0.20	0.38	0.25	20.72	6,217	51,470	66,338	396	396	51,073	1.17	434.79
13	65	1.08	2.2	0.55	0.20	0.47	0.35	28.89	8,668	59,741	67,225	401	401	59,340	1.36	434.92
14	70	1.17	2.2	0.55	0.20	0.47	0.35	28.89	8,668	68,008	68,111	407	407	67,601	1.55	435.04
15	75	1.25	2.2	0.55	0.20	0.47	0.35	28.89	8,668	76,269	68,997	412	412	75,857	1.74	435.16
16	80	1.33	2.0	0.50	0.20	0.42	0.30	24.81	7,443	83,299	69,751	417	417	82,883	1.90	435.26
17	85	1.42	2.6	0.65	0.20	0.55	0.45	37.06	11,118	94,001	70,898	423	423	93,578	2.15	435.42
18	90	1.50	2.7	0.67	0.20	0.57	0.48	39.10	11,731	105,309	72,054	430	430	104,879	2.41	435.58
19	95	1.58	2.4	0.60	0.20	0.51	0.40	32.98	9,893	114,772	72,984	436	436	114,336	2.62	435.71
20	100	1.67	2.7	0.67	0.20	0.57	0.48	39.10	11,731	126,067	74,094	443	443	125,625	2.88	435.86
21	105	1.75	3.3	0.82	0.20	0.70	0.63	51.36	15,407	141,032	75,564	451	451	140,580	3.23	436.05
22	110	1.83	3.1	0.77	0.20	0.66	0.58	47.27	14,182	154,762	76,913	459	459	154,303	3.54	436.24
23	115	1.92	2.9	0.72	0.20	0.62	0.53	43.19	12,956	167,259	78,142	467	467	166,792	3.83	436.40
24	120	2.00	3.0	0.75	0.20	0.64	0.55	45.23	13,569	180,361	79,382	474	474	179,887	4.13	436.57

RCFC & WCD
HYDROLOGY MANUAL

SYNTHETIC UNIT HYDROGRAPH METHOD

SHORTCUT METHOD

3-HOUR STORM

UNIT HYDROGRAPH and EFFECTIVE RAIN CALCULATION FORM

PROJECT: COVA
Job No.: 2811
BY: saw DATE

DRAINAGE AREA-ACRES	81.14
UNIT TIME-MINUTES	5
LAG TIME - MINUTES	5.30
UNIT TIME-PERCENT OF LAG	94.3
TOTAL ADJUSTED STORM RAIN (in)	2.08
CONSTANT LOSS RATE (in/hr)	0.20
LOW LOSS RATE - PERCENT	85.00%

Basin Percolation Rate	0.9 in/hr	
Maxwell Drywells		
Number	0	
Drywell Percolation Rate	0.00 cfs	0.00 cfm

Unit Time Period	Time		Pattern Percent	Storm Rain	Loss Rate in/hr		Effective Rain	Flood Hydrograph Flow	Volume In	Basin Volume	Basin Losses			Total In Basin		Basin WSEL
	Minutes	Hours	(Plate E-5.9)	in/hr	Max	Low	in/hr	cfs	cu-ft	cu-ft	Percolation Area sf	Maximum Percolation cu-ft	Percolation Out cu-ft	cu-ft	ac-ft	ft
25	125	2.08	3.1	0.77	0.20	0.66	0.58	47.27	14,182	194,069	80,626	482	482	193,588	4.44	436.74
26	130	2.17	4.2	1.05	0.20	0.89	0.85	69.74	20,921	214,508	82,481	493	493	214,016	4.91	436.98
27	135	2.25	5.0	1.25	0.20	1.06	1.05	86.07	25,822	239,838	84,781	506	506	239,331	5.49	437.29
28	140	2.33	3.5	0.87	0.20	0.74	0.68	55.44	16,632	255,963	86,244	515	515	255,448	5.86	437.49
29	145	2.42	6.8	1.70	0.20	1.44	1.50	122.83	36,849	292,298	89,316	533	533	291,764	6.70	437.89
30	150	2.50	7.3	1.82	0.20	1.55	1.63	133.04	39,913	331,677	92,641	553	553	331,124	7.60	438.33
31	155	2.58	8.2	2.05	0.20	1.74	1.85	**151.42**	**45,426**	376,550	96,266	575	575	375,975	8.63	438.80
32	160	2.67	5.9	1.47	0.20	1.25	1.28	104.45	31,336	407,311	98,695	589	589	406,722	9.34	439.11
33	165	2.75	2.0	0.50	0.20	0.42	0.30	24.81	7,443	414,164	99,236	593	593	413,571	9.49	439.18
34	170	2.83	1.8	0.45	0.20	0.38	0.25	20.72	6,217	419,789	99,680	595	595	419,194	9.62	439.24
35	175	2.92	1.8	0.45	0.20	0.38	0.25	20.72	6,217	425,411	100,124	598	598	**424,813**	**9.75**	**439.30**
36	180	3.00	0.6	0.15	0.20	0.13	0.02	1.84	551	425,364	100,121	598	598	424,766	9.75	439.30

EFFECTIVE RAIN & FLOOD VOLUMES SUMMARY

EFFECTIVE RAIN	1.50 in
FLOOD VOLUME	10.13 acft
FLOOD VOLUME	441,160 cu-ft
REQUIRED STORAGE	9.75 acft
REQUIRED STORAGE	424,813 cu-ft
MAX WSEL	439.30 ft
PEAK FLOW RATE	151.42 cfs
TOTAL BASIN LOSSES	16,394 cu-ft
AVERAGE PERCOLATION RATE	91.08 cf/min

RCFC & WCD
HYDROLOGY
MANUAL

SYNTHETIC UNIT HYDROGRAPH METHOD

SHORTCUT METHOD

6-HOUR STORM

UNIT HYDROGRAPH and EFFECTIVE RAIN CALCULATION FORM

PROJECT: COVA
Job No.: 2811
BY: saw DATE 12/10/25

DRAINAGE AREA-ACRES	81.14
UNIT TIME-MINUTES	5
LAG TIME - MINUTES	5.30
UNIT TIME-PERCENT OF LAG	94.3
TOTAL ADJUSTED STORM RAIN (in)	2.75
CONSTANT LOSS RATE (in/hr)	0.20
LOW LOSS RATE - PERCENT	85.00%

Basin Percolation Rate	0.9 in/hr	
Maxwell Drywells		
Number	0	
Drywell Percolation Rate	0.00 cfs	0.00 cfm

Unit Time Period	Time		Pattern	Storm Rain	Loss Rate		Effective Rain	Flood Hydrograph	Volume In	Basin Volume	Basin Losses			Total In Basin		Basin WSEL
	Minutes	Hours	Percent	in/hr	in/hr Max	Low	in/hr	Flow cfs	cu-ft	cu-ft	Percolation Area sf	Maximum Percolation cu-ft	Percolation Out cu-ft	cu-ft	ac-ft	ft
			(Plate E-5.9)													
1	5	0.08	0.5	0.17	0.20	0.14	0.02	2.02	607	607	60,643	362	362	245	0.01	434.00
2	10	0.17	0.6	0.20	0.20	0.17	0.00	0.17	50	295	60,607	362	295	0	0.00	434.00
3	15	0.25	0.6	0.20	0.20	0.17	0.00	0.17	50	50	60,579	362	50	0	0.00	434.00
4	20	0.33	0.6	0.20	0.20	0.17	0.00	0.17	50	50	60,579	362	50	0	0.00	434.00
5	25	0.42	0.6	0.20	0.20	0.17	0.00	0.17	50	50	60,579	362	50	0	0.00	434.00
6	30	0.50	0.7	0.23	0.20	0.20	0.04	2.87	860	860	60,672	362	362	497	0.01	434.01
7	35	0.58	0.7	0.23	0.20	0.20	0.04	2.87	860	1,357	60,729	363	363	994	0.02	434.02
8	40	0.67	0.7	0.23	0.20	0.20	0.04	2.87	860	1,854	60,786	363	363	1,491	0.03	434.02
9	45	0.75	0.7	0.23	0.20	0.20	0.04	2.87	860	2,351	60,844	363	363	1,987	0.05	434.03
10	50	0.83	0.7	0.23	0.20	0.20	0.04	2.87	860	2,847	60,901	364	364	2,483	0.06	434.04
11	55	0.92	0.7	0.23	0.20	0.20	0.04	2.87	860	3,343	60,958	364	364	2,979	0.07	434.05
12	60	1.00	0.8	0.26	0.20	0.22	0.07	5.57	1,670	4,648	61,108	365	365	4,284	0.10	434.07
13	65	1.08	0.8	0.26	0.20	0.22	0.07	5.57	1,670	5,953	61,258	366	366	5,587	0.13	434.09
14	70	1.17	0.8	0.26	0.20	0.22	0.07	5.57	1,670	7,257	61,409	367	367	6,890	0.16	434.11
15	75	1.25	0.8	0.26	0.20	0.22	0.07	5.57	1,670	8,560	61,559	368	368	8,192	0.19	434.13
16	80	1.33	0.8	0.26	0.20	0.22	0.07	5.57	1,670	9,862	61,708	369	369	9,493	0.22	434.15
17	85	1.42	0.8	0.26	0.20	0.22	0.07	5.57	1,670	11,163	61,858	369	369	10,794	0.25	434.17
18	90	1.50	0.8	0.26	0.20	0.22	0.07	5.57	1,670	12,463	62,008	370	370	12,093	0.28	434.19
19	95	1.58	0.8	0.26	0.20	0.22	0.07	5.57	1,670	13,763	62,158	371	371	13,391	0.31	434.21
20	100	1.67	0.8	0.26	0.20	0.22	0.07	5.57	1,670	15,061	62,307	372	372	14,689	0.34	434.24
21	105	1.75	0.8	0.26	0.20	0.22	0.07	5.57	1,670	16,359	62,457	373	373	15,986	0.37	434.26
22	110	1.83	0.8	0.26	0.20	0.22	0.07	5.57	1,670	17,655	62,606	374	374	17,281	0.40	434.28
23	115	1.92	0.8	0.26	0.20	0.22	0.07	5.57	1,670	18,951	62,755	375	375	18,576	0.43	434.30
24	120	2.00	0.9	0.30	0.20	0.25	0.10	8.27	2,480	21,056	62,997	376	376	20,680	0.47	434.33
25	125	2.08	0.8	0.26	0.20	0.22	0.07	5.57	1,670	22,349	63,146	377	377	21,972	0.50	434.35
26	130	2.17	0.9	0.30	0.20	0.25	0.10	8.27	2,480	24,452	63,388	379	379	24,073	0.55	434.39
27	135	2.25	0.9	0.30	0.20	0.25	0.10	8.27	2,480	26,553	63,630	380	380	26,173	0.60	434.42
28	140	2.33	0.9	0.30	0.20	0.25	0.10	8.27	2,480	28,652	63,872	381	381	28,271	0.65	434.45
29	145	2.42	0.9	0.30	0.20	0.25	0.10	8.27	2,480	30,751	64,114	383	383	30,368	0.70	434.49
30	150	2.50	0.9	0.30	0.20	0.25	0.10	8.27	2,480	32,847	64,342	384	384	32,463	0.75	434.52
31	155	2.58	0.9	0.30	0.20	0.25	0.10	8.27	2,480	34,943	64,566	386	386	34,557	0.79	434.55
32	160	2.67	0.9	0.30	0.20	0.25	0.10	8.27	2,480	37,037	64,791	387	387	36,650	0.84	434.58
33	165	2.75	1.0	0.33	0.20	0.28	0.13	10.97	3,290	39,939	65,102	389	389	39,551	0.91	434.62
34	170	2.83	1.0	0.33	0.20	0.28	0.13	10.97	3,290	42,840	65,413	391	391	42,450	0.97	434.67
35	175	2.92	1.0	0.33	0.20	0.28	0.13	10.97	3,290	45,739	65,724	393	393	45,347	1.04	434.71

RCFC & WCD
HYDROLOGY
MANUAL

SYNTHETIC UNIT HYDROGRAPH METHOD

SHORTCUT METHOD

6-HOUR STORM

UNIT HYDROGRAPH and EFFECTIVE RAIN CALCULATION FORM

PROJECT: COVA
Job No.: 2811
BY: saw DATE 12/10/25

DRAINAGE AREA-ACRES	81.14
UNIT TIME-MINUTES	5
LAG TIME - MINUTES	5.30
UNIT TIME-PERCENT OF LAG	94.3
TOTAL ADJUSTED STORM RAIN (in)	2.75
CONSTANT LOSS RATE (in/hr)	0.20
LOW LOSS RATE - PERCENT	85.00%

Basin Percolation Rate	0.9 in/hr	
Maxwell Drywells		
Number	0	
Drywell Percolation Rate	0.00 cfs	0.00 cfm

Unit Time Period	Time		Pattern Percent	Storm Rain	Loss Rate in/hr		Effective Rain	Flood Hydrograph Flow	Volume In	Basin Volume	Basin Losses			Total In Basin		Basin WSEL
	Minutes	Hours		in/hr	Max	Low	in/hr	cfs	cu-ft	cu-ft	Percolation Area sf	Maximum Percolation cu-ft	Percolation Out cu-ft	cu-ft	ac-ft	ft
			(Plate E-5.9)													
36	180	3.00	1.0	0.33	0.20	0.28	0.13	10.97	3,290	48,636	66,035	394	394	48,242	1.11	434.75
37	185	3.08	1.0	0.33	0.20	0.28	0.13	10.97	3,290	51,532	66,345	396	396	51,135	1.17	434.79
38	190	3.17	1.1	0.36	0.20	0.31	0.17	13.67	4,100	55,235	66,742	399	399	54,836	1.26	434.85
39	195	3.25	1.1	0.36	0.20	0.31	0.17	13.67	4,100	58,936	67,139	401	401	58,535	1.34	434.90
40	200	3.33	1.1	0.36	0.20	0.31	0.17	13.67	4,100	62,635	67,535	403	403	62,231	1.43	434.96
41	205	3.42	1.2	0.40	0.20	0.34	0.20	16.37	4,910	67,141	68,018	406	406	66,735	1.53	435.02
42	210	3.50	1.3	0.43	0.20	0.36	0.23	19.07	5,720	72,454	68,588	410	410	72,045	1.65	435.10
43	215	3.58	1.4	0.46	0.20	0.39	0.27	21.77	6,530	78,574	69,244	414	414	78,161	1.79	435.19
44	220	3.67	1.4	0.46	0.20	0.39	0.27	21.77	6,530	84,690	69,900	417	417	84,273	1.93	435.28
45	225	3.75	1.5	0.50	0.20	0.42	0.30	24.47	7,340	91,612	70,642	422	422	91,190	2.09	435.39
46	230	3.83	1.5	0.50	0.20	0.42	0.30	24.47	7,340	98,530	71,384	426	426	98,103	2.25	435.49
47	235	3.92	1.6	0.53	0.20	0.45	0.33	27.17	8,150	106,253	72,146	431	431	105,822	2.43	435.59
48	240	4.00	1.6	0.53	0.20	0.45	0.33	27.17	8,150	113,972	72,905	435	435	113,536	2.61	435.69
49	245	4.08	1.7	0.56	0.20	0.48	0.37	29.87	8,960	122,496	73,743	440	440	122,055	2.80	435.81
50	250	4.17	1.8	0.59	0.20	0.50	0.40	32.56	9,769	131,825	74,659	446	446	131,379	3.02	435.93
51	255	4.25	1.9	0.63	0.20	0.53	0.43	35.26	10,579	141,958	75,655	452	452	141,507	3.25	436.07
52	260	4.33	2.0	0.66	0.20	0.56	0.46	37.96	11,389	152,896	76,730	458	458	152,438	3.50	436.21
53	265	4.42	2.1	0.69	0.20	0.59	0.50	40.66	12,199	164,637	77,884	465	465	164,172	3.77	436.37
54	270	4.50	2.1	0.69	0.20	0.59	0.50	40.66	12,199	176,372	79,020	472	472	175,900	4.04	436.52
55	275	4.58	2.2	0.73	0.20	0.62	0.53	43.36	13,009	188,909	80,158	479	479	188,430	4.33	436.67
56	280	4.67	2.3	0.76	0.20	0.65	0.56	46.06	13,819	202,250	81,369	486	486	201,764	4.63	436.84
57	285	4.75	2.4	0.79	0.20	0.67	0.60	48.76	14,629	216,393	82,652	494	494	215,900	4.96	437.01
58	290	4.83	2.4	0.79	0.20	0.67	0.60	48.76	14,629	230,529	83,936	501	501	230,028	5.28	437.18
59	295	4.92	2.5	0.83	0.20	0.70	0.63	51.46	15,439	245,467	85,292	509	509	244,958	5.62	437.36
60	300	5.00	2.6	0.86	0.20	0.73	0.66	54.16	16,249	261,207	86,691	518	518	260,689	5.98	437.55
61	305	5.08	3.1	1.02	0.20	0.87	0.83	67.66	20,299	280,988	88,361	528	528	280,461	6.44	437.77
62	310	5.17	3.6	1.19	0.20	1.01	0.99	81.16	24,349	304,810	90,372	540	540	304,270	6.99	438.03
63	315	5.25	3.9	1.29	0.20	1.09	1.09	89.26	26,779	331,049	92,588	553	553	330,496	7.59	438.32
64	320	5.33	4.2	1.39	0.20	1.18	1.19	97.36	29,209	359,706	94,936	567	567	359,139	8.24	438.63
65	325	5.42	4.7	1.55	0.20	1.32	1.36	110.86	33,259	392,398	97,517	582	582	391,815	8.99	438.96
66	330	5.50	5.6	1.85	0.20	1.57	1.65	**135.16**	**40,549**	432,364	100,673	601	601	431,763	9.91	439.37
67	335	5.58	1.9	0.63	0.20	0.53	0.43	35.26	10,579	442,342	101,461	606	606	441,736	10.14	439.47
68	340	5.67	0.9	0.30	0.20	0.25	0.10	8.27	2,480	444,216	101,609	607	607	**443,609**	**10.18**	**439.49**
69	345	5.75	0.6	0.20	0.20	0.17	0.00	0.17	50	443,659	101,565	607	607	443,052	10.17	439.49
70	350	5.83	0.5	0.17	0.20	0.14	0.02	2.02	607	443,660	101,565	607	607	443,053	10.17	439.49

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HYDROLOGY
MANUAL

SYNTHETIC UNIT HYDROGRAPH METHOD

SHORTCUT METHOD

6-HOUR STORM

UNIT HYDROGRAPH and EFFECTIVE RAIN CALCULATION FORM

PROJECT: COVA
Job No.: 2811
BY: saw DATE 12/10/25

DRAINAGE AREA-ACRES	81.14
UNIT TIME-MINUTES	5
LAG TIME - MINUTES	5.30
UNIT TIME-PERCENT OF LAG	94.3
TOTAL ADJUSTED STORM RAIN (in)	2.75
CONSTANT LOSS RATE (in/hr)	0.20
LOW LOSS RATE - PERCENT	85.00%

Basin Percolation Rate	0.9 in/hr	
Maxwell Drywells		
Number	0	
Drywell Percolation Rate	0.00 cfs	0.00 cfm

Unit Time Period	Time		Pattern	Storm Rain	Loss Rate		Effective Rain	Flood Hydrograph	Volume In	Basin Volume	Basin Losses			Total In Basin		Basin WSEL
	Minutes	Hours	Percent	in/hr	in/hr Max	Low	in/hr	Flow cfs	cu-ft	cu-ft	Percolation Area sf	Maximum Percolation cu-ft	Percolation Out cu-ft	cu-ft	ac-ft	ft
			(Plate E-5.9)													
71	355	5.92	0.3	0.10	0.20	0.08	0.01	1.21	364	443,418	101,546	606	606	442,811	10.17	439.48
72	360	6.00	0.2	0.07	0.20	0.06	0.01	0.81	243	443,054	101,518	606	606	442,448	10.16	439.48

EFFECTIVE RAIN & FLOOD VOLUMES SUMMARY

EFFECTIVE RAIN	1.60 in
FLOOD VOLUME	10.85 acft
FLOOD VOLUME	472,562 cu-ft
REQUIRED STORAGE	10.18 acft
REQUIRED STORAGE	443,609 cu-ft
MAX WSEL	439.49 ft
PEAK FLOW RATE	135.16 cfs
TOTAL BASIN LOSSES	30,114 cu-ft
AVERAGE PERCOLATION RATE	83.65 cf/min

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MANUAL

SYNTHETIC UNIT HYDROGRAPH METHOD

SHORTCUT METHOD

24-HOUR STORM

UNIT HYDROGRAPH and EFFECTIVE RAIN CALCULATION FORM

PROJECT: COVA
Job No.: 2811
BY: saw DATE 12/10/25

DRAINAGE AREA-ACRES	81.14	VARIABLE LOSS RATE (AVG) IN/HR		Basin Percolation Rate	0.9 in/hr
UNIT TIME-MINUTES	15	Fm = Minimum value on loss curve (in/hr)	0.10		
LAG TIME - MINUTES	5.30	C	0.00181	Maxwell Drywells	
UNIT TIME-PERCENT OF LAG	283%	Low Loss Rate (percent)	85.00%	Number	0
TOTAL ADJUSTED STORM RAIN (in)	4.38			Drywell Percolation Rate	0.00 cfs 0.00 cfm

Unit Time Period	Time Minutes	Hours	Pattern Percent	Storm Rain in/hr	Loss Rate in/hr		Effective Rain	Flood Hydrograph Flow	Volume In	Basin Volume	Basin Losses			Total In Basin		Basin WSEL
											Percolation Area	Maximum Percolation	Percolation Out			
			(Plate E-5.9)		Max	Low	in/hr	cfs	cu-ft	cu-ft	sf	cu-ft	cu-ft	cu-ft	ac-ft	ft
1	15	0.25	0.2	0.035	0.346	0.030	0.01	0.43	387	387	60,618	1,086	387	0	0.00	434.00
2	30	0.50	0.3	0.053	0.342	0.045	0.01	0.65	581	581	60,640	1,086	581	0	0.00	434.00
3	45	0.75	0.3	0.053	0.338	0.045	0.01	0.65	581	581	60,640	1,086	581	0	0.00	434.00
4	60	1.00	0.4	0.070	0.334	0.060	0.01	0.86	774	774	60,662	1,087	774	0	0.00	434.00
5	75	1.25	0.3	0.053	0.330	0.045	0.01	0.65	581	581	60,640	1,086	581	0	0.00	434.00
6	90	1.50	0.3	0.053	0.326	0.045	0.01	0.65	581	581	60,640	1,086	581	0	0.00	434.00
7	105	1.75	0.3	0.053	0.322	0.045	0.01	0.65	581	581	60,640	1,086	581	0	0.00	434.00
8	120	2.00	0.4	0.070	0.318	0.060	0.01	0.86	774	774	60,662	1,087	774	0	0.00	434.00
9	135	2.25	0.4	0.070	0.315	0.060	0.01	0.86	774	774	60,662	1,087	774	0	0.00	434.00
10	150	2.50	0.4	0.070	0.311	0.060	0.01	0.86	774	774	60,662	1,087	774	0	0.00	434.00
11	165	2.75	0.5	0.088	0.307	0.074	0.01	1.08	968	968	60,684	1,087	968	0	0.00	434.00
12	180	3.00	0.5	0.088	0.303	0.074	0.01	1.08	968	968	60,684	1,087	968	0	0.00	434.00
13	195	3.25	0.5	0.088	0.299	0.074	0.01	1.08	968	968	60,684	1,087	968	0	0.00	434.00
14	210	3.50	0.5	0.088	0.296	0.074	0.01	1.08	968	968	60,684	1,087	968	0	0.00	434.00
15	225	3.75	0.5	0.088	0.292	0.074	0.01	1.08	968	968	60,684	1,087	968	0	0.00	434.00
16	240	4.00	0.6	0.105	0.288	0.089	0.02	1.29	1,161	1,161	60,707	1,088	1,088	73	0.00	434.00
17	255	4.25	0.6	0.105	0.285	0.089	0.02	1.29	1,161	1,234	60,715	1,088	1,088	147	0.00	434.00
18	270	4.50	0.7	0.123	0.281	0.104	0.02	1.51	1,355	1,501	60,746	1,088	1,088	413	0.01	434.01
19	285	4.75	0.7	0.123	0.277	0.104	0.02	1.51	1,355	1,767	60,777	1,089	1,089	679	0.02	434.01
20	300	5.00	0.8	0.140	0.274	0.119	0.02	1.72	1,548	2,227	60,829	1,090	1,090	1,137	0.03	434.02
21	315	5.25	0.6	0.105	0.270	0.089	0.02	1.29	1,161	2,298	60,838	1,090	1,090	1,208	0.03	434.02
22	330	5.50	0.7	0.123	0.267	0.104	0.02	1.51	1,355	2,562	60,868	1,091	1,091	1,472	0.03	434.02
23	345	5.75	0.8	0.140	0.263	0.119	0.02	1.72	1,548	3,020	60,921	1,091	1,091	1,929	0.04	434.03
24	360	6.00	0.8	0.140	0.260	0.119	0.02	1.72	1,548	3,477	60,973	1,092	1,092	2,384	0.05	434.04
25	375	6.25	0.9	0.158	0.256	0.134	0.02	1.94	1,742	4,126	61,048	1,094	1,094	3,032	0.07	434.05
26	390	6.50	0.9	0.158	0.253	0.134	0.02	1.94	1,742	4,774	61,123	1,095	1,095	3,679	0.08	434.06
27	405	6.75	1.0	0.175	0.250	0.149	0.03	2.15	1,935	5,614	61,219	1,097	1,097	4,517	0.10	434.07
28	420	7.00	1.0	0.175	0.246	0.149	0.03	2.15	1,935	6,452	61,316	1,099	1,099	5,353	0.12	434.09
29	435	7.25	1.0	0.175	0.243	0.149	0.03	2.15	1,935	7,288	61,412	1,100	1,100	6,188	0.14	434.10
30	450	7.50	1.1	0.193	0.240	0.164	0.03	2.37	2,129	8,317	61,531	1,102	1,102	7,214	0.17	434.12
31	465	7.75	1.2	0.210	0.236	0.179	0.03	2.58	2,322	9,537	61,671	1,105	1,105	8,432	0.19	434.14
32	480	8.00	1.3	0.228	0.233	0.194	0.03	2.80	2,516	10,947	61,833	1,108	1,108	9,839	0.23	434.16
33	495	8.25	1.5	0.263	0.230	0.223	0.03	2.70	2,432	12,271	61,986	1,111	1,111	11,160	0.26	434.18
34	510	8.50	1.5	0.263	0.227	0.223	0.04	2.96	2,667	13,828	62,165	1,114	1,114	12,714	0.29	434.20
35	525	8.75	1.6	0.280	0.223	0.238	0.06	4.66	4,191	16,905	62,519	1,120	1,120	15,785	0.36	434.25
36	540	9.00	1.7	0.298	0.220	0.253	0.08	6.35	5,713	21,498	63,048	1,130	1,130	20,368	0.47	434.33
37	555	9.25	1.9	0.333	0.217	0.283	0.12	9.47	8,523	28,891	63,900	1,145	1,145	27,746	0.64	434.44
38	570	9.50	2.0	0.350	0.214	0.298	0.14	11.16	10,040	37,787	64,871	1,162	1,162	36,624	0.84	434.58
39	585	9.75	2.1	0.368	0.211	0.313	0.16	12.84	11,556	48,180	65,986	1,182	1,182	46,998	1.08	434.73
40	600	10.00	2.2	0.385	0.208	0.328	0.18	14.52	13,069	60,067	67,260	1,205	1,205	58,862	1.35	434.91
41	615	10.25	1.5	0.263	0.205	0.223	0.06	4.73	4,260	63,122	67,588	1,211	1,211	61,911	1.42	434.95
42	630	10.50	1.5	0.263	0.202	0.223	0.06	4.98	4,478	66,389	67,938	1,217	1,217	65,172	1.50	435.00
43	645	10.75	2.0	0.350	0.199	0.298	0.15	12.38	11,146	76,318	69,002	1,236	1,236	75,081	1.72	435.15

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MANUAL

SYNTHETIC UNIT HYDROGRAPH METHOD

SHORTCUT METHOD

24-HOUR STORM

UNIT HYDROGRAPH and EFFECTIVE RAIN CALCULATION FORM

PROJECT: COVA
Job No.: 2811
BY: saw DATE 12/10/25

DRAINAGE AREA-ACRES	81.14	VARIABLE LOSS RATE (AVG) IN/HR		Basin Percolation Rate	0.9 in/hr
UNIT TIME-MINUTES	15	Fm = Minimum value on loss curve (in/hr)	0.10		
LAG TIME - MINUTES	5.30	C	0.00181	Maxwell Drywells	
UNIT TIME-PERCENT OF LAG	283%	Low Loss Rate (percent)	85.00%	Number	0
TOTAL ADJUSTED STORM RAIN (in)	4.38			Drywell Percolation Rate	0.00 cfs 0.00 cfm

Unit Time Period	Time Minutes	Hours	Pattern Percent	Storm Rain in/hr	Loss Rate in/hr		Effective Rain	Flood Hydrograph Flow	Volume In	Basin Volume	Basin Losses Percolation Area	Maximum Percolation	Percolation Out	Total In Basin		Basin WSEL
			(Plate E-5.9)		Max	Low	in/hr	cfs	cu-ft	cu-ft	sf	cu-ft	cu-ft	cu-ft	ac-ft	ft
44	660	11.00	2.0	0.350	0.196	0.298	0.15	12.62	11,360	86,441	70,088	1,256	1,256	85,186	1.96	435.30
45	675	11.25	1.9	0.333	0.193	0.283	0.14	11.42	10,282	95,468	71,055	1,273	1,273	94,195	2.16	435.43
46	690	11.50	1.9	0.333	0.190	0.283	0.14	11.66	10,492	104,687	71,992	1,290	1,290	103,397	2.37	435.56
47	705	11.75	1.7	0.298	0.188	0.253	0.11	9.02	8,120	111,517	72,664	1,302	1,302	110,215	2.53	435.65
48	720	12.00	1.8	0.315	0.185	0.268	0.13	10.68	9,615	119,830	73,481	1,317	1,317	118,513	2.72	435.76
49	735	12.25	2.5	0.438	0.182	0.372	0.26	20.94	18,849	137,362	75,204	1,347	1,347	136,015	3.12	435.99
50	750	12.50	2.6	0.456	0.179	0.387	0.28	22.60	20,340	156,355	77,070	1,381	1,381	154,974	3.56	436.25
51	765	12.75	2.8	0.491	0.177	0.417	0.31	25.69	23,118	178,092	79,176	1,419	1,419	176,673	4.06	436.53
52	780	13.00	2.9	0.508	0.174	0.432	0.33	27.34	24,604	201,278	81,280	1,456	1,456	199,821	4.59	436.81
53	795	13.25	3.4	0.596	0.171	0.506	0.42	34.72	31,248	231,070	83,985	1,505	1,505	229,565	5.27	437.17
54	810	13.50	3.4	0.596	0.169	0.506	0.43	**34.93**	**31,439**	261,004	86,674	1,553	1,553	259,452	5.96	437.53
55	825	13.75	2.3	0.403	0.166	0.343	0.24	19.37	17,437	276,889	88,015	1,577	1,577	275,312	6.32	437.71
56	840	14.00	2.3	0.403	0.164	0.343	0.24	19.58	17,623	292,935	89,370	1,601	1,601	291,334	6.69	437.89
57	855	14.25	2.7	0.473	0.161	0.402	0.31	25.52	22,968	314,302	91,174	1,634	1,634	312,668	7.18	438.12
58	870	14.50	2.6	0.456	0.159	0.387	0.30	24.29	21,859	334,527	92,881	1,664	1,664	332,863	7.64	438.35
59	885	14.75	2.6	0.456	0.156	0.387	0.30	24.49	22,037	354,900	94,556	1,694	1,694	353,206	8.11	438.57
60	900	15.00	2.5	0.438	0.154	0.372	0.28	23.25	20,923	374,129	96,075	1,721	1,721	372,408	8.55	438.76
61	915	15.25	2.4	0.420	0.151	0.357	0.27	22.01	19,806	392,214	97,503	1,747	1,747	390,467	8.96	438.95
62	930	15.50	2.3	0.403	0.149	0.343	0.25	20.76	18,687	409,154	98,841	1,771	1,771	407,383	9.35	439.12
63	945	15.75	1.9	0.333	0.147	0.283	0.19	15.22	13,695	421,078	99,782	1,788	1,788	419,290	9.63	439.24
64	960	16.00	1.9	0.333	0.145	0.283	0.19	15.40	13,860	433,150	100,735	1,805	1,805	**431,345**	**9.90**	**439.37**
65	975	16.25	0.4	0.070	0.142	0.060	0.01	0.86	774	432,119	100,654	1,803	1,803	430,316	9.88	439.36
66	990	16.50	0.4	0.070	0.140	0.060	0.01	0.86	774	431,090	100,573	1,802	1,802	429,288	9.86	439.35
67	1005	16.75	0.3	0.053	0.138	0.045	0.01	0.65	581	429,869	100,476	1,800	1,800	428,068	9.83	439.33
68	1020	17.00	0.3	0.053	0.136	0.045	0.01	0.65	581	428,649	100,380	1,798	1,798	426,850	9.80	439.32
69	1035	17.25	0.5	0.088	0.134	0.074	0.01	1.08	968	427,818	100,314	1,797	1,797	426,021	9.78	439.31
70	1050	17.50	0.5	0.088	0.132	0.074	0.01	1.08	968	426,988	100,249	1,796	1,796	425,192	9.76	439.30
71	1065	17.75	0.5	0.088	0.130	0.074	0.01	1.08	968	426,160	100,183	1,795	1,795	424,365	9.74	439.30
72	1080	18.00	0.4	0.070	0.128	0.060	0.01	0.86	774	425,139	100,103	1,794	1,794	423,345	9.72	439.28
73	1095	18.25	0.4	0.070	0.126	0.060	0.01	0.86	774	424,119	100,022	1,792	1,792	422,327	9.70	439.27
74	1110	18.50	0.4	0.070	0.124	0.060	0.01	0.86	774	423,101	99,942	1,791	1,791	421,311	9.67	439.26
75	1125	18.75	0.3	0.053	0.123	0.045	0.01	0.65	581	421,891	99,846	1,789	1,789	420,102	9.64	439.25
76	1140	19.00	0.2	0.035	0.121	0.030	0.01	0.43	387	420,489	99,736	1,787	1,787	418,702	9.61	439.24
77	1155	19.25	0.3	0.053	0.119	0.045	0.01	0.65	581	419,283	99,640	1,785	1,785	417,498	9.58	439.23
78	1170	19.50	0.4	0.070	0.117	0.060	0.01	0.86	774	418,272	99,561	1,784	1,784	416,488	9.56	439.21
79	1185	19.75	0.3	0.053	0.116	0.045	0.01	0.65	581	417,069	99,466	1,782	1,782	415,286	9.53	439.20
80	1200	20.00	0.2	0.035	0.114	0.030	0.01	0.43	387	415,673	99,355	1,780	1,780	413,893	9.50	439.19
81	1215	20.25	0.3	0.053	0.113	0.045	0.01	0.65	581	414,474	99,261	1,778	1,778	412,695	9.47	439.18
82	1230	20.50	0.3	0.053	0.111	0.045	0.01	0.65	581	413,276	99,166	1,777	1,777	411,499	9.45	439.16
83	1245	20.75	0.3	0.053	0.110	0.045	0.01	0.65	581	412,080	99,072	1,775	1,775	410,305	9.42	439.15
84	1260	21.00	0.2	0.035	0.109	0.030	0.01	0.43	387	410,692	98,962	1,773	1,773	408,919	9.39	439.14
85	1275	21.25	0.3	0.053	0.107	0.045	0.01	0.65	581	409,499	98,868	1,771	1,771	407,728	9.36	439.13
86	1290	21.50	0.2	0.035	0.106	0.030	0.01	0.43	387	408,115	98,758	1,769	1,769	406,346	9.33	439.11

RCFC & WCD
HYDROLOGY MANUAL

SYNTHETIC UNIT HYDROGRAPH METHOD

SHORTCUT METHOD

24-HOUR STORM

UNIT HYDROGRAPH and EFFECTIVE RAIN CALCULATION FORM

PROJECT: COVA
Job No.: 2811
BY: saw DATE 12/10/25

DRAINAGE AREA-ACRES	81.14	VARIABLE LOSS RATE (AVG) IN/HR		Basin Percolation Rate	0.9 in/hr
UNIT TIME-MINUTES	15	Fm = Minimum value on loss curve (in/hr)	0.10		
LAG TIME - MINUTES	5.30	C	0.00181	Maxwell Drywells	
UNIT TIME-PERCENT OF LAG	283%	Low Loss Rate (percent)	85.00%	Number	0
TOTAL ADJUSTED STORM RAIN (in)	4.38			Drywell Percolation Rate	0.00 cfs 0.00 cfm

Unit Time Period	Time Minutes	Hours	Pattern Percent	Storm Rain in/hr	Loss Rate in/hr		Effective Rain	Flood Hydrograph Flow	Volume In	Basin Volume	Basin Losses			Total In Basin		Basin WSEL
					Max	Low					Percolation Area	Maximum Percolation	Percolation Out			
			(Plate E-5.9)				in/hr	cfs	cu-ft	cu-ft	sf	cu-ft	cu-ft	cu-ft	ac-ft	ft
87	1305	21.75	0.3	0.053	0.105	0.045	0.01	0.65	581	406,926	98,665	1,768	1,768	405,158	9.30	439.10
88	1320	22.00	0.2	0.035	0.104	0.030	0.01	0.43	387	405,545	98,556	1,766	1,766	403,780	9.27	439.08
89	1335	22.25	0.3	0.053	0.103	0.045	0.01	0.65	581	404,360	98,462	1,764	1,764	402,596	9.24	439.07
90	1350	22.50	0.2	0.035	0.102	0.030	0.01	0.43	387	402,983	98,353	1,762	1,762	401,221	9.21	439.06
91	1365	22.75	0.2	0.035	0.101	0.030	0.01	0.43	387	401,608	98,245	1,760	1,760	399,848	9.18	439.04
92	1380	23.00	0.2	0.035	0.100	0.030	0.01	0.43	387	400,235	98,136	1,758	1,758	398,476	9.15	439.03
93	1395	23.25	0.2	0.035	0.099	0.030	0.01	0.43	387	398,863	98,028	1,756	1,756	397,107	9.12	439.02
94	1410	23.50	0.2	0.035	0.099	0.030	0.01	0.43	387	397,494	97,920	1,754	1,754	395,740	9.08	439.00
95	1425	23.75	0.2	0.035	0.098	0.030	0.01	0.43	387	396,127	97,812	1,752	1,752	394,374	9.05	438.99
96	1440	24.00	0.2	0.035	0.098	0.030	0.01	0.43	387	394,761	97,704	1,751	1,751	393,011	9.02	438.97

EFFECTIVE RAIN & FLOOD VOLUMES SUMMARY

EFFECTIVE RAIN	1.78 in
FLOOD VOLUME	12.05 acft
FLOOD VOLUME	524,686 cu-ft
REQUIRED STORAGE	9.90 acft
REQUIRED STORAGE	431,345 cu-ft
MAX WSEL	439.37 ft
PEAK FLOW RATE	34.93 cfs
TOTAL BASIN LOSSES	131,675 cu-ft
AVERAGE PERCOLATION RATE	91.44 cf/min

BASIN VOLUME WORKSHEET

PROECT COVA
JOB No. 2811
BASIN DESIGNATION: Retention Basin

BASIN CHARACTERISTICS

CONTOUR ELEVATION	DEPTH		AREA		VOLUME		
	INCR (ft)	TOTAL (ft)	INCR (sf)	TOTAL (sf)	INCR (cuft)	TOTAL (cuft)	(acre-ft)
434	0	0		60,573	0	0	0.00
434.5	0.5	0.5	3,590	64,163	31,180	31,180	0.72
435.5	1	1.5	7,265	71,428	67,763	98,943	2.27
436.5	1	2.5	7,379	78,807	75,087	174,030	4.00
437.5	1	3.5	7,491	86,298	82,524	256,554	5.89
438.5	1	4.5	7,605	93,903	90,074	346,628	7.96
439.5	1	5.5	7,718	101,621	97,737	444,365	10.20

WHERE:

$$V = \frac{1}{3}(E_1 - E_2)\left(A_1 + A_2 + \sqrt{A_1 A_2}\right)$$

Appendix G

Riverside County Whitewater River Region WQMP Worksheets

Whitewater Watershed

BMP Design Volume, V_{BMP} & Design Flow Rate, Q_{BMP} (Rev. 06-2014)

Legend: Required Entries / Calculated Cells

Company Name	MSA Consulting, Inc	Date	December 10, 2025
Designed By	SAW	County/City Case No.	
Company Project Number/Name	COVA - MSA Job No. 2811		
Drainage Area Number/Name	Site		

Enter the Area Tributary to this Feature (A_{TRIB}) — A_{TRIB} = 81.140 acres

Determine the Impervious Area Ratio

Determine the Impervious Area Within A_{TRIB} (A_{IMP}) — A_{IMP} = 56.410 acres

Calculate the Impervious Area Ratio (I_F)

$I_F = A_{IMP}/A_{TRIB}$ — I_F = 0.70

Calculate the Composite Runoff Coefficient, C for the BMP Tributary Area

Use the following equation based on the WEF/ASCE Method

$C_{BMP} = 0.858I_f^3 - 0.78I_f^2 + 0.774I_f + 0.04$ — C_{BMP} = 0.49

Determine Design Storage Volume, V_{BMP}

Calculate V_U, the 80% Unit Storage Volume $V_U = 0.40 \times C_{BMP}$ — V_U = 0.20 (in*ac)/ac

Calculate the design storage volume of the BMP, V_{BMP}

$$V_{BMP}\ (ft^3) = \frac{V_U\ (in\text{-}ac/ac) \times A_T\ (ac) \times 43{,}560\ (ft^2/ac)}{12(in/ft)}$$

V_{BMP} = 57,660 ft^3

BMP Design Flow Rate, Q_{BMP}

$Q_{BMP} = C_{BMP} \times I \times A_{TRIB}$ — Q_{BMP} = 7.94 ft^3/s

I = Design Rainfall Intensity, 0.2 in/hr

Notes:

Appendix H
Existing Conditions Exhibit

778-350-005
EX. ZONING:
REGIONAL COMMERCIAL (R-C)
EX. GENERAL PLAN:
REGIONAL RETAIL DISTRICT

778-350-009
EX. ZONING:
REGIONAL COMMERCIAL (R-C)
EX. GENERAL PLAN:
REGIONAL RETAIL DISTRICT

778-350-002
EX. ZONING:
REGIONAL COMMERCIAL (R-C)
EX. GENERAL PLAN:
REGIONAL RETAIL DISTRICT

778-350-004
EX. ZONING:
REGIONAL COMMERCIAL (R-C)
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778-350-006
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REGIONAL COMMERCIAL (R-C)
EX. GENERAL PLAN:
REGIONAL RETAIL DISTRICT

778-350-008
EX. ZONING:
REGIONAL COMMERCIAL (R-C)
EX. GENERAL PLAN:
REGIONAL RETAIL DISTRICT

AVENUE 52

CALHOUN STREET

780-040-002
EX. ZONING:
LIGHT AGRICULTURE (A-1-20)
EX. GENERAL PLAN:
RURAL COMMUNITY - ESTATE DENSITY RESIDENTIAL

CITY OF COACHELLA
COUNTY OF RIVERSIDE

780-060-004
EX. ZONING:
LIGHT AGRICULTURE (A-1-20)
EX. GENERAL PLAN:
AGRICULTURE

780-060-003
EX. ZONING:
LIGHT AGRICULTURE (A-1-20)
EX. GENERAL PLAN:
AGRICULTURE

VAN BUREN STREET

PROJECT NAME:	COVA
MAP NUMBER:	TENTATIVE TRACT MAP NO. 39330
PLAN:	EXISTING CONDITIONS EXHIBIT
EXHIBIT DATE:	DECEMBER 10, 2025

MSA CONSULTING, INC.
Civil Engineering • Land Surveying • Landscape Architecture
Planning • Environmental Services • Dry Utility Coordination • GIS
34200 Bob Hope Drive Rancho Mirage, CA 92270 | 760.320.9811 | MSAConsultinginc.com

DESIGN BY	SAW
DRAWN BY	SAW
CHECK BY	JAD

NORTH

0' 60' 120' 180' 240'
SCALE 1"=60'

R:\2811\Adv\Hydrology\Preliminary\2811 Existing Conditions Exhibit.dwg, 12/15/2025 7:43:11 AM, swedberg, MSA Consulting, Inc.

Appendix J
Preliminary SUH Exhibit

AVENUE 52

CALHOUN STREET

VAN BUREN STREET

778-360-008
EX. ZONING:
REGIONAL COMMERCIAL (R-C)
EX. GENERAL PLAN:
REGIONAL RETAIL DISTRICT

778-360-009
EX. ZONING:
REGIONAL COMMERCIAL (R-C)
EX. GENERAL PLAN:
REGIONAL RETAIL DISTRICT

778-360-002
EX. ZONING:
REGIONAL COMMERCIAL (R-C)
EX. GENERAL PLAN:
REGIONAL RETAIL DISTRICT

778-360-004
EX. ZONING:
REGIONAL COMMERCIAL (R-C)
EX. GENERAL PLAN:
REGIONAL RETAIL DISTRICT

778-360-006
EX. ZONING:
REGIONAL COMMERCIAL (R-C)
EX. GENERAL PLAN:
REGIONAL RETAIL DISTRICT

778-360-005
EX. ZONING:
REGIONAL COMMERCIAL (R-C)
EX. GENERAL PLAN:
REGIONAL RETAIL DISTRICT

780-040-002
EX. ZONING:
LIGHT AGRICULTURE (A-1-20)
EX. GENERAL PLAN:
RURAL COMMUNITY - ESTATE DENSITY RESIDENTIAL

780-050-004
EX. ZONING:
LIGHT AGRICULTURE (A-1-20)
EX. GENERAL PLAN:
AGRICULTURE

780-050-003
EX. ZONING:
LIGHT AGRICULTURE (A-1-20)
EX. GENERAL PLAN:
AGRICULTURE

CITY OF COACHELLA
COUNTY OF RIVERSIDE

SOIL TYPE A

SOIL TYPE B

LAGOON
WSE 440.0
BOT 430.0

SITE
A-81.14

POND
MAXIMUM WSE 439.5
NORMAL WSE 434.5
BOT 430.0

LAND USE SUMMARY	
LAND USE	TOTAL (ac)
SOIL TYPE A	
PAVING/HARDSCAPE	1.04
CONDOMINIUMS	4.03
SOIL TYPE B	
PAVING/HARDSCAPE	9.42
CONDOMINIUMS	66.65
TOTAL	81.14

STORM EVENT SUMMARY					
DURATION		1-HOUR	3-HOUR	6-HOUR	24-HOUR
EFFECTIVE RAIN	(in)	1.10	1.50	1.60	1.78
FLOOD VOLUME	(cu-ft)	325,179	441,160	472,562	524,686
	(acre-ft)	7.47	10.13	10.85	12.05
REQUIRED STORAGE	(cu-ft)	319,900	424,813	**443,609**	431,345
	(acre-ft)	7.34	9.75	**10.18**	9.90
STORAGE PROVIDED	(cu-ft)	444,365			
	(acre-ft)	10.20			
PEAK FLOW	(cfs)	N/A	151.42	135.16	34.93
MAXIMUM WSE		438.20	439.30	**439.49**	439.37
DEPTH	(ft)	4.20	5.30	**5.49**	5.37

BASIN VOLUME SUMMARY							
CONTOUR ELEVATION	DEPTH INCR (FT)	DEPTH TOTAL (FT)	AREA INCR (SF)	AREA TOTAL (SF)	VOLUME INCR (CUFT)	VOLUME TOTAL (CUFT)	VOLUME TOTAL (AC-FT)
434.0	0	0		60,573	0	0	0
434.5	0.5	0.5	3,590	64,163	31,380	31,380	0.72
435.5	1	1.5	7,265	71,428	67,763	98,943	2.27
436.5	1	2.5	7,379	78,807	75,087	174,030	4.00
437.5	1	3.5	7,491	86,298	82,524	256,554	5.89
438.5	1	4.5	7,605	93,903	90,074	346,628	7.96
439.5	1	5.5	7,718	101,621	97,737	444,365	10.20

LEGEND

- DRAINAGE AREA BOUNDARY
- HARDSCAPE – SOIL TYPE A
- HARDSCAPE – SOIL TYPE B
- CONDOMINIUMS – SOIL TYPE A
- CONDOMINIUMS – SOIL TYPE B
- SITE A-81.14 — DRAINAGE SUB-AREA ID AREA (AC)

NORTH

0' 60' 120' 180' 240'

SCALE 1"=60'

PROJECT NAME:	COVA
MAP NUMBER:	TENTATIVE TRACT MAP NO. 39330
PLAN:	PRELIMINARY SUH EXHIBIT
EXHIBIT DATE:	JUNE 2026

MSA CONSULTING, INC.
Civil Engineering • Land Surveying • Landscape Architecture
Planning • Environmental Services • Dry Utility Coordination • GIS
34200 Bob Hope Drive Rancho Mirage, CA 92270 | 760.320.9811 | MSAConsultinginc.com

DESIGN BY: SAW
DRAWN BY: SAW
CHECK BY: JAD

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Appendix K
Preliminary Grading Exhibit

AVENUE 52

CALHOUN STREET

VAN BUREN STREET

CITY OF COACHELLA
COUNTY OF RIVERSIDE

LAGOON
WSE 440.0
BOT 430.0

LAGOON
WSE 440.0
BOT 438.0

POND
MAXIMUM WSE 439.5
NORMAL WSE 434.2
BOT 430.0

778-360-005
EX. ZONING
REGIONAL COMMERCIAL (R-C)
EX. GENERAL PLAN
REGIONAL RETAIL DISTRICT

778-360-009
EX. ZONING
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778-360-002
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REGIONAL RETAIL DISTRICT

778-360-004
EX. ZONING
REGIONAL COMMERCIAL (R-C)
EX. GENERAL PLAN
REGIONAL RETAIL DISTRICT

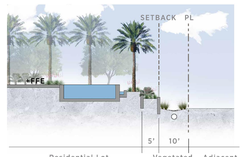
778-360-006
EX. ZONING
REGIONAL COMMERCIAL (R-C)
EX. GENERAL PLAN
REGIONAL RETAIL DISTRICT

778-360-008
EX. ZONING
REGIONAL COMMERCIAL (R-C)
EX. GENERAL PLAN
REGIONAL RETAIL DISTRICT

780-060-002
EX. ZONING
LIGHT AGRICULTURE (A-1-20)
EX. GENERAL PLAN
RURAL COMMUNITY - ESTATE DENSITY RESIDENTIAL

780-060-004
EX. ZONING
LIGHT AGRICULTURE (A-1-20)
EX. GENERAL PLAN
AGRICULTURE

780-060-003
EX. ZONING
LIGHT AGRICULTURE (A-1-20)
EX. GENERAL PLAN
AGRICULTURE



SECTION A-A
SOUTHERN PROPERTY LINE
N.T.S.

ESTIMATED EARTHWORK QUANTITIES

	CUT (CY)	FILL (CY)
RAW QUANTITIES	374,676	231,055
SUBSIDENCE	12,534	13,866
RAW ADJUSTED	362,142	244,921
SHRINKAGE		43,221
OVER EXCAVATION	268,620	268,620
OVER EXCAVATION SHRINKAGE		47,404
SUBTOTAL	630,762	604,166
EXPORT		26,596
TOTAL EARTHWORK	630,762	630,762

EARTHWORK FACTORS:

THE FOLLOWING FACTORS WERE USED IN THE PREPARATION OF THE EARTHWORK ANALYSIS:
SHRINKAGE: 15%
SUBSIDENCE: 0.20'
OVER-EX. : 4'

PROJECT NAME:	COVA
MAP NUMBER:	TENTATIVE TRACT MAP NO. 39330
PLAN:	PRELIMINARY GRADING EXHIBIT
EXHIBIT DATE:	JUNE 2026

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DESIGN BY	SAW
DRAWN BY	SAW
CHECK BY	JAD

NORTH
0' 60' 120' 180' 240'
SCALE 1"=60'

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Project Specific
Preliminary Water Quality Management Plan

For: **COVA - Tentative Tract Map 39330**

SEC of Avenue 52 and Van Buren Street

Coachella, CA 92236

DESIGN REVIEW NO. **TBD**

DEVELOPMENT NO. **TBD**

Prepared for:
Relevant Coachella Owner, LLC
6417 Selma Avenue
Hollywood, CA 90028
Telephone: (310) 270-6222

Prepared By:
Jesus Herrera-Cortes, CPSWQ, QSD/QSP
MSA Consulting, Inc.
34200 Bob Hope Drive
Rancho Mirage, CA 92270
Jherrera-cortes@msaconsultinginc.com

Prepared Under the Direction of:
Julian A. De La Torre, PE
MSA Consulting, Inc.
34200 Bob Hope Drive
Rancho Mirage, CA 92270
Telephone: (760) 320-9811
Fax No. (760) 323-7893
Jdelatorre@msaconsultinginc.com

Original Date Prepared: June 8, 2026

Revision Date(s): N/A

OWNER'S CERTIFICATION

This project-specific Preliminary Water Quality Management Plan has been prepared for:

Relevant Coachella Owner, LLC by MSA Consulting, Inc. for the project known as **COVA - Tentative Tract Map 39330** in the **City of Coachella, CA.**

This WQMP is intended to comply with the requirements of Coachella for a portion of **APNs 780-040-001, 780-040-003, 780-060-001, and 780-060-002** which includes the requirement for the preparation and implementation of a project-specific WQMP.

The undersigned, while owning the property/project described in the preceding paragraph, shall be responsible for the implementation of this WQMP and will ensure that this WQMP is amended as appropriate to reflect up-to-date conditions on the site. This WQMP will be reviewed with the facility operator, facility supervisors, employees, tenants, maintenance and service contractors, or any other party (or parties) having responsibility for implementing portions of this WQMP. At least one copy of this WQMP will be maintained at the project site or project office in perpetuity.

The undersigned is authorized to certify and to approve implementation of this WQMP. The undersigned is aware that implementation of this WQMP is enforceable under the City of Coachella (Coachella Code of Ordinances, Chapter 13.16, Water Quality Control).

If the undersigned transfers its interest in the subject property/project, the undersigned shall notify the successor in interest of its responsibility to implement this WQMP.

"I, the undersigned, certify under penalty of law that I am the owner of the property that is the subject of this WQMP, and that the provisions of this WQMP have been reviewed and accepted and that the WQMP will be transferred to future successors in interest."

_____
Owner's Signature

_____
Owner's Printed Name

_____
Owner's Title/Position

_____
Date

6417 Selma Avenue
Hollywood, CA 90028

ATTEST

_____
Notary Signature

_____
Printed Name

_____
Title/Position

_____
Date

THIS FORM SHALL BE NOTARIZED BEFORE ACCEPTANCE OF THE FINAL PROJECT SPECIFIC WQMP

Contents

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III. Pollutants of Concern 7
IV. Hydrologic Conditions of Concern 9
V. Best Management Practices 11
V.1 Site Design BMP Concepts, LID/Site Design and Treatment Control BMPs 11
V.1.A Site Design BMP Concepts and LID/Site Design BMPs 13
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APPENDICES

A. Conditions of Approval
B. Vicinity Map, WQMP Site Plan, and Receiving Waters Map
(Appendix B includes overall site plan, retention basin plan and hydrology plans)
C. Supporting Detail Related to Hydrologic Conditions of Concern (If Applicable)
D. Educational Materials
E. Soils Report (if applicable)
F. Structural BMP and/or Retention Facility Sizing Calculations and Design Details
G. Agreements – CC&Rs, Covenant and Agreements, BMP Maintenance Agreements and/or Other Mechanisms for ensuring ongoing Operation, Maintenance, Funding and Transfer of Requirements for this project-specific WQMP
H. Phase 1 Environmental Site Assessment – Summary of Site Remediation Conducted and Use Restrictions
I. Project-Specific WQMP Summary Data Form

I. Project Description

Project Owner: Relevant Coachella Owner, LLC
6417 Selma Avenue
Hollywood, CA 90028
Telephone: (310) 270-6222

WQMP Preparer: Under the Direct Supervision of Julian A. De La Torre
MSA Consulting, Inc.
34200 Bob Hope Drive
Rancho Mirage, CA 92270
Telephone: (760) 323-7893
Fax No.: (760) 323-7893

Project Site Address:	**SEC of Avenue 52 and Van Buren Street Coachella, CA 92236**
Planning Area:	**Van Buren Corridor General Plan Subarea**
Community Name:	**Coachella**
Development Name:	**COVA - Tentative Tract Map 39330**
APN Number(s):	**780-040-001, 780-040-003, 780-060-001, 780-060-002**
Latitude & Longitude:	**33.6686, -116.2023**
Receiving Water:	**Coachella Valley Stormwater Channel**
Hydrologic Area:	**81.14 Acres**

Standard Industrial Classification (SIC) Code(s):

- 7011: Hotels
- Not applicable to the residential development

Formation of Home Owners' Association (HOA)
or Property Owners Association (POA): Y ☒ N ☐

Additional Permits/Approvals required for the Project:

AGENCY	Permit required
State Department of Fish and Wildlife, Fish and Game Code §1602 Streambed Alteration Agreement	Y ☐ N☒
State Water Resources Control Board, Clean Water Act (CWA) Section 401 Water Quality Certification	Y ☐ N☒
US Army Corps of Engineers, CWA Section 404 permit	Y ☐ N☒
US Fish and Wildlife, Endangered Species Act Section 7 biological opinion	Y ☐ N☒
Statewide Construction General Permit Coverage	Y ☒ N☐
Statewide Industrial General Permit Coverage	Y ☐ N☒
Other: City of Coachella Grading Permit City of Coachella Building Permit	 Y ☒ N☐ Y ☒ N☐

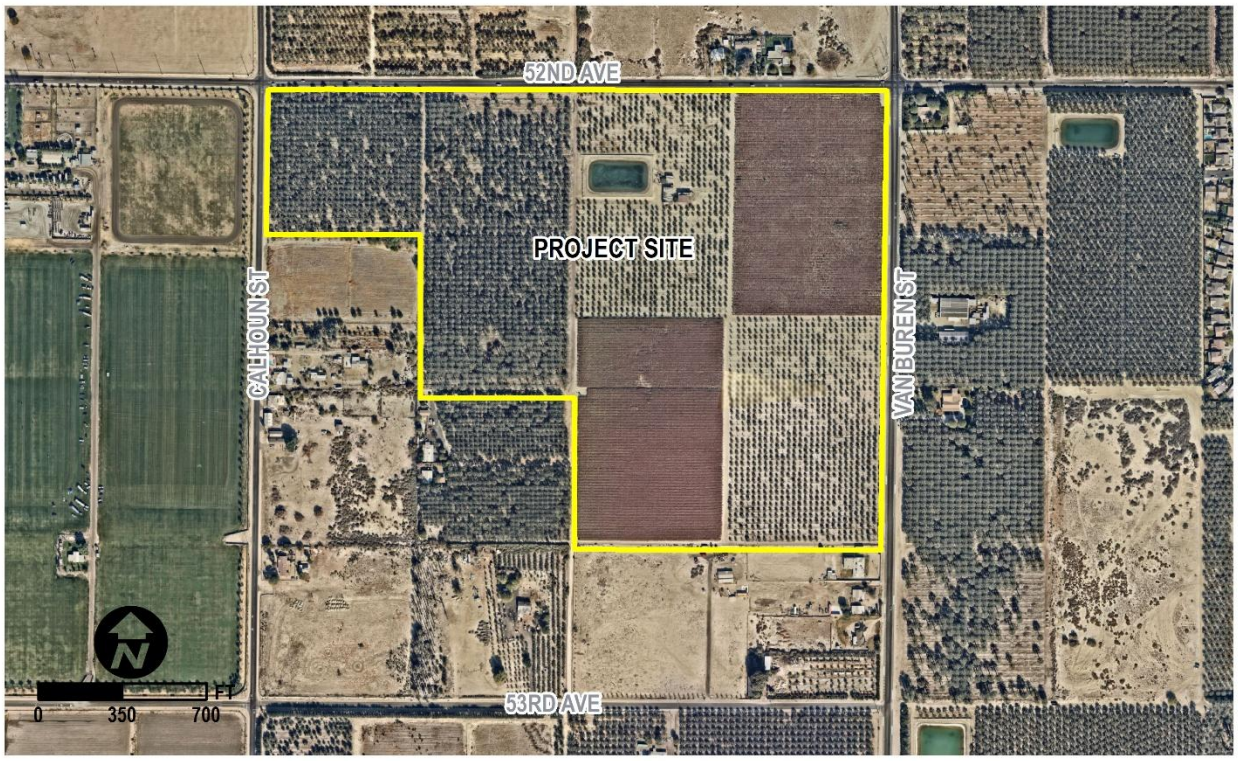
- The project will not divert or obstruct the natural flow or change the bed, channel, or bank of any stream, river or lake. Therefore, a State Department of Fish and Game, 1601 Streambed Alteration Agreement is not required.
- The project will not result in discharge into navigable waters; therefore, a Clean Water Act Section 401 Water Quality Certification permit is not required.
- The project will not result in the discharge of dredged or fill materials into the waters of the United States, including wetlands. A Clean Water Act Section 404 Permit is not required for this project.
- The project site is not recognized as a habitat of an endangered species nor does it form part of a Conservation Area under the Coachella Valley Multiple Species Habitat Conservation Plan. A U.S. Fish and Wildlife, Endangered Species Act Section 7 biological opinion is not required for this project.
- The project is not industrial in nature. Therefore, coverage under the General Permit for Storm Water Discharges Associated with Industrial Activities is not required. This project will obtain coverage under the State Water Board NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities.

Existing Conditions and Proposed Development:

This Project-Specific Preliminary WQMP applies to the master-plan scope of COVA - Tentative Tract Map 39330. The site is located south of 52nd Avenue; east of Calhoun Street; and west of Van Buren Street in the City of Coachella, County of Riverside, California. The project site is characterized by agricultural uses and the presence of accessory structures. Other than maintained agricultural drainage and irrigation reservoir facilities, the site does include natural drainage courses, such as those associated with streams, rivers, or washes.

The scope of this project involves a master-planned destination resort and residential community with 162 residential dwelling units and 240-key condominium hotel units. Associated amenities include water recreation, well and fitness facilities, dining, and hospitality. The scope, content, and level of detail of this Preliminary WQMP is based on the master-plan development plans and preliminary engineering prepared for entitlement approvals. Future conditions of approval and engineering plans will be incorporated into the Final WQMP to provide additional design detail.

Figure 1 – Project Location and Existing Conditions



Proposed Storm Drain Improvements

Based on the preliminary grading and hydrology design, the project has a single hydrologic (tributary) area of 81.14 acres, encompassing the entire development. The Final WQMP will identify applicable delineation of sub-drainage management areas, as determined by final engineering and hydrology design. Stormwater runoff volume resulting from the controlling 100-year storm event will be conveyed southerly along surface and piped flows to the retention facility, where the available freeboard will adequately contain the flows.

The proposed method of stormwater retention will involve two designated irrigation ponds with approximately 5.0 to 5.5 feet of available freeboard in relation to the normal irrigation water

surface elevation. The provided freeboard has been sized to accommodate the full stormwater volume generated across the project site. Storm drain inlets connected to this retention facility may be equipped with screening methods to filter out potential trash, organic debris, and other solids. Alternatively, the storm drain outlets may also be configured to allow for adequate screening prior to discharge into the retention area. Such details and information will be provided in the Final WQMP based on final (precise) grading, hydrology, and associated improvement plans.

The drainage management area identification, acreages, primary land uses, impervious cover, VBMP quantities, retention basin sizes, retention basin design depths, basin dewatering times, and provided storage are summarized in Table A. Final quantities and design details will be provided in the Final WQMP, resulting from plan review and conditions of approval.

Table A - Summary of Drainage Management Areas and Retention Capacities

Drainage Area ID	Tributary Area (In Acres)	Impervious Area (In Acres)	WQMP V_{BMP} (In Cubic Feet)	Provided Retention Capacity (In Cubic Feet)	Method of Retention
Site	81.14	56.410 (70%)	57,660	447,365	Retention Pond Freeboard
Total	**81.14**	**56.410 (70%)**	**57,660**	**447,365**	See Above
Source: Preliminary Hydrology Report for COVA, TTM 39330					

As summarized in Table A and consistent with the preliminary hydrology report, each hydrologic drainage management area of the project will include a respective retention basin system capacity to retain the controlling stormwater volume to meet the City of Coachella's hydrologic requirements, while also accounting for the smaller V_{BMP} quantities. The provided retention capacity will ensure that the project does not result in a routine stormwater discharge into any off-site facility.

Location of Activities:

The project does not have a specific area where heightened activities would warrant additional site design, source control or treatment measures other than the proposed retention facilities for the respective drainage areas.

Waste Generation:

The proposed project is expected to generate a variety of solid waste according to land use and facility type. The project's waste will be collected and managed by Burrtec Waste Industries on a typical schedule.

Materials Storage and Delivery Areas:

The proposed project is expected to generate non-hazardous solid waste typical of most residential and resort land uses. The project's waste will be collected and managed by Burrtec Waste Industries on a typical schedule. Pollution prevention, waste reduction, and recycling practices will be implemented on-site. The Final WQMP will identify the final location, configuration and details of these facilities based on final engineering design.

Appendix A will include complete copy of the final Conditions of Approval.

Appendix B of this project-specific WQMP includes:

a. A Vicinity Map identifying the project site and surrounding planning areas in sufficient detail; and

b. A Site Plan for the project. The Site Plan included as part of Appendix B depicts the following project features:

- Location and identification of all structural BMPs, including Source Control, LID/Site Design and Treatment Control BMPs. **To be provided in Final WQMP based on final engineering design, as applicable.**
- Landscaped areas. **To be provided in Final WQMP based on final engineering design. Current preliminary hydrology calculations account for pervious cover.**
- Paved areas and intended uses (i.e., parking, outdoor work area, outdoor material storage area, sidewalks, patios, tennis courts, etc.). **To be provided in Final WQMP based on final engineering design, as applicable. Current preliminary hydrology calculations account for impervious/pervious cover.**
- Number and type of structures and intended uses (i.e., buildings, tenant spaces, dwelling units, community facilities such as pools, recreation facilities, tot lots, etc.).
- Infrastructure (i.e., streets, storm drains, etc.) that will revert to public agency ownership and operation.
- Location of existing and proposed public and private storm drainage facilities (i.e., storm drains, channels, basins, etc.), including catch basins and other inlets/outlet structures. Existing and proposed drainage facilities should be clearly differentiated. **To be provided in Final WQMP based on final engineering design, as applicable.**
- Location(s) of Receiving Waters to which the project directly or indirectly discharges.
- Location of points where onsite (or tributary offsite) flows exit the property/project site. **To be provided in Final WQMP based on final engineering design, as applicable.**
- Delineation of proposed drainage area boundaries, including tributary offsite areas, for each location where flows exit the project site and existing site (where existing site flows are required to be addressed). Each tributary area should be clearly denoted.
- Pre- and post-project topography.

Appendix I is a one-page form that summarizes pertinent information relative to this project-specific WQMP.

II. Site Characterization

Existing/Proposed General Plan: Regional Retail District

Existing/Proposed Zoning: Regional Commercial (R-C)

Current Property Use:	Agricultural
Proposed Property Use:	Residential and Hospitality
Availability of Soils Report:	Y ☒ N ☐
Phase 1 Site Assessment:	Y ☒ N ☐

Receiving Waters for Urban Runoff from Site

Receiving Waters	EPA Approved 303(d) List Impairments	Designated Beneficial Uses	Proximity to RARE Beneficial Use Designated Receiving Waters
Coachella Valley Stormwater Channel	Ammonia, DDT (Dichlorodiphenyltrichloroethane), Dieldrin, Disulfoton, Indicator Bacteria, Oxygen, Dissolved, PCBs (Polychlorinated biphenyls), Toxaphene, Toxicity	FRSH, REC I *c*, REC II *c*, WARM, WILD, RARE *d*	Approximately 2 miles

The preceding table is based on the **2020-2022 Integrated Report (Clean Water Act Section 303(d) List/305(b) Report.**

Abbreviations:
I – Intermittent Beneficial Use
FRSH – Freshwater Replenishment
REC I – Water Contact Recreation
REC II – Non-Contact Water Recreation
WARM – Warm Freshwater Habitat
WILD – Wildlife Habitat
RARE – Preservation of Rare, Threatened, or Endangered Species
MUN – Municipal & Domestic Supply
AGR – Agricultural Supply
GWR – Groundwater Recharge
AQUA – Acuaculture
COLD – Cold Freshwater Habitat
POW – Hydropower Generation

a. Although it is not encouraged, children play in the water infrequently on the wildlife reserve
b. Section of perennial flow from approximately Indio to the Salton Sea.
c. Unauthorized use.
d. Rare, endangered, or threatened wildlife exists in or utilizes some of this waterway.

III. Pollutants of Concern

Table 1. Pollutant of Concern Summary

Pollutant Category	Potential for Project	Causing Receiving Water Impairment
Bacteria/Virus (Pathogens)	Yes	Yes (Pathogens)
Heavy Metals	No	No
Nutrients	Yes	No
Toxic Organic Compounds	No	Yes
Sediment/Turbidity	Yes	No
Trash & Debris	Yes	No
Oil & Grease	Yes	No

Based on the 2020-2022 Integrated Report (Clean Water Act Section 303(d) List/305(b) Report, the Coachella Valley Stormwater Channel is impaired by **Ammonia, DDT (Dichlorodiphenyltrichloroethane), Dieldrin, Disulfoton, Indicator Bacteria, Oxygen, Dissolved, PCBs (Polychlorinated biphenyls), Toxaphene, Toxicity**

- The proposed new residential and hospitality development is not expected to be a source of DDT contamination because the use of this substance (synthetic organic compound) has been banned since 1972; therefore, it will not be handled or form part of the proposed development.
- The proposed new residential and hospitality development is not expected to be a source of Dieldrin contamination because the use of this substance (synthetic organic compound) was related to agricultural operations (found in pesticides for crops) and it has been illegal since 1987; therefore, it will not be handled or form part of the proposed development.
- The proposed new residential and hospitality development is not expected to be a source of polychlorinated biphenyls (PCBs) because manufacturing this substance (synthetic organic compound) stopped in 1977 and its application was banned in 1979; therefore, it will not be handled or form part of the proposed development.
- The proposed new residential and hospitality development is not expected to be a source of toxaphene because the use of this substance (synthetic organic compound) has been illegal since 1990; therefore, it will not be handled or form part of the proposed development.
- The proposed new residential and hospitality development is not expected to be a source of Nitrogen, ammonia (Total Ammonia).
- The project has the potential to generate small amounts of pathogens (bacteria/virus). These pollutants are generally associated with various human activities, but pathogens are also present in natural environments. Moreover, pathogens can be associated with wild and domesticated animal waste. Source control measures to address this potential pollutant are discussed in the subsequent sections of this report.
- The project is not expected to generate or discharge toxicants, such as toxic metals and synthetic organic compounds that would result in detrimental physiological responses in human, plant, animal, or indigenous aquatic life in the receiving waters.

Table 1 (*Potential Pollutants Generated by Land Use Type*) of the *Riverside County Whitewater River Region Stormwater Quality Best Management Practice Design Handbook for Low Impact Development* identifies eight (8) land use categories with their corresponding potential pollutants that may be generated.

Type of Development (Land Use)	Sediment/ Turbidity	Nutrients	Toxic Organic Compounds	Trash & Debris	Bacteria & Viruses (*Also: Pathogens*)	Oil & Grease	Heavy Metals
Detached Residential Development	P	P	N	P	P	P	N
Attached Residential Development	P	P	N	P	P	P(2)	N
Restaurants (Resort)	N	N	N	P	P	P	N
Parking Lots	P	P(1)	P(4)	P	P	P	P

Abbreviations:

P = Potential **N** = Not potential

Notes:

(1) A potential Pollutant if non-native landscaping exists or is proposed onsite; otherwise not expected.
(2) A potential Pollutant if the project includes uncovered parking areas; otherwise not expected.
(3) A potential Pollutant if land use involves food or animal waste products.
(4) Specifically, petroleum hydrocarbons.
(5) Specifically, solvents; however, this Pollutant is not expected at commercial office or commercial retail sites, unless said retail is vehicle related.
(6) A potential Pollutant if the project includes outdoor storage or metal roofs; otherwise not expected.

Pollutants of Concern: Based on the comparison of potential project pollutants with the pollutant categories causing receiving water impairments, the pollutants of concern include **bacteria/virus**. The project's proposed storm drain improvements are designed to intercept and retain the locally required stormwater volume. Therefore, the project will not produce runoff or pollutants that could affect off-site or downstream resources, such as the proximate receiving waters.

IV. Hydrologic Conditions of Concern

Local Jurisdiction Requires On-Site Retention of Urban Runoff:

Yes ☒ The project will be required to retain urban runoff onsite in conformance with local ordinance (See Table 6 of the WQMP Guidance document, "Local Land use Authorities Requiring Onsite Retention of Stormwater"). This section does not need to be completed; however, retention facility design details and sizing calculations must be included in Appendix F.

The project is obligated to meet the City of Coachella's hydrologic requirements by demonstrating that stormwater runoff from the developed condition can be adequately conveyed and retained on-site. In accordance with the hydrology report, the project's retention facilities have been sized to adequately contain the required stormwater volume for hydrology and water quality purposes for the on-site areas. Therefore, the project will not result in changes to the hydrologic regime that will permanently impact downstream channels, receiving waters, or habitat integrity. No Hydrologic Conditions of Concern are expected to result from the project.

No ☐ This section must be completed.

This Project meets the following condition:

☐ **Condition A**: 1) Runoff from the Project is discharged directly to a publicly-owned, operated and maintained MS4 or engineered and maintained channel, 2) the discharge is in full compliance with local land use authority requirements for connections and discharges to the MS4 (including both quality and quantity requirements), 3) the discharge would not significantly impact stream habitat in proximate Receiving Waters, **and** 4) the discharge is authorized by the local land use authority.

☐ **Condition B**: The project disturbs less than 1 acre and is not part of a larger common plan of development that exceeds 1 acre of disturbance. The disturbed area calculation must include all disturbances associated with larger plans of development.

☐ **Condition C**: The project's runoff flow rate, volume, velocity and duration for the post-development condition do not exceed the pre-development condition for the 2-year, 24-hour and 10-year 24-hour rainfall events. This condition can be achieved by, where applicable, complying with the local land use authority's on-site retention ordinance, or minimizing impervious area on a site and incorporating other Site-Design BMP concepts and LID/Site Design BMPs that assure non-exceedance of pre-development conditions. This condition must be substantiated by hydrologic modeling methods acceptable to the local land use authority.

☐ **None:** Refer to Section 3.4 of the Whitewater River Region WQMP Guidance document for additional requirements.

Supporting engineering studies, calculations, and reports are included in Appendix C.

	2 year – 24 hour		10 year – 24 hour	
	Precondition	**Post-condition**	**Precondition**	**Post-condition**
Discharge (cfs)				
Velocity (fps)				
Volume (cubic feet)				
Duration (minutes)				

V. Best Management Practices

This project implements Best Management Practices (BMPs) to address the Pollutants of Concern that may potentially be generated from the use of the project site. These BMPs have been selected and implemented to comply with Section 3.5 of the WQMP Guidance document, and consist of Site Design BMP concepts, Source Control, LID/Site Design and, if/where necessary, Treatment Control BMPs as described herein.

V.1 Site Design BMP Concepts, LID/Site Design and Treatment Control BMPs

Local Jurisdiction Requires On-Site Retention of Urban Runoff:

Yes ☒ The project will be required to retain Urban Runoff onsite in conformance with local ordinance (See Table 6 of the WQMP Guidance document, "Local Land use Authorities Requiring Onsite Retention of Stormwater). **The LID/Site Design measurable goal has thus been met (100%), and Sections V.1.A and V.1.B do not need to be completed**; however, retention facility design details and sizing calculations must be included in Appendix F, and '100%' should be entered into Column 3 of Table 6 below.

The project is obligated to meet the City of Coachella's hydrologic requirements by demonstrating that stormwater runoff from the developed condition can be adequately conveyed and retained on-site. In accordance with the hydrology report, the project's retention facilities have been sized to adequately contain the required stormwater volume for hydrology and water quality purposes for the on-site areas. Therefore, the project will not result in changes to the hydrologic regime that will permanently impact downstream channels, receiving waters, or habitat integrity. No Hydrologic Conditions of Concern are expected to result from the project.

No ☐ Section V.1 must be completed.

This section of the Project-Specific WQMP documents the LID/Site Design BMPs and, if/where necessary, the Treatment Control BMPs that will be implemented on the project to meet the requirements detailed within Section 3.5.1 of the WQMP Guidance document. Section 3.5.1 includes requirements to implement Site Design Concepts and BMPs, and includes requirements to address Pollutants of Concern with BMPs. Further, sub-section 3.5.1.1 specifically requires that Pollutants of Concern be addressed with LID/Site Design BMPs to the extent feasible.

LID/Site Design BMPs are those BMPs listed within Table 2 below which promote retention and/or feature a natural treatment mechanism; off-site and regionally-based BMPs are also LID/Site Design BMPs, and therefore count towards the measurable goal, if they fit these criteria. This project incorporates LID/Site Design BMPs to fully address the Treatment Control BMP requirement where and to the extent feasible. If and where it has been acceptably demonstrated to the local land use authority that it is infeasible to fully meet this requirement with LID/Site Design BMPs, Section V.1.B (below) includes a description of the conventional Treatment Control BMPs that will be substituted to meet the same requirements. In addressing Pollutants of Concern, BMPs are selected using Table 2 below.

Table 2. BMP Selection Matrix Based Upon Pollutant of Concern Removal Efficiency (1)

(Sources: Riverside County Flood Control & Water Conservation District Design Handbook for Low Impact Development Best Management Practices, dated September 2011, the Orange County Technical Guidance Document for Water Quality Management Plans, dated May 19, 2011, and the Caltrans Treatment BMP Technology Report, dated April 2010 and April 2008)

Pollutant of Concern	Landscape Swale[2, 3]	Landscape Strip[2, 3]	Biofiltration (with underdrain)[2, 3]	Extended Detention Basin[2]	Sand Filter Basin[2]	Infiltration Basin[2]	Infiltration Trench[2]	Permeable Pavement[2]	Bioretention (w/o underdrain)[2, 3]	Other BMPs Including Proprietary BMPs[4, 6]
Sediment & Turbidity	M	M	H	M	H	H	H	H	H	Varies by Product[5]
Nutrients	L/M	L/M	M	L/M	L/M	H	H	H	H	
Toxic Organic Compounds	M/H	M/H	M/H	L	L/M	H	H	H	H	
Trash & Debris	L	L	H	H	H	H	H	L	H	
Bacteria & Viruses (also: Pathogens)	L	M	H	L	M	H	H	H	H	
Oil & Grease	M	M	H	M	H	H	H	H	H	
Heavy Metals	M	M/H	M/H	L/M	M	H	H	H	H	

Abbreviations:

L: Low removal efficiency M: Medium removal efficiency H: High removal efficiency

Notes:

(1) Periodic performance assessment and updating of the guidance provided by this table may be necessary.

(2) Expected performance when designed in accordance with the most current edition of the document, "Riverside County, Whitewater River Region Stormwater Quality Best Management Practice Design Handbook".

(3) Performance dependent upon design which includes implementation of thick vegetative cover. Local water conservation and/or landscaping requirements should be considered; approval is based on the discretion of the local land use authority.

(4) Includes proprietary stormwater treatment devices as listed in the CASQA Stormwater Best Management Practices Handbooks, other stormwater treatment BMPs not specifically listed in this WQMP (including proprietary filters, hydrodynamic separators, inserts, etc.), or newly developed/emerging stormwater treatment technologies.

(5) Expected performance should be based on evaluation of unit processes provided by BMP and available testing data. Approval is based on the discretion of the local land use authority.

(6) When used for primary treatment as opposed to pre-treatment, requires site-specific approval by the local land use authority.

V.1.A Site Design BMP Concepts and LID/Site Design BMPs

Note: This section is not applicable Due to conformance with local retention ordinance per Section 3.5.1.2 of Whitewater River Region WQMP Guidance Document.

This section documents the Site Design BMP concepts and LID/Site Design BMPs that will be implemented on this project to comply with the requirements detailed in Section 3.5.1 of the WQMP Guidance document.

- Table 3 herein documents the implementation of the Site Design BMP Concepts described in sub-sections 3.5.1.3 and 3.5.1.4.
- Table 4 herein documents the extent to which this project has implemented the LID/Site Design goals described in sub-section 3.5.1.1.

Table 3. Implementation of Site Design BMP Concepts

Note: Completion of this sub-section is not required since the project retains urban runoff on-site in conformance with the local ordinances.

Design Concept	Technique	Specific BMP	Included			Brief Reason for BMPs Indicated as No or N/A
			Yes	No	N/A	
Site Design BMP Concept 1	**Minimize Urban Runoff, Minimize Impervious Footprint, and Conserve Natural Areas (See WQMP Section 3.5.1.3)**	Conserve natural areas by concentrating or clustering development on the least environmentally sensitive portions of a site while leaving the remaining land in a natural, undisturbed condition.	☐	☐	☒	The project is not located in an environmentally sensitive area.
		Conserve natural areas by incorporating the goals of the Multi-Species Habitat Conservation Plan or other natural resource plans.	☐	☐	☒	The project site is not located in an environmentally sensitive area of the Coachella Valley MSHCP.
		Preserve natural drainage features and natural depressional storage areas on the site.	☐	☐	☒	The project does not have naturally occurring storage areas.
		Maximize canopy interception and water conservation by preserving existing native trees and shrubs, and planting additional native or drought tolerant trees and large shrubs.	☐	☐	☒	The project site doesn't have canopy coverage that can be preserved. The project's landscape design will follow local water efficiency and drought tolerant requirements.
		Use natural drainage systems.	☐	☒	☐	The site does not involve using any natural drainage systems.
		Where applicable, incorporate Self-Treating Areas	☐	☒	☐	Not proposed.
		Where applicable, incorporate Self-Retaining Areas	☒	☐	☐	Self-retaining areas will occur where applicable in the form of a retention facilities.
		Increase the building floor to area ratio (i.e., number of stories above or below ground).	☐	☐	☒	Lot coverage will follow the local development standards.
		Construct streets, sidewalks and parking lot aisles to minimum widths necessary, provided that public safety and a walkable environment for pedestrians are not compromised.	☐	☐	☒	Widths of sidewalks and streets are designed per City standards.
		Reduce widths of streets where off-street parking is available.	☐	☐	☒	Street widths will follow the local development standards.
		Minimize the use of impervious surfaces, such as decorative concrete, in the landscape design.	☒	☐	☐	Landscaping improvements are proposed to reduce impervious surfaces.
		Other comparable and equally effective Site Design BMP concept(s) as approved by the local land use authority (Note: Additional narrative required to describe BMP and how it addresses site design concept).	☐	☒	☐	No other Site Design BMP concepts are proposed.

Table 3. Site Design BMP Concepts (continued)

Note: Completion of this sub-section is not required since the project retains urban runoff on-site in conformance with the local ordinances.

Design Concept	Technique	Specific BMP	Included			Brief Reason for Each BMP Indicated as No or N/A
			Yes	No	N/A	
Site Design BMP Concept 2	**Minimize Directly Connected Impervious Area** **(See WQMP Section 3.5.1.4)**	Design residential and commercial sites to contain and infiltrate roof runoff, or direct roof runoff to landscaped swales or buffer areas.	☐	☐	☐	All roof runoff and other impervious runoff will be conveyed indirectly to the designated retention facilities.
		Drain impervious sidewalks, walkways, trails, and patios into adjacent landscaping.	☒	☐	☐	
		Incorporate landscaped buffer areas between sidewalks and streets.	☐	☒	☐	Not proposed in approved site plan.
		Use natural or landscaped drainage swales in lieu of underground piping or imperviously lined swales.	☐	☒	☐	The project will primarily rely on imperviously lined conveyances (piped and surface)
		Where soil conditions are suitable, use perforated pipe or gravel filtration pits for low flow infiltration.	☐	☒	☐	Not proposed
		Maximize the permeable area by constructing walkways, trails, patios, overflow parking, alleys, driveways, low-traffic streets, and other low-traffic areas with open-jointed paving materials or permeable surfaces such as pervious concrete, porous asphalt, unit pavers, and granular materials.	☐	☒	☐	As designed, there are currently no proposed open-jointed paving materials or other permeable surfaces (except for landscaped areas and retention facilities) that would help maximize permeable areas.
		Use one or more of the following:				
		Rural swale system: street sheet flows to landscaped swale or gravel shoulder, curbs used at street corners, and culverts used under driveways and street crossings.	☐	☒	☐	This form of improvements is not proposed.
		Urban curb/swale system: street slopes to curb; periodic swale inlets drain to landscaped swale or biofilter.	☐	☒	☐	This form of improvements is not proposed.
		Dual drainage system: first flush captured in street catch basins and discharged to adjacent vegetated swale or gravel shoulder; high flows connect directly to MS4s.	☐	☒	☐	Storm runoff from the site will be conveyed to the on-site retention facilities.
		Other comparable and equally effective Site Design BMP concept(s) as approved by the local land use authority (Note: Additional narrative required to describe BMP and how it addresses site design concept).	☐	☐	☐	None are proposed.
		Use one or more of the following for design of driveways and private residential parking areas:				
		Design driveways with shared access, flared (single lane at street), or wheel strips (paving only under the tires).	☐	☒	☐	Not proposed.
		Uncovered temporary or guest parking on residential lots paved with a permeable surface, or designed to drain into landscaping.	☐	☒	☐	Not proposed

Table 3. Site Design BMP Concepts (continued)

Note: Completion of this sub-section is not required since the project retains urban runoff on-site in conformance with the local ordinances.

Design Concept	Technique	Specific BMP	Included: Yes	Included: No	Included: N/A	Brief Reason for Each BMP Indicated as No or N/A
Site Design BMP Concept 2 (cont'd)	**Minimize Directly Connected Impervious Area (See WQMP Section 3.5.1.4)**	Other comparable and equally effective Site Design BMP concept(s) as approved by the local land use authority (Note: Additional narrative required to describe BMP and how it addresses site design concept).	☐	☒	☐	Not proposed.
		Use one or more of the following for design of parking areas:				
		Where landscaping is proposed in parking areas, incorporate parking area landscaping into the drainage design.	☐	☐	☒	The entire project, including parking areas, will be incorporated into the drainage design.
		Overflow parking (parking stalls provided in excess of the Permittee's minimum parking requirements) may be constructed with permeable pavement.	☐	☒	☐	No additional comparable or equally effective BMPs are proposed under Site Design Concept 2. Landscaping improvements are proposed to help minimize directly connected impervious areas.
		Other comparable and equally effective Site Design BMP (or BMPs) as approved by the local land use authority (Note: Additional narrative required describing BMP and how it addresses site design concept).	☐	☒	☐	Not proposed.

Project Site Design BMP Concepts:

Note: This section is not applicable Due to conformance with local retention ordinance per Section 3.5.1.2 of Whitewater River Region WQMP Guidance Document.

Alternative Project Site Design BMP Concepts:

Not Applicable

Table 4. LID/Site Design BMPs Meeting the LID/Site Design Measurable Goal

(1) DRAINAGE SUB-AREA ID OR NO.	(2) LID/SITE DESIGN BMP TYPE* (See Table 2)	(3) POTENTIAL POLLUTANTS OF CONCERN WITHIN DRAINAGE SUB-AREA (Refer to Table 1)	(4) POTENTIAL POLLUTANTS WITHIN SUB-AREA CAUSING RECEIVING WATER IMPAIRMENTS (Refer to Table 1)	(5) EFFECTIVENESS OF LID/SITE DESIGN BMP AT ADDRESSING IDENTIFIED POTENTIAL POLLUTANTS (U, L, M, H/M, H; see Table 2)	(6) BMP MEETS WHICH DESIGN CRITERIA? (Identify as V_{BMP} OR Q_{BMP})	(7) TOTAL AREA WITHIN DRAINAGE SUB-AREA (Nearest 0.1 acre)
1A	Retention BMP	Bacteria/virus	Bacteria/virus	H	**VBMP = 57,660 CU-FT Provided Capacity: 447,365 CU-FT**	81.14 AC.
TOTAL PROJECT AREA TREATED WITH LID/SITE DESIGN BMPs (NEAREST 0.1 ACRE)						**81.14 AC.**

*** LID/Site Design BMPs listed in this table are those that completely address the 'Treatment Control BMP requirement' for their drainage sub-area.** ***Conformance with the local retention requirements will be satisfied by conveying project runoff into the proposed on-site retention facilities.***

Justification of infeasibility for sub-areas not addressed with LID/Site Design BMPs

Not applicable.

V.1.B TREATMENT CONTROL BMPS

Conventional Treatment Control BMPs shall be implemented to address the project's Pollutants of Concern as required in WQMP Section 3.5.1 where, and to the extent that, Section V.1.A has demonstrated that it is infeasible to meet these requirements through implementation of LID/Site Design BMPs.

☒ The LID/Site Design BMPs described in Section V.1.A of this project-specific WQMP completely address the 'Treatment Control BMP requirement' for the entire project site (and where applicable, entire existing site) as required in Section 3.5.1.1 of the WQMP Guidance document. Supporting documentation for the sizing of these LID/Site Design BMPs is included in Appendix F. ***Section V.1.B does not need to be completed**.

☐ The LID/Site Design BMPs described in Section V.1.A of this project-specific WQMP do **NOT** completely address the 'Treatment Control BMP requirement' for the entire project site (or where applicable, entire existing site) as required in Section 3.5.1.1 of the WQMP. ***Section V.1.B must be completed.**

The Treatment Control BMPs identified in this section are selected, sized and implemented to treat the design criteria of V_{BMP} and/or Q_{BMP} for all project (and if required, existing site) drainage sub-areas which were not fully addressed using LID/Site Design BMPs. Supporting documentation for the sizing of these Treatment Control BMPs is included in Appendix F.

Table 5: Treatment Control BMP Summary

(1) DRAINAGE SUB-AREA ID OR NO.	(2) TREATMENT CONTROL BMP TYPE* (See Table 2)	(3) POTENTIAL POLLUTANTS OF CONCERN WITHIN DRAINAGE SUB-AREA (Refer to Table 1)	(4) POTENTIAL POLLUTANTS WITHIN SUB-AREA CAUSING RECEIVING WATER IMPAIRMENTS (Refer to Table 1)	(5) EFFECTIVENESS OF TREATMENT CONTROL BMP AT ADDRESSING IDENTIFIED POTENTIAL POLLUTANTS (U, L, M, H/M, H; see Table 2)	(6) BMP MEETS WHICH DESIGN CRITERIA? (Identify as V_{BMP} OR Q_{BMP})	(7) TOTAL AREA WITHIN DRAINAGE SUB-AREA (Nearest 0.1 acre)
N/A	N/A	N/A	N/A	N/A	N/A	N/A
	TOTAL PROJECT AREA TREATED WITH TREATMENT CONTROL BMPs (NEAREST 0.1 ACRE)					N/A

Note: Conformance with the local retention requirements will be satisfied by conveying project runoff into the proposed on-site retention facilities.

V.1.C MEASURABLE GOAL SUMMARY

This section documents the extent to which this project has met the measurable goal described in WQMP Section 3.5.1.1 of addressing 100% of the project's 'Treatment Control BMP requirement' with LID/Site Design BMPs. Projects required to retain Urban Runoff onsite in conformance with local ordinance are considered to have met the measurable goal; for these instances, '100%' is entered into Column 3 of the Table.

Table 6: Measurable Goal Summary

(1) **Total Area Treated with LID/Site Design BMPs** **(Last row of Table 4)**	(2) **Total Area Treated with Treatment Control BMPs** **(Last row of Table 5)**	(3) **% of Treatment Control BMP Requirement addressed with LID/Site Design BMPs**
81.14	**N/A** *Due to conformance with local retention ordinance per Section 3.5.1.2 of Whitewater River Region WQMP Guidance Document.*	**100**

Note: Conformance with the local retention requirements will be satisfied by conveying project runoff into the proposed on-site retention facilities.

V.2 SOURCE CONTROL BMPS

This section identifies and describes the Source Control BMPs applicable and implemented on this project.

Table 7. Source Control BMPs

BMP Name	Check One		If not applicable, state brief reason
	Included	Not Applicable	
Non-Structural Source Control BMPs			
Education for Property Owners, Operators, Tenants, Occupants, or Employees	☒	☐	
Activity Restrictions	☒	☐	
Irrigation System and Landscape Maintenance	☒	☐	
Common Area Litter Control	☒	☐	
Street Sweeping Private Streets and Parking Lots	☒	☐	
Drainage Facility Inspection and Maintenance	☒	☐	
Structural Source Control BMPs			
Storm Drain Inlet Stenciling and Signage	☒	☐	
Landscape and Irrigation System Design	☒	☐	
Protect Slopes and Channels	☒	☐	
Provide Community Car Wash Racks	☐	☒	Not part of project.
Properly Design*:			
Fueling Areas	☐	☒	Not part of project.
Air/Water Supply Area Drainage	☐	☒	Not part of project.
Trash Storage Areas	☐	☒	Not part of project.
Loading Docks	☐	☒	Not part of project.
Maintenance Bays	☐	☒	Not part of project.
Vehicle and Equipment Wash Areas	☐	☒	Not part of project.
Outdoor Material Storage Areas	☐	☒	Not part of project.
Outdoor Work Areas or Processing Areas	☐	☒	Not part of project.
Provide Wash Water Controls for Food Preparation Areas	☐	☒	Not part of project.

*Details demonstrating proper design must be included in Appendix F.

Non-Structural Source Control BMPs

Education Program:

Residents and maintenance staff should be informed on topics related to stormwater pollution and prevention through various means, which can include the distribution of printed materials or public posting of rules or activity restrictions. Staff may also be referred to the education materials in Appendix D of this WQMP or to the Riverside County Watershed Protection web site at the following link:

https://www.rcwatershed.org/

Activity Restrictions:

Activity restrictions should prohibit littering, dumping of waste or non-stormwater discharge into storm drain system, hosing of debris or non-stormwater materials into storm drain system, or causing nuisance non-stormwater flows into storm drain system. Improper handling of categorized hazardous materials is often prohibited under federal law. Additional activity restrictions may be established in the CC&Rs for the residential communities to be provided in the Final WQMP.

Irrigation System and Landscape Maintenance:

The irrigation and landscape maintenance will help increase the effectiveness of these systems and minimize the amount of runoff that enters the storm drain system. Erosion and the conveyance of pesticides/fertilizers in runoff should also be prevented through proper routine maintenance. Routine irrigation system and landscape maintenance will also serve as a vector control measure due to the minimization of nuisance water runoff and stagnation.

Common Area Litter Control:

Common area litter control should be implemented to reduce pollution in runoff. Routine monitoring should be performed in the landscaped areas, trash receptacles, in common areas, and along the project edges. Any observed accumulated trash, vegetation debris or improper disposal should be addressed promptly by the designated staff. Common area litter control measures can be coordinated and improved by the landscaping maintenance is currently taking place on-site. No trash should be allowed to be stored at the base of the containers. Pick-up intervals should be determined so that the containers are not overfilled. Additional information to be provided in the Final WQMP.

Paved Area Sweeping and Cleaning:

Paved area sweeping and/or cleaning is recommended on-site to prevent sediment, litter and other debris from being washed by runoff into the on-site storm drain system and facilities. Paved area sweeping should be performed during dry weather if possible and the frequency should be flexible to accommodate climate conditions and areas of concern. All collected debris should be transported to an appropriate disposal facility. Additional information to be provided in the Final WQMP.

Structural Source Control BMPs

The project will incorporate measures to discourage illegal dumping in the proposed private storm drain system.

- MS4 Stenciling:

At each storm drain inlet, a stencil or fixed sign (including medallions) should contain a brief statement that prohibits dumping of improper materials into the urban runoff conveyance system. The legibility of markers and signs should be maintained throughout the life of the project.

- Rules and Regulations:

  The residential management should establish and implement rules that prohibit improper non-stormwater discharge into the storm drain system. This measure may also be considered non-structural and form part of the activity restrictions associated with the site's standard operating procedures.

Landscape and Irrigation System Design:

The site's structural source control BMP involves an efficient landscape irrigation design consistent with the local ordinances. The system will include native or drought-tolerant plants and mechanisms to minimize excess irrigation and nuisance water into the stormwater conveyance system while working to reduce soil amendments and irrigation frequency. The system should also minimize the conveyance of landscape related chemicals, including pesticides. Additional information to be provided in the Final WQMP.

Trash Receptacles in Common Areas:

Trash containers shall be leak proof and have attached covers or lids.

Storm Drain System Facilities:

Catch basins and storm drainage facilities on-site should be inspected, cleaned, and maintained routinely. Maintenance staff should take prompt action to correct or repair malfunctioning facilities.

Protection of Slopes and Channels:

Landscaping improvements will help stabilize the proposed landscaped areas and prevent erosion. These areas will be subject to routine maintenance to address potential instances of soil erosion. Basin slopes should be visually inspected on a quarterly basis and after major rainfall events. Physical obstructions caused by vegetation debris or littering should be cleared to ensure that the slopes continue to function as designed. Any material collected (e.g. landscape debris or trash) should be properly handled and disposed of. Additional information to be provided in the Final WQMP.

Building and Grounds Maintenance (CASQA SC-41): (Property management/operator)

A series of maintenance practices can be implemented to prevent or reduce the discharge of potential pollutants into the storm drain system resulting from building and grounds maintenance activities. The BMP implementation will be achieved with the following guidelines under SC-41: washing and cleaning up with as little water as possible; following good landscape management practices; preventing and cleaning up spills immediately; keeping debris from entering the storm drains; and properly maintaining the stormwater collection system. Additional information to be provided in the Final WQMP.

Appendix D includes copies of the educational materials (described in Section 3.5.2.1 of the WQMP Guidance document) that will be used in implementing this project-specific WQMP.

V.3 EQUIVALENT TREATMENT CONTROL BMP ALTERNATIVES

Not applicable.

V.4 REGIONALLY-BASED BMPS

Not Applicable

VI. Operation and Maintenance Responsibility for BMPs

Appendix G of this project-specific WQMP includes copies of CC&Rs, Covenant and Agreements, BMP Maintenance Agreement and/or other mechanisms used to ensure the ongoing operation, maintenance, funding, transfer and implementation of the project-specific WQMP requirements.

TABLE 8 -OPERATIONS AND MAINTENANCE

BMP Requiring Maintenance	Party Responsibility	Recommended Inspection and Maintenance Frequency	Recommended Self-Inspection and Record Keeping	Implementation Period	Recommended O & M Activities and Process
Landscaped Areas	Property Owner, Operator, Hired Management, Home Owner's Association	At least twice monthly or according to a maintenance schedule.	Quarterly summaries of inspection and maintenance activities should be appended to the WQMP.	Post-Construction	(See following page for
Irrigation System	Property Owner, Operator, Hired Management, Home Owner's Association	At least twice monthly or according to a maintenance schedule.		Post-Construction	(See following page)
Trash Receptacles and Common Area Litter Control	Property Owner, Operator, Hired Management, Home Owner's Association	Based on trash pick-up intervals and according to a maintenance schedule.		Post-Construction	(See following page)
Paved Area Sweeping	Property Owner, Operator, Hired Management, Home Owner's Association	Based on HOA Maintenance Schedule to be Determined		Post-Construction	(See following page)
Storm Drain System	Property Owner, Operator, Hired Management, Home Owner's Association	Quarterly and after storm events or according to a maintenance schedule		Post-Construction	(See following page)
Retention Facilities	Property Owner, Operator, Hired Management, Home Owner's Association	Quarterly and after storm events or according to an established maintenance schedule		Post-Construction	(See following page)

*Note: "Storm events" refer to precipitation events producing 0.5 inches of rain or greater within a 48-hour period. The occurrence of these events may be confirmed against the local rain event summaries published in the National Weather Service or National Oceanic and Atmospheric Administration web site (www.noaa.gov). The recommended inspection, maintenance, and recordkeeping practices in this WQMP may be addressed by a formal schedule, operations manual, and other standard operating procedures which may be developed for this site.

Note: The following maintenance recommendations, including the responsible parties, inspection intervals, and maintenance intervals, are not intended to be exhaustive in nature and should not serve as the sole source of on-site operating procedures. Where applicable, refer to the equipment manufacturer's recommendations, other relevant maintenance recommendations, and the *Declaration of Covenants,*

Conditions and Restrictions, Reservation of Easements that apply to this site. Additional information to be provided in the Final WQMP.

Description of Maintenance Requirements:

Landscaped Areas: All trimming, pruning, and removal of fallen organic material from plants, shrubs, and trees should be collected per an established landscape maintenance plan for proper disposal in green waste collection facilities. Mechanical equipment or associated materials temporarily staged during maintenance activities should be placed away from storm water drainage facilities, including inlets and conveyances. Where applicable, collected waste resulting from the maintenance activities should be promptly transported to the designated disposal containers or locations. In conjunction with the routine activities, maintenance staff should visually inspect for indicators of improper watering levels so that adequate adjustments can be made.

Irrigation Systems: Water conservation practices should be upheld at all times per the approved irrigation plans and established practices. Monitoring of the irrigation system should be performed as necessary to ensure that appropriate watering levels are maintained and to verify that no piping or irrigation heads are leaking. Any debris, sediment, mineral and grit deposits should be removed from the irrigation system at regular intervals to provide consistent watering levels. The irrigation and landscape maintenance will help increase the effectiveness of these systems and minimize the amount of runoff that enters the storm drain system. Erosion and the conveyance of pesticides/fertilizers in runoff will also be reduced through routine maintenance.

Trash Management and Common Area Litter Control: Common area litter control should be implemented to reduce pollution in runoff. Routine monitoring should be performed in the landscaped areas, trash receptacles, in common areas, and along the project edges. Any observed accumulated trash, vegetation debris or improper disposal should be addressed promptly by the designated staff. Common area litter control measures can be coordinated and improved by the landscaping maintenance is currently taking place on-site. No trash should be allowed to be stored at the base of the containers. Pick-up intervals should be determined so that the containers are not overfilled.

Storm Drain System: Storm water conveyance systems, including inlets, swales, outlets, cleanouts, manholes and pipelines within the project should be inspected quarterly and after each major storm event or according to a maintenance schedule. All parts of the system should be periodically cleaned to ensure that the system works properly during any storm event. Any waste collected from the cleaning activities should be collected and handled for proper disposal.

Paved Area Sweeping and Cleaning

Paved area sweeping is recommended to prevent sediment, litter and other debris from being washed by runoff into the on-site storm drain system. Paved area sweeping should be performed during dry weather if possible and the frequency should be flexible to accommodate climate conditions and areas of concern. Street sweeping equipment must be operated only by trained personnel based on the manufacturer's specifications. Street sweeping equipment should be properly maintained off-site by the operator. Debris should be collected for proper handling and disposal.

Retention Facilities: WQMP Operation and maintenance should consider and prioritize the maintenance procedures established for the proper operation of the irrigation pond. Irrigation pond maintenance may supersede the general operation and maintenance guidelines provided herein.

Retention facilities should be visually inspected on a quarterly basis or according to a landscaping maintenance schedule. Physical obstructions caused by vegetation debris or littering should be promptly cleared to ensure that the facility continues to function as designed. Any material collected (e.g. landscape debris or trash) should be properly handled and disposed of. Retention facility outlets must be inspected for signs of erosion or obstruction.

Before annual storm seasons and following rainfall events producing precipitation of 0.5 inches or more:

- Maintain landscaping and irrigation system as needed.
- Remove debris and litter from the entire irrigation pond and retention freeboard to minimize clogging and improve aesthetics.
- Inspect for obvious problems and repair as needed. Address odor, insects, and overgrowth issues.
- Check for erosion and sediment laden areas in the basin shoreline. Repair as needed.
- Re-stabilize the basin slopes as needed.

Perform the following inspection procedures within 72 hours after a rainfall event producing precipitation of 0.5 inches or greater:

- Examine the tributary inlet for blockage, the embankment and spillway integrity, as well as damage to any structural element.
- Check for erosion, slumping and overgrowth. Repair as needed.
- Check basin depth for sediment build up and reduced total capacity.
- No algae formation should be visible.

Record Keeping: A copy of this project-specific WQMP should be maintained on-site or remotely by the project owner or operator (Home Owner's Association). Records of maintenance shall be appended to this WQMP.

VII. Funding

The funding source for operation and maintenance of each BMP identified in the Project Specific Water Quality Management Plan shall be the responsibility Relevant Coachella Owner, LLC. The owner recognizes that a source of funding is required to support the on-going operation and maintenance of BMPs, and that funding will continue for the life of the project.

By certifying the final project specific WQMP, the Project applicant is certifying that the funding responsibilities have been addressed and will be transferred to future owners. One example of how to adhere to the requirement to transfer operation and maintenance responsibilities is to record the project specific WQMP against the title to the property.

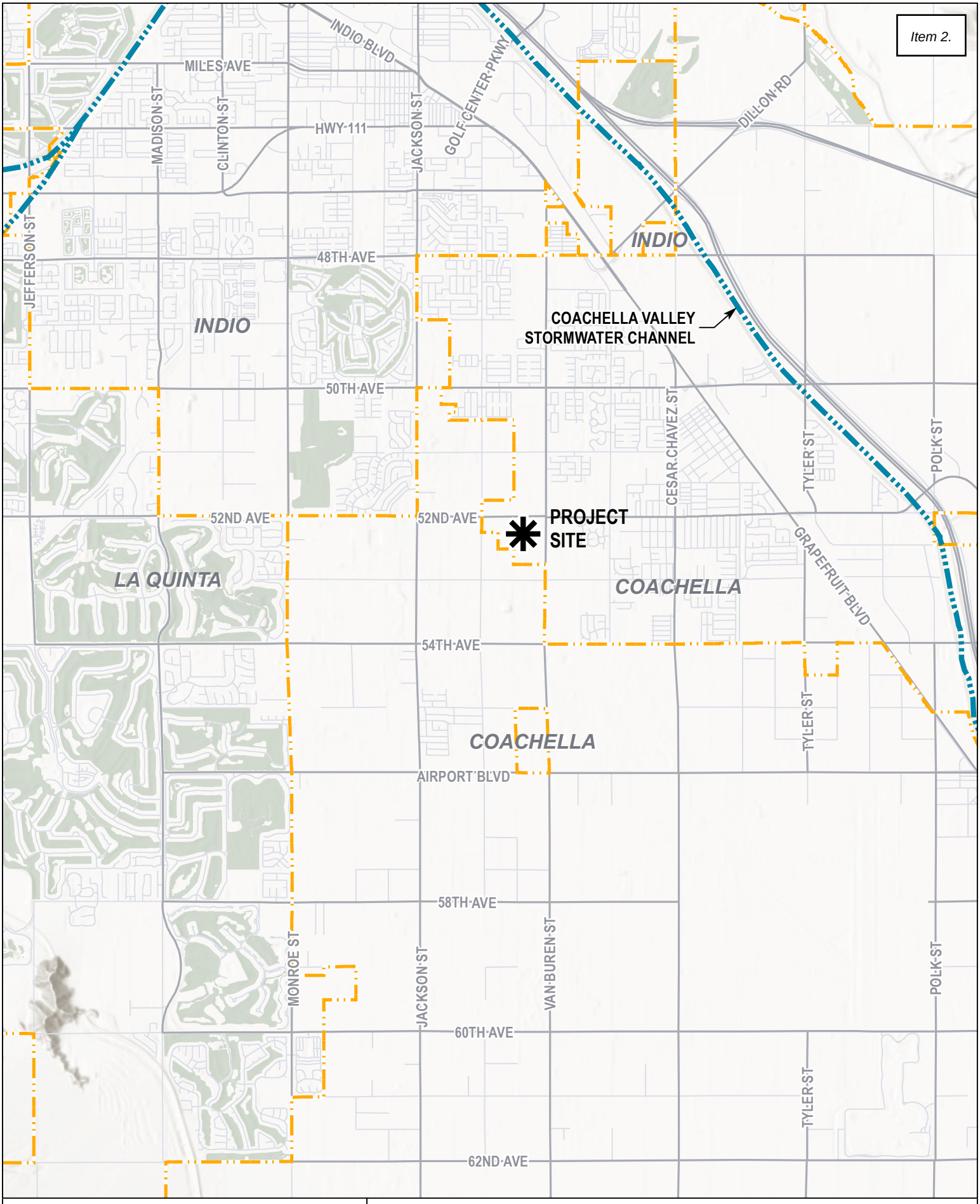
Appendix A

CONDITIONS OF APPROVAL

Planning Commission Resolution	To Be Provided
Dated	To Be Provided

Appendix B

VICINITY MAP, WQMP SITE PLAN, AND RECEIVING WATERS MAP

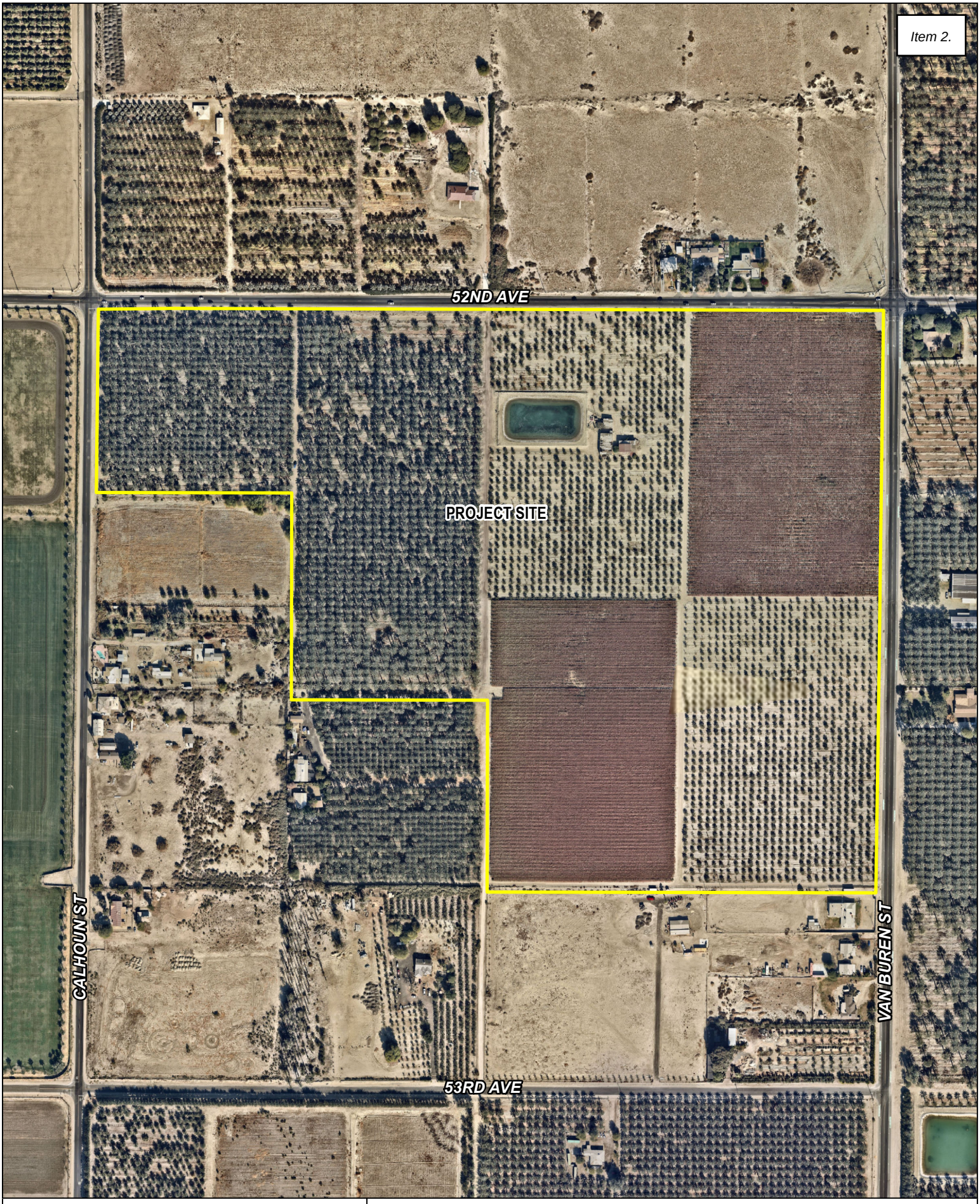


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0 NORTH 5,000 FT

THE RANCH - TTM 39330

VICINITY MAP

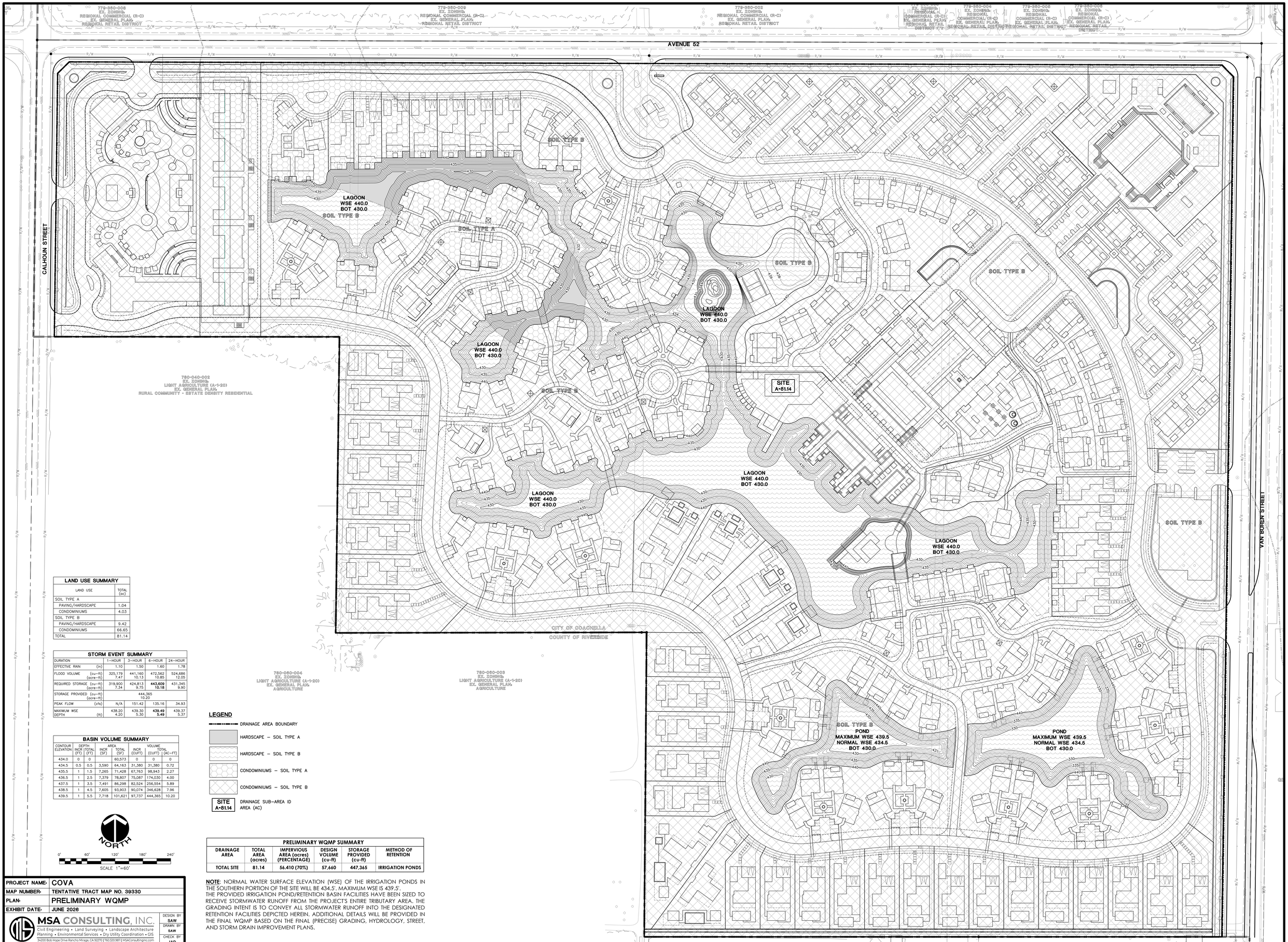


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0 NORTH 400 FT

THE RANCH - TTM 39330

EXISTING COND S



LAND USE SUMMARY	
LAND USE	TOTAL (ac)
SOIL TYPE A	
PAVING/HARDSCAPE	1.04
CONDOMINIUMS	4.03
SOIL TYPE B	
PAVING/HARDSCAPE	9.42
CONDOMINIUMS	66.65
TOTAL	81.14

STORM EVENT SUMMARY					
DURATION		1-HOUR	3-HOUR	6-HOUR	24-HOUR
EFFECTIVE RAIN	(in)	1.10	1.50	1.60	1.78
FLOOD VOLUME	(cu-ft)	325,179	441,160	472,562	524,686
	(acre-ft)	7.47	10.13	10.85	12.05
REQUIRED STORAGE	(cu-ft)	319,900	424,813	**443,609**	431,345
	(acre-ft)	7.34	9.75	**10.18**	9.90
STORAGE PROVIDED	(cu-ft)		444,365		
	(acre-ft)		10.20		
PEAK FLOW	(cfs)	N/A	151.42	135.16	34.93
MAXIMUM WSE		438.20	439.30	**439.49**	439.37
DEPTH	(ft)	4.20	5.30	**5.49**	5.37

BASIN VOLUME SUMMARY							
CONTOUR ELEVATION	DEPTH INCR (FT)	DEPTH TOTAL (FT)	AREA INCR (SF)	AREA TOTAL (SF)	VOLUME INCR (CUFT)	VOLUME TOTAL (CUFT)	VOLUME TOTAL (AC-FT)
434.0	0	0		60,573	0	0	0
434.5	0.5	0.5	3,590	64,163	31,380	31,380	0.72
435.5	1	1.5	7,265	71,428	67,763	98,943	2.27
436.5	1	2.5	7,379	78,807	75,087	174,030	4.00
437.5	1	3.5	7,491	86,298	82,524	256,554	5.89
438.5	1	4.5	7,605	93,903	90,074	346,628	7.96
439.5	1	5.5	7,718	101,621	97,737	444,365	10.20

NORTH

0' 60' 120' 180' 240'

SCALE 1"=60'

LEGEND

- DRAINAGE AREA BOUNDARY
- HARDSCAPE – SOIL TYPE A
- HARDSCAPE – SOIL TYPE B
- CONDOMINIUMS – SOIL TYPE A
- CONDOMINIUMS – SOIL TYPE B
- SITE A-81.14 — DRAINAGE SUB-AREA ID AREA (AC)

PRELIMINARY WQMP SUMMARY					
DRAINAGE AREA	TOTAL AREA (acres)	IMPERVIOUS AREA (acres) (PERCENTAGE)	DESIGN VOLUME (cu-ft)	STORAGE PROVIDED (cu-ft)	METHOD OF RETENTION
TOTAL SITE	81.14	56.410 (70%)	57,660	447,365	IRRIGATION PONDS

NOTE: NORMAL WATER SURFACE ELEVATION (WSE) OF THE IRRIGATION PONDS IN THE SOUTHERN PORTION OF THE SITE WILL BE 434.5'. MAXIMUM WSE IS 439.5'. THE PROVIDED IRRIGATION POND/RETENTION BASIN FACILITIES HAVE BEEN SIZED TO RECEIVE STORMWATER RUNOFF FROM THE PROJECT'S ENTIRE TRIBUTARY AREA. THE GRADING INTENT IS TO CONVEY ALL STORMWATER RUNOFF INTO THE DESIGNATED RETENTION FACILITIES DEPICTED HEREIN. ADDITIONAL DETAILS WILL BE PROVIDED IN THE FINAL WQMP BASED ON THE FINAL (PRECISE) GRADING, HYDROLOGY, STREET, AND STORM DRAIN IMPROVEMENT PLANS.

PROJECT NAME:	COVA
MAP NUMBER:	TENTATIVE TRACT MAP NO. 39330
PLAN:	PRELIMINARY WQMP
EXHIBIT DATE:	JUNE 2026

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34200 Bob Hope Drive Rancho Mirage, CA 92270 | 760.320.9811 | MSAConsultinginc.com

DESIGN BY	SAW
DRAWN BY	SAW
CHECK BY	JAD

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Appendix C

SUPPORTING DETAIL RELATED TO HYDROLOGIC CONDITIONS OF CONCERN

(NOT APPLICABLE – SEE APPENDIX F FOR HYDROLOGY REPORT SUMMARY)

Appendix D

EDUCATIONAL MATERIALS

CHECKLIST FOR MINIMIZING VECTOR PRODUCTION IN STORMWATER MANAGEMENT STRUCTURES

OUTDOOR CLEANING ACTIVITIES AND PROFESSIONAL MOBILE SERVICE PROVIDERS

CALIFORNIA STORMWATER BMP HANDBOOK - MUNICIPAL

SC-10: Non-Stormwater Discharges

SC-11: Spill Prevention, Control & Cleanup

SC-41: Building and Grounds Maintenance

SC-60: Housekeeping Practices

SC-61: Safer Alternative Products

SC-70: Road and Street Maintenance

SC-71: Plaza and Sidewalk Cleaning

SC-72: Fountain and Pool Maintenance

SC-73: Landscape Maintenance

SC-74: Drainage System Maintenance

SD-10: Site Design & Landscape Planning

SD-12: Efficient Irrigation

SD-13: Storm Drain Signage

TC-11: Infiltration Basin

TC-30: TC-30 Vegetated Swale

Safer Alternative Products SC-35

Description

Promote the use of less harmful products and products that contain little or no TMDL pollutants. Alternatives exist for most product classes including chemical fertilizers, pesticides, cleaning solutions, janitorial chemicals, automotive and paint products, and consumables (batteries, fluorescent lamps).

Approach

Pattern a new program after the many established programs around the state and country. Integrate this best management practice as much as possible with existing programs at your facility.

Develop a comprehensive program based on:

- The "Precautionary Principle," which is an alternative to the "Risk Assessment" model that says it's acceptable to use a potentially harmful product until physical evidence of its harmful effects are established and deemed too costly from an environmental or public health perspective. For instance, a risk assessment approach might say it's acceptable to use a pesticide until there is direct proof of an environmental impact. The Precautionary Principle approach is used to evaluate whether a given product is safe, whether it is really necessary, and whether alternative products would perform just as well.
- Environmentally Preferable Purchasing Program to minimize the purchase of products containing hazardous ingredients used in the facility's custodial services, fleet maintenance, and facility maintenance in favor of using alternate products that pose less risk to employees and to the environment.
- Integrated Pest Management (IPM) or Less-Toxic Pesticide Program, which uses a pest management approach that minimizes the use of toxic chemicals and gets rid of pests by methods that pose a lower risk to employees, the public, and the environment.
- Energy Efficiency Program including no-cost and low-cost energy conservation and efficiency actions that can reduce both energy consumption and electricity bills, along with long-term energy efficiency investments.

Consider the following mechanisms for developing and implementing a comprehensive program:

- Policies

Objectives

- Educate
- Reduce/Minimize
- Product Substitution

Targeted Constituents

Sediment	
Nutrients	✓
Trash	
Metals	✓
Bacteria	
Oil and Grease	✓
Organics	✓

CASQA California Stormwater Quality Association

SC-35 Safer Alternative Products

- Procedures
  - Standard operating procedures (SOPs)
  - Purchasing guidelines and procedures
  - Bid packages (services and supplies)
- Materials
  - Preferred or approved product and supplier lists
  - Product and supplier evaluation criteria
  - Training sessions and manuals
  - Fact sheets for employees

Implement this BMP in conjunction with the Vehicle and Equipment Management fact sheets (SC20 – SC22) and SC41, Building and Grounds Maintenance.

Training

- Employees who handle potentially harmful materials in the use of safer alternatives.
- Purchasing departments should be encouraged to procure less hazardous materials and products that contain little or no harmful substances or TMDL pollutants.

Regulations

This BMP has no regulatory requirements. Existing regulations already encourage facilities to reduce the use of hazardous materials through incentives such as reduced:

- Specialized equipment storage and handling requirements,
- Storm water runoff sampling requirements,
- Training and licensing requirements, and
- Record keeping and reporting requirements.

Equipment

- There are no major equipment requirements to this BMP.

Limitations

- Alternative products may not be available, suitable, or effective in every case.

Requirements

Cost Considerations

- The primary cost is for staff time to: 1) develop new policies and procedures and 2) educate purchasing departments and employees who handle potentially harmful materials about the availability, procurement, and use of safer alternatives.

Safer Alternative Products SC-35

- Some alternative products may be slightly more expensive than conventional products.

Supplemental Information

Employees and contractors / service providers can both be educated about safer alternatives by using information developed by a number of organizations including the references and resources listed below.

The following discussion provides some general information on safer alternatives. More specific information on particular hazardous materials and the available alternatives may be found in the references and resources listed below.

- Automotive products – Less toxic alternatives are not available for many automotive products, especially engine fluids. But there are alternatives to grease lubricants, car polishes, degreasers, and windshield washer solution. Rerefined motor oil is also available.
- Vehicle/Trailer lubrication – Fifth wheel bearings on trucks require routine lubrication. Adhesive lubricants are available to replace typical chassis grease.
- Cleaners – Vegetables-based or citrus-based soaps are available to replace petroleum-based soaps/detergents.
- Paint products – Water-based paints, wood preservatives, stains, and finishes are available.
- Pesticides – Specific alternative products or methods exist to control most insects, fungi, and weeds.
- Chemical Fertilizers – Compost and soil amendments are natural alternatives.
- Consumables – Manufacturers have either reduced or are in the process of reducing the amount of heavy metals in consumables such as batteries and fluorescent lamps. All fluorescent lamps contain mercury, however low-mercury containing lamps are now available from most hardware and lighting stores. Fluorescent lamps are also more energy efficient than the average incandescent lamp.
- Janitorial chemicals – Even biodegradable soap can harm fish and wildlife before it biodegrades. Biodegradable does not mean non-toxic. Safer products and procedures are available for floor stripping and cleaning, as well as carpet, glass, metal, and restroom cleaning and disinfecting.

Examples

There are a number of business and trade associations, and communities with effective programs. Some of the more prominent are listed below in the references and resources section.

References and Resources

Note: Many of these references provide alternative products for materials that typically are used inside and disposed to the sanitary sewer as well as alternatives to products that usually end up in the storm drain.

SC-35 Safer Alternative Products

General Sustainable Practices and Pollution Prevention Including Pollutant-Specific Information

California Department of Toxic Substances Control (www.dtsc.ca.gov)

California Integrated Waste Management Board (www.ciwmb.ca.gov)

City of Santa Monica (www.santa-monica.org/environment)

City of Palo Alto (www.city.palo-alto.ca.us/cleanbay)

City and County of San Francisco, Department of the Environment (www.ci.sf.ca.us/sfenvironment)

Earth 911 (www.earth911.org/master.asp)

Environmental Finance Center Region IX (www.greenstart.org/efc9)

Flex Your Power (www.flexyourpower.ca.gov)

GreenBiz.com (www.greenbiz.com)

Green Business Program (www.abag.org/bayarea/enviro/gbus/gb.html)

Pacific Industrial and Business Association (www.piba.org)

Sacramento Clean Water Business Partners (www.sacstormwater.org)

USEPA BMP fact sheet – Alternative products (http://cfpub.epa.gov/npdes/stormwater/menuofbmps/poll_2.cfm)

USEPA Region IX Pollution Prevention Program (www.epa.gov/region09/p2)

Western Regional Pollution Prevention Network (www.westp2net.org)

Metals (mercury, copper)

National Electrical Manufacturers Association - Environment, Health and Safety (www.nema.org)

Sustainable Conservation (www.suscon.org)

- Auto Recycling Project
- Brake Pad Partnership

Pesticides and Chemical Fertilizers

Bio-Integral Resource Center (www.birc.org)

California Department of Pesticide Regulation (www.cdpr.ca.gov)

University of California Statewide IPM Program (www.ipm.ucdavis.edu/default.html)

Dioxins

Bay Area Dioxins Project (http://dioxin.abag.ca.gov/)

Building & Grounds Maintenance SC-41

Description

Stormwater runoff from building and grounds maintenance activities can be contaminated with toxic hydrocarbons in solvents, fertilizers and pesticides, suspended solids, heavy metals, abnormal pH, and oils and greases. Utilizing the protocols in this fact sheet will prevent or reduce the discharge of pollutants to stormwater from building and grounds maintenance activities by washing and cleaning up with as little water as possible, following good landscape management practices, preventing and cleaning up spills immediately, keeping debris from entering the storm drains, and maintaining the stormwater collection system.

Approach

Reduce potential for pollutant discharge through source control pollution prevention and BMP implementation. Successful implementation depends on effective training of employees on applicable BMPs and general pollution prevention strategies and objectives.

General Pollution Prevention Protocols

- ☐ Switch to non-toxic chemicals for maintenance to the maximum extent possible.
- ☐ Choose cleaning agents that can be recycled.
- ☐ Encourage proper lawn management and landscaping, including use of native vegetation.
- ☐ Encourage use of Integrated Pest Management techniques for pest control.
- ☐ Encourage proper onsite recycling of yard trimmings.
- ☐ Recycle residual paints, solvents, lumber, and other material as much as possible.

Objectives
■ *Cover*
■ *Contain*
■ *Educate*
■ *Reduce/Minimize*
■ *Product Substitution*

Targeted Constituents	
Sediment	✓
Nutrients	✓
Trash	
Metals	✓
Bacteria	✓
Oil and Grease	
Organics	

Minimum BMPs Covered	
Good Housekeeping	✓
Preventative Maintenance	
Spill and Leak Prevention and Response	✓
Material Handling & Waste Management	✓
Erosion and Sediment Controls	
Employee Training Program	✓
Quality Assurance Record Keeping	✓

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- Clean work areas at the end of each work shift using dry cleaning methods such as sweeping and vacuuming.



Good Housekeeping

Pressure Washing of Buildings, Rooftops, and Other Large Objects

- In situations where soaps or detergents are used and the surrounding area is paved, pressure washers must use a water collection device that enables collection of wash water and associated solids. A sump pump, wet vacuum or similarly effective device must be used to collect the runoff and loose materials. The collected runoff and solids must be disposed of properly.

- If soaps or detergents are not used, and the surrounding area is paved, wash runoff does not have to be collected but must be screened. Pressure washers must use filter fabric or some other type of screen on the ground and/or in the catch basin to trap the particles in wash water runoff.

- If you are pressure washing on a grassed area (with or without soap), runoff must be dispersed as sheet flow as much as possible, rather than as a concentrated stream. The wash runoff must remain on the grass and not drain to pavement.

Landscaping Activities

- Dispose of grass clippings, leaves, sticks, or other collected vegetation as garbage, or by composting. Do not dispose of collected vegetation into waterways or storm drainage systems.

- Use mulch or other erosion control measures on exposed soils. See also SC-40, Contaminated and Erodible Areas, for more information.

Building Repair, Remodeling, and Construction

- Do not dump any toxic substance or liquid waste on the pavement, the ground, or toward a storm drain.

- Use ground or drop cloths underneath outdoor painting, scraping, and sandblasting work, and properly dispose of collected material daily.

- Use a ground cloth or oversized tub for activities such as paint mixing and tool cleaning.

- Clean paintbrushes and tools covered with water-based paints in sinks connected to sanitary sewers or in portable containers that can be dumped into a sanitary sewer drain. Brushes and tools covered with non-water-based paints, finishes, or other materials must be cleaned in a manner that enables collection of used solvents (e.g., paint thinner, turpentine, etc.) for recycling or proper disposal.

- Use a storm drain cover, filter fabric, or similarly effective runoff control mechanism if dust, grit, wash water, or other pollutants may escape the work area and enter a catch basin. This is particularly necessary on rainy days. The containment device(s) must be in place at the beginning of the work day, and accumulated dirty runoff and

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solids must be collected and disposed of before removing the containment device(s) at the end of the work day.

- If you need to de-water an excavation site, you may need to filter the water before discharging to a catch basin or off-site. If directed off-site, you should direct the water through hay bales and filter fabric or use other sediment filters or traps.
- Store toxic material under cover during precipitation events and when not in use. A cover would include tarps or other temporary cover material.

Mowing, Trimming, and Planting

- Dispose of leaves, sticks, or other collected vegetation as garbage, by composting or at a permitted landfill. Do not dispose of collected vegetation into waterways or storm drainage systems.
- Use mulch or other erosion control measures when soils are exposed.
- Place temporarily stockpiled material away from watercourses and drain inlets, and berm or cover stockpiles to prevent material releases to the storm drain system.
- Consider an alternative approach when bailing out muddy water: do not put it in the storm drain; pour over landscaped areas.
- Use hand weeding where practical.

Fertilizer and Pesticide Management

- Do not use pesticides if rain is expected.
- Do not mix or prepare pesticides for application near storm drains.
- Use the minimum amount needed for the job.
- Calibrate fertilizer distributors to avoid excessive application.
- Employ techniques to minimize off-target application (e.g., spray drift) of pesticides, including consideration of alternative application techniques.
- Apply pesticides only when wind speeds are low.
- Fertilizers should be worked into the soil rather than dumped or broadcast onto the surface.
- Irrigate slowly to prevent runoff and then only as much as is needed.
- Clean pavement and sidewalk if fertilizer is spilled on these surfaces before applying irrigation water.

Inspection

- Inspect irrigation system periodically to ensure that the right amount of water is being applied and that excessive runoff is not occurring. Minimize excess watering and repair leaks in the irrigation system as soon as they are observed.

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Spill Response and Prevention Procedures

- ☐ Keep your Spill Prevention Control and Countermeasure (SPCC) Plan up-to-date.
- ☐ Place a stockpile of spill cleanup materials, such as brooms, dustpans, and vacuum sweepers (if desired) near the storage area where it will be readily accessible.
- ☐ Have employees trained in spill containment and cleanup present during the loading/unloading of dangerous wastes, liquid chemicals, or other materials.
- ☐ Familiarize employees with the Spill Prevention Control and Countermeasure Plan.
- ☐ Clean up spills immediately.



Material Handling and Waste Management

- ☐ Follow all federal, state, and local laws and regulations governing the use, storage, and disposal of fertilizers and pesticides and training of applicators and pest control advisors.
- ☐ Use less toxic pesticides that will do the job when applicable. Avoid use of copper-based pesticides if possible.
- ☐ Dispose of empty pesticide containers according to the instructions on the container label.
- ☐ Use up the pesticides. Rinse containers, and use rinse water as product. Dispose of unused pesticide as hazardous waste.
- ☐ Implement storage requirements for pesticide products with guidance from the local fire department and County Agricultural Commissioner. Provide secondary containment for pesticides.



Employee Training Program

- ☐ Educate and train employees on pesticide use and in pesticide application techniques to prevent pollution.
- ☐ Train employees and contractors in proper techniques for spill containment and cleanup.
- ☐ Be sure the frequency of training takes into account the complexity of the operations and the needs of individual staff.



Quality Assurance and Record Keeping

- ☐ Keep accurate logs that document maintenance activities performed and minimum BMP measures implemented.
- ☐ Keep accurate logs of spill response actions that document what was spilled, how it was cleaned up, and how the waste was disposed.
- ☐ Establish procedures to complete logs and file them in the central office.

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Potential Capital Facility Costs and Operation & Maintenance Requirements

Facilities

- Additional capital costs are not anticipated for building and grounds maintenance. Implementation of the minimum BMPs described above should be conducted as part of regular site operations.

Maintenance

- Maintenance activities for the BMPs described above will be minimal, and no additional cost is anticipated.

Supplemental Information

Fire Sprinkler Line Flushing

Site fire sprinkler line flushing may be a source of non-stormwater runoff pollution. The water entering the system is usually potable water, though in some areas it may be non-potable reclaimed wastewater. There are subsequent factors that may drastically reduce the quality of the water in such systems. Black iron pipe is usually used since it is cheaper than potable piping, but it is subject to rusting and results in lower quality water. Initially, the black iron pipe has an oil coating to protect it from rusting between manufacture and installation; this will contaminate the water from the first flush but not from subsequent flushes. Nitrates, poly-phosphates and other corrosion inhibitors, as well as fire suppressants and antifreeze may be added to the sprinkler water system. Water generally remains in the sprinkler system a long time (typically a year) and between flushes may accumulate iron, manganese, lead, copper, nickel, and zinc. The water generally becomes anoxic and contains living and dead bacteria and breakdown products from chlorination. This may result in a significant BOD problem and the water often smells. Consequently dispose fire sprinkler line flush water into the sanitary sewer. Do not allow discharge to storm drain or infiltration due to potential high levels of pollutants in fire sprinkler line water.

References and Resources

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Sacramento Stormwater Management Program. *Best Management Practices for Industrial Storm Water Pollution Control.* Available online at:

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http://www.msa.saccounty.net/sactostormwater/documents/guides/industrial-BMP-manual.pdf.

US EPA, 1997. *Best Management Practices Handbook for Hazardous Waste Containers*. Available online at: http://www.epa.gov/region6/6en/h/handbk4.pdf.

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Road and Street Maintenance SC-70



Objectives

- Cover
- Contain
- Educate
- Reduce/Minimize
- Product Substitution

Targeted Constituents

Sediment	☑
Nutrients	
Trash	☑
Metals	☑
Bacteria	
Oil and Grease	☑
Organics	☑
Oxygen Demanding	☑

Description

Streets, roads, and highways are significant sources of pollutants in stormwater discharges, and operation and maintenance (O&M) practices, if not conducted properly, can contribute to the problem. Stormwater pollution from roadway and bridge maintenance should be addressed on a site-specific basis. Use of the procedures outlined below, that address street sweeping and repair, bridge and structure maintenance, and unpaved roads will reduce pollutants in stormwater.

Approach

Pollution Prevention

- Use the least toxic materials available (e.g. water based paints, gels or sprays for graffiti removal)
- Recycle paint and other materials whenever possible.
- Enlist the help of citizens to keep yard waste, used oil, and other wastes out of the gutter.

Suggested Protocols

Street Sweeping and Cleaning

- Maintain a consistent sweeping schedule. Provide minimum monthly sweeping of curbed streets.
- Perform street cleaning during dry weather if possible.

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- Avoid wet cleaning or flushing of street, and utilize dry methods where possible.
- Consider increasing sweeping frequency based on factors such as traffic volume, land use, field observations of sediment and trash accumulation, proximity to water courses, etc. For example:
  - Increase the sweeping frequency for streets with high pollutant loadings, especially in high traffic and industrial areas.
  - Increase the sweeping frequency just before the wet season to remove sediments accumulated during the summer.
  - Increase the sweeping frequency for streets in special problem areas such as special events, high litter or erosion zones.
- Maintain cleaning equipment in good working condition and purchase replacement equipment as needed. Old sweepers should be replaced with new technologically advanced sweepers (preferably regenerative air sweepers) that maximize pollutant removal.
- Operate sweepers at manufacturer requested optimal speed levels to increase effectiveness.
- To increase sweeping effectiveness consider the following:
  - Institute a parking policy to restrict parking in problematic areas during periods of street sweeping.
  - Post permanent street sweeping signs in problematic areas; use temporary signs if installation of permanent signs is not possible.
  - Develop and distribute flyers notifying residents of street sweeping schedules.
- Regularly inspect vehicles and equipment for leaks, and repair immediately.
- If available use vacuum or regenerative air sweepers in the high sediment and trash areas (typically industrial/commercial).
- Keep accurate logs of the number of curb-miles swept and the amount of waste collected.
- Dispose of street sweeping debris and dirt at a landfill.
- Do not store swept material along the side of the street or near a storm drain inlet.
- Keep debris storage to a minimum during the wet season or make sure debris piles are contained (e.g. by berming the area) or covered (e.g. with tarps or permanent covers).

Street Repair and Maintenance

Pavement marking

- Schedule pavement marking activities for dry weather.

- Develop paint handling procedures for proper use, storage, and disposal of paints.
- Transfer and load paint and hot thermoplastic away from storm drain inlets.
- Provide drop cloths and drip pans in paint mixing areas.
- Properly maintain application equipment.
- Street sweep thermoplastic grindings. Yellow thermoplastic grindings may require special handling as they may contain lead.
- Paints containing lead or tributyltin are considered a hazardous waste and must be disposed of properly.
- Use water based paints whenever possible. If using water based paints, clean the application equipment in a sink that is connected to the sanitary sewer.
- Properly store leftover paints if they are to be kept for the next job, or dispose of properly.

Concrete installation and repair

- Schedule asphalt and concrete activities for dry weather.
- Take measures to protect any nearby storm drain inlets and adjacent watercourses, prior to breaking up asphalt or concrete (e.g. place san bags around inlets or work areas).
- Limit the amount of fresh concrete or cement mortar mixed, mix only what is needed for the job.
- Store concrete materials under cover, away from drainage areas. Secure bags of cement after they are open. Be sure to keep wind-blown cement powder away from streets, gutters, storm drains, rainfall, and runoff.
- Return leftover materials to the transit mixer. Dispose of small amounts of hardened excess concrete, grout, and mortar in the trash.
- Do not wash sweepings from exposed aggregate concrete into the street or storm drain. Collect and return sweepings to aggregate base stockpile, or dispose in the trash.
- When making saw cuts in pavement, use as little water as possible and perform during dry weather. Cover each storm drain inlet completely with filter fabric or plastic during the sawing operation and contain the slurry by placing straw bales, sandbags, or gravel dams around the inlets. After the liquid drains or evaporates, shovel or vacuum the slurry residue from the pavement or gutter and remove from site. Alternatively, a small onsite vacuum may be used to pick up the slurry as this will prohibit slurry from reaching storm drain inlets.
- Wash concrete trucks off site or in designated areas on site designed to preclude discharge of wash water to drainage system.

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Patching, resurfacing, and surface sealing

- Schedule patching, resurfacing and surface sealing for dry weather.
- Stockpile materials away from streets, gutter areas, storm drain inlets or watercourses. During wet weather, cover stockpiles with plastic tarps or berm around them if necessary to prevent transport of materials in runoff.
- Pre-heat, transfer or load hot bituminous material away from drainage systems or watercourses.
- Where applicable, cover and seal nearby storm drain inlets (with waterproof material or mesh) and maintenance holes before applying seal coat, slurry seal, etc. Leave covers in place until job is complete and until all water from emulsified oil sealants has drained or evaporated. Clean any debris from covered maintenance holes and storm drain inlets when the job is complete.
- Prevent excess material from exposed aggregate concrete or similar treatments from entering streets or storm drain inlets. Designate an area for clean up and proper disposal of excess materials.
- Use only as much water as necessary for dust control, to avoid runoff.
- Sweep, never hose down streets to clean up tracked dirt. Use a street sweeper or vacuum truck. Do not dump vacuumed liquid in storm drains.
- Catch drips from paving equipment that is not in use with pans or absorbent material placed under the machines. Dispose of collected material and absorbents properly.

Equipment cleaning maintenance and storage

- Inspect equipment daily and repair any leaks. Place drip pans or absorbent materials under heavy equipment when not in use.
- Perform major equipment repairs at the corporation yard, when practical.
- If refueling or repairing vehicles and equipment must be done onsite, use a location away from storm drain inlets and watercourses.
- Clean equipment including sprayers, sprayer paint supply lines, patch and paving equipment, and mud jacking equipment at the end of each day. Clean in a sink or other area (e.g. vehicle wash area) that is connected to the sanitary sewer.

Bridge and Structure Maintenance

Paint and Paint Removal

- Transport paint and materials to and from job sites in containers with secure lids and tied down to the transport vehicle.
- Do not transfer or load paint near storm drain inlets or watercourses.

- Test and inspect spray equipment prior to starting to paint. Tighten all hoses and connections and do not overfill paint container.
- Plug nearby storm drain inlets prior to starting painting where there is significant risk of a spill reaching storm drains. Remove plugs when job is completed.
- If sand blasting is used to remove paint, cover nearby storm drain inlets prior to starting work.
- Perform work on a maintenance traveler or platform, or use suspended netting or tarps to capture paint, rust, paint removing agents, or other materials, to prevent discharge of materials to surface waters if the bridge crosses a watercourse. If sanding, use a sander with a vacuum filter bag.
- Capture all clean-up water, and dispose of properly.
- Recycle paint when possible (e.g. paint may be used for graffiti removal activities). Dispose of unused paint at an appropriate household hazardous waste facility.

Graffiti Removal

- Schedule graffiti removal activities for dry weather.
- Protect nearby storm drain inlets prior to removing graffiti from walls, signs, sidewalks, or other structures needing graffiti abatement. Clean up afterwards by sweeping or vacuuming thoroughly, and/or by using absorbent and properly disposing of the absorbent.
- When graffiti is removed by painting over, implement the procedures under Painting and Paint Removal above.
- Direct runoff from sand blasting and high pressure washing (with no cleaning agents) into a landscaped or dirt area. If such an area is not available, filter runoff through an appropriate filtering device (e.g. filter fabric) to keep sand, particles, and debris out of storm drains.
- If a graffiti abatement method generates wash water containing a cleaning compound (such as high pressure washing with a cleaning compound), plug nearby storm drains and vacuum/pump wash water to the sanitary sewer.
- Consider using a waterless and non-toxic chemical cleaning method for graffiti removal (e.g. gels or spray compounds).

Repair Work

- Prevent concrete, steel, wood, metal parts, tools, or other work materials from entering storm drains or watercourses.
- Thoroughly clean up the job site when the repair work is completed.
- When cleaning guardrails or fences follow the appropriate surface cleaning methods (depending on the type of surface) outlined in SC-71 Plaza & Sidewalk Cleaning fact sheet.

SC-70 Road and Street Maintenance

- If painting is conducted, follow the painting and paint removal procedures above.
- If graffiti removal is conducted, follow the graffiti removal procedures above.
- If construction takes place, see the Construction Activity BMP Handbook.
- Recycle materials whenever possible.

Unpaved Roads and Trails

- Stabilize exposed soil areas to prevent soil from eroding during rain events. This is particularly important on steep slopes.
- For roadside areas with exposed soils, the most cost-effective choice is to vegetate the area, preferably with a mulch or binder that will hold the soils in place while the vegetation is establishing. Native vegetation should be used if possible.
- If vegetation cannot be established immediately, apply temporary erosion control mats/blankets; a comma straw, or gravel as appropriate.
- If sediment is already eroded and mobilized in roadside areas, temporary controls should be installed. These may include: sediment control fences, fabric-covered triangular dikes, gravel-filled burlap bags, biobags, or hay bales staked in place.

Non-Stormwater Discharges

Field crews should be aware of non-stormwater discharges as part of their ongoing street maintenance efforts.

- Refer to SC-10 Non-Stormwater Discharges
- Identify location, time and estimated quantity of discharges.
- Notify appropriate personnel.

Training

- Train employees regarding proper street sweeping operation and street repair and maintenance.
- Instruct employees and subcontractors to ensure that measures to reduce the stormwater impacts of roadway/bridge maintenance are being followed.
- Require engineering staff and/or consulting A/E firms to address stormwater quality in new bridge designs or existing bridge retrofits.
- Use a training log or similar method to document training.
- Train employees on proper spill containment and clean up, and in identifying non-stormwater discharges.

Spill Response and Prevention

- Refer to SC-11, Spill Prevention, Control & Cleanup.
- Keep your Spill Prevention Control and countermeasure (SPCC) plan up-to-date, and implement accordingly.
- Have spill cleanup materials readily available and in a known location.
- Cleanup spills immediately and use dry methods if possible.
- Properly dispose of spill cleanup material.

Other Considerations

- Densely populated areas or heavily used streets may require parking regulations to clear streets for cleaning.
- No currently available conventional sweeper is effective at removing oil and grease. Mechanical sweepers are not effective at removing finer sediments.
- Limitations may arise in the location of new bridges. The availability and cost of land and other economic and political factors may dictate where the placement of a new bridge will occur. Better design of the bridge to control runoff is required if it is being placed near sensitive waters.

Requirements

Costs

- The maintenance of local roads and bridges is already a consideration of most community public works or transportation departments. Therefore, the cost of pollutant reducing management practices will involve the training and equipment required to implement these new practices.
- The largest expenditures for street sweeping programs are in staffing and equipment. The capital cost for a conventional street sweeper is between $60,000 and $120,000. Newer technologies might have prices approaching $180,000. The average useful life of a conventional sweeper is about four years, and programs must budget for equipment replacement. Sweeping frequencies will determine equipment life, so programs that sweep more often should expect to have a higher cost of replacement.
- A street sweeping program may require the following.
  - Sweeper operators, maintenance, supervisory, and administrative personnel are required.
  - Traffic control officers may be required to enforce parking restrictions.
  - Skillful design of cleaning routes is required for program to be productive.
  - Arrangements must be made for disposal of collected wastes.

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- If investing in newer technologies, training for operators must be included in operation and maintenance budgets. Costs for public education are small, and mostly deal with the need to obey parking restrictions and litter control. Parking tickets are an effective reminder to obey parking rules, as well as being a source of revenue.

Maintenance

- Not applicable

Supplemental Information

Further Detail of the BMP

Street sweeping

There are advantages and disadvantages to the two common types of sweepers. The best choice depends on your specific conditions. Many communities find it useful to have a compliment of both types in their fleet.

Mechanical Broom Sweepers - More effective at picking up large debris and cleaning wet streets. Less costly to purchase and operate. Create more airborne dust.

Vacuum Sweepers - More effective at removing fine particles and associated heavy metals. Ineffective at cleaning wet streets. Noisier than mechanical broom sweepers which may restrict areas or times of operation. May require an advance vehicle to remove large debris.

Street Flushers - Not affected by biggest interference to cleaning, parked cars. May remove finer sediments, moving them toward the gutter and stormwater inlets. For this reason, flushing fell out of favor and is now used primarily after sweeping. Flushing may be effective for combined sewer systems. Presently street flushing is not allowed under most NPDES permits.

Cross-Media Transfer of Pollutants

The California Air Resources Board (ARB) has established state ambient air quality standards including a standard for respirable particulate matter (less than or equal to 10 microns in diameter, symbolized as PM10). In the effort to sweep up finer sediments to remove attached heavy metals, municipalities should be aware that fine dust, that cannot be captured by the sweeping equipment and becomes airborne, could lead to issues of worker and public safety.

Bridges

Bridges that carry vehicular traffic generate some of the more direct discharges of runoff to surface waters. Bridge scupper drains cause a direct discharge of stormwater into receiving waters and have been shown to carry relatively high concentrations of pollutants. Bridge maintenance also generates wastes that may be either directly deposited to the water below or carried to the receiving water by stormwater. The following steps will help reduce the stormwater impacts of bridge maintenance:

- Site new bridges so that significant adverse impacts to wetlands, sensitive areas, critical habitat, and riparian vegetation are minimized.

- Design new bridges to avoid the use of scupper drains and route runoff to land for treatment control. Existing scupper drains should be cleaned on a regular basis to avoid sediment/debris accumulation.
- Reduce the discharge of pollutants to surface waters during maintenance by using suspended traps, vacuums, or booms in the water to capture paint, rust, and paint removing agents. Many of these wastes may be hazardous. Properly dispose of this waste by referring to CA21 (Hazardous Waste Management) in the Construction Handbook.
- Train employees and subcontractors to reduce the discharge of wastes during bridge maintenance.

De-icing

- Do not over-apply deicing salt and sand, and routinely calibrate spreaders.
- Near reservoirs, restrict the application of deicing salt and redirect any runoff away from reservoirs.
- Consider using alternative deicing agents (less toxic, biodegradable, etc.).

References and Resources

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Landscape Maintenance SC-75



Objectives

- Contain
- Educate
- Reduce/Minimize
- Product Substitution

Targeted Constituents

Sediment	☑
Nutrients	☑
Trash	☑
Metals	
Bacteria	
Oil and Grease	
Organics	
Oxygen Demanding	☑

Description

Landscape maintenance activities include vegetation removal; herbicide and insecticide application; fertilizer application; watering; and other gardening and lawn care practices. Vegetation control typically involves a combination of chemical (herbicide) application and mechanical methods. All of these maintenance practices have the potential to contribute pollutants to the storm drain system. The major objectives of this BMP are to minimize the discharge of pesticides, herbicides and fertilizers to the storm drain system and receiving waters; prevent the disposal of landscape waste into the storm drain system by collecting and properly disposing of clippings and cuttings, and educating employees and the public.

Approach

Pollution Prevention

- Implement an integrated pest management (IPM) program. IPM is a sustainable approach to managing pests by combining biological, cultural, physical, and chemical tools.
- Choose low water using flowers, trees, shrubs, and groundcover.
- Consider alternative landscaping techniques such as naturescaping and xeriscaping.
- Conduct appropriate maintenance (i.e. properly timed fertilizing, weeding, pest control, and pruning) to help preserve the landscapes water efficiency.

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SC-73 Landscape Maintenance

- Consider grass cycling (grass cycling is the natural recycling of grass by leaving the clippings on the lawn when mowing. Grass clippings decompose quickly and release valuable nutrients back into the lawn).

Suggested Protocols

Mowing, Trimming, and Weeding

- Whenever possible use mechanical methods of vegetation removal (e.g mowing with tractor-type or push mowers, hand cutting with gas or electric powered weed trimmers) rather than applying herbicides. Use hand weeding where practical.
- Avoid loosening the soil when conducting mechanical or manual weed control, this could lead to erosion. Use mulch or other erosion control measures when soils are exposed.
- Performing mowing at optimal times. Mowing should not be performed if significant rain events are predicted.
- Mulching mowers may be recommended for certain flat areas. Other techniques may be employed to minimize mowing such as selective vegetative planting using low maintenance grasses and shrubs.
- Collect lawn and garden clippings, pruning waste, tree trimmings, and weeds. Chip if necessary, and compost or dispose of at a landfill (see waste management section of this fact sheet).
- Place temporarily stockpiled material away from watercourses, and berm or cover stockpiles to prevent material releases to storm drains.

Planting

- Determine existing native vegetation features (location, species, size, function, importance) and consider the feasibility of protecting them. Consider elements such as their effect on drainage and erosion, hardiness, maintenance requirements, and possible conflicts between preserving vegetation and the resulting maintenance needs.
- Retain and/or plant selected native vegetation whose features are determined to be beneficial, where feasible. Native vegetation usually requires less maintenance (e.g., irrigation, fertilizer) than planting new vegetation.
- Consider using low water use groundcovers when planting or replanting.

Waste Management

- Compost leaves, sticks, or other collected vegetation or dispose of at a permitted landfill. Do not dispose of collected vegetation into waterways or storm drainage systems.
- Place temporarily stockpiled material away from watercourses and storm drain inlets, and berm or cover stockpiles to prevent material releases to the storm drain system.
- Reduce the use of high nitrogen fertilizers that produce excess growth requiring more frequent mowing or trimming.

- Avoid landscape wastes in and around storm drain inlets by either using bagging equipment or by manually picking up the material.

Irrigation

- Where practical, use automatic timers to minimize runoff.
- Use popup sprinkler heads in areas with a lot of activity or where there is a chance the pipes may be broken. Consider the use of mechanisms that reduce water flow to sprinkler heads if broken.
- Ensure that there is no runoff from the landscaped area(s) if re-claimed water is used for irrigation.
- If bailing of muddy water is required (e.g. when repairing a water line leak), do not put it in the storm drain; pour over landscaped areas.
- Irrigate slowly or pulse irrigate to prevent runoff and then only irrigate as much as is needed.
- Apply water at rates that do not exceed the infiltration rate of the soil.

Fertilizer and Pesticide Management

- Utilize a comprehensive management system that incorporates integrated pest management (IPM) techniques. There are many methods and types of IPM, including the following:
  - Mulching can be used to prevent weeds where turf is absent, fencing installed to keep rodents out, and netting used to keep birds and insects away from leaves and fruit.
  - Visible insects can be removed by hand (with gloves or tweezers) and placed in soapy water or vegetable oil. Alternatively, insects can be sprayed off the plant with water or in some cases vacuumed off of larger plants.
  - Store-bought traps, such as species-specific, pheromone-based traps or colored sticky cards, can be used.
  - Slugs can be trapped in small cups filled with beer that are set in the ground so the slugs can get in easily.
  - In cases where microscopic parasites, such as bacteria and fungi, are causing damage to plants, the affected plant material can be removed and disposed of (pruning equipment should be disinfected with bleach to prevent spreading the disease organism).
  - Small mammals and birds can be excluded using fences, netting, tree trunk guards.
  - Beneficial organisms, such as bats, birds, green lacewings, ladybugs, praying mantis, ground beetles, parasitic nematodes, trichogramma wasps, seed head weevils, and spiders that prey on detrimental pest species can be promoted.
- Follow all federal, state, and local laws and regulations governing the use, storage, and disposal of fertilizers and pesticides and training of applicators and pest control advisors.

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- Use pesticides only if there is an actual pest problem (not on a regular preventative schedule).
- Do not use pesticides if rain is expected. Apply pesticides only when wind speeds are low (less than 5 mph).
- Do not mix or prepare pesticides for application near storm drains.
- Prepare the minimum amount of pesticide needed for the job and use the lowest rate that will effectively control the pest.
- Employ techniques to minimize off-target application (e.g. spray drift) of pesticides, including consideration of alternative application techniques.
- Fertilizers should be worked into the soil rather than dumped or broadcast onto the surface.
- Calibrate fertilizer and pesticide application equipment to avoid excessive application.
- Periodically test soils for determining proper fertilizer use.
- Sweep pavement and sidewalk if fertilizer is spilled on these surfaces before applying irrigation water.
- Purchase only the amount of pesticide that you can reasonably use in a given time period (month or year depending on the product).
- Triple rinse containers, and use rinse water as product. Dispose of unused pesticide as hazardous waste.
- Dispose of empty pesticide containers according to the instructions on the container label.

Inspection

- Inspect irrigation system periodically to ensure that the right amount of water is being applied and that excessive runoff is not occurring. Minimize excess watering, and repair leaks in the irrigation system as soon as they are observed.
- Inspect pesticide/fertilizer equipment and transportation vehicles daily.

Training

- Educate and train employees on use of pesticides and in pesticide application techniques to prevent pollution. Pesticide application must be under the supervision of a California qualified pesticide applicator.
- Train/encourage municipal maintenance crews to use IPM techniques for managing public green areas.
- Annually train employees within departments responsible for pesticide application on the appropriate portions of the agency's IPM Policy, SOPs, and BMPs, and the latest IPM techniques.

- Employees who are not authorized and trained to apply pesticides should be periodically (at least annually) informed that they cannot use over-the-counter pesticides in or around the workplace.
- Use a training log or similar method to document training.

Spill Response and Prevention

- Refer to SC-11, Spill Prevention, Control & Cleanup
- Have spill cleanup materials readily available and in a know in location
- Cleanup spills immediately and use dry methods if possible.
- Properly dispose of spill cleanup material.

Other Considerations

- The Federal Pesticide, Fungicide, and Rodenticide Act and California Title 3, Division 6, Pesticides and Pest Control Operations place strict controls over pesticide application and handling and specify training, annual refresher, and testing requirements. The regulations generally cover: a list of approved pesticides and selected uses, updated regularly; general application information; equipment use and maintenance procedures; and record keeping. The California Department of Pesticide Regulations and the County Agricultural Commission coordinate and maintain the licensing and certification programs. All public agency employees who apply pesticides and herbicides in "agricultural use" areas such as parks, golf courses, rights-of-way and recreation areas should be properly certified in accordance with state regulations. Contracts for landscape maintenance should include similar requirements.
- All employees who handle pesticides should be familiar with the most recent material safety data sheet (MSDS) files.
- Municipalities do not have the authority to regulate the use of pesticides by school districts, however the California Healthy Schools Act of 2000 (AB 2260) has imposed requirements on California school districts regarding pesticide use in schools. Posting of notification prior to the application of pesticides is now required, and IPM is stated as the preferred approach to pest management in schools.

Requirements

Costs

Additional training of municipal employees will be required to address IPM techniques and BMPs. IPM methods will likely increase labor cost for pest control which may be offset by lower chemical costs.

Maintenance

Not applicable

SC-73 Landscape Maintenance

Supplemental Information

Further Detail of the BMP

Waste Management

Composting is one of the better disposal alternatives if locally available. Most municipalities either have or are planning yard waste composting facilities as a means of reducing the amount of waste going to the landfill. Lawn clippings from municipal maintenance programs as well as private sources would probably be compatible with most composting facilities

Contractors and Other Pesticide Users

Municipal agencies should develop and implement a process to ensure that any contractor employed to conduct pest control and pesticide application on municipal property engages in pest control methods consistent with the IPM Policy adopted by the agency. Specifically, municipalities should require contractors to follow the agency's IPM policy, SOPs, and BMPs; provide evidence to the agency of having received training on current IPM techniques when feasible; provide documentation of pesticide use on agency property to the agency in a timely manner.

References and Resources

King County Stormwater Pollution Control Manual. Best Management Practices for Businesses. 1995. King County Surface Water Management. July. On-line: http://dnr.metrokc.gov/wlr/dss/spcm.htm

Los Angeles County Stormwater Quality Model Programs. Public Agency Activities http://ladpw.org/wmd/npdes/model_links.cfm

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Santa Clara Valley Urban Runoff Pollution Prevention Program. 1997 Urban Runoff Management Plan. September 1997, updated October 2000.

United States Environmental Protection Agency (USEPA). 2002. Pollution Prevention/Good Housekeeping for Municipal Operations Landscaping and Lawn Care. Office of Water. Office of Wastewater Management. On-line: http://www.epa.gov/npdes/menuofbmps/poll_8.htm

Drainage System Maintenance SC-74



Photo Credit: Geoff Brosseau

Objectives

- Contain
- Educate
- Reduce/Minimize

Description

As a consequence of its function, the stormwater conveyance system collects and transports urban runoff that may contain certain pollutants. Maintaining catch basins, stormwater inlets, and other stormwater conveyance structures on a regular basis will remove pollutants, prevent clogging of the downstream conveyance system, restore catch basins' sediment trapping capacity, and ensure the system functions properly hydraulically to avoid flooding.

Targeted Constituents

Sediment	☑
Nutrients	☑
Trash	☑
Metals	☑
Bacteria	☑
Oil and Grease	☑
Organics	☑
Oxygen Demanding	☑

Approach

Suggested Protocols

Catch Basins/Inlet Structures

- Municipal staff should regularly inspect facilities to ensure the following:
  - Immediate repair of any deterioration threatening structural integrity.
  - Cleaning before the sump is 40% full. Catch basins should be cleaned as frequently as needed to meet this standard.
  - Stenciling of catch basins and inlets (see SC-75 Waste Handling and Disposal).
- Clean catch basins, storm drain inlets, and other conveyance structures in high pollutant load areas just before the wet season to remove sediments and debris accumulated during the summer.

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- Conduct inspections more frequently during the wet season for problem areas where sediment or trash accumulates more often. Clean and repair as needed.
- Keep accurate logs of the number of catch basins cleaned.
- Record the amount of waste collected.
- Store wastes collected from cleaning activities of the drainage system in appropriate containers or temporary storage sites in a manner that prevents discharge to the storm drain.
- Dewater the wastes with outflow into the sanitary sewer if permitted. Water should be treated with an appropriate filtering device prior to discharge to the sanitary sewer. If discharge to the sanitary sewer is not allowed, water should be pumped or vacuumed to a tank and properly disposed of. Do not dewater near a storm drain or stream.
- Except for small communities with relatively few catch basins that may be cleaned manually, most municipalities will require mechanical cleaners such as eductors, vacuums, or bucket loaders.

Storm Drain Conveyance System

- Locate reaches of storm drain with deposit problems and develop a flushing schedule that keeps the pipe clear of excessive buildup.
- Collect flushed effluent and pump to the sanitary sewer for treatment.

Pump Stations

- Clean all storm drain pump stations prior to the wet season to remove silt and trash.
- Do not allow discharge from cleaning a storm drain pump station or other facility to reach the storm drain system.
- Conduct quarterly routine maintenance at each pump station.
- Inspect, clean, and repair as necessary all outlet structures prior to the wet season.
- Sample collected sediments to determine if landfill disposal is possible, or illegal discharges in the watershed are occurring.

Open Channel

- Consider modification of storm channel characteristics to improve channel hydraulics, to increase pollutant removals, and to enhance channel/creek aesthetic and habitat value.
- Conduct channel modification/improvement in accordance with existing laws. Any person, government agency, or public utility proposing an activity that will change the natural (emphasis added) state of any river, stream, or lake in California, must enter into a steam or Lake Alteration Agreement with the Department of Fish and Game. The developer-applicant should also contact local governments (city, county, special districts), other state agencies

(SWRCB, RWQCB, Department of Forestry, Department of Water Resources), and Federal Corps of Engineers and USFWS

Illicit Connections and Discharges

- During routine maintenance of conveyance system and drainage structures field staff should look for evidence of illegal discharges or illicit connections:
  - Is there evidence of spills such as paints, discoloring, etc.
  - Are there any odors associated with the drainage system
  - Record locations of apparent illegal discharges/illicit connections
  - Track flows back to potential dischargers and conduct aboveground inspections. This can be done through visual inspection of up gradient manholes or alternate techniques including zinc chloride smoke testing, fluorometric dye testing, physical inspection testing, or television camera inspection.
  - Once the origin of flow is established, require illicit discharger to eliminate the discharge.
- Stencil storm drains, where applicable, to prevent illegal disposal of pollutants. Storm drain inlets should have messages such as "Dump No Waste Drains to Stream" stenciled next to them to warn against ignorant or intentional dumping of pollutants into the storm drainage system.
- Refer to fact sheet SC-10 Non-Stormwater Discharges.

Illegal Dumping

- Regularly inspect and clean up hot spots and other storm drainage areas where illegal dumping and disposal occurs.
- Establish a system for tracking incidents. The system should be designed to identify the following:
  - Illegal dumping hot spots
  - Types and quantities (in some cases) of wastes
  - Patterns in time of occurrence (time of day/night, month, or year)
  - Mode of dumping (abandoned containers, "midnight dumping" from moving vehicles, direct dumping of materials, accidents/spills)
  - Responsible parties
- Post "No Dumping" signs in problem areas with a phone number for reporting dumping and disposal. Signs should also indicate fines and penalties for illegal dumping.
- Refer to fact sheet SC-10 Non-Stormwater Discharges.

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- The State Department of Fish and Game has a hotline for reporting violations called Cal TIP (1-800-952-5400). The phone number may be used to report any violation of a Fish and Game code (illegal dumping, poaching, etc.).
- The California Department of Toxic Substances Control's Waste Alert Hotline, 1-800-69TOXIC, can be used to report hazardous waste violations.

Training

- Train crews in proper maintenance activities, including record keeping and disposal.
- Only properly trained individuals are allowed to handle hazardous materials/wastes.
- Train municipal employees from all departments (public works, utilities, street cleaning, parks and recreation, industrial waste inspection, hazardous waste inspection, sewer maintenance) to recognize and report illegal dumping.
- Train municipal employees and educate businesses, contractors, and the general public in proper and consistent methods for disposal.
- Train municipal staff regarding non-stormwater discharges (See SC-10 Non-Stormwater Discharges).

Spill Response and Prevention

- Refer to SC-11, Prevention, Control & Cleanup
- Have spill cleanup materials readily available and in a known location.
- Cleanup spills immediately and use dry methods if possible.
- Properly dispose of spill cleanup material.

Other Considerations

- Cleanup activities may create a slight disturbance for local aquatic species. Access to items and material on private property may be limited. Trade-offs may exist between channel hydraulics and water quality/riparian habitat. If storm channels or basins are recognized as wetlands, many activities, including maintenance, may be subject to regulation and permitting.
- Storm drain flushing is most effective in small diameter pipes (36-inch diameter pipe or less, depending on water supply and sediment collection capacity). Other considerations associated with storm drain flushing may include the availability of a water source, finding a downstream area to collect sediments, liquid/sediment disposal, and disposal of flushed effluent to sanitary sewer may be prohibited in some areas.
- Regulations may include adoption of substantial penalties for illegal dumping and disposal.
- Municipal codes should include sections prohibiting the discharge of soil, debris, refuse, hazardous wastes, and other pollutants into the storm drain system.
- Private property access rights may be needed to track illegal discharges up gradient.

- Requirements of municipal ordinance authority for suspected source verification testing for illicit connections necessary for guaranteed rights of entry.

Requirements

Costs

- An aggressive catch basin cleaning program could require a significant capital and O&M budget. A careful study of cleaning effectiveness should be undertaken before increased cleaning is implemented. Catch basin cleaning costs are less expensive if vacuum street sweepers are available; cleaning catch basins manually can cost approximately twice as much as cleaning the basins with a vacuum attached to a sweeper.

- Methods used for illicit connection detection (smoke testing, dye testing, visual inspection, and flow monitoring) can be costly and time-consuming. Site-specific factors, such as the level of impervious area, the density and ages of buildings, and type of land use will determine the level of investigation necessary. Encouraging reporting of illicit discharges by employees can offset costs by saving expense on inspectors and directing resources more efficiently. Some programs have used funds available from "environmental fees" or special assessment districts to fund their illicit connection elimination programs.

Maintenance

- Two-person teams may be required to clean catch basins with vactor trucks.

- Identifying illicit discharges requires teams of at least two people (volunteers can be used), plus administrative personnel, depending on the complexity of the storm sewer system.

- Arrangements must be made for proper disposal of collected wastes.

- Requires technical staff to detect and investigate illegal dumping violations, and to coordinate public education.

Supplemental Information

Further Detail of the BMP

Storm Drain flushing

Sanitary sewer flushing is a common maintenance activity used to improve pipe hydraulics and to remove pollutants in sanitary sewer systems. The same principles that make sanitary sewer flushing effective can be used to flush storm drains. Flushing may be designed to hydraulically convey accumulated material to strategic locations, such as to an open channel, to another point where flushing will be initiated, or over to the sanitary sewer and on to the treatment facilities, thus preventing re-suspension and overflow of a portion of the solids during storm events. Flushing prevents "plug flow" discharges of concentrated pollutant loadings and sediments. The deposits can hinder the designed conveyance capacity of the storm drain system and potentially cause backwater conditions in severe cases of clogging.

Storm drain flushing usually takes place along segments of pipe with grades that are too flat to maintain adequate velocity to keep particles in suspension. An upstream manhole is selected to place an inflatable device that temporarily plugs the pipe. Further upstream, water is pumped into the line to create a flushing wave. When the upstream reach of pipe is sufficiently full to

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cause a flushing wave, the inflated device is rapidly deflated with the assistance of a vacuum pump, releasing the backed up water and resulting in the cleaning of the storm drain segment.

To further reduce the impacts of stormwater pollution, a second inflatable device, placed well downstream, may be used to re-collect the water after the force of the flushing wave has dissipated. A pump may then be used to transfer the water and accumulated material to the sanitary sewer for treatment. In some cases, an interceptor structure may be more practical or required to re-collect the flushed waters.

It has been found that cleansing efficiency of periodic flush waves is dependent upon flush volume, flush discharge rate, sewer slope, sewer length, sewer flow rate, sewer diameter, and population density. As a rule of thumb, the length of line to be flushed should not exceed 700 feet. At this maximum recommended length, the percent removal efficiency ranges between 65-75 percent for organics and 55-65 percent for dry weather grit/inorganic material. The percent removal efficiency drops rapidly beyond that. Water is commonly supplied by a water truck, but fire hydrants can also supply water. To make the best use of water, it is recommended that reclaimed water be used or that fire hydrant line flushing coincide with storm drain flushing.

Flow Management

Flow management has been one of the principal motivations for designing urban stream corridors in the past. Such needs may or may not be compatible with the stormwater quality goals in the stream corridor.

Downstream flood peaks can be suppressed by reducing through flow velocity. This can be accomplished by reducing gradient with grade control structures or increasing roughness with boulders, dense vegetation, or complex banks forms. Reducing velocity correspondingly increases flood height, so all such measures have a natural association with floodplain open space. Flood elevations laterally adjacent to the stream can be lowered by increasing through flow velocity.

However, increasing velocity increases flooding downstream and inherently conflicts with channel stability and human safety. Where topography permits, another way to lower flood elevation is to lower the level of the floodway with drop structures into a large but subtly excavated bowl where flood flows we allowed to spread out.

Stream Corridor Planning

Urban streams receive and convey stormwater flows from developed or developing watersheds. Planning of stream corridors thus interacts with urban stormwater management programs. If local programs are intended to control or protect downstream environments by managing flows delivered to the channels, then it is logical that such programs should be supplemented by management of the materials, forms, and uses of the downstream riparian corridor. Any proposal for steam alteration or management should be investigated for its potential flow and stability effects on upstream, downstream, and laterally adjacent areas. The timing and rate of flow from various tributaries can combine in complex ways to alter flood hazards. Each section of channel is unique, influenced by its own distribution of roughness elements, management activities, and stream responses.

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Flexibility to adapt to stream features and behaviors as they evolve must be included in stream reclamation planning. The amenity and ecology of streams may be enhanced through the landscape design options of 1) corridor reservation, 2) bank treatment, 3) geomorphic restoration, and 4) grade control.

Corridor reservation - Reserving stream corridors and valleys to accommodate natural stream meandering, aggradation, degradation, and over bank flows allows streams to find their own form and generate less ongoing erosion. In California, open stream corridors in recent urban developments have produced recreational open space, irrigation of streamside plantings, and the aesthetic amenity of flowing water.

Bank treatment - The use of armoring, vegetative cover, and flow deflection may be used to influence a channel's form, stability, and biotic habitat. To prevent bank erosion, armoring can be done with rigid construction materials, such as concrete, masonry, wood planks and logs, riprap, and gabions. Concrete linings have been criticized because of their lack of provision of biotic habitat. In contrast, riprap and gabions make relatively porous and flexible linings. Boulders, placed in the bed reduce velocity and erosive power.

Riparian vegetation can stabilize the banks of streams that are at or near a condition of equilibrium. Binding networks of roots increase bank shear strength. During flood flows, resilient vegetation is forced into erosion-inhibiting mats. The roughness of vegetation leads to lower velocity, further reducing erosive effects. Structural flow deflection can protect banks from erosion or alter fish habitat. By concentrating flow, a deflector causes a pool to be scoured in the bed.

Geomorphic restoration – Restoration refers to alteration of disturbed streams so their form and behavior emulate those of undisturbed streams. Natural meanders are retained, with grading to gentle slopes on the inside of curves to allow point bars and riffle-pool sequences to develop. Trees are retained to provide scenic quality, biotic productivity, and roots for bank stabilization, supplemented by plantings where necessary.

A restorative approach can be successful where the stream is already approaching equilibrium. However, if upstream urbanization continues new flow regimes will be generated that could disrupt the equilibrium of the treated system.

Grade Control - A grade control structure is a level shelf of a permanent material, such as stone, masonry, or concrete, over which stream water flows. A grade control structure is called a sill, weir, or drop structure, depending on the relation of its invert elevation to upstream and downstream channels.

A sill is installed at the preexisting channel bed elevation to prevent upstream migration of nick points. It establishes a firm base level below which the upstream channel can not erode.

A weir or check dam is installed with invert above the preexisting bed elevation. A weir raises the local base level of the stream and causes aggradation upstream. The gradient, velocity, and erosive potential of the stream channel are reduced. A drop structure lowers the downstream invert below its preexisting elevation, reducing downstream gradient and velocity. Weirs and drop structure control erosion by dissipating energy and reducing slope velocity.

SC-74 Drainage System Maintenance

When carefully applied, grade control structures can be highly versatile in establishing human and environmental benefits in stabilized channels. To be successful, application of grade control structures should be guided by analysis of the stream system both upstream and downstream from the area to he reclaimed.

Examples

The California Department of Water Resources began the Urban Stream Restoration Program in 1985. The program provides grant funds to municipalities and community groups to implement stream restoration projects. The projects reduce damages from streambank aid watershed instability arid floods while restoring streams' aesthetic, recreational, and fish and wildlife values.

In Buena Vista Park, upper floodway slopes are gentle and grassed to achieve continuity of usable park land across the channel of small boulders at the base of the slopes.

The San Diego River is a large, vegetative lined channel, which was planted in a variety of species to support riparian wildlife while stabilizing the steep banks of the floodway.

References and Resources

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Efficient Irrigation SD-12



Design Objectives

- ☑ Maximize Infiltration
- ☑ Provide Retention
- ☑ Slow Runoff
- Minimize Impervious Land Coverage
- Prohibit Dumping of Improper Materials
- Contain Pollutants
- Collect and Convey

Description

Irrigation water provided to landscaped areas may result in excess irrigation water being conveyed into stormwater drainage systems.

Approach

Project plan designs for development and redevelopment should include application methods of irrigation water that minimize runoff of excess irrigation water into the stormwater conveyance system.

Suitable Applications

Appropriate applications include residential, commercial and industrial areas planned for development or redevelopment. (Detached residential single-family homes are typically excluded from this requirement.)

Design Considerations

Designing New Installations

The following methods to reduce excessive irrigation runoff should be considered, and incorporated and implemented where determined applicable and feasible by the Permittee:

- Employ rain-triggered shutoff devices to prevent irrigation after precipitation.
- Design irrigation systems to each landscape area's specific water requirements.
- Include design featuring flow reducers or shutoff valves triggered by a pressure drop to control water loss in the event of broken sprinkler heads or lines.
- Implement landscape plans consistent with County or City water conservation resolutions, which may include provision of water sensors, programmable irrigation times (for short cycles), etc.

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SD-12 Efficient Irrigation

- Design timing and application methods of irrigation water to minimize the runoff of excess irrigation water into the storm water drainage system.
- Group plants with similar water requirements in order to reduce excess irrigation runoff and promote surface filtration. Choose plants with low irrigation requirements (for example, native or drought tolerant species). Consider design features such as:
  - Using mulches (such as wood chips or bar) in planter areas without ground cover to minimize sediment in runoff
  - Installing appropriate plant materials for the location, in accordance with amount of sunlight and climate, and use native plant materials where possible and/or as recommended by the landscape architect
  - Leaving a vegetative barrier along the property boundary and interior watercourses, to act as a pollutant filter, where appropriate and feasible
  - Choosing plants that minimize or eliminate the use of fertilizer or pesticides to sustain growth
- Employ other comparable, equally effective methods to reduce irrigation water runoff.

Redeveloping Existing Installations

Various jurisdictional stormwater management and mitigation plans (SUSMP, WQMP, etc.) define "redevelopment" in terms of amounts of additional impervious area, increases in gross floor area and/or exterior construction, and land disturbing activities with structural or impervious surfaces. The definition of " redevelopment" must be consulted to determine whether or not the requirements for new development apply to areas intended for redevelopment. If the definition applies, the steps outlined under "designing new installations" above should be followed.

Other Resources

A Manual for the Standard Urban Stormwater Mitigation Plan (SUSMP), Los Angeles County Department of Public Works, May 2002.

Model Standard Urban Storm Water Mitigation Plan (SUSMP) for San Diego County, Port of San Diego, and Cities in San Diego County, February 14, 2002.

Model Water Quality Management Plan (WQMP) for County of Orange, Orange County Flood Control District, and the Incorporated Cities of Orange County, Draft February 2003.

Ventura Countywide Technical Guidance Manual for Stormwater Quality Control Measures, July 2002.

Appendix E

SOILS REPORT

Sladden Engineering

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October 22, 2024

Project No. 544-24159
24-10-561

Relevant Living
6417 Selma Avenue, 2nd Floor
Los Angeles, California 90028

Project: Proposed The Ranch at Coachella
Mixed-Use Development
APN's 780-040-001, 003, 780-060-001 & 002
SWC 52nd Avenue & Van Buren Street
Coachella, California

Subject: Percolation/Infiltration Testing for Stormwater Management

Ref: Geotechnical Investigation report, Proposed "The Ranch at Coachella" Mixed-Use Development, APNs 780-040-001, 003 & 780-060-001 & 002 Coachella, California, Project No. 544-24159, Report No. 24-07-358.

In accordance with your request, we have performed percolation testing on the subject site to evaluate the infiltration potential of the near-surface soil to assist in stormwater management system design. It is our understanding that on-site stormwater retention including infiltration is planned for the proposed project.

Percolation testing has been performed within 8 shallow test holes excavated on the site. Testing was performed at a depth of approximately 4 and 6 feet below the existing ground surface. The approximate locations of the test holes are presented on the attached Test Location Photograph (Figure 3). Proposed testing locations were provided to Sladden Engineering by MSA Consulting, Inc. However, final locations were adjusted based on encountered field conditions and by on site tenant's request.

Testing was performed by placing water within the test bores and recording the drop in the water surface with time. Testing was performed in general accordance with Section 2.3 of Riverside County – Low Impact Development BMP Design Handbook for percolation testing. Test results are summarized in the following table.

PERCOLATION/INFILTRATION TEST RESULTS

Test No.	Depth (Ft)	USCS	Percolation Rate (in/hr)	Infiltration Rate (in/hr)
P-1	6.00	SM	24.00	3.00
P-2	6.00	SM	27.50	3.64
P-3	4.00	SM	40.00	6.67
P-4	6.00	SM	40.00	6.67

P-5	6.00	SM	32.50	4.68
P-6	4.00	SM	40.00	6.67
P-7	4.00	SM	40.00	6.67
P-8	4.00	SM	40.00	6.67

The percolation rates determined represent the ultimate field rates that do not include a safety factor. The corresponding infiltration rates were calculated using the Porchet Method. An appropriate safety factor should be incorporated into stormwater retention/infiltration system design.

If you have any questions regarding this memo, please contact the undersigned.

Respectfully submitted,
SLADDEN ENGINEERING

James W. Minor III
Senior Geologist

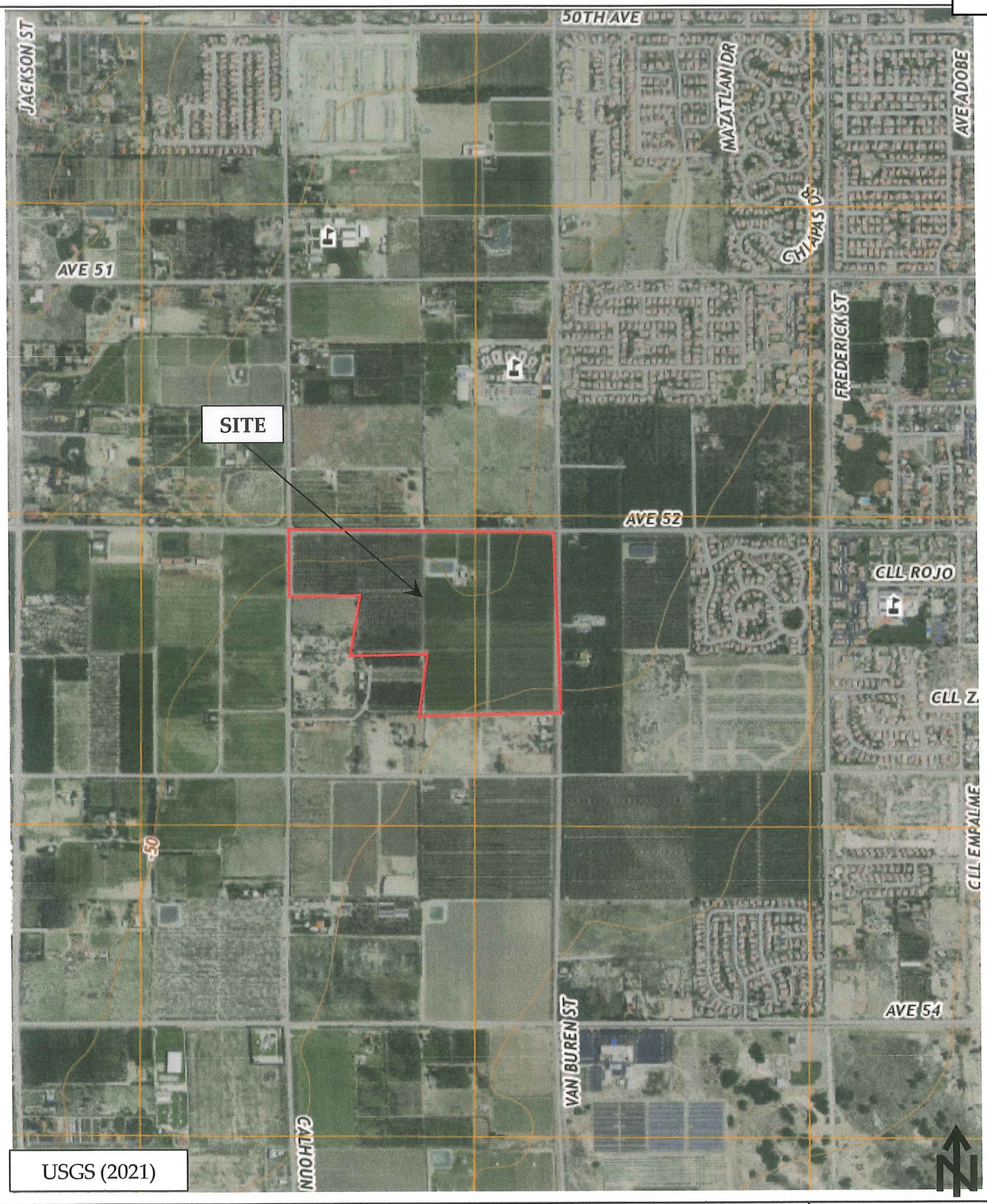
PROFESSIONAL GEOLOGIST
JAMES W. MINOR III
No. 9735
STATE OF CALIFORNIA

Brett L. Anderson
Principal Engineer

REGISTERED PROFESSIONAL ENGINEER
BRETT L. ANDERSON
No. C45389
CIVIL ENGINEERING
STATE OF CALIFORNIA

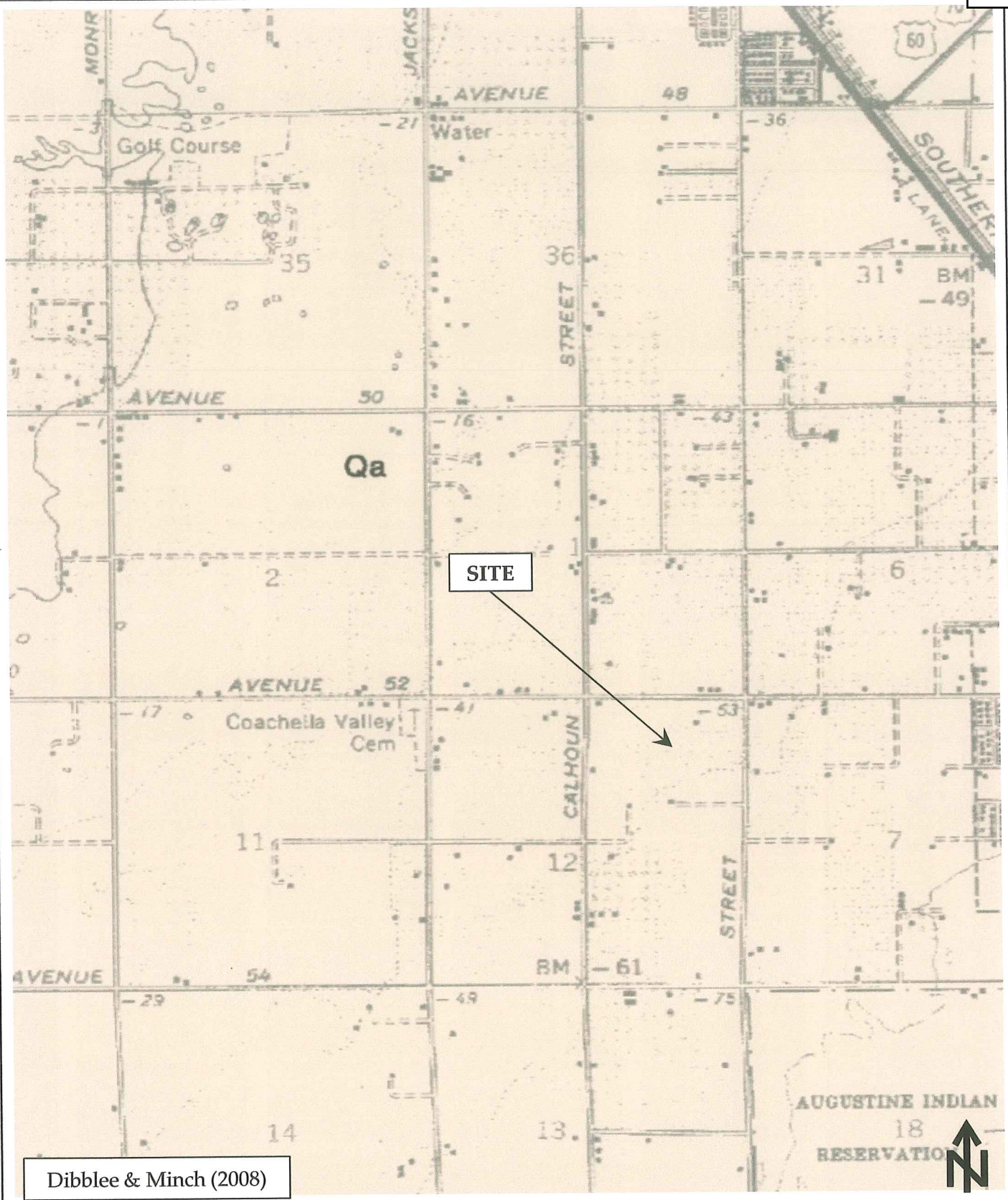
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SITE LOCATION MAP
REGIONAL GEOLOGIC MAP
TEST LOCATION PHOTOGRAPH



USGS (2021)

	SITE LOCATION MAP	FIGURE
Sladden Engineering	Project Number: 544-24159	1
	Report Number: 24-10-561	
	Date: October 22, 2024	



Dibblee & Minch (2008)

Sladden Engineering	REGIONAL GEOLOGIC MAP	FIGURE 2
	Project Number: 544-24159	
	Report Number: 24-10-561	
	Date: October 22, 2024	



LEGEND

P-8 Approximate Percolation Testing Location

Google Earth (2024)

Sladden Engineering

TEST LOCATION PHOTOGRAPH

Project Number:	544-24159
Report Number:	24-10-561
Date:	October 22, 2024

FIGURE

3

BORING LOGS
STORMWATER TESTING DATA SHEETS

Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	9/26/2024
Elevation:	-50 FT MSL	Boring No:	P-1

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							2		Silty Sand (SM); grayish brown, moist, fine-to coarse-grained, micaceous, with trace of clay.
							4		
							6		
							8		Terminated at ~ 6 ft bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered. Borehole Cased with Perforated Pipe for Percolation Testing.
							10		
							12		
							14		
							16		
							18		
							20		
							22		
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

MIXED-USE DEVELOPMENT
SWC 52ND AVENUE & VAN BUREN, COACHELLA

Project No:	544-24159	Page	1
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Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	9/26/2024
Elevation:	-50 FT MSL	Boring No:	P-2

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							2		Silty Sand (SM); grayish brown, moist, fine-to coarse-grained, micaceous, with trace of clay.
							4		
							6		
							8		Terminated at ~ 6 ft bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered. Borehole Cased with Perforated Pipe for Percolation Testing.
							10		
							12		
							14		
							16		
							18		
							20		
							22		
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

MIXED-USE DEVELOPMENT
SWC 52ND AVENUE & VAN BUREN, COACHELLA

Project No:	544-24159	Page	2
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Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	9/26/2024
Elevation:	-50 FT MSL	Boring No:	P-3

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							2		Silty Sand (SM); grayish brown, slightly moist, fine-to coarse-grained, micaceous.
							4		
							6		
							8		
							10		Terminated at ~ 4 ft bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered. Borehole Cased with Perforated Pipe for Percolation Testing.
							12		
							14		
							16		
							18		
							20		
							22		
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

MIXED-USE DEVELOPMENT
SWC 52ND AVENUE & VAN BUREN, COACHELLA

Project No:	544-24159	Page	3
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Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	9/26/2024
Elevation:	-50 FT MSL	Boring No:	P-4

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							2		Silty Sand (SM); grayish brown, slightly moist, fine-to coarse-grained, micaceous.
							4		
							6		
							8		Terminated at ~ 6 ft bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered. Borehole Cased with Perforated Pipe for Percolation Testing.
							10		
							12		
							14		
							16		
							18		
							20		
							22		
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

MIXED-USE DEVELOPMENT
SWC 52ND AVENUE & VAN BUREN, COACHELLA

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Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	9/26/2024
Elevation:	-50 FT MSL	Boring No:	P-5

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							2		Silty Sand (SM); grayish brown, slightly moist, fine-to coarse-grained, micaceous.
							4		
							6		
							8		Terminated at ~ 6 ft bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered. Borehole Cased with Perforated Pipe for Percolation Testing.
							10		
							12		
							14		
							16		
							18		
							20		
							22		
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

MIXED-USE DEVELOPMENT
SWC 52ND AVENUE & VAN BUREN, COACHELLA

Project No:	544-24159	Page	5
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Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	9/26/2024
Elevation:	-50 FT MSL	Boring No:	P-6

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							2		Silty Sand (SM); grayish brown, slightly moist, fine-to coarse-grained, micaceous.
							4		
							6		
							8		
							10		Terminated at ~ 4 ft bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered. Borehole Cased with Perforated Pipe for Percolation Testing.
							12		
							14		
							16		
							18		
							20		
							22		
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

MIXED-USE DEVELOPMENT
SWC 52ND AVENUE & VAN BUREN, COACHELLA

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Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	9/26/2024
Elevation:	-50 FT MSL	Boring No:	P-7

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							2		Silty Sand (SM); grayish brown, slightly moist, fine-to coarse-grained, micaceous.
							4		
							6		
							8		
							10		Terminated at ~ 4 ft bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered. Borehole Cased with Perforated Pipe for Percolation Testing.
							12		
							14		
							16		
							18		
							20		
							22		
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

MIXED-USE DEVELOPMENT
SWC 52ND AVENUE & VAN BUREN, COACHELLA

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Report No:	24-10-561		

Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	9/26/2024
Elevation:	-50 FT MSL	Boring No:	P-8

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							2		Silty Sand (SM); grayish brown, slightly moist, fine-to coarse-grained, micaceous.
							4		
							6		
							8		
							10		Terminated at ~ 4 ft bgs.
							12		No Bedrock Encountered.
							14		No Groundwater or Seepage Encountered.
							16		Borehole Cased with Perforated Pipe for Percolation Testing.
							18		
							20		
							22		
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

MIXED-USE DEVELOPMENT
SWC 52ND AVENUE & VAN BUREN, COACHELLA

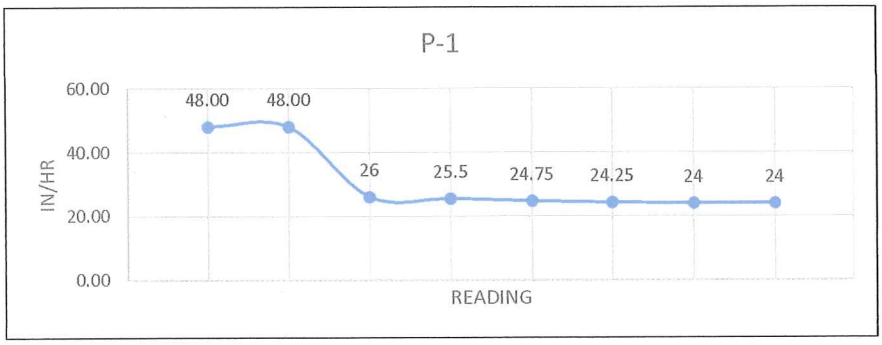
Project No:	544-24159	Page	8
Report No:	24-10-561		

STORMWATER PERCOLATION SHEET (LESS THAN 10 FT)

Project:	Mixed-Use Development	Depth (ft):	6.00
Job No. :	544-24159	USCS Soil Class:	SM
Date:	10/21/2024	Sandy Soil:	Favorable
Test Hole #:	P-1	Tested By:	Robert

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
A	25.00	6.00	20	0	20	48.00
B	25.00	6.00	20	0	20	48.00

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
1	30.00	6.00	20	7	13	26
2	30.00	6.00	20	7 2/8	12 6/8	25.5
3	30.00	6.00	20	7 5/8	12 3/8	24.75
4	30.00	6.00	20	7 7/8	12 1/8	24.25
5	30.00	6.00	20	8	12	24
6	30.00	6.00	20	8	12	24



PERCOLATION RATE CONVERSION (PORCHET METHOD)

$$I_{t=} \quad \frac{\Delta H\ 60\ R}{\Delta t(r+2H_{avg})}$$

Δt =	30.00
D_f =	64.00
r =	4.00
D_0 =	52
D_t =	72.00
H_0 =	20
H_f =	8
ΔH =	12.00
H_{avg} =	14.00

Δt (minutes)
D_f (Final Depth to water)
r (hole radius in inches)
D_0 (Initial Depth to water)
D_t (Total Depth of test hole)
H_0 (initial height of water at selected time interval)

$$H_0 = D_t - D_0$$

H_f (final height of water at the selected time interval)

$$H_f = D_t - D_f$$

ΔH (change in head over the time interval)

$$\Delta H = H_0 - H_f$$

H_{avg} (average head height over the time interval)

$$H_{avg} = (H_0 + H_f)/2$$

Field Rate:	24 in/hr
Infiltration Rate:	3.00 in/hr

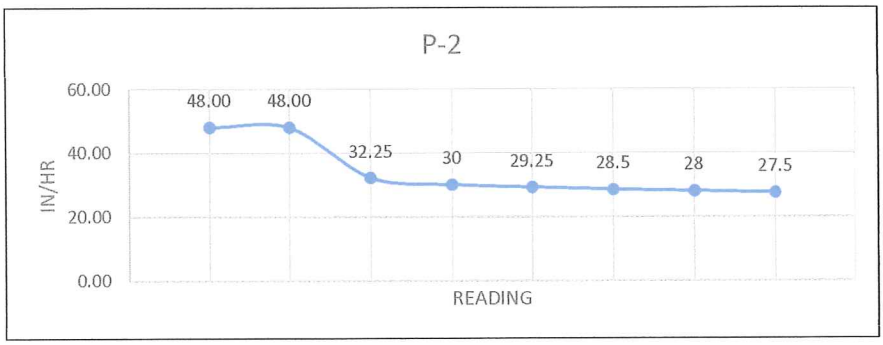
SLADDEN ENGINEERING

STORMWATER PERCOLATION SHEET (LESS THAN 10 FT)

Project:	Mixed-Use Development	Depth (ft):	6.00
Job No. :	544-24159	USCS Soil Class:	SM
Date:	10/21/2024	Sandy Soil:	Favorable
Test Hole #:	P-2	Tested By:	Robert

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
A	25.00	6.00	20	0	20	48.00
B	25.00	6.00	20	0	20	48.00

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
1	30.00	6.00	20	3 7/8	16 1/8	32.25
2	30.00	6.00	20	5	15	30
3	30.00	6.00	20	5 3/8	14 5/8	29.25
4	30.00	6.00	20	5 6/8	14 2/8	28.5
5	30.00	6.00	20	6	14	28
6	30.00	6.00	20	6 2/8	13 6/8	27.5



PERCOLATION RATE CONVERSION (PORCHET METHOD)

$$I_{t=} \quad \frac{\Delta H\ 60\ R}{\Delta t(r+2H_{avg})}$$

Δt =	30.00
D_f =	65.75
r =	4.00
D_0 =	52
D_t =	72.00
H_0 =	20
H_f =	6.25
ΔH =	13.75
H_{avg} =	13.13

Δt (minutes)

D_f (Final Depth to water)

r (hole radius in inches)

D_0 (Initial Depth to water)

D_t (Total Depth of test hole)

H_0 (initial height of water at selected time interval)

$$H_0 = D_t - D_0$$

H_f (final height of water at the selected time interval)

$$H_f = D_t - D_f$$

ΔH (change in head over the time interval)

$$\Delta H = H_0 - H_f$$

H_{avg} (average head height over the time interval)

$$H_{avg} = (H_0 + H_f)/2$$

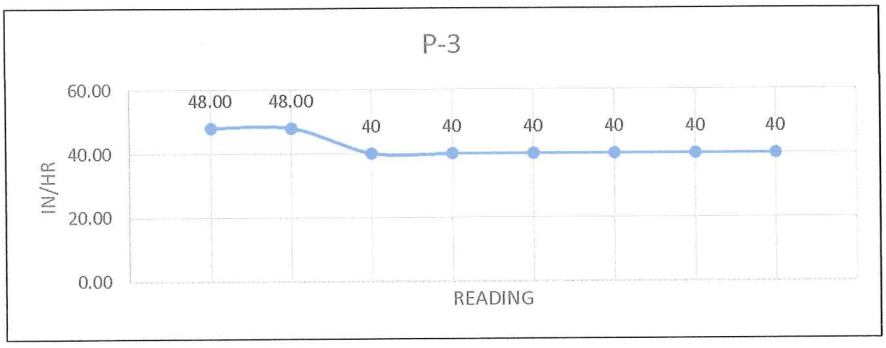
Field Rate:	27.5 in/hr
Infiltration Rate:	3.64 in/hr

STORMWATER PERCOLATION SHEET (LESS THAN 10 FT)

Project:	Mixed-Use Development	Depth (ft):	4.00
Job No. :	544-24159	USCS Soil Class:	SM
Date:	10/21/2024	Sandy Soil:	Favorable
Test Hole #:	P-3	Tested By:	Robert

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
A	25.00	4.00	20	0	20	48.00
B	25.00	4.00	20	0	20	48.00

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
1	30.00	4.00	20	0	20	40
2	30.00	4.00	20	0	20	40
3	30.00	4.00	20	0	20	40
4	30.00	4.00	20	0	20	40
5	30.00	4.00	20	0	20	40
6	30.00	4.00	20	0	20	40



PERCOLATION RATE CONVERSION (PORCHET METHOD)

$$I_{t=} \quad \frac{\Delta H\ 60\ R}{\Delta t(r+2H_{avg})}$$

Δt =	30.00
D_f =	48.00
r =	4.00
D_0 =	28
D_t =	48.00
H_0 =	20
H_f =	0
ΔH =	20.00
H_{avg} =	10.00

Δt (minutes)
D_f (Final Depth to water)
r (hole radius in inches)
D_0 (Initial Depth to water)
D_t (Total Depth of test hole)
H_0 (initial height of water at selected time interval)

$$H_0 = D_t - D_0$$

H_f (final height of water at the selected time interval)

$$H_f = D_t - D_f$$

ΔH (change in head over the time interval)

$$\Delta H = H_0 - H_f$$

H_{avg} (average head height over the time interval)

$$H_{avg} = (H_0 + H_f)/2$$

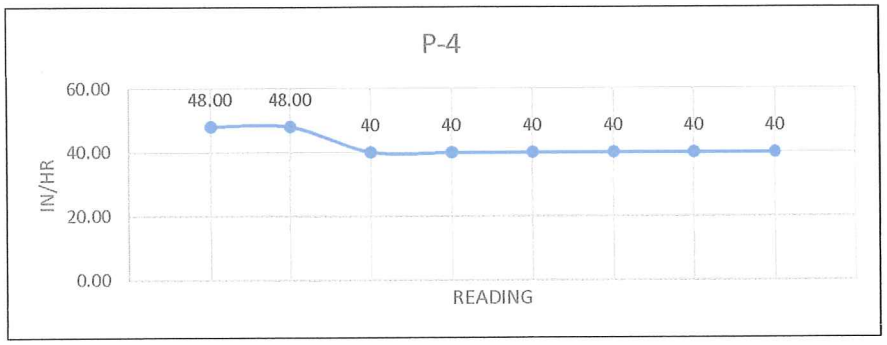
Field Rate:	40 in/hr
Infiltration Rate:	6.67 in/hr

STORMWATER PERCOLATION SHEET (LESS THAN 10 FT)

Project:	Mixed-Use Development	Depth (ft):	6.00
Job No. :	544-24159	USCS Soil Class:	SM
Date:	10/21/2024	Sandy Soil:	Favorable
Test Hole #:	P-4	Tested By:	Robert

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
A	25.00	6.00	20	0	20	48.00
B	25.00	6.00	20	0	20	48.00

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
1	30.00	6.00	20	0	20	40
2	30.00	6.00	20	0	20	40
3	30.00	6.00	20	0	20	40
4	30.00	6.00	20	0	20	40
5	30.00	6.00	20	0	20	40
6	30.00	6.00	20	0	20	40



PERCOLATION RATE CONVERSION (PORCHET METHOD)

$$I_{t=} \quad \frac{\Delta H\ 60\ R}{\Delta t(r+2H_{avg})}$$

Δt =	30.00
D_f =	72.00
r =	4.00
D_0 =	52
D_t =	72.00
H_0 =	20
H_f =	0
ΔH =	20.00
H_{avg} =	10.00

Δt (minutes)

D_f (Final Depth to water)

r (hole radius in inches)

D_0 (Initial Depth to water)

D_t (Total Depth of test hole)

H_0 (initial height of water at selected time interval)

$$H_0 = D_t - D_0$$

H_f (final height of water at the selected time interval)

$$H_f = D_t - D_f$$

ΔH (change in head over the time interval)

$$\Delta H = H_0 - H_f$$

H_{avg} (average head height over the time interval)

$$H_{avg} = (H_0 + H_f)/2$$

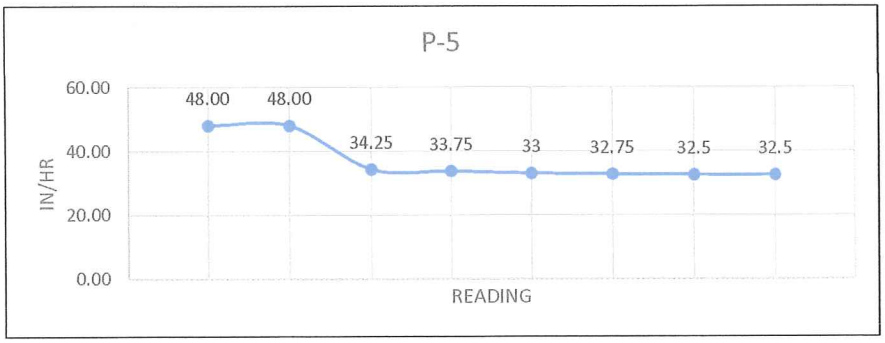
Field Rate:	40 in/hr
Infiltration Rate:	6.67 in/hr

STORMWATER PERCOLATION SHEET (LESS THAN 10 FT)

Project:	Mixed-Use Development	Depth (ft):	6.00
Job No. :	544-24159	USCS Soil Class:	SM
Date:	10/21/2024	Sandy Soil:	Favorable
Test Hole #:	P-5	Tested By:	Robert

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
A	25.00	6.00	20	0	20	48.00
B	25.00	6.00	20	0	20	48.00

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
1	30.00	6.00	20	2 7/8	17 1/8	34.25
2	30.00	6.00	20	3 1/8	16 7/8	33.75
3	30.00	6.00	20	3 4/8	16 4/8	33
4	30.00	6.00	20	3 5/8	16 3/8	32.75
5	30.00	6.00	20	3 6/8	16 2/8	32.5
6	30.00	6.00	20	3 6/8	16 2/8	32.5



PERCOLATION RATE CONVERSION (PORCHET METHOD)

$$I_{t=} \quad \frac{\Delta H\ 60\ R}{\Delta t(r+2H_{avg})}$$

Δt =	30.00
D_f =	68.25
r =	4.00
D_0 =	52
D_t =	72.00
H_0 =	20
H_f =	3.75
ΔH =	16.25
H_{avg} =	11.88

Δt (minutes)
D_f (Final Depth to water)
r (hole radius in inches)
D_0 (Initial Depth to water)
D_t (Total Depth of test hole)
H_0 (initial height of water at selected time interval)

$$H_0 = D_t - D_0$$

H_f (final height of water at the selected time interval)

$$H_f = D_t - D_f$$

ΔH (change in head over the time interval)

$$\Delta H = H_0 - H_f$$

H_{avg} (average head height over the time interval)

$$H_{avg} = (H_0 + H_f)/2$$

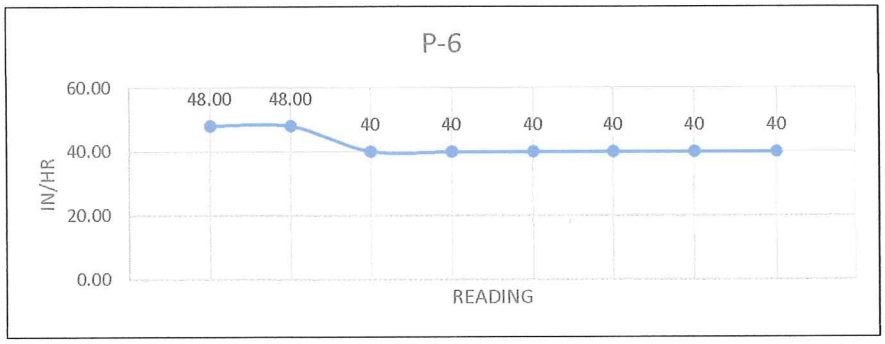
Field Rate:	32.5 in/hr
Infiltration Rate:	4.68 in/hr

STORMWATER PERCOLATION SHEET (LESS THAN 10 FT)

Project:	Mixed-Use Development	Depth (ft):	4.00
Job No. :	544-24159	USCS Soil Class:	SM
Date:	10/21/2024	Sandy Soil:	Favorable
Test Hole #:	P-6	Tested By:	Robert

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
A	25.00	4.00	20	0	20	48.00
B	25.00	4.00	20	0	20	48.00

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
1	30.00	4.00	20	0	20	40
2	30.00	4.00	20	0	20	40
3	30.00	4.00	20	0	20	40
4	30.00	4.00	20	0	20	40
5	30.00	4.00	20	0	20	40
6	30.00	4.00	20	0	20	40



PERCOLATION RATE CONVERSION (PORCHET METHOD)

$$I_{t=} \quad \frac{\Delta H\ 60\ R}{\Delta t(r+2H_{avg})}$$

Δt =	30.00
D_f =	48.00
r =	4.00
D_0 =	28
D_t =	48.00
H_0 =	20
H_f =	0
ΔH =	20.00
H_{avg} =	10.00

Δt (minutes)

D_f (Final Depth to water)

r (hole radius in inches)

D_0 (Initial Depth to water)

D_t (Total Depth of test hole)

H_0 (initial height of water at selected time interval)

$$H_0 = D_t - D_0$$

H_f (final height of water at the selected time interval)

$$H_f = D_t - D_f$$

ΔH (change in head over the time interval)

$$\Delta H = H_0 - H_f$$

H_{avg} (average head height over the time interval)

$$H_{avg} = (H_0 + H_f)/2$$

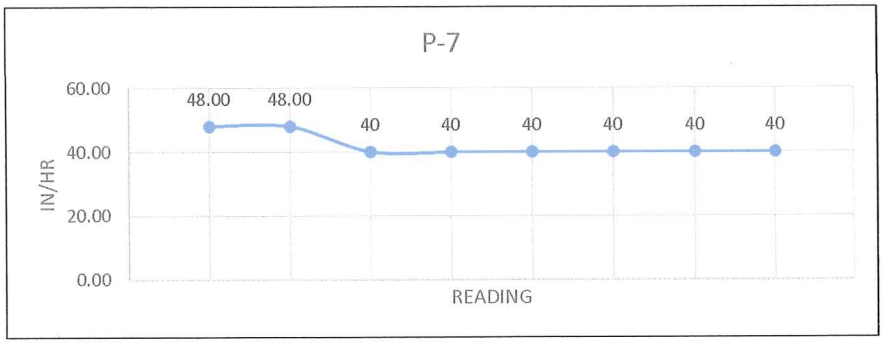
Field Rate:	40 in/hr
Infiltration Rate:	6.67 in/hr

STORMWATER PERCOLATION SHEET (LESS THAN 10 FT)

Project:	Mixed-Use Development	Depth (ft):	4.00
Job No. :	544-24159	USCS Soil Class:	SM
Date:	10/21/2024	Sandy Soil:	Favorable
Test Hole #:	P-7	Tested By:	Robert

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
A	25.00	4.00	20	0	20	48.00
B	25.00	4.00	20	0	20	48.00

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
1	30.00	4.00	20	0	20	40
2	30.00	4.00	20	0	20	40
3	30.00	4.00	20	0	20	40
4	30.00	4.00	20	0	20	40
5	30.00	4.00	20	0	20	40
6	30.00	4.00	20	0	20	40



PERCOLATION RATE CONVERSION (PORCHET METHOD)

$$I_{t=} \quad \frac{\Delta H\ 60\ R}{\Delta t(r+2H_{avg})}$$

Δt =	30.00
D_f =	48.00
r =	4.00
D_0 =	28
D_t =	48.00
H_0 =	20
H_f =	0
ΔH =	20.00
H_{avg} =	10.00

Δt (minutes)
D_f (Final Depth to water)
r (hole radius in inches)
D_0 (Initial Depth to water)
D_t (Total Depth of test hole)
H_0 (initial height of water at selected time interval)

$$H_0 = D_t - D_0$$

H_f (final height of water at the selected time interval)

$$H_f = D_t - D_f$$

ΔH (change in head over the time interval)

$$\Delta H = H_0 - H_f$$

H_{avg} (average head height over the time interval)

$$H_{avg} = (H_0 + H_f)/2$$

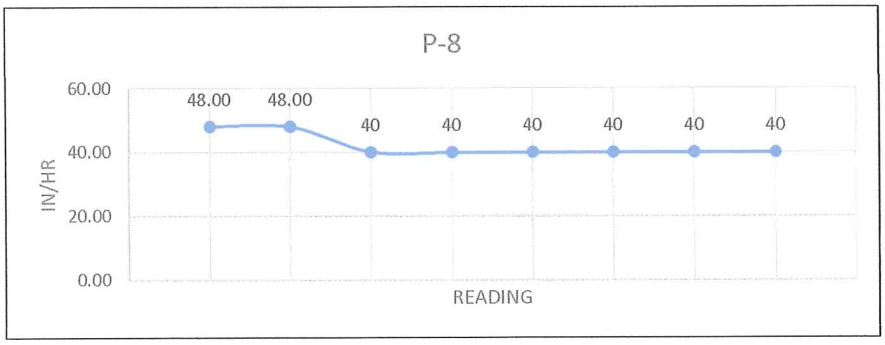
Field Rate:	40 in/hr
Infiltration Rate:	6.67 in/hr

STORMWATER PERCOLATION SHEET (LESS THAN 10 FT)

Project:	Mixed-Use Development	Depth (ft):	4.00
Job No. :	544-24159	USCS Soil Class:	SM
Date:	10/21/2024	Sandy Soil:	Favorable
Test Hole #:	P-8	Tested By:	Robert

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
A	25.00	4.00	20	0	20	48.00
B	25.00	4.00	20	0	20	48.00

READING	TIME (min)	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)	IN/HR
1	30.00	4.00	20	0	20	40
2	30.00	4.00	20	0	20	40
3	30.00	4.00	20	0	20	40
4	30.00	4.00	20	0	20	40
5	30.00	4.00	20	0	20	40
6	30.00	4.00	20	0	20	40



PERCOLATION RATE CONVERSION (PORCHET METHOD)

$$I_{t=} \quad \frac{\Delta H\ 60\ R}{\Delta t(r+2H_{avg})}$$

Δt =	30.00
D_f =	48.00
r =	4.00
D_0 =	28
D_t =	48.00
H_0 =	20
H_f =	0
ΔH =	20.00
H_{avg} =	10.00

Δt (minutes)

D_f (Final Depth to water)

r (hole radius in inches)

D_0 (Initial Depth to water)

D_t (Total Depth of test hole)

H_0 (initial height of water at selected time interval)

$$H_0 = D_t - D_0$$

H_f (final height of water at the selected time interval)

$$H_f = D_t - D_f$$

ΔH (change in head over the time interval)

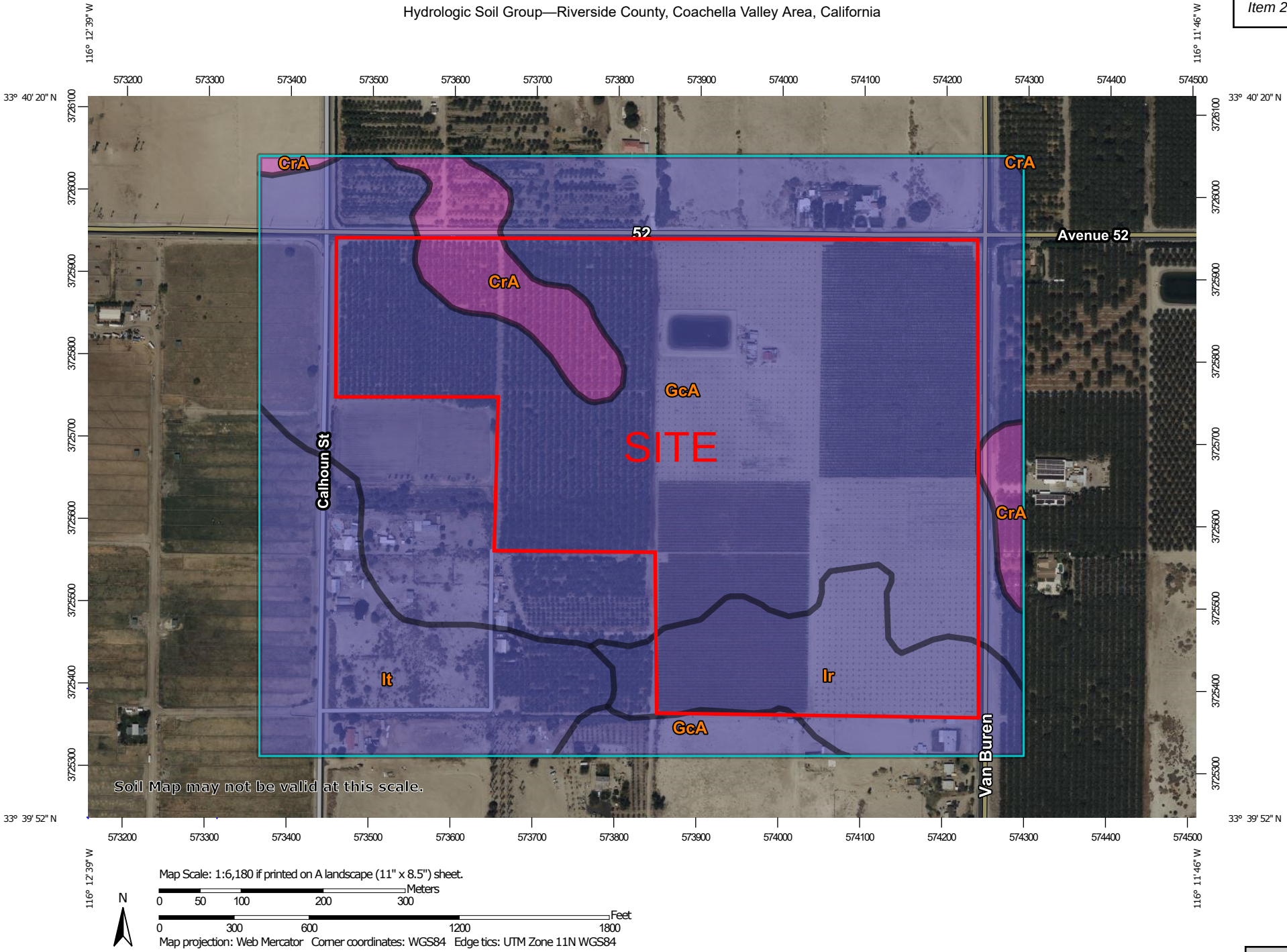
$$\Delta H = H_0 - H_f$$

H_{avg} (average head height over the time interval)

$$H_{avg} = (H_0 + H_f)/2$$

Field Rate:	40 in/hr
Infiltration Rate:	6.67 in/hr

Hydrologic Soil Group—Riverside County, Coachella Valley Area, California



MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Soil Rating Lines

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Soil Rating Points

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Riverside County, Coachella Valley Area, California
Survey Area Data: Version 17, Sep 10, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 15, 2022—May 28, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
CrA	Coachella fine sand, wet, 0 to 2 percent slopes	A	10.4	6.2%
GcA	Gilman fine sandy loam, wet, 0 to 2 percent slopes	B	118.2	70.0%
Ir	Indio fine sandy loam, wet	B	17.4	10.3%
It	Indio very fine sandy loam, wet	B	22.7	13.5%
Totals for Area of Interest			**168.7**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Appendix F

STRUCTURAL BMP AND/OR RETENTION FACILITY SIZING CALCULATIONS AND DESIGN DETAILS

SUMMARY HYDROLOGY REPORT

Whitewater Watershed

BMP Design Volume, V_{BMP} & Design Flow Rate, Q_{BMP} (Rev. 06-2014)

Legend: Required Entries / Calculated Cells

Company Name	MSA Consulting, Inc	Date	December 10, 2025
Designed By	SAW	County/City Case No.	
Company Project Number/Name	COVA - MSA Job No. 2811		
Drainage Area Number/Name	Site		

Enter the Area Tributary to this Feature (A_{TRIB}) — A_{TRIB} = 81.140 acres

Determine the Impervious Area Ratio

Determine the Impervious Area Within A_{TRIB} (A_{IMP}) — A_{IMP} = 56.410 acres

Calculate the Impervious Area Ratio (I_F)

$I_F = A_{IMP}/A_{TRIB}$ — I_F = 0.70

Calculate the Composite Runoff Coefficient, C for the BMP Tributary Area

Use the following equation based on the WEF/ASCE Method

$C_{BMP} = 0.858I_f^3 - 0.78I_f^2 + 0.774I_f + 0.04$ — C_{BMP} = 0.49

Determine Design Storage Volume, V_{BMP}

Calculate V_U, the 80% Unit Storage Volume $V_U = 0.40 \times C_{BMP}$ — V_U = 0.20 (in*ac)/ac

Calculate the design storage volume of the BMP, V_{BMP}

$$V_{BMP}\ (ft^3) = \frac{V_U\ (in\text{-}ac/ac) \times A_T\ (ac) \times 43{,}560\ (ft^2/ac)}{12(in/ft)}$$

V_{BMP} = 57,660 ft^3

BMP Design Flow Rate, Q_{BMP}

$Q_{BMP} = C_{BMP} \times I \times A_{TRIB}$ — Q_{BMP} = 7.94 ft^3/s

I = Design Rainfall Intensity, 0.2 in/hr

Notes:

BASIN VOLUME WORKSHEET

PROECT COVA
JOB No. 2811
BASIN DESIGNATION: Retention Basin

BASIN CHARACTERISTICS

CONTOUR ELEVATION	DEPTH		AREA		VOLUME		
	INCR (ft)	TOTAL (ft)	INCR (sf)	TOTAL (sf)	INCR (cuft)	TOTAL (cuft)	(acre-ft)
434	0	0		60,573	0	0	0.00
434.5	0.5	0.5	3,590	64,163	31,180	31,180	0.72
435.5	1	1.5	7,265	71,428	67,763	98,943	2.27
436.5	1	2.5	7,379	78,807	75,087	174,030	4.00
437.5	1	3.5	7,491	86,298	82,524	256,554	5.89
438.5	1	4.5	7,605	93,903	90,074	346,628	7.96
439.5	1	5.5	7,718	101,621	97,737	444,365	10.20

WHERE:

$$V = \frac{1}{3}(E_1 - E_2)\left(A_1 + A_2 + \sqrt{A_1 A_2}\right)$$

RCFCD SYNTHETIC UNIT HYDROGRAPH - SHORTCUT METHOD

DATA INPUT SHEET

DATE	December 10, 2025
WORKSHEET PREPARED BY:	saw
PROJECT NAME	COVA
PROJECT NUMBER	2811
CONCENTRATION POINT DESIGNATION	Retention Basin
AREA DESIGNATION	Site
AMC NUMBER	2

Low Loss Conditions: X=Existing; D=Developed; BS=Retention

AREA DESIG	SOIL GROUP	TRIBUTARY AREAS	ACRES	LOW LOSS CONDITION	RI NUMBER	AMC II INFILTRATION RATE	IMPERVIOUS PERCENT
2	A	PAVING/HARDSCAPE	1.04	D	32	0.74	1.00
6	A	MF - CONDIMINIUMS	4.03	D	32	0.74	0.65
2	B	PAVING/HARDSCAPE	9.42	D	56	0.51	1.00
6	B	MF - CONDIMINIUMS	66.65	D	56	0.51	0.65

LENGTH OF WATERCOURSE (L)	2,675 ft
LENGTH TO POINT OPPOSITE CENTROID (Lca)	1,120 ft
ELEVATION OF HEADWATER	449.9 ft
ELEVATION OF CONCENTRATION POINT	440.4 ft
AVERAGE MANNINGS 'N' VALUE	0.015
STORM FREQUENCY (YEAR)	100
LOW LOSS RATE (Storm Events > 10 Years)	**85%**
POINT RAIN FROM NOAA ATLAS	**14**
1-HOUR	1.30 in
3-HOUR	2.08 in
6-HOUR	2.75 in
24-HOUR	4.38 in

BASIN CHARACTERISTICS:

ELEVATION	AREA
434.0 ft	60,573 sf
434.5 ft	64,163 sf
435.5 ft	71,428 sf
436.5 ft	78,807 sf
437.5 ft	86,298 sf
438.5 ft	93,903 sf
439.5 ft	101,621 sf

PERCOLATION RATE (in/hr)	0.9 in/hr
DRYWELL DATA	
NUMBER USED	0
PERCOLATION RATE	0.00 cfs
LOWEST FLOWLINE ELEVATION	440
LOWEST PAD ELEVATION	442

RCFC & WCD HYDROLOGY MANUAL	SYNTHETIC UNIT HYDROGRAPH METHOD BASIC DATA CALCULATION FORM	PROJECT: COVA Job No.: 2811 BY: saw DATE: 12/10/25

PHYSICAL DATA

[1] CONCENTRATION POINT	Retention Basin
[2] AREA DESIGNATION	Site
[3] AREA - ACRES	81.14
[4] L-FEET	2675
[5] L-MILES	0.507
[6] La-FEET	1120.00
[7] La-MILES	0.212
[8] ELEVATION OF HEADWATER	449.87
[9] ELEVATION OF CONCENTRATION POINT	440.39
[10] H-FEET	9.48
[11] S-FEET/MILE	18.7
[12] S^0.5	4.33
[13] L*LCA/S^0.5	0.025
[14] AVERAGE MANNINGS 'N'	0.015
[15] LAG TIME-HOURS	0.09
[16] LAG TIME-MINUTES	5.3
[17] 100% OF LAG-MINUTES	5.3
[18] 200% OF LAG-MINUTES	10.6

RAINFALL DATA

[1] AMC	II
[2] FREQUENCY-YEARS	100
FROM NOAA ATLAS	**14**
[3] STORM DURATION:	Point Rain
1-HOUR	1.30 in
3-HOUR	2.08 in
6-HOUR	2.75 in
24-HOUR	4.38 in

STORM EVENT SUMMARY

STORM DURATION		1-HOUR	3-HOUR	6-HOUR	24-HOUR
EFFECTIVE RAIN	(in)	1.10	1.50	1.60	1.78
FLOOD VOLUME	(cu-ft)	325,179	441,160	472,562	**524,686**
	(acre-ft)	7.47	10.13	10.85	**12.05**
REQUIRED STORAGE	(cu-ft)	319,900	424,813	**443,609**	431,345
	(acre-ft)	7.34	9.75	**10.18**	9.90
FACTOR OF SAFETY		1.39	1.05	1.00	1.03
STORAGE PROVIDED	(cu-ft)	444,365			
	(acre-ft)	10.20			
PEAK FLOW	(cfs)	n/a	151.42	135.16	34.93
MAXIMUM WSEL	(ft)	438.20	439.30	**439.49**	439.37
DEPTH	(ft)	4.20	5.30	**5.49**	5.37
LOWEST FLOWLINE ELEVATION		440.00			
DIFFERENCE	(ft)	1.80	0.70	0.51	0.63
LOWEST PAD ELEVATION		442.00			
DIFFERENCE	(ft)	3.80	2.70	2.51	2.63
ESTIMATED TIME TO DEWATER BASIN Based on Total Flood Volume & Average Percolation Rate	(days)	2.6	3.4	3.9	4.0

NOTE: PEAK FLOW FOR THE 1-HOUR STORM IS NOT REPRESENTATIVE. PER RCFCD PEAK DISCHARGES FROM THE 3-HOUR STORM SHOULD NORMALLY COMPARE WELL WITH RATIONAL PEAKS.

RCFC & WCD HYDROLOGY MANUAL	SYNTHETIC UNIT HYDROGRAPH METHOD BASIC DATA CALCULATION FORM AMC II	PROJECT: COVA Job No.: 2811 BY: saw DATE: 12/10/25

AVERAGE ADJUSTED LOSS RATE

SOIL GROUP [Plate C-1]	LAND USE	RI NUMBER [Plate E-6.1]	PERVIOUS AREA INFILTRATION RATE (in/hr) [Plate E-6.2]	DECIMAL PERCENT OF AREA IMPERVIOUS [Plate E-6.3]	ADJUSTED INFILTRATION RATE (in/hr)	AREA	AREA WEIGHTED AVERAGE	MAX AVERAGE ADJUSTED INFILTRATION RATE (in/hr)	LOW LOSS CONDITION	LOW LOSS RATE PER RCFC/2322	MIN AVERAGE ADJUSTED INFILTRATION RATE
A	PAVING/HARDSCAPE	32	0.74	100%	0.07	1.04	0.013	0.0009	DEVELOPED	0.1000	0.0013
A	MF - CONDIMINIUMS	32	0.74	65%	0.31	4.03	0.050	0.0153	DEVELOPED	0.3800	0.0189
B	PAVING/HARDSCAPE	56	0.51	100%	0.05	9.42	0.116	0.0059	DEVELOPED	0.1000	0.0116
B	MF - CONDIMINIUMS	56	0.51	65%	0.21	66.65	0.821	0.1739	DEVELOPED	0.3800	0.3121
					SUM	81.14	SUM	0.1960			0.3439

VARIABLE LOSS RATE CURVE (24-HOUR STORM ONLY)

Fm= 0.097987833

C= 0.00181

$F_t=C(24-(T/60))^{1.55}+F_m$ = 0.00181 (24-(T/60))^1.55 + 0.10 in/hr

CONSTANT LOSS RATE (3 & 6 HOUR STORMS) = **0.1960**

LOW LOSS RATE = **0.8500**

Where:

T=Time in minutes. To get an average value for each unit time period, Use T=1/2 the unit time for the first time period, T=1 1/2 unit time for the second period, etc.

NOTE: Low loss rates established per RCFC/2322 (Dated: May-30-95)
For 10 Year Storms or Less
Undeveloped Condition: Low Loss = 90%
Developed Condition: Low Loss = 0.9 - (0.8 * %impervious)
Basin Site: Low Loss = 10%
For 100 Year Storm - Low Loss should be between 80% & 90% of the Rainfall Rate

RCFC & WCD
HYDROLOGY MANUAL

SYNTHETIC UNIT HYDROGRAPH METHOD

SHORTCUT METHOD

1-HOUR STORM

UNIT HYDROGRAPH and EFFECTIVE RAIN CALCULATION FORM

PROJECT: COVA
Job No.: 2811
BY: saw DATE 12/10/25

DRAINAGE AREA-ACRES	81.14
UNIT TIME-MINUTES	5
LAG TIME - MINUTES	5.30
UNIT TIME-PERCENT OF LAG	94.3
TOTAL ADJUSTED STORM RAIN-INCHES	1.30
CONSTANT LOSS RATE-in/hr	0.20
LOW LOSS RATE - PERCENT	85.00%

Basin Percolation Rate	0.9 in/hr	
Maxwell Drywells		
Number	0	
Drywell Percolation Rate	0.00 cfs	0.00 cfm

Unit Time Period	Time Minutes	Time Hours	Pattern Percent (Plate E-5.9)	Storm Rain in/hr	Loss Rate in/hr Max	Loss Rate in/hr Low	Effective Rain in/hr	Flood Hydrograph Flow cfs	Volume In cu-ft	Basin Volume cu-ft	Basin Losses Percolation Area sf	Basin Losses Maximum Percolation cu-ft	Basin Losses Percolation Out cu-ft	Total In Basin cu-ft	Total In Basin ac-ft	Basin WSEL ft
1	5	0.08	3.6	0.56	0.20	0.48	0.37	29.91	8,974	8,974	61,606	368	368	8,606	0.20	434.14
2	10	0.17	4.2	0.66	0.20	0.56	0.46	37.57	11,272	19,878	62,862	375	375	19,503	0.45	434.31
3	15	0.25	4.4	0.69	0.20	0.58	0.49	40.12	12,037	31,540	64,202	383	383	31,157	0.72	434.50
4	20	0.33	4.6	0.72	0.20	0.61	0.52	42.68	12,803	43,960	65,533	391	391	43,568	1.00	434.68
5	25	0.42	5.0	0.78	0.20	0.66	0.58	47.78	14,335	57,903	67,028	400	400	57,503	1.32	434.89
6	30	0.50	5.6	0.87	0.20	0.74	0.68	55.44	16,632	74,135	68,768	411	411	73,724	1.69	435.13
7	35	0.58	6.4	1.00	0.20	0.85	0.80	65.65	19,695	93,420	70,836	423	423	92,997	2.13	435.41
8	40	0.67	8.1	1.26	0.20	1.07	1.07	87.35	26,205	119,202	73,419	438	438	118,763	2.73	435.76
9	45	0.75	13.1	2.04	0.20	1.74	1.85	151.17	45,350	164,113	77,832	465	465	163,648	3.76	436.36
10	50	0.83	34.5	5.38	0.20	4.57	5.19	**424.30**	**127,291**	290,939	89,201	533	533	290,406	6.67	437.88
11	55	0.92	6.7	1.05	0.20	0.89	0.85	69.48	20,844	311,250	90,916	543	543	310,707	7.13	438.10
12	60	1.00	3.8	0.59	0.20	0.50	0.40	32.47	9,740	320,447	91,693	548	548	**319,900**	**7.34**	**438.20**

EFFECTIVE RAIN & FLOOD VOLUMES SUMMARY

EFFECTIVE RAIN	1.10 in
FLOOD VOLUME	7.47 acft
FLOOD VOLUME	325,179 cu-ft
REQUIRED STORAGE	7.34
REQUIRED STORAGE	319,900 cu-ft
MAX WSEL	438.20 ft
PEAK FLOW RATE	424.30 cfs
TOTAL BASIN LOSSES	5,279 cu-ft
AVERAGE PERCOLATION RATE	87.98 cf/min

RCFC & WCD
HYDROLOGY MANUAL

SYNTHETIC UNIT HYDROGRAPH METHOD

SHORTCUT METHOD

3-HOUR STORM

UNIT HYDROGRAPH and EFFECTIVE RAIN CALCULATION FORM

PROJECT: COVA
Job No.: 2811
BY: saw DATE

DRAINAGE AREA-ACRES	81.14
UNIT TIME-MINUTES	5
LAG TIME - MINUTES	5.30
UNIT TIME-PERCENT OF LAG	94.3
TOTAL ADJUSTED STORM RAIN (in)	2.08
CONSTANT LOSS RATE (in/hr)	0.20
LOW LOSS RATE - PERCENT	85.00%

Basin Percolation Rate	0.9 in/hr	
Maxwell Drywells		
Number	0	
Drywell Percolation Rate	0.00 cfs	0.00 cfm

Unit Time Period	Time		Pattern Percent	Storm Rain	Loss Rate in/hr		Effective Rain	Flood Hydrograph Flow	Volume In	Basin Volume	Basin Losses			Total In Basin		Basin WSEL
	Minutes	Hours	(Plate E-5.9)	in/hr	Max	Low	in/hr	cfs	cu-ft	cu-ft	Percolation Area sf	Maximum Percolation cu-ft	Percolation Out cu-ft	cu-ft	ac-ft	ft
1	5	0.08	1.3	0.32	0.20	0.28	0.13	10.51	3,154	3,154	60,936	364	364	2,790	0.06	434.04
2	10	0.17	1.3	0.32	0.20	0.28	0.13	10.51	3,154	5,944	61,257	366	366	5,578	0.13	434.09
3	15	0.25	1.1	0.27	0.20	0.23	0.08	6.43	1,929	7,507	61,437	367	367	7,140	0.16	434.11
4	20	0.33	1.5	0.37	0.20	0.32	0.18	14.60	4,379	11,520	61,899	370	370	11,150	0.26	434.18
5	25	0.42	1.5	0.37	0.20	0.32	0.18	14.60	4,379	15,530	62,361	372	372	15,157	0.35	434.24
6	30	0.50	1.8	0.45	0.20	0.38	0.25	20.72	6,217	21,374	63,034	376	376	20,998	0.48	434.34
7	35	0.58	1.5	0.37	0.20	0.32	0.18	14.60	4,379	25,377	63,495	379	379	24,998	0.57	434.40
8	40	0.67	1.8	0.45	0.20	0.38	0.25	20.72	6,217	31,216	64,167	383	383	30,832	0.71	434.49
9	45	0.75	1.8	0.45	0.20	0.38	0.25	20.72	6,217	37,050	64,792	387	387	36,663	0.84	434.58
10	50	0.83	1.5	0.37	0.20	0.32	0.18	14.60	4,379	41,042	65,220	390	390	40,653	0.93	434.64
11	55	0.92	1.6	0.40	0.20	0.34	0.20	16.64	4,992	45,645	65,714	392	392	45,252	1.04	434.71
12	60	1.00	1.8	0.45	0.20	0.38	0.25	20.72	6,217	51,470	66,338	396	396	51,073	1.17	434.79
13	65	1.08	2.2	0.55	0.20	0.47	0.35	28.89	8,668	59,741	67,225	401	401	59,340	1.36	434.92
14	70	1.17	2.2	0.55	0.20	0.47	0.35	28.89	8,668	68,008	68,111	407	407	67,601	1.55	435.04
15	75	1.25	2.2	0.55	0.20	0.47	0.35	28.89	8,668	76,269	68,997	412	412	75,857	1.74	435.16
16	80	1.33	2.0	0.50	0.20	0.42	0.30	24.81	7,443	83,299	69,751	417	417	82,883	1.90	435.26
17	85	1.42	2.6	0.65	0.20	0.55	0.45	37.06	11,118	94,001	70,898	423	423	93,578	2.15	435.42
18	90	1.50	2.7	0.67	0.20	0.57	0.48	39.10	11,731	105,309	72,054	430	430	104,879	2.41	435.58
19	95	1.58	2.4	0.60	0.20	0.51	0.40	32.98	9,893	114,772	72,984	436	436	114,336	2.62	435.71
20	100	1.67	2.7	0.67	0.20	0.57	0.48	39.10	11,731	126,067	74,094	443	443	125,625	2.88	435.86
21	105	1.75	3.3	0.82	0.20	0.70	0.63	51.36	15,407	141,032	75,564	451	451	140,580	3.23	436.05
22	110	1.83	3.1	0.77	0.20	0.66	0.58	47.27	14,182	154,762	76,913	459	459	154,303	3.54	436.24
23	115	1.92	2.9	0.72	0.20	0.62	0.53	43.19	12,956	167,259	78,142	467	467	166,792	3.83	436.40
24	120	2.00	3.0	0.75	0.20	0.64	0.55	45.23	13,569	180,361	79,382	474	474	179,887	4.13	436.57

RCFC & WCD
HYDROLOGY MANUAL

SYNTHETIC UNIT HYDROGRAPH METHOD

SHORTCUT METHOD

3-HOUR STORM

UNIT HYDROGRAPH and EFFECTIVE RAIN CALCULATION FORM

PROJECT: COVA
Job No.: 2811
BY: saw DATE

DRAINAGE AREA-ACRES	81.14
UNIT TIME-MINUTES	5
LAG TIME - MINUTES	5.30
UNIT TIME-PERCENT OF LAG	94.3
TOTAL ADJUSTED STORM RAIN (in)	2.08
CONSTANT LOSS RATE (in/hr)	0.20
LOW LOSS RATE - PERCENT	85.00%

Basin Percolation Rate	0.9 in/hr	
Maxwell Drywells		
Number	0	
Drywell Percolation Rate	0.00 cfs	0.00 cfm

Unit Time Period	Time		Pattern Percent	Storm Rain in/hr	Loss Rate in/hr		Effective Rain in/hr	Flood Hydrograph Flow cfs	Volume In cu-ft	Basin Volume cu-ft	Basin Losses			Total In Basin		Basin WSEL ft
	Minutes	Hours	(Plate E-5.9)		Max	Low					Percolation Area sf	Maximum Percolation cu-ft	Percolation Out cu-ft	cu-ft	ac-ft	
25	125	2.08	3.1	0.77	0.20	0.66	0.58	47.27	14,182	194,069	80,626	482	482	193,588	4.44	436.74
26	130	2.17	4.2	1.05	0.20	0.89	0.85	69.74	20,921	214,508	82,481	493	493	214,016	4.91	436.98
27	135	2.25	5.0	1.25	0.20	1.06	1.05	86.07	25,822	239,838	84,781	506	506	239,331	5.49	437.29
28	140	2.33	3.5	0.87	0.20	0.74	0.68	55.44	16,632	255,963	86,244	515	515	255,448	5.86	437.49
29	145	2.42	6.8	1.70	0.20	1.44	1.50	122.83	36,849	292,298	89,316	533	533	291,764	6.70	437.89
30	150	2.50	7.3	1.82	0.20	1.55	1.63	133.04	39,913	331,677	92,641	553	553	331,124	7.60	438.33
31	155	2.58	8.2	2.05	0.20	1.74	1.85	**151.42**	**45,426**	376,550	96,266	575	575	375,975	8.63	438.80
32	160	2.67	5.9	1.47	0.20	1.25	1.28	104.45	31,336	407,311	98,695	589	589	406,722	9.34	439.11
33	165	2.75	2.0	0.50	0.20	0.42	0.30	24.81	7,443	414,164	99,236	593	593	413,571	9.49	439.18
34	170	2.83	1.8	0.45	0.20	0.38	0.25	20.72	6,217	419,789	99,680	595	595	419,194	9.62	439.24
35	175	2.92	1.8	0.45	0.20	0.38	0.25	20.72	6,217	425,411	100,124	598	598	**424,813**	**9.75**	**439.30**
36	180	3.00	0.6	0.15	0.20	0.13	0.02	1.84	551	425,364	100,121	598	598	424,766	9.75	439.30

EFFECTIVE RAIN & FLOOD VOLUMES SUMMARY

EFFECTIVE RAIN	1.50 in
FLOOD VOLUME	10.13 acft
FLOOD VOLUME	441,160 cu-ft
REQUIRED STORAGE	9.75 acft
REQUIRED STORAGE	424,813 cu-ft
MAX WSEL	439.30 ft
PEAK FLOW RATE	151.42 cfs
TOTAL BASIN LOSSES	16,394 cu-ft
AVERAGE PERCOLATION RATE	91.08 cf/min

RCFC & WCD
HYDROLOGY
MANUAL

SYNTHETIC UNIT HYDROGRAPH METHOD

SHORTCUT METHOD

6-HOUR STORM

UNIT HYDROGRAPH and EFFECTIVE RAIN CALCULATION FORM

PROJECT: COVA
Job No.: 2811
BY: saw DATE 12/10/25

DRAINAGE AREA-ACRES	81.14
UNIT TIME-MINUTES	5
LAG TIME - MINUTES	5.30
UNIT TIME-PERCENT OF LAG	94.3
TOTAL ADJUSTED STORM RAIN (in)	2.75
CONSTANT LOSS RATE (in/hr)	0.20
LOW LOSS RATE - PERCENT	85.00%

Basin Percolation Rate	0.9 in/hr	
Maxwell Drywells		
Number	0	
Drywell Percolation Rate	0.00 cfs	0.00 cfm

Unit Time Period	Time		Pattern	Storm Rain	Loss Rate		Effective Rain	Flood Hydrograph	Volume In	Basin Volume	Basin Losses			Total In Basin		Basin WSEL
	Minutes	Hours	Percent	in/hr	in/hr Max	Low	in/hr	Flow cfs	cu-ft	cu-ft	Percolation Area sf	Maximum Percolation cu-ft	Percolation Out cu-ft	cu-ft	ac-ft	ft
			(Plate E-5.9)													
1	5	0.08	0.5	0.17	0.20	0.14	0.02	2.02	607	607	60,643	362	362	245	0.01	434.00
2	10	0.17	0.6	0.20	0.20	0.17	0.00	0.17	50	295	60,607	362	295	0	0.00	434.00
3	15	0.25	0.6	0.20	0.20	0.17	0.00	0.17	50	50	60,579	362	50	0	0.00	434.00
4	20	0.33	0.6	0.20	0.20	0.17	0.00	0.17	50	50	60,579	362	50	0	0.00	434.00
5	25	0.42	0.6	0.20	0.20	0.17	0.00	0.17	50	50	60,579	362	50	0	0.00	434.00
6	30	0.50	0.7	0.23	0.20	0.20	0.04	2.87	860	860	60,672	362	362	497	0.01	434.01
7	35	0.58	0.7	0.23	0.20	0.20	0.04	2.87	860	1,357	60,729	363	363	994	0.02	434.02
8	40	0.67	0.7	0.23	0.20	0.20	0.04	2.87	860	1,854	60,786	363	363	1,491	0.03	434.02
9	45	0.75	0.7	0.23	0.20	0.20	0.04	2.87	860	2,351	60,844	363	363	1,987	0.05	434.03
10	50	0.83	0.7	0.23	0.20	0.20	0.04	2.87	860	2,847	60,901	364	364	2,483	0.06	434.04
11	55	0.92	0.7	0.23	0.20	0.20	0.04	2.87	860	3,343	60,958	364	364	2,979	0.07	434.05
12	60	1.00	0.8	0.26	0.20	0.22	0.07	5.57	1,670	4,648	61,108	365	365	4,284	0.10	434.07
13	65	1.08	0.8	0.26	0.20	0.22	0.07	5.57	1,670	5,953	61,258	366	366	5,587	0.13	434.09
14	70	1.17	0.8	0.26	0.20	0.22	0.07	5.57	1,670	7,257	61,409	367	367	6,890	0.16	434.11
15	75	1.25	0.8	0.26	0.20	0.22	0.07	5.57	1,670	8,560	61,559	368	368	8,192	0.19	434.13
16	80	1.33	0.8	0.26	0.20	0.22	0.07	5.57	1,670	9,862	61,708	369	369	9,493	0.22	434.15
17	85	1.42	0.8	0.26	0.20	0.22	0.07	5.57	1,670	11,163	61,858	369	369	10,794	0.25	434.17
18	90	1.50	0.8	0.26	0.20	0.22	0.07	5.57	1,670	12,463	62,008	370	370	12,093	0.28	434.19
19	95	1.58	0.8	0.26	0.20	0.22	0.07	5.57	1,670	13,763	62,158	371	371	13,391	0.31	434.21
20	100	1.67	0.8	0.26	0.20	0.22	0.07	5.57	1,670	15,061	62,307	372	372	14,689	0.34	434.24
21	105	1.75	0.8	0.26	0.20	0.22	0.07	5.57	1,670	16,359	62,457	373	373	15,986	0.37	434.26
22	110	1.83	0.8	0.26	0.20	0.22	0.07	5.57	1,670	17,655	62,606	374	374	17,281	0.40	434.28
23	115	1.92	0.8	0.26	0.20	0.22	0.07	5.57	1,670	18,951	62,755	375	375	18,576	0.43	434.30
24	120	2.00	0.9	0.30	0.20	0.25	0.10	8.27	2,480	21,056	62,997	376	376	20,680	0.47	434.33
25	125	2.08	0.8	0.26	0.20	0.22	0.07	5.57	1,670	22,349	63,146	377	377	21,972	0.50	434.35
26	130	2.17	0.9	0.30	0.20	0.25	0.10	8.27	2,480	24,452	63,388	379	379	24,073	0.55	434.39
27	135	2.25	0.9	0.30	0.20	0.25	0.10	8.27	2,480	26,553	63,630	380	380	26,173	0.60	434.42
28	140	2.33	0.9	0.30	0.20	0.25	0.10	8.27	2,480	28,652	63,872	381	381	28,271	0.65	434.45
29	145	2.42	0.9	0.30	0.20	0.25	0.10	8.27	2,480	30,751	64,114	383	383	30,368	0.70	434.49
30	150	2.50	0.9	0.30	0.20	0.25	0.10	8.27	2,480	32,847	64,342	384	384	32,463	0.75	434.52
31	155	2.58	0.9	0.30	0.20	0.25	0.10	8.27	2,480	34,943	64,566	386	386	34,557	0.79	434.55
32	160	2.67	0.9	0.30	0.20	0.25	0.10	8.27	2,480	37,037	64,791	387	387	36,650	0.84	434.58
33	165	2.75	1.0	0.33	0.20	0.28	0.13	10.97	3,290	39,939	65,102	389	389	39,551	0.91	434.62
34	170	2.83	1.0	0.33	0.20	0.28	0.13	10.97	3,290	42,840	65,413	391	391	42,450	0.97	434.67
35	175	2.92	1.0	0.33	0.20	0.28	0.13	10.97	3,290	45,739	65,724	393	393	45,347	1.04	434.71

RCFC & WCD
HYDROLOGY
MANUAL

SYNTHETIC UNIT HYDROGRAPH METHOD

SHORTCUT METHOD

6-HOUR STORM

UNIT HYDROGRAPH and EFFECTIVE RAIN CALCULATION FORM

PROJECT: COVA
Job No.: 2811
BY: saw DATE 12/10/25

DRAINAGE AREA-ACRES	81.14
UNIT TIME-MINUTES	5
LAG TIME - MINUTES	5.30
UNIT TIME-PERCENT OF LAG	94.3
TOTAL ADJUSTED STORM RAIN (in)	2.75
CONSTANT LOSS RATE (in/hr)	0.20
LOW LOSS RATE - PERCENT	85.00%

Basin Percolation Rate	0.9 in/hr	
Maxwell Drywells		
Number	0	
Drywell Percolation Rate	0.00 cfs	0.00 cfm

Unit Time Period	Time		Pattern	Storm Rain	Loss Rate		Effective Rain	Flood Hydrograph	Volume In	Basin Volume	Basin Losses			Total In Basin		Basin WSEL
	Minutes	Hours	Percent	in/hr	in/hr Max	Low	in/hr	Flow cfs	cu-ft	cu-ft	Percolation Area sf	Maximum Percolation cu-ft	Percolation Out cu-ft	cu-ft	ac-ft	ft
			(Plate E-5.9)													
36	180	3.00	1.0	0.33	0.20	0.28	0.13	10.97	3,290	48,636	66,035	394	394	48,242	1.11	434.75
37	185	3.08	1.0	0.33	0.20	0.28	0.13	10.97	3,290	51,532	66,345	396	396	51,135	1.17	434.79
38	190	3.17	1.1	0.36	0.20	0.31	0.17	13.67	4,100	55,235	66,742	399	399	54,836	1.26	434.85
39	195	3.25	1.1	0.36	0.20	0.31	0.17	13.67	4,100	58,936	67,139	401	401	58,535	1.34	434.90
40	200	3.33	1.1	0.36	0.20	0.31	0.17	13.67	4,100	62,635	67,535	403	403	62,231	1.43	434.96
41	205	3.42	1.2	0.40	0.20	0.34	0.20	16.37	4,910	67,141	68,018	406	406	66,735	1.53	435.02
42	210	3.50	1.3	0.43	0.20	0.36	0.23	19.07	5,720	72,454	68,588	410	410	72,045	1.65	435.10
43	215	3.58	1.4	0.46	0.20	0.39	0.27	21.77	6,530	78,574	69,244	414	414	78,161	1.79	435.19
44	220	3.67	1.4	0.46	0.20	0.39	0.27	21.77	6,530	84,690	69,900	417	417	84,273	1.93	435.28
45	225	3.75	1.5	0.50	0.20	0.42	0.30	24.47	7,340	91,612	70,642	422	422	91,190	2.09	435.39
46	230	3.83	1.5	0.50	0.20	0.42	0.30	24.47	7,340	98,530	71,384	426	426	98,103	2.25	435.49
47	235	3.92	1.6	0.53	0.20	0.45	0.33	27.17	8,150	106,253	72,146	431	431	105,822	2.43	435.59
48	240	4.00	1.6	0.53	0.20	0.45	0.33	27.17	8,150	113,972	72,905	435	435	113,536	2.61	435.69
49	245	4.08	1.7	0.56	0.20	0.48	0.37	29.87	8,960	122,496	73,743	440	440	122,055	2.80	435.81
50	250	4.17	1.8	0.59	0.20	0.50	0.40	32.56	9,769	131,825	74,659	446	446	131,379	3.02	435.93
51	255	4.25	1.9	0.63	0.20	0.53	0.43	35.26	10,579	141,958	75,655	452	452	141,507	3.25	436.07
52	260	4.33	2.0	0.66	0.20	0.56	0.46	37.96	11,389	152,896	76,730	458	458	152,438	3.50	436.21
53	265	4.42	2.1	0.69	0.20	0.59	0.50	40.66	12,199	164,637	77,884	465	465	164,172	3.77	436.37
54	270	4.50	2.1	0.69	0.20	0.59	0.50	40.66	12,199	176,372	79,020	472	472	175,900	4.04	436.52
55	275	4.58	2.2	0.73	0.20	0.62	0.53	43.36	13,009	188,909	80,158	479	479	188,430	4.33	436.67
56	280	4.67	2.3	0.76	0.20	0.65	0.56	46.06	13,819	202,250	81,369	486	486	201,764	4.63	436.84
57	285	4.75	2.4	0.79	0.20	0.67	0.60	48.76	14,629	216,393	82,652	494	494	215,900	4.96	437.01
58	290	4.83	2.4	0.79	0.20	0.67	0.60	48.76	14,629	230,529	83,936	501	501	230,028	5.28	437.18
59	295	4.92	2.5	0.83	0.20	0.70	0.63	51.46	15,439	245,467	85,292	509	509	244,958	5.62	437.36
60	300	5.00	2.6	0.86	0.20	0.73	0.66	54.16	16,249	261,207	86,691	518	518	260,689	5.98	437.55
61	305	5.08	3.1	1.02	0.20	0.87	0.83	67.66	20,299	280,988	88,361	528	528	280,461	6.44	437.77
62	310	5.17	3.6	1.19	0.20	1.01	0.99	81.16	24,349	304,810	90,372	540	540	304,270	6.99	438.03
63	315	5.25	3.9	1.29	0.20	1.09	1.09	89.26	26,779	331,049	92,588	553	553	330,496	7.59	438.32
64	320	5.33	4.2	1.39	0.20	1.18	1.19	97.36	29,209	359,706	94,936	567	567	359,139	8.24	438.63
65	325	5.42	4.7	1.55	0.20	1.32	1.36	110.86	33,259	392,398	97,517	582	582	391,815	8.99	438.96
66	330	5.50	5.6	1.85	0.20	1.57	1.65	**135.16**	**40,549**	432,364	100,673	601	601	431,763	9.91	439.37
67	335	5.58	1.9	0.63	0.20	0.53	0.43	35.26	10,579	442,342	101,461	606	606	441,736	10.14	439.47
68	340	5.67	0.9	0.30	0.20	0.25	0.10	8.27	2,480	444,216	101,609	607	607	**443,609**	**10.18**	**439.49**
69	345	5.75	0.6	0.20	0.20	0.17	0.00	0.17	50	443,659	101,565	607	607	443,052	10.17	439.49
70	350	5.83	0.5	0.17	0.20	0.14	0.02	2.02	607	443,660	101,565	607	607	443,053	10.17	439.49

RCFC & WCD
HYDROLOGY
MANUAL

SYNTHETIC UNIT HYDROGRAPH METHOD

SHORTCUT METHOD

6-HOUR STORM

UNIT HYDROGRAPH and EFFECTIVE RAIN CALCULATION FORM

PROJECT: COVA
Job No.: 2811
BY: saw DATE 12/10/25

DRAINAGE AREA-ACRES	81.14
UNIT TIME-MINUTES	5
LAG TIME - MINUTES	5.30
UNIT TIME-PERCENT OF LAG	94.3
TOTAL ADJUSTED STORM RAIN (in)	2.75
CONSTANT LOSS RATE (in/hr)	0.20
LOW LOSS RATE - PERCENT	85.00%

Basin Percolation Rate	0.9 in/hr	
Maxwell Drywells		
Number	0	
Drywell Percolation Rate	0.00 cfs	0.00 cfm

Unit Time Period	Time		Pattern	Storm Rain	Loss Rate		Effective Rain	Flood Hydrograph	Volume In	Basin Volume	Basin Losses			Total In Basin		Basin WSEL
	Minutes	Hours	Percent	in/hr	in/hr Max	Low	in/hr	Flow cfs	cu-ft	cu-ft	Percolation Area sf	Maximum Percolation cu-ft	Percolation Out cu-ft	cu-ft	ac-ft	ft
			(Plate E-5.9)													
71	355	5.92	0.3	0.10	0.20	0.08	0.01	1.21	364	443,418	101,546	606	606	442,811	10.17	439.48
72	360	6.00	0.2	0.07	0.20	0.06	0.01	0.81	243	443,054	101,518	606	606	442,448	10.16	439.48

EFFECTIVE RAIN & FLOOD VOLUMES SUMMARY

EFFECTIVE RAIN	1.60 in
FLOOD VOLUME	10.85 acft
FLOOD VOLUME	472,562 cu-ft
REQUIRED STORAGE	10.18 acft
REQUIRED STORAGE	443,609 cu-ft
MAX WSEL	439.49 ft
PEAK FLOW RATE	135.16 cfs
TOTAL BASIN LOSSES	30,114 cu-ft
AVERAGE PERCOLATION RATE	83.65 cf/min

RCFC & WCD
HYDROLOGY
MANUAL

SYNTHETIC UNIT HYDROGRAPH METHOD

SHORTCUT METHOD

24-HOUR STORM

UNIT HYDROGRAPH and EFFECTIVE RAIN CALCULATION FORM

PROJECT: COVA
Job No.: 2811
BY: saw DATE 12/10/25

DRAINAGE AREA-ACRES	81.14	VARIABLE LOSS RATE (AVG) IN/HR		Basin Percolation Rate	0.9 in/hr
UNIT TIME-MINUTES	15	Fm = Minimum value on loss curve (in/hr)	0.10		
LAG TIME - MINUTES	5.30	C	0.00181	Maxwell Drywells	
UNIT TIME-PERCENT OF LAG	283%	Low Loss Rate (percent)	85.00%	Number	0
TOTAL ADJUSTED STORM RAIN (in)	4.38			Drywell Percolation Rate	0.00 cfs 0.00 cfm

Unit Time Period	Time Minutes	Hours	Pattern Percent	Storm Rain in/hr	Loss Rate in/hr		Effective Rain	Flood Hydrograph Flow	Volume In	Basin Volume	Basin Losses			Total In Basin		Basin WSEL
											Percolation Area	Maximum Percolation	Percolation Out			
			(Plate E-5.9)		Max	Low	in/hr	cfs	cu-ft	cu-ft	sf	cu-ft	cu-ft	cu-ft	ac-ft	ft
1	15	0.25	0.2	0.035	0.346	0.030	0.01	0.43	387	387	60,618	1,086	387	0	0.00	434.00
2	30	0.50	0.3	0.053	0.342	0.045	0.01	0.65	581	581	60,640	1,086	581	0	0.00	434.00
3	45	0.75	0.3	0.053	0.338	0.045	0.01	0.65	581	581	60,640	1,086	581	0	0.00	434.00
4	60	1.00	0.4	0.070	0.334	0.060	0.01	0.86	774	774	60,662	1,087	774	0	0.00	434.00
5	75	1.25	0.3	0.053	0.330	0.045	0.01	0.65	581	581	60,640	1,086	581	0	0.00	434.00
6	90	1.50	0.3	0.053	0.326	0.045	0.01	0.65	581	581	60,640	1,086	581	0	0.00	434.00
7	105	1.75	0.3	0.053	0.322	0.045	0.01	0.65	581	581	60,640	1,086	581	0	0.00	434.00
8	120	2.00	0.4	0.070	0.318	0.060	0.01	0.86	774	774	60,662	1,087	774	0	0.00	434.00
9	135	2.25	0.4	0.070	0.315	0.060	0.01	0.86	774	774	60,662	1,087	774	0	0.00	434.00
10	150	2.50	0.4	0.070	0.311	0.060	0.01	0.86	774	774	60,662	1,087	774	0	0.00	434.00
11	165	2.75	0.5	0.088	0.307	0.074	0.01	1.08	968	968	60,684	1,087	968	0	0.00	434.00
12	180	3.00	0.5	0.088	0.303	0.074	0.01	1.08	968	968	60,684	1,087	968	0	0.00	434.00
13	195	3.25	0.5	0.088	0.299	0.074	0.01	1.08	968	968	60,684	1,087	968	0	0.00	434.00
14	210	3.50	0.5	0.088	0.296	0.074	0.01	1.08	968	968	60,684	1,087	968	0	0.00	434.00
15	225	3.75	0.5	0.088	0.292	0.074	0.01	1.08	968	968	60,684	1,087	968	0	0.00	434.00
16	240	4.00	0.6	0.105	0.288	0.089	0.02	1.29	1,161	1,161	60,707	1,088	1,088	73	0.00	434.00
17	255	4.25	0.6	0.105	0.285	0.089	0.02	1.29	1,161	1,234	60,715	1,088	1,088	147	0.00	434.00
18	270	4.50	0.7	0.123	0.281	0.104	0.02	1.51	1,355	1,501	60,746	1,088	1,088	413	0.01	434.01
19	285	4.75	0.7	0.123	0.277	0.104	0.02	1.51	1,355	1,767	60,777	1,089	1,089	679	0.02	434.01
20	300	5.00	0.8	0.140	0.274	0.119	0.02	1.72	1,548	2,227	60,829	1,090	1,090	1,137	0.03	434.02
21	315	5.25	0.6	0.105	0.270	0.089	0.02	1.29	1,161	2,298	60,838	1,090	1,090	1,208	0.03	434.02
22	330	5.50	0.7	0.123	0.267	0.104	0.02	1.51	1,355	2,562	60,868	1,091	1,091	1,472	0.03	434.02
23	345	5.75	0.8	0.140	0.263	0.119	0.02	1.72	1,548	3,020	60,921	1,091	1,091	1,929	0.04	434.03
24	360	6.00	0.8	0.140	0.260	0.119	0.02	1.72	1,548	3,477	60,973	1,092	1,092	2,384	0.05	434.04
25	375	6.25	0.9	0.158	0.256	0.134	0.02	1.94	1,742	4,126	61,048	1,094	1,094	3,032	0.07	434.05
26	390	6.50	0.9	0.158	0.253	0.134	0.02	1.94	1,742	4,774	61,123	1,095	1,095	3,679	0.08	434.06
27	405	6.75	1.0	0.175	0.250	0.149	0.03	2.15	1,935	5,614	61,219	1,097	1,097	4,517	0.10	434.07
28	420	7.00	1.0	0.175	0.246	0.149	0.03	2.15	1,935	6,452	61,316	1,099	1,099	5,353	0.12	434.09
29	435	7.25	1.0	0.175	0.243	0.149	0.03	2.15	1,935	7,288	61,412	1,100	1,100	6,188	0.14	434.10
30	450	7.50	1.1	0.193	0.240	0.164	0.03	2.37	2,129	8,317	61,531	1,102	1,102	7,214	0.17	434.12
31	465	7.75	1.2	0.210	0.236	0.179	0.03	2.58	2,322	9,537	61,671	1,105	1,105	8,432	0.19	434.14
32	480	8.00	1.3	0.228	0.233	0.194	0.03	2.80	2,516	10,947	61,833	1,108	1,108	9,839	0.23	434.16
33	495	8.25	1.5	0.263	0.230	0.223	0.03	2.70	2,432	12,271	61,986	1,111	1,111	11,160	0.26	434.18
34	510	8.50	1.5	0.263	0.227	0.223	0.04	2.96	2,667	13,828	62,165	1,114	1,114	12,714	0.29	434.20
35	525	8.75	1.6	0.280	0.223	0.238	0.06	4.66	4,191	16,905	62,519	1,120	1,120	15,785	0.36	434.25
36	540	9.00	1.7	0.298	0.220	0.253	0.08	6.35	5,713	21,498	63,048	1,130	1,130	20,368	0.47	434.33
37	555	9.25	1.9	0.333	0.217	0.283	0.12	9.47	8,523	28,891	63,900	1,145	1,145	27,746	0.64	434.44
38	570	9.50	2.0	0.350	0.214	0.298	0.14	11.16	10,040	37,787	64,871	1,162	1,162	36,624	0.84	434.58
39	585	9.75	2.1	0.368	0.211	0.313	0.16	12.84	11,556	48,180	65,986	1,182	1,182	46,998	1.08	434.73
40	600	10.00	2.2	0.385	0.208	0.328	0.18	14.52	13,069	60,067	67,260	1,205	1,205	58,862	1.35	434.91
41	615	10.25	1.5	0.263	0.205	0.223	0.06	4.73	4,260	63,122	67,588	1,211	1,211	61,911	1.42	434.95
42	630	10.50	1.5	0.263	0.202	0.223	0.06	4.98	4,478	66,389	67,938	1,217	1,217	65,172	1.50	435.00
43	645	10.75	2.0	0.350	0.199	0.298	0.15	12.38	11,146	76,318	69,002	1,236	1,236	75,081	1.72	435.15

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SYNTHETIC UNIT HYDROGRAPH METHOD

SHORTCUT METHOD

24-HOUR STORM

UNIT HYDROGRAPH and EFFECTIVE RAIN CALCULATION FORM

PROJECT: COVA
Job No.: 2811
BY: saw DATE 12/10/25

DRAINAGE AREA-ACRES	81.14	VARIABLE LOSS RATE (AVG) IN/HR		Basin Percolation Rate	0.9 in/hr
UNIT TIME-MINUTES	15	Fm = Minimum value on loss curve (in/hr)	0.10		
LAG TIME - MINUTES	5.30	C	0.00181	Maxwell Drywells	
UNIT TIME-PERCENT OF LAG	283%	Low Loss Rate (percent)	85.00%	Number	0
TOTAL ADJUSTED STORM RAIN (in)	4.38			Drywell Percolation Rate	0.00 cfs 0.00 cfm

Unit Time Period	Time Minutes	Hours	Pattern Percent	Storm Rain in/hr	Loss Rate in/hr		Effective Rain	Flood Hydrograph Flow	Volume In	Basin Volume	Basin Losses			Total In Basin		Basin WSEL
											Percolation Area	Maximum Percolation	Percolation Out			
			(Plate E-5.9)		Max	Low	in/hr	cfs	cu-ft	cu-ft	sf	cu-ft	cu-ft	cu-ft	ac-ft	ft
44	660	11.00	2.0	0.350	0.196	0.298	0.15	12.62	11,360	86,441	70,088	1,256	1,256	85,186	1.96	435.30
45	675	11.25	1.9	0.333	0.193	0.283	0.14	11.42	10,282	95,468	71,055	1,273	1,273	94,195	2.16	435.43
46	690	11.50	1.9	0.333	0.190	0.283	0.14	11.66	10,492	104,687	71,992	1,290	1,290	103,397	2.37	435.56
47	705	11.75	1.7	0.298	0.188	0.253	0.11	9.02	8,120	111,517	72,664	1,302	1,302	110,215	2.53	435.65
48	720	12.00	1.8	0.315	0.185	0.268	0.13	10.68	9,615	119,830	73,481	1,317	1,317	118,513	2.72	435.76
49	735	12.25	2.5	0.438	0.182	0.372	0.26	20.94	18,849	137,362	75,204	1,347	1,347	136,015	3.12	435.99
50	750	12.50	2.6	0.456	0.179	0.387	0.28	22.60	20,340	156,355	77,070	1,381	1,381	154,974	3.56	436.25
51	765	12.75	2.8	0.491	0.177	0.417	0.31	25.69	23,118	178,092	79,176	1,419	1,419	176,673	4.06	436.53
52	780	13.00	2.9	0.508	0.174	0.432	0.33	27.34	24,604	201,278	81,280	1,456	1,456	199,821	4.59	436.81
53	795	13.25	3.4	0.596	0.171	0.506	0.42	34.72	31,248	231,070	83,985	1,505	1,505	229,565	5.27	437.17
54	810	13.50	3.4	0.596	0.169	0.506	0.43	**34.93**	**31,439**	261,004	86,674	1,553	1,553	259,452	5.96	437.53
55	825	13.75	2.3	0.403	0.166	0.343	0.24	19.37	17,437	276,889	88,015	1,577	1,577	275,312	6.32	437.71
56	840	14.00	2.3	0.403	0.164	0.343	0.24	19.58	17,623	292,935	89,370	1,601	1,601	291,334	6.69	437.89
57	855	14.25	2.7	0.473	0.161	0.402	0.31	25.52	22,968	314,302	91,174	1,634	1,634	312,668	7.18	438.12
58	870	14.50	2.6	0.456	0.159	0.387	0.30	24.29	21,859	334,527	92,881	1,664	1,664	332,863	7.64	438.35
59	885	14.75	2.6	0.456	0.156	0.387	0.30	24.49	22,037	354,900	94,556	1,694	1,694	353,206	8.11	438.57
60	900	15.00	2.5	0.438	0.154	0.372	0.28	23.25	20,923	374,129	96,075	1,721	1,721	372,408	8.55	438.76
61	915	15.25	2.4	0.420	0.151	0.357	0.27	22.01	19,806	392,214	97,503	1,747	1,747	390,467	8.96	438.95
62	930	15.50	2.3	0.403	0.149	0.343	0.25	20.76	18,687	409,154	98,841	1,771	1,771	407,383	9.35	439.12
63	945	15.75	1.9	0.333	0.147	0.283	0.19	15.22	13,695	421,078	99,782	1,788	1,788	419,290	9.63	439.24
64	960	16.00	1.9	0.333	0.145	0.283	0.19	15.40	13,860	433,150	100,735	1,805	1,805	**431,345**	**9.90**	**439.37**
65	975	16.25	0.4	0.070	0.142	0.060	0.01	0.86	774	432,119	100,654	1,803	1,803	430,316	9.88	439.36
66	990	16.50	0.4	0.070	0.140	0.060	0.01	0.86	774	431,090	100,573	1,802	1,802	429,288	9.86	439.35
67	1005	16.75	0.3	0.053	0.138	0.045	0.01	0.65	581	429,869	100,476	1,800	1,800	428,068	9.83	439.33
68	1020	17.00	0.3	0.053	0.136	0.045	0.01	0.65	581	428,649	100,380	1,798	1,798	426,850	9.80	439.32
69	1035	17.25	0.5	0.088	0.134	0.074	0.01	1.08	968	427,818	100,314	1,797	1,797	426,021	9.78	439.31
70	1050	17.50	0.5	0.088	0.132	0.074	0.01	1.08	968	426,988	100,249	1,796	1,796	425,192	9.76	439.30
71	1065	17.75	0.5	0.088	0.130	0.074	0.01	1.08	968	426,160	100,183	1,795	1,795	424,365	9.74	439.30
72	1080	18.00	0.4	0.070	0.128	0.060	0.01	0.86	774	425,139	100,103	1,794	1,794	423,345	9.72	439.28
73	1095	18.25	0.4	0.070	0.126	0.060	0.01	0.86	774	424,119	100,022	1,792	1,792	422,327	9.70	439.27
74	1110	18.50	0.4	0.070	0.124	0.060	0.01	0.86	774	423,101	99,942	1,791	1,791	421,311	9.67	439.26
75	1125	18.75	0.3	0.053	0.123	0.045	0.01	0.65	581	421,891	99,846	1,789	1,789	420,102	9.64	439.25
76	1140	19.00	0.2	0.035	0.121	0.030	0.01	0.43	387	420,489	99,736	1,787	1,787	418,702	9.61	439.24
77	1155	19.25	0.3	0.053	0.119	0.045	0.01	0.65	581	419,283	99,640	1,785	1,785	417,498	9.58	439.23
78	1170	19.50	0.4	0.070	0.117	0.060	0.01	0.86	774	418,272	99,561	1,784	1,784	416,488	9.56	439.21
79	1185	19.75	0.3	0.053	0.116	0.045	0.01	0.65	581	417,069	99,466	1,782	1,782	415,286	9.53	439.20
80	1200	20.00	0.2	0.035	0.114	0.030	0.01	0.43	387	415,673	99,355	1,780	1,780	413,893	9.50	439.19
81	1215	20.25	0.3	0.053	0.113	0.045	0.01	0.65	581	414,474	99,261	1,778	1,778	412,695	9.47	439.18
82	1230	20.50	0.3	0.053	0.111	0.045	0.01	0.65	581	413,276	99,166	1,777	1,777	411,499	9.45	439.16
83	1245	20.75	0.3	0.053	0.110	0.045	0.01	0.65	581	412,080	99,072	1,775	1,775	410,305	9.42	439.15
84	1260	21.00	0.2	0.035	0.109	0.030	0.01	0.43	387	410,692	98,962	1,773	1,773	408,919	9.39	439.14
85	1275	21.25	0.3	0.053	0.107	0.045	0.01	0.65	581	409,499	98,868	1,771	1,771	407,728	9.36	439.13
86	1290	21.50	0.2	0.035	0.106	0.030	0.01	0.43	387	408,115	98,758	1,769	1,769	406,346	9.33	439.11

RCFC & WCD
HYDROLOGY MANUAL

SYNTHETIC UNIT HYDROGRAPH METHOD

SHORTCUT METHOD

24-HOUR STORM

UNIT HYDROGRAPH and EFFECTIVE RAIN CALCULATION FORM

PROJECT: COVA
Job No.: 2811
BY: saw DATE 12/10/25

DRAINAGE AREA-ACRES	81.14	VARIABLE LOSS RATE (AVG) IN/HR		Basin Percolation Rate	0.9 in/hr
UNIT TIME-MINUTES	15	Fm = Minimum value on loss curve (in/hr)	0.10		
LAG TIME - MINUTES	5.30	C	0.00181	Maxwell Drywells	
UNIT TIME-PERCENT OF LAG	283%	Low Loss Rate (percent)	85.00%	Number	0
TOTAL ADJUSTED STORM RAIN (in)	4.38			Drywell Percolation Rate	0.00 cfs 0.00 cfm

Unit Time Period	Time Minutes	Hours	Pattern Percent	Storm Rain in/hr	Loss Rate in/hr		Effective Rain	Flood Hydrograph Flow	Volume In	Basin Volume	Basin Losses			Total In Basin		Basin WSEL
					Max	Low					Percolation Area	Maximum Percolation	Percolation Out			
			(Plate E-5.9)				in/hr	cfs	cu-ft	cu-ft	sf	cu-ft	cu-ft	cu-ft	ac-ft	ft
87	1305	21.75	0.3	0.053	0.105	0.045	0.01	0.65	581	406,926	98,665	1,768	1,768	405,158	9.30	439.10
88	1320	22.00	0.2	0.035	0.104	0.030	0.01	0.43	387	405,545	98,556	1,766	1,766	403,780	9.27	439.08
89	1335	22.25	0.3	0.053	0.103	0.045	0.01	0.65	581	404,360	98,462	1,764	1,764	402,596	9.24	439.07
90	1350	22.50	0.2	0.035	0.102	0.030	0.01	0.43	387	402,983	98,353	1,762	1,762	401,221	9.21	439.06
91	1365	22.75	0.2	0.035	0.101	0.030	0.01	0.43	387	401,608	98,245	1,760	1,760	399,848	9.18	439.04
92	1380	23.00	0.2	0.035	0.100	0.030	0.01	0.43	387	400,235	98,136	1,758	1,758	398,476	9.15	439.03
93	1395	23.25	0.2	0.035	0.099	0.030	0.01	0.43	387	398,863	98,028	1,756	1,756	397,107	9.12	439.02
94	1410	23.50	0.2	0.035	0.099	0.030	0.01	0.43	387	397,494	97,920	1,754	1,754	395,740	9.08	439.00
95	1425	23.75	0.2	0.035	0.098	0.030	0.01	0.43	387	396,127	97,812	1,752	1,752	394,374	9.05	438.99
96	1440	24.00	0.2	0.035	0.098	0.030	0.01	0.43	387	394,761	97,704	1,751	1,751	393,011	9.02	438.97

EFFECTIVE RAIN & FLOOD VOLUMES SUMMARY

EFFECTIVE RAIN	1.78 in
FLOOD VOLUME	12.05 acft
FLOOD VOLUME	524,686 cu-ft
REQUIRED STORAGE	9.90 acft
REQUIRED STORAGE	431,345 cu-ft
MAX WSEL	439.37 ft
PEAK FLOW RATE	34.93 cfs
TOTAL BASIN LOSSES	131,675 cu-ft
AVERAGE PERCOLATION RATE	91.44 cf/min

Appendix G

AGREEMENTS – CC&RS, COVENANT AND AGREEMENTS, BMP MAINTENANCE AGREEMENTS AND/OR OTHER MECHANISMS FOR ENSURING ONGOING OPERATION, MAINTENANCE, FUNDING AND TRANSFER OF REQUIREMENTS FOR THIS PROJECT-SPECIFIC WQMP

Appendix H

PHASE 1 ENVIRONMENTAL SITE ASSESSMENT – SUMMARY OF SITE REMEDIATION CONDUCTED AND USE RESTRICTIONS

(NOT AVAILABLE)

Appendix I

PROJECT-SPECIFIC WQMP SUMMARY DATA FORM

Project-Specific WQMP Summary Data Form

Applicant Information	
Name and Title	Jeremy Smith
Company	Relevant Coachella Owner, LLC
Phone	(310) 270-6222
Email	grant@relevantgroup.com
Project Information	
Project Name (as shown on project application/project-specific WQMP)	The Ranch - Tentative Tract Map 39330
Street Address	SEC of Avenue 52 and Van Buren Street
Nearest Cross Streets	Van Buren Street
Municipality (City or Unincorporated County)	Coachella
Zip Code	92236
Tract Number(s) and/or Assessor Parcel Number(s)	APNs 780-040-001, 780-040-003, 780-060-001, 780-060-002
Other (other information to help identify location of project)	

Indicate type of project.	**Priority Development Projects (Use an "X" in cell preceding project type):**	
		SF hillside residence; impervious area ≥ 10,000 sq. ft.; Slope ≥ 25%
		SF hillside residence; impervious area ≥ 10,000 sq. ft.; Slope ≥ 10% & erosive soils
		Commercial or Industrial ≥ 100,000 sq. ft.
		Automotive repair shop
		Retail Gasoline Outlet disturbing > 5,000 sq. ft.
		Restaurant disturbing > 5,000 sq. ft.
	X	Home subdivision ≥ 10 housing units
	X	Parking lot ≥ 5,000 sq. ft. or ≥ 25 parking spaces

Date Project-Specific WQMP Submitted	October 1, 2025, June 8, 2026
Size of Project Area (nearest 0.1 acre)	81.14 Acres
Will the project replace more than 50% of the impervious surfaces on an existing developed site?	No
Project Area managed with LID/Site Design BMPs (nearest 0.1 acre)	81.14 Acres
Are Treatment Control BMPs required?	No
Is the project subject to onsite retention by ordinance or policy?	Yes
Did the project meet the 100% LID/Site Design Measurable Goal?	Yes
Name of the entity that will implement, operate, and maintain the post-construction BMPs	Relevant Coachella Owner, LLC
Contact Name	Grant King
Street or Mailing Address	6417 Selma Avenue
City	Hollywood, CA
Zip Code	90028
Phone	(310) 270-6222

Space Below for Use by City/County Staff Only	
Preceding Information Verified by (consistent with information in project-specific WQMP)	**Name:** **Date:**
Date Project-Specific WQMP Approved:	
Data Entered by	**Name:** **Date:**
Other Comments	

Water Supply Assessment

for the Proposed

Cova Project

Prepared for:

City of Coachella
Coachella Water Authority
1515 Sixth Street
Coachella, CA 92236

Prepared by:

MSA Consulting, Inc.
34200 Bob Hope Drive
Rancho Mirage, CA 92270

June 2026

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1 Summary and Requirements

The environmental review of the Cova (Project) is being prepared in compliance with the California Environmental Quality Act (CEQA) process. The City of Coachella is the Lead Agency for the planning and environmental review of the proposed Project. The City of Coachella has identified the Coachella Water Authority (CWA) as the Public Water System (PWS) that will supply water for the proposed Project and has requested that CWA assist in preparing a Water Supply Assessment (WSA) as part of the environmental review for the Project.

The Project is located on the southwestern corner Avenue 52 and Van Buren Street in the City of Coachella, Riverside County. The Applicant is proposing a mixed-use development on the 87-acre site. The project will feature two primary components: a private sector and public sector. The private sector will consist of up to 165 single-family residential units comprised of estate lots, zero lot line lots, bungalow lots, and VIP suites; and 244 condo hotel recreational home units, which will operate similar to the single-family lots. These units will operate under fractional ownership, timeshare, second homes, and/or short-term and long-term rental models. These accommodations will be complemented by on-site resort amenities (i.e., recreational courts, spa/pool, lagoon and water features, bar and entertainment, library, restaurant), which will be used by guests/owners of this sector.

This WSA determined that the total projected water demand for the Project is 225.96 AFY. This WSA demonstrates that sufficient water supplies exist, or will exist based on current water planning assumptions, to meet the projected demands of the Project, in addition to current and future projected water demands within CWA's service area in normal, single-dry, and multiple-dry years over a 20-year projection. This WSA will be reviewed every five years, or in the event that the water planning assumptions have changed, until the Project begins construction to ensure it remains accurate and no significant changes to either the Project or available water supply has occurred. Consistent with the provisions of SB 610, neither this WSA nor its approval shall be construed to create a right or entitlement to water service or any specific level of water service, and shall not impose, expand, or limit any duty concerning the obligation of CWA to provide certain service to its existing customers or to any future potential customers.

This WSA does not constitute an agreement to provide water service to the Project, and does not entitle the Project, Project Applicant, or any other person or entity to any right, priority or allocation in any supply, capacity, or facility. To receive water service, the Project will be subject to an agreement with CWA, together with any and all applicable fees, charges, plans and specifications, conditions, and any and all other applicable CWA requirements in place and as amended from time to time. Nor does anything in this WSA prevent or otherwise interfere with CWA's discretionary authority to declare a water shortage emergency in accordance with the Water Code.

1.1 Regulatory Requirements

This WSA provides an assessment of the availability of sufficient water supplies during normal, single-dry, and multiple-dry years over a 20-year projection to meet the projected demands of the Project, in addition to existing and planned future water demands of CWA, as required by Senate Bill (SB) 610 and SB 1262. This WSA also includes identification of existing water supply entitlements, water rights, water service contracts, or agreements relevant to the identified water supply for the Project and quantities of water received in prior years pursuant to those entitlements, rights, contracts, and agreements.

This WSA has been prepared in compliance with the requirements under SB 610 and SB 1262 by MSA Consulting Inc. in consultation with CWA and the City of Coachella. This WSA does not relieve the Project from complying with all applicable state, county, city, and local ordinances or regulations, including the Model Water Efficient Landscape Ordinance (MWELO) and indoor water use performance standards provided in the California Water Code (CWC). This WSA will be reviewed every five years, or in the event that the water planning assumptions have changed, until the Project begins construction, to ensure it remains accurate and no significant changes to either the Project or available water supply has occurred. The Project applicant shall notify CWA when construction of the project begins.

1.1.1 Senate Bill 610

On January 1, 2002, Senate Bill 610 (SB 610) was enacted and codified in CWC Section 10910 et seq., requiring the preparation of a Water Supply Assessment (WSA) for certain new development projects. As stated in SB 610, the purpose of a WSA is to determine whether the PWS's "total projected water supplies available during normal, single-dry, and multiple-dry water years during a 20-year projection will meet the projected water demand associated with the proposed project, in addition to the PWS's existing and planned future uses, including agricultural and manufacturing uses."

CWC Section 10912 defines a "project" as any of the following:

- A proposed residential development of more than 500 dwelling units;
- A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- A proposed hotel or motel, or both, having more than 500 rooms;
- A proposed industrial, manufacturing, or processing plant, or industrial park, planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor space;
- A mixed-use project that includes one or more of the projects specified in this subdivision; or

- A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project (about 250 acre-feet per year).

The intent of SB 610 is to improve the link between information on water supply availability and certain land-use decisions made by cities and counties.

1.1.2 Senate Bill 1262

On January 1, 2017, Senate Bill 1262 (SB 1262) was enacted and amended CWC Section 10910, requiring that information regarding the Sustainable Groundwater Management Act (SGMA) be included in a WSA if the water supply for a proposed project includes groundwater from a basin that is not adjudicated and was designated medium- or high-priority by the California Department of Water Resources (DWR).

1.2 Water Management Planning Documents

CWA has prepared long-term planning documents to project future was use and manage the water supplies within its service area. These planning documents can be used for compliance with SB 610 and SB 1262 and are discussed in further detail in the following sections.

1.2.1 Urban Water Management Planning Act

The Urban Water Management Planning Act (UWMPA) was established by Assembly Bill 797 (AB 797) on September 21, 1983, and passage of this law recognized that water is a limited resource and that efficient water use and conservation would be actively pursued throughout the State. The UWMPA requires that municipal water suppliers providing either directly or indirectly to more than 3,000 customers or supplying more the 3,000 acre-feet per year (AFY), prepare and adopt an Urban Water Management Plan (UWMP) every five years which defines their current and future water use, source of supply, source reliability, and existing conservation measures.

1.2.1.1 Urban Water Management Plan

CWA is required to prepare a UWMP every five years in response to the requirements of the UWMP Act and Water Conservation Act of 2009 (SBx7-7). CWA prepared and adopted its 2010 and 2015 UWMP to document CWA's projected water demands and plans for delivering water supplies to its water service area during normal, single-dry, and multiple-dry years over a 20-year projection.

The six urban water suppliers in the Coachella Valley (CWA), Coachella Valley Water District (CVWD), Desert Water Agency (DWA), Indio Water Authority (IWA), Mission Springs Water District (MSWD), and Myoma Dunes Mutual Water Company) collaboratively prepared the 2020 Coachella Valley Regional UWMP, including regional and individual agency content and other necessary elements as set forth in DWR's 2020 UWMP Guidebook. The 2025 Coachella Valley Regional UWMP was finalized on June 26, 2026.

1.2.2 Sustainable Groundwater Management Act

In September 2014, Governor Brown signed three bills into law: Assembly Bill 1739, Senate Bill 1319, and Senate Bill 1168, which became collectively known as the SGMA, creating a framework for sustainable, local groundwater management for the first time in California history. DWR evaluated and prioritized the 515 groundwater basins identified in Bulletin 118, and 94 of these groundwater basins were designated as high- or medium-priority basins, as of December 2019, requiring them to be sustainably managed within 20 years. SGMA required local authorities to form local Groundwater Sustainability Agencies (GSAs) by June 30, 2017, to evaluate conditions in their local groundwater basins and adopt locally-based Groundwater Sustainability Plans (GSPs), or Alternatives to a GSP (Alternative Plans), tailored to their regional economic and environmental needs.

As defined by DWR, the subbasins of the Coachella Valley Groundwater Basin are the Indio, Mission Creek, San Gorgonio Pass, and Desert Hot Springs Subbasins. CWA service area overlies the Indio Subbasin; therefore, the Project is located within the Indio Subbasin. The Indio Subbasin has been designated medium-priority by DWR and is subject to the requirements of SGMA. Basin prioritization is based on a variety of factors such as population, number of wells, and other information determined to be relevant by DWR.

1.2.2.1 Alternative Plan for the Indio Subbasin

Twenty years before the adoption of SGMA, CVWD began the development of the initial water management plan for the Coachella Valley in 1994 after recognizing the need to sustainably manage the Coachella Valley Groundwater Basin. The original planning document is the 2002 Coachella Valley Water Management Plan (CVWMP). The 2002 CVWMP was updated in 2010 and adopted in 2012.

CWA, CVWD, DWA, and IWA, are the Indio Subbasin GSAs designated by DWR for their respective service areas. On December 29, 2016, CWA, CVWD, DWA, and IWA collaboratively submitted the 2010 CVWMP Update as an Alternative Plan for the Indio Subbasin, with an associated Bridge Document and supporting documents, to DWR for review and evaluation. On July 17, 2019, DWR determined that the Alternative Plan for the Indio Subbasin satisfies the objectives of SGMA and notified the Indio Subbasin GSAs that the Alternative Plan was approved, and that they would be required to submit an assessment and update of the Alternative Plan pursuant to the SGMA by January 1, 2022, and every five years thereafter. The 2022 Alternative Plan Update for the Indio Subbasin was submitted to DWR on December 29, 2021. On June 27, 2024, DWR approved the 2022 Alternative Plan Update for the Indio Subbasin finding that it continues to satisfy the objectives of SGMA.

On February 1, 2018, DWR notified all GSAs who submitted Alternative Plans that they would be required to submit annual reports pursuant to SGMA by April 1, 2018, and every year thereafter.

CWA, CVWD, DWA, and IWA have collaboratively prepared and submitted the Indio Subbasin Annual Reports for Water Years 2016-2017 through 2023-2024.

1.2.3 Groundwater Replenishment

Colorado River water has been a major source of supply for the Coachella Valley since 1949 with the completion of the Coachella Canal. The Coachella Canal (Canal) is a branch of the All-American Canal that brings Colorado River water into the Imperial and Coachella Valleys. The Canal originates at Drop 1 on the All-American Canal and extends approximately 122 miles, terminating in CVWD's Lake Cahuilla. This water is used for agricultural, golf courses, and landscape irrigation purposes, as well as groundwater replenishment. The Colorado River is managed and operated in accordance with the Law of the River, the collection of interstate compacts, federal and state legislation, various agreements and contracts, an international treaty, a U.S. Supreme Court decree, and federal administrative actions that govern the rights to use of Colorado River water within the seven Colorado River Basin states.

State Water Code (SWC) 31630-31639 provides CVWD with the authority to levy and collect water Replenishment Assessment Charges (RACs) to implement groundwater replenishment programs (GRPs) within its jurisdictional boundary. Groundwater replenishment is necessary to mitigate overdraft of the groundwater basin and associated undesirable results. The jurisdictional areas that benefit from the GRPs, and where CVWD levies replenishment assessments on groundwater production, are termed Areas of Benefit (AOBs). There are three AOBs within CVWD's boundary: the Mission Creek Subbasin AOB, the West Whitewater River Subbasin AOB, and the East Whitewater River Subbasin AOB. The GRP for the West Whitewater River Subbasin AOB was formed in 1976, the GRP for the Mission Creek Subbasin AOB was formed in 2003, and the GRP for the East Whitewater River Subbasin AOB was formed in 2004. To recover the cost of the GRP, a RAC is applied to all non-exempt groundwater production. These RACs are calculated and managed separately by each agency for each of the AOBs. The Project is located within the East Whitewater River Subbasin AOB.

1.2.3.1 Annual Engineer's Reports

CVWD is required to prepare and present to its Board of Directors annually an Engineer's Report on Water Supply and Replenishment Assessment on the conditions of the groundwater supplies and recommend RACs to be levied upon groundwater production greater than 25 AFY within each AOB in accordance with SWC 31630-31639. The Engineer's Report must include the following information: a summary of the conditions of groundwater supplies; the need for replenishment; a description of the replenishment programs, including the source and amount of replenishment waters, the costs associated with the GRP, the areas directly and indirectly benefited by the GRP, and the amount of groundwater produced in each area during the prior year; and a recommendation for the RAC to be levied on each AOB. The 2026-2027 Engineer's Report on Water Supply and Replenishment Assessment was prepared and presented to CVWD's Board of Directors on April 28, 2026.

The significance of CVWD's Annual Engineers Report extends to CWA, as CWA is obligated to pay RACs to guarantee water availability to its service population. These RACs help ensure that the Coachella Valley Groundwater Basin is properly managed.

2 Public Water System

The City of Coachella is the Lead Agency for the planning and environmental review of the proposed COVA Project (Project). The City of Coachella has identified the Coachella Water Authority (CWA) as the Public Water System (PWS) that will supply water for the proposed Project and has requested that CWA assist in preparing a Water Supply Assessment (WSA) as part of the environmental review for the Project.

2.1 Coachella Water Authority

The City of Coachella provides domestic water delivery, wastewater collection and reclamation, and local drainage control. In addition, the City manages the Coachella Sanitary District that operates a 4.5 MGD secondary treatment wastewater facility.

The Coachella Water Authority (CWA) was established in 1957 and is administered and managed by the Utilities General Manager under direct supervision of the City Manager. CWA's existing water system consists of different pressure zones, groundwater wells, storage reservoirs, booster pumping stations, and distribution facilities. The current water system is divided into two pressure zones, the Low Zone and the 150 Zone. The Low Zone Area is generally south of 48th Avenue, bounded by Van Buren on the west, the Coachella Valley Storm Channel on the east, and 54th Avenue on the south. The Low Zone provides water service to the majority of the City and as the City continues to grow, the Low Zone will extend further east. The 150 Zone service area is generally north of 48th Avenue and supplies primarily commercial and light industrial users along the Interstate 10 freeway corridor.

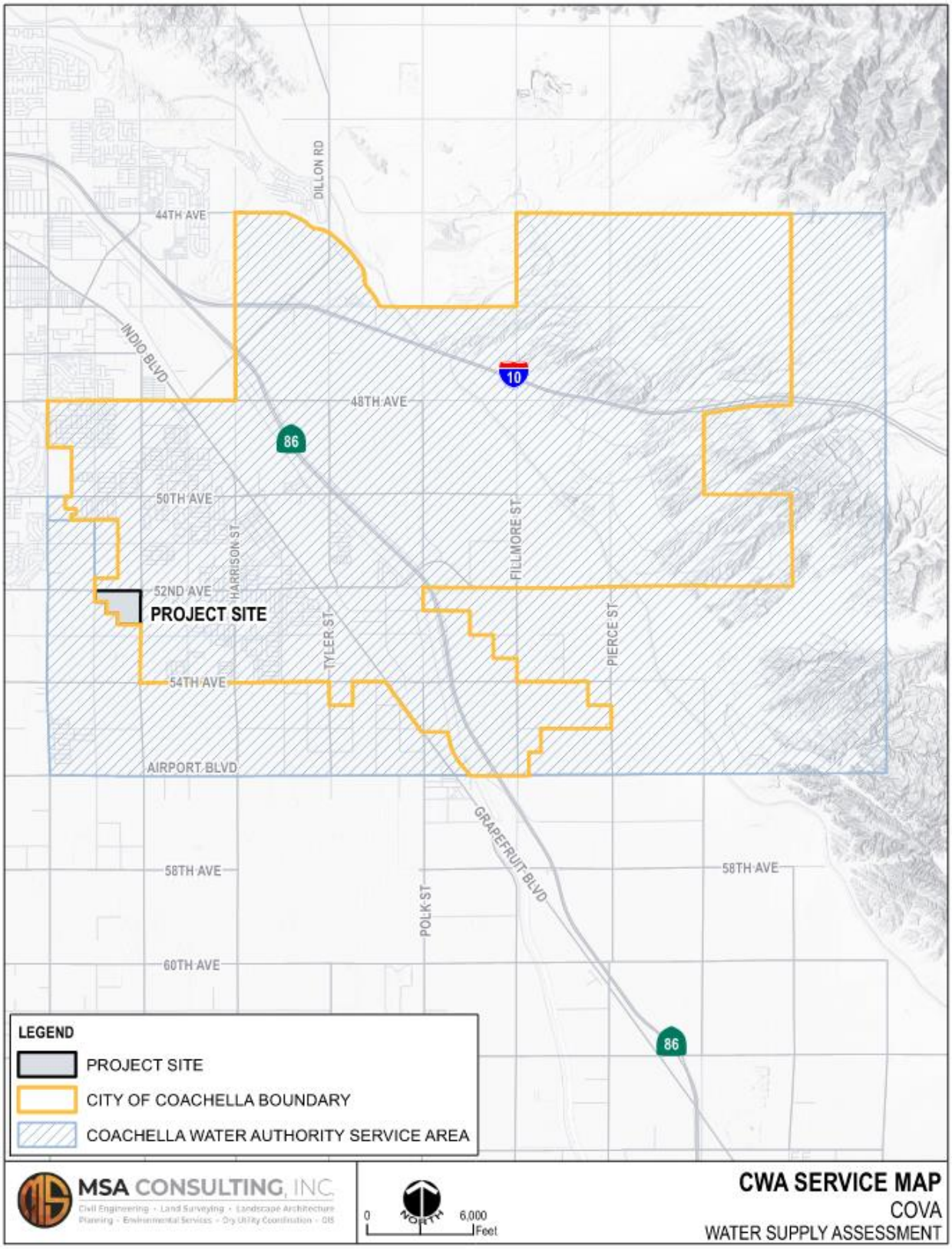
There are currently six wells within the City's distribution system. The total pumping capacity of active wells is approximately 11,400 gallons per minute (gpm) or 16.5 million gallons per day (MGD). There are three storage reservoirs within the City, the 1.5-million-gallon (MG) Dillion Road Reservoir, the 3.6 MG Mecca Reservoir, and the 5.4 MG Well 18 Reservoir. CWA has a total reservoir storage capacity of approximately 10.5 MG; of which approximately 1.5 MG lies within the 150 Zone.

CWA operates two booster pumping stations, the Mecca Reservoir booster pump station (Well 12 Booster) and the Well 18 Reservoir booster pump station (Well 18 Booster). The Well 12 Booster supplies the Low Zone and takes suction from the Mecca Reservoir, and the Well 18 Booster supplies both the 150 Zone and Low Zone and takes suction from the Well 18 Reservoir. CWA's distribution system network consists of approximately 120 miles of pipeline. It is estimated that a majority of pipes in the City's water distribution system network were installed between the year 1940 and year 1990. The older pipes reside in the southerly section of the lower zone, and the newer pipes are in the northerly section.

CWA's current water supply source is groundwater from the Indio Subbasin produced from CWA owned and operated wells. While CWA is responsible for the water supply for its residents, the City pays RACs to CVWD to ensure necessary groundwater management and replenishment is achieved for the East White Water River Subbasin AOB.

Agricultural areas are not served by CWA's water system and rely on Coachella Canal water and privately owned and operated wells. As undeveloped and agricultural lands are developed into residential or other land uses, they will be served by CWA and become part of CWA's service area. For the purpose of developing baselines and targets, CWA delineated the existing water service area based on the existing distribution system as shown in **Figure 2-1**.

Figure 2-1: Coachella Water Authority Service Map



2.2 Coachella Valley Hydrology

The bulk of natural groundwater replenishment comes from runoff from the adjacent mountains. The climate in the Coachella Valley is characterized by low humidity, high summer temperatures, and mild dry winters. Average annual precipitation varies from 3 to 6 inches of rain on the Coachella Valley floor to more than 30 inches in the surrounding mountains. Most of the precipitation occurs between December and February, except for summer thundershowers. Prevailing winds in the area are usually gentle but occasionally increase to velocities as high as 30 miles per hour or more. Mid-summer temperatures commonly exceed 100 degrees Fahrenheit (°F), frequently reach 110 °F, and periodically reach or exceed 120 °F, and the average winter temperature is approximately 60 °F as shown in **Table 2-1** and **Table 2-2**. Data from the climate station in Indio represents climate in the CWA service area.

Table 2-1: Monthly Average Climate Data for Palm Springs

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Max (°F)[1]	71	73	80	86	94	104	108	107	102	90	78	69	89
Min (°F)[1]	47	49	54	59	65	73	80	79	74	64	53	46	62
Rain (in)[1]	1.1	1.1	0.5	0.1	0.0	0.00	0.3	0.1	0.2	0.2	0.2	0.7	4.6
ETo (in)[2]	2.5	3.4	5.6	7.1	8.3	8.7	8.1	7.5	6.2	4.7	2.9	2.2	67.2

Source: 2025 Coachella Valley Regional Urban Water Management Plan Final Draft

[1] National Weather Service Forecast, Station Palm Springs Airport, 1991-2020

[2] CIMIS Station 208 – La Quinta II, 2007-2020

Table 2-2: Monthly Average Climate Data for Indio

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Max (°F)	72	75	82	93	103	103	106	106	101	90	80	65	88
Min (°F)	42	45	52	58	63	70	76	75	69	59	49	39	58
Rain (in)	0.5	0.6	0.7	0.3	0.3	0.1	0.2	0.1	0.1	0.4	0.2	0.7	3.8
ETo (in)	2.7	3.6	6.0	7.7	9.2	9.8	9.8	9.1	7.2	5.2	3.3	2.3	75.7

Source: 2025 Coachella Valley Regional Urban Water Management Plan Final Draft

Data from California Irrigation Management Information System (CIMIS) Station 200, Indio II. Data from May 2006 through December 2020.

3 Public Water System – Existing Supply and Demand

Currently, all CWA's urban potable water uses are supplied using groundwater from the East Whitewater River Subbasin, which is continually replenished by CVWD. As defined by the SWC, CWA is a producer who files a sworn statement with the district setting forth the total quantity of water production in acre-feet which is subject to the Replenishment Assessment Charge (RAC). The RAC partially funds CVWD's groundwater replenishment program. There are three separate RACs based on geography because of the varying costs and benefits of the replenishment program for each geography. CWA pays RACs to ensure that the East Whitewater River Subbasin is replenished. To replenish the East Whitewater River Subbasin, CVWD receives imported water from the Colorado River.

3.1 Groundwater

Groundwater is the principal source of potable supply in the Coachella Valley and CWA obtains water from the East Whitewater River Subbasin of the Coachella Valley Groundwater Basin. CVWD has statutory authority to replenish local groundwater supplies and collect RACs necessary to support a groundwater replenishment program as provided in the County Water District Law (California Water Code section 30000, et seq.) and as a GSA under the SGMA. CWA pays the RAC to ensure the East Whitewater River Subbasin Area of Benefit is properly managed.

3.1.1 Coachella Valley Groundwater Basin

The Coachella Valley Groundwater Basin is bounded on the north and east by the San Bernardino and Little San Bernardino Mountains, on the south and west by the Santa Rosa and San Jacinto Mountains, and on the south by the Salton Sea. At the west end of the San Gorgonio Pass, between Beaumont and Banning, the basin boundary is defined by a surface drainage divide separating the Coachella Valley Groundwater Basin from the Beaumont Groundwater Basin of the Upper Santa Ana Drainage Area.

The southern boundary is formed primarily by the watershed of the Mecca Hills and by the northwest shoreline of the Salton Sea running between the Santa Rosa Mountains and Mortmar. Between the Salton Sea and Travertine Rock, at the base of the Santa Rosa Mountains, the southern boundary crosses the Riverside County Line into Imperial and San Diego Counties.

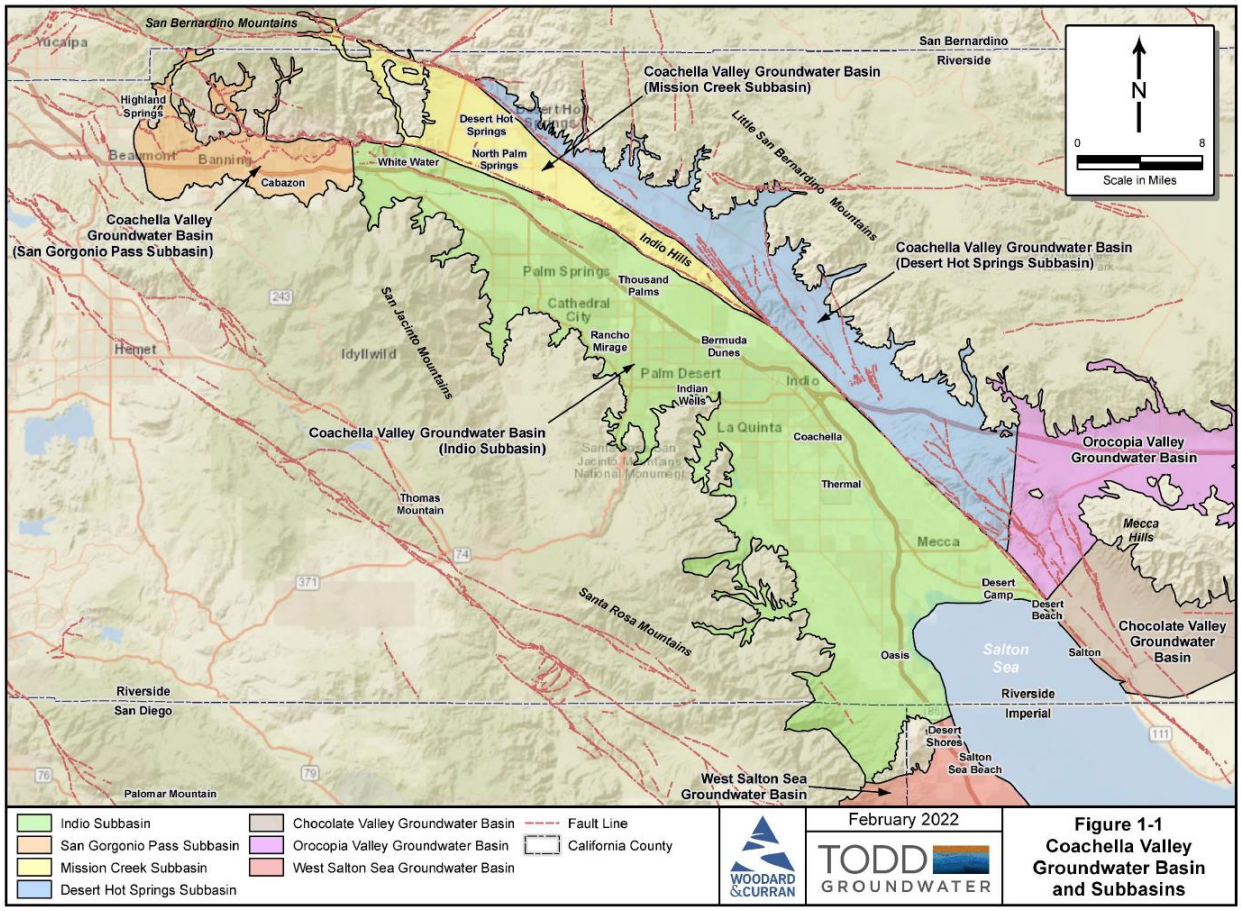
Although there is interflow of groundwater throughout the Coachella Valley Groundwater Basin, fault barriers, constrictions in the basin profile, and areas of low permeability limit and control movement of groundwater. Based on these factors, the Coachella Valley Groundwater Basin has been divided into subbasins and subareas as described by DWR in 1964 and 2003, and by the United States Geological Survey (USGS) in 1974.

3.1.1.1 Coachella Valley Groundwater Basin – Subbasins

As shown on **Figure 3-1,** the subbasins of the Coachella Valley Groundwater Basin are the Indio, Mission Creek, San Gorgonio Pass, and Desert Hot Springs Subbasins. The subbasins are defined without regard to water quantity or quality. They delineate areas underlain by formations which readily yield stored groundwater through water wells and offer natural reservoirs for the regulation of water supplies.

The boundaries between subbasins within the Coachella Valley Groundwater Basin are generally defined by faults that impede the lateral movement of groundwater. Minor subareas have also been delineated based on one or more of the following geologic or hydrologic characteristics: types of water-bearing formations, water quality, areas of confined groundwater, forebay areas, groundwater divides, and surface drainage divides.

Figure 3-1: Coachella Valley Groundwater Basin and Subbasins



Source: Indio Subbasin Annual Report for Water Year 2020-2021

The following is a list of the subbasins in the Coachella Valley Groundwater Basin as designated by DWR in Bulletin 118:

- Indio Subbasin (Subbasin 7-21.01)
- Mission Creek Subbasin (Subbasin 7-21.02)
- San Gorgonio Pass Subbasin (Subbasin 7-21.03)
- Desert Hot Springs Subbasin (Subbasin 7-21.04)

DWR designated the Indio, Mission Creek, and San Gorgonio Pass Subbasins as medium-priority, and the Desert Hot Springs Subbasin as very low priority. None of the subbasins are adjudicated or in a state of overdraft.

In 1964, DWR estimated that the subbasins in the Coachella Valley Groundwater Basin contained approximately 39,200,000 acre-feet (AF) of water in the first 1,000 feet below the groundwater surface. The capacities of the subbasins are shown in **Table 3-1**.

Table 3-1: Groundwater Storage in the Coachella Valley Groundwater Basin

Subbasin/Subarea	Storage (AF) [1]
Indio Subbasin	
Palm Springs Subarea	4,600,000
Thousand Palms Subarea	1,800,000
Oasis Subarea	3,000,000
Garnet Hill Subarea	1,000,000
Thermal Subarea	19,400,000
Indio Subbasin Subtotal	**29,800,000**
Mission Creek Subbasin	2,600,000
San Gorgonio Subbasin	2,700,000
Desert Hot Springs Subbasin	4,100,000
Total	**39,200,000**

Source: DWR Bulletin 108 (1964)

[1] First 1,000 feet below ground surface. (DWR, 1964)

3.1.2 Groundwater Demand

Groundwater is the principal source of potable supply in the Coachella Valley and CWA obtains groundwater from the Indio Subbasin of the Coachella Valley Groundwater Basin, which is continually replenished by CVWD. CWA's groundwater demand in the Coachella Valley Groundwater Basin for 2016 through 2020 is shown in **Table 3-2**.

Table 3-2: CWA Groundwater Demand in the Coachella Valley Groundwater Basin

Groundwater Production (AF)	2020	2021	2022	2023	2024	2025
Indio Subbasin	7,216	7,523	7,207	7,190	7,851	7,782

Source: 2025 Coachella Valley Regional Urban Water Management Plan Final Draft

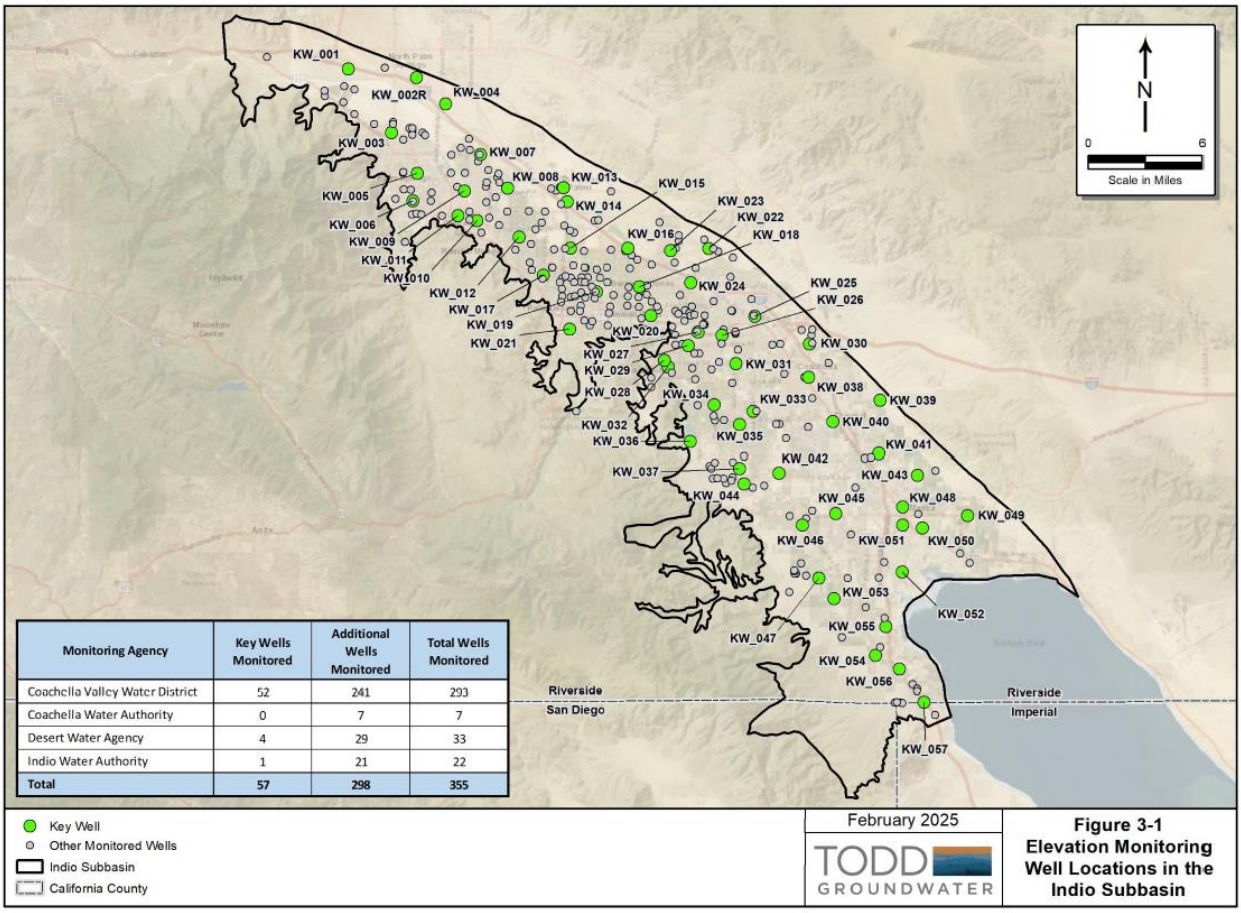
3.1.3 Groundwater Sustainability

Long-term sustainability is typically assessed based on changes in groundwater storage over a period on the order of ten to twenty years that includes wet and dry periods.

3.1.3.1 Indio Subbasin

The 2022 Indio Subbasin Alternative Plan Update identified 57 Key Wells across the subbasin to represent local groundwater levels, shown in **Figure 3-2**. The plan set metrics to demonstrate sustainability, including a Minimum Threshold (MT) at each Key Well. MTs are numeric values used to define undesirable results under SGMA. In WY 2023-2024, water levels in all 57 Key Wells remained above their respective MTs. This confirms that the significant undesirable results of chronic lowering of groundwater levels, depletion of groundwater storage, and potential subsidence are not occurring in the Indio Subbasin.

Figure 3-2: Water Level Monitoring Wells in the Indio Subbasin

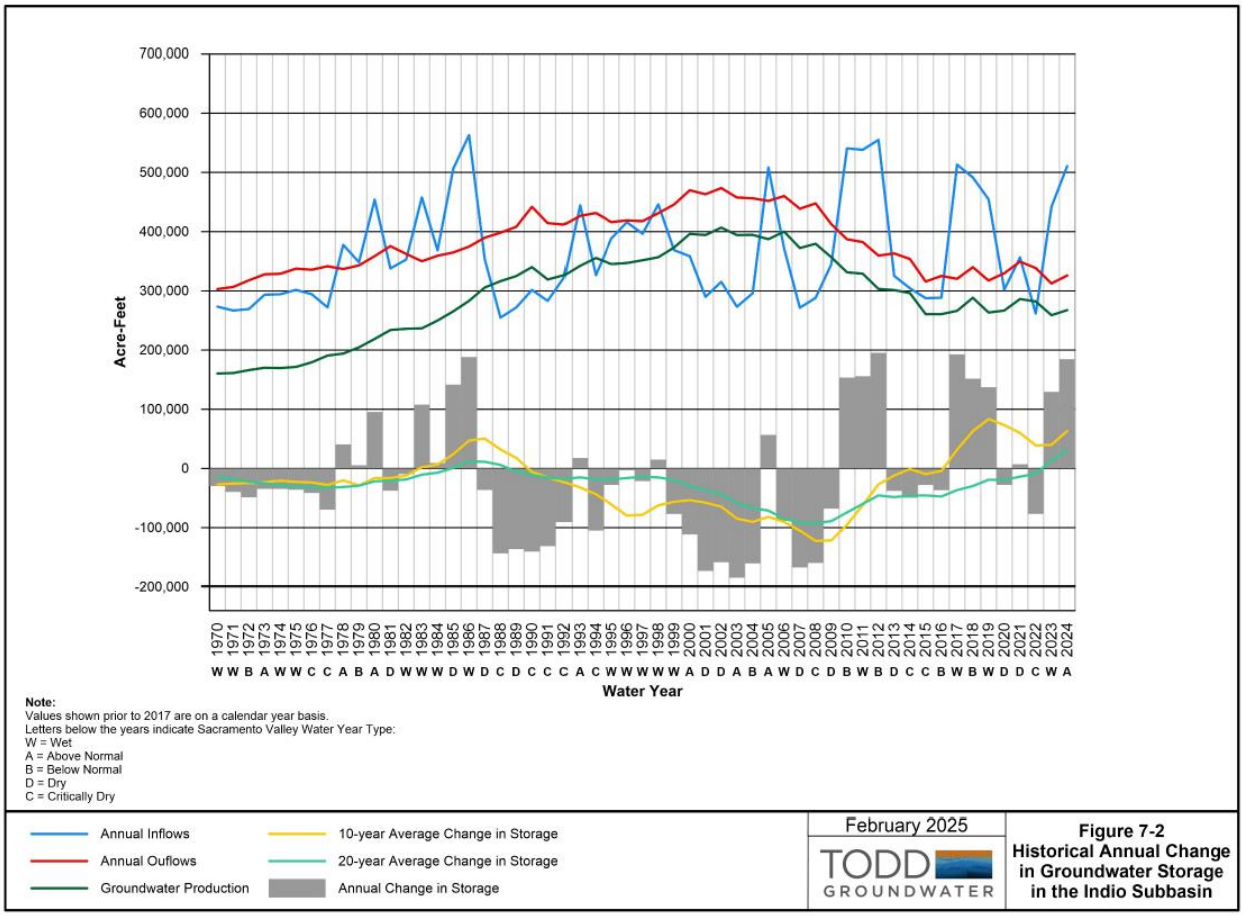


Source: Indio Subbasin Annual Report for Water Year 2023-2024

Figure 3-3 shows the historical annual change in groundwater storage from 1970 through Water Year (WY) 2023-2024 in the Indio Subbasin. The figure also shows annual inflows, outflows, groundwater production, and 10-year and 20-year running-average change in groundwater storage. During periods of high artificial recharge, the change in storage tends to be positive. In dry years or periods of high groundwater pumping, the change in storage can be negative.

As shown in **Figure 3-3**, annual inflows to the Indio Subbasin are highly variable with years of high inflows corresponding to wet years when State Water Project (SWP) delivery volumes were greater. Higher inflows in the mid-1980s occurred when the Metropolitan Water District of Southern California (MWD) commenced large-scale advanced water deliveries to the Indio Subbasin. After an extended period of decline, both the 10-year and 20-year running-average change in storage have shown positive trends since 2009, and the 10-year running-average has been positive since 2009. The 10-year and 20-year running-averages have been positive since 2017 and 2023 respectively. Thomas E. Levy Groundwater Replenishment Facility (GRF) that services CWA does not receive SWP water; however, it is important to understand what deliverables occur for the whole Indio Subbasin.

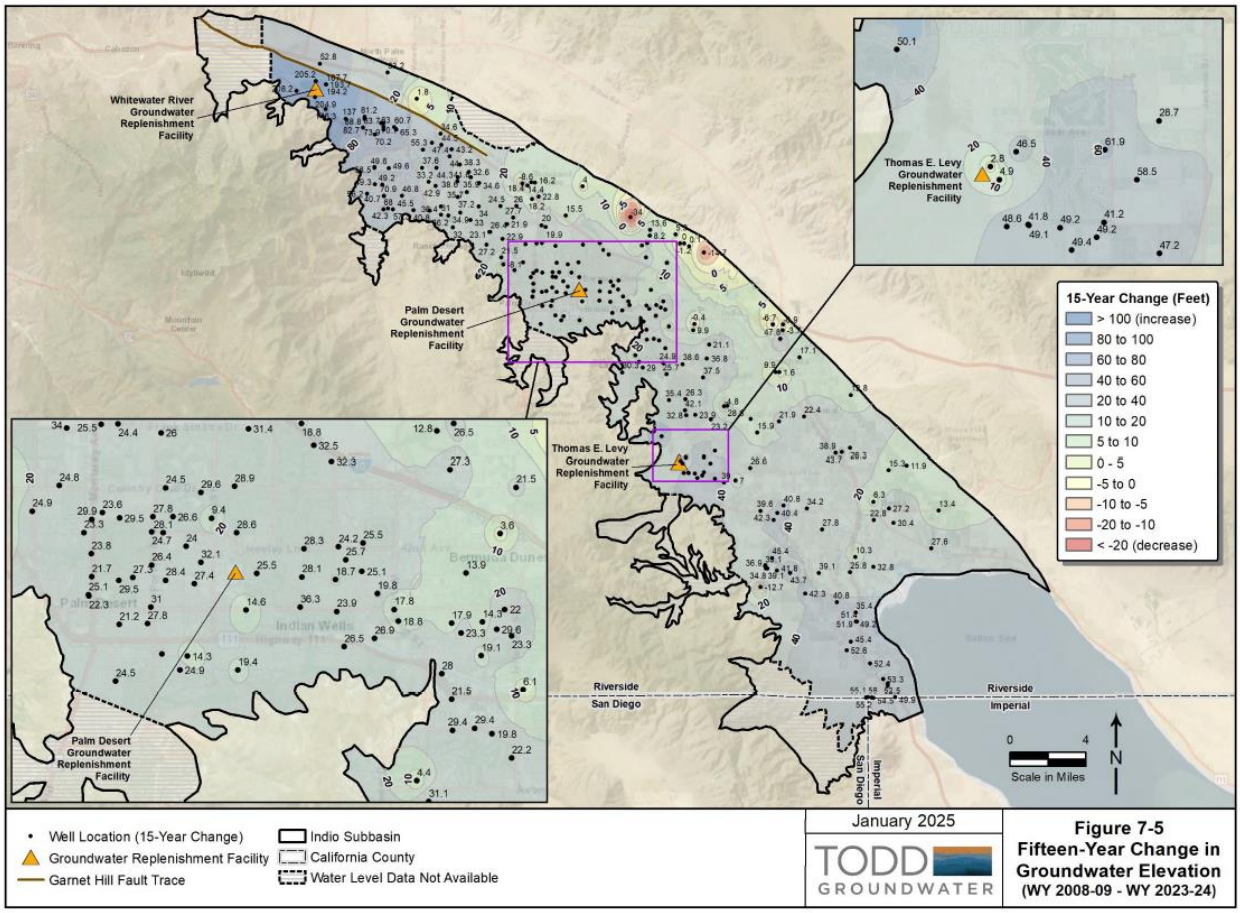
Figure 3-3: Historical Annual Change in Groundwater Storage in the Indio Subbasin



Source: Indio Subbasin Annual Report for Water Year 2023-2024

As shown in **Figure 3-4**, groundwater levels have increased significantly in the Indio Subbasin from WY 2008-2009 to WY 2023-2024. The Indio Subbasin Annual Report uses 2009 water levels as a metric of sustainability because historical low groundwater levels occurred in the years around 2009 throughout most of the Indio Subbasin. The Indio Subbasin shows a long-term positive trend in sustainability resulting from implementation of the Indio Subbasin Alternative Plan.

Figure 3-4: Change in Groundwater Elevation, WY 2009-2024 (Indio Subbasin)



Source: Indio Subbasin Annual Report for Water Year 2023-2024

CWA, CVWD, DWA, and IWA represent the GSA responsible for sustainably managing the Indio Subbasin in compliance with the SGMA. The GSAs have continued efforts to advance the project management actions (PMAs) to maintain the Indio Subbasin in sustainable conditions, able to meet Plan Area water demands, and groundwater levels and quality that avoid undesirable results. With continued implementation of these PMAs, the GSAs are anticipated to meet their water management goals and comply effectively with SGMA. PMAs regarding CWA and its service population discussed in the Indio Subbasin 2023-2024 Annual Report include outreach and costumer programs, costumer rebates, grant funding, and developing a Water Shortage Contingency Plan (WSCP). Water shortage contingency planning is further discussed below in **Section 3.7 - Water Shortage Contingency Planning.**

3.2 Imported Water

CWA's current water supply source is groundwater from the Indio Subbasin produced from CWA owned and operated wells. There are currently six wells within the City's distribution system. The East Whitewater River Subbasin is regionally managed by CWA, CVWD, and IWA. CVWD has statutory authority to replenish local groundwater supplies and collect assessments necessary to

support a groundwater replenishment program as provided in the Country Water District Law. CWA pays RACs according to groundwater use to ensure that the East Whitewater River Subbasin is replenished.

CVWD has two sources of imported water available: Colorado River water delivered via the Coachella Canal and SWP water exchanged for Colorado River water delivered through the Colorado River Aqueduct. These imported water sources are used to recharge the groundwater basin and as an alternative to meet non-potable demands from irrigation of agriculture, golf, and urban uses that would have otherwise been met by pumping groundwater. The source of replenishment water for Thomas E. Levy is Colorado River water via the Coachella Canal and does not include SWP water. CWA receives benefits from the Thomas E. Levy GRF; therefore, CWA pays RACs to ensure the eastern portion (East Whitewater River Subbasin) of the Indio Subbasin receives enough water from the Colorado River to replenish water needed to service CWA customers.

3.2.1 Colorado River Water

Colorado River water has been a significant water supply source for the Indio Subbasin since the Coachella Canal was completed in 1949. CVWD is the only agency in the Indio Subbasin that receives Colorado River water allocations. The Colorado River is managed and operated in accordance with the Law of the River, a collection of interstate compacts, federal and state legislation, various agreements and contracts, an international treaty, a U.S. Supreme Court decree, and federal administrative actions that govern the rights to use Colorado River water within the seven Colorado River Basin states. The 1922 Colorado River Compact apportioned the waters of the Colorado River Basin between the Upper Colorado River Basin (i.e., Colorado, Wyoming, Utah, and New Mexico) and the Lower Basin (i.e., Nevada, Arizona, and California). The 1922 Colorado River Compact allocates 15 million AFY of Colorado River water as follows: 7.5 million AFY to the Upper Basin and 7.5 million AFY to the Lower Basin, plus up to 1 million AFY of surplus supplies. The Lower Basin's water was further apportioned among the three Lower Basin states by the 1928 Boulder Canyon Project Act and the 1931 Boulder Canyon Project Agreement, typically called the 1931 Seven Party Agreement, which allocates California's apportionment of Colorado River water among Palo Verde Irrigation District, Imperial Irrigation District (IID), CVWD, Metropolitan Water District of Southern California (MWD), City of Los Angeles, City of San Diego, and County of San Diego. The 1964 U.S. Supreme Court decree in Arizona v. California established Arizona's basic annual apportionment at 2.8 million AFY, California's at 4.4 million AFY, and Nevada's at 0.3 million AFY. Mexico is entitled to 1.5 million AFY of the Colorado River under the 1944 United States-Mexico Treaty for Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande. However, this treaty did not specify a required quality for water entering Mexico. In 1973, the United States and Mexico signed Minute No. 242 of the International Boundary and Water Commission requiring certain water quality standards for water entering Mexico. California's Colorado River supply is protected by the 1968 Colorado River Basin Project Act, which provides that in years of insufficient supply on the main

stem of the Colorado River, supplies to the Central Arizona Project shall be reduced to zero before California will be reduced below 4.4 million AF in any year. This assures full supplies to the Coachella Valley, except in periods of extreme drought.

The Coachella Canal is a branch of the All-American Canal that brings Colorado River water into the Imperial and Coachella Valleys. Under the 1931 Seven Party Agreement, CVWD receives 330,000 AFY of Priority 3A Colorado River water diverted from the All-American Canal at the Imperial Dam. The Coachella Canal originates at Drop 1 on the All-American Canal and extends approximately 123 miles, terminating in CVWD's Lake Cahuilla. The service area for Colorado River water delivery under CVWD's contract with the U.S. Bureau of Reclamation (USBR) is defined as Improvement District No. 1 (ID-1), which encompasses 136,400 acres covering most of the East Valley and a portion of the West Valley north of Interstate 10. Under the 1931 Seven Party Agreement, CVWD has water rights to Colorado River water as part of the first 3.85 million AFY allocated to California. CVWD is in the third priority position along with IID.

In 2003, CVWD, IID, and MWD successfully negotiated the 2003 Quantification Settlement Agreement (2003 QSA), which quantifies Colorado River allocations through 2077 and supports the transfer of water between agencies. Under the 2003 QSA, CVWD has a base entitlement of 330,000 AFY. CVWD negotiated water transfer agreements with MWD and IID that increased CVWD supplies by an additional 123,000 AFY. CVWD's net QSA supply will increase to 424,000 AFY by 2026 and remain at that level until 2047, decreasing to 421,000 AFY until 2077, when the agreement terminates. As of 2021, CVWD's available Colorado River water diversions at Imperial Dam under the QSA were 399,000 AFY. This includes the base entitlement of 330,000 AFY, the MWD/IID Transfer of 20,000 AFY, IID/CVWD First Transfer of 50,000 AFY, and IID/CVWD Second Transfer of 28,000 AFY. CVWD's QSA diversions also deducts the -26,000 AFY transferred to San Diego County Water Authority (SDCWA) as part of the Coachella Canal Lining Project and the -3,000 AFY transfer to Indian Present Perfected Rights. Additionally, under the 2003 QSA, MWD transferred 35,000 AFY of its State Water Project (SWP) Table A Amount to CVWD. This SWP water is exchanged for Colorado River water and can be delivered at Imperial Dam for delivery via the Coachella Canal to the eastern portion of the Indio Subbasin or at Lake Havasu for delivery via the Colorado River Aqueduct to the western portion of the Indio Subbasin at the Whitewater River Groundwater Replenishment Facility (WWR-GRF). The 2019 Second Amendment guaranteed delivery of the 35,000 AFY from 2019 to 2026, for a total of 280,000 AFY of water to the WWR-GRF during that timeframe. MWD can deliver the water through CVWD's Whitewater Service Connections (for recharge at WWR-GRF) or via the Advance Delivery account.

The MWD/IID Transfer originated in a 1989 agreement with MWD to receive 20,000 AF of its Colorado River supply. The 2019 Amended and Restated Agreement for Exchange and Advance Delivery of Water defined the exchange and delivery terms between MWD, CVWD, and DWA. The 2019 Second Amendment to Delivery and Exchange Agreement reduced CVWD's annual delivery of the MWD/IID Transfer to 15,000 AFY, for a total of 105,000 AF, if taken at the Whitewater Service Connections (for recharge at WWR-GRF) between 2020 and 2026. For those

seven years, MWD keeps the remaining 5,000 AFY, after which CVWD's allocation increases back up to 20,000 AFY. CVWD's total allocations under the QSA, including MWD's transfer of 35,000 AFY and the MWD/IID Transfer, will increase from 424,000 AFY in 2020 to 459,000 AFY by 2026 and remain at that level for the remainder of the 75-year term of the QSA. **Table 3-3** lists total Colorado River entitlements under existing agreements.

Table 3-3: CVWD Colorado River Entitlements (AFY)

Diversion	2020	2025	2030	2035	2040	2045
Base Entitlement	330,000	330,000	330,000	330,000	330,000	330,000
1988 MWD/IID Approval Agreement	20,000	20,000	20,000	20,000	20,000	20,000
IID/CVWD First Transfer	50,000	50,000	50,000	50,000	50,000	50,000
IID/CVWD Second Transfer[1]	23,000	48,000	53,000	53,000	53,000	53,000
Coachella Canal Lining	-26,000	-26,000	-26,000	-26,000	-26,000	-26,000
Indian Present Perfected Rights Transfer	-3,000	-3,000	-3,000	-3,000	-3,000	-3,000
QSA Diversions	**394,000**	**419,000**	**424,000**	**424,000**	**424,000**	**424,000**
MWD SWP Transfer[2]	35,000	35,000	35,000	35,000	35,000	35,000
Total Diversions	**429,000**	**454,000**	**459,000**	**459,000**	**459,000**	**459,000**
Assumed Conveyance Losses (5%)	-21,200	-22,700	-22,950	-22,950	-22,950	-22,950
MWD/IID Approval Agreement Transfer[3]	-5,000	-5,000	0	0	0	0
Total Available Deliveries	**402,800**	**426,300**	**436,050**	**436,050**	**436,050**	**436,050**

Source: 2022 Alternative Plan Update for the Indio Subbasin

[1] The Second IID/CVWD Transfer began in 2018 with 13,000 AF of water. This amount increases annually by 5,000 AFY for a total of 53,000 AFY in 2026.

[2] The 35,000 AFY MWD/CVWD SWP Transfer may be delivered at either Imperial Dam or Whitewater River and is not subject to SWP or Colorado River reliability.

[3] Accounts for -5,000 AFY reduction in MWD/IID Approval Agreement deliveries from 2020-2026 per the 2019 Amendments with MWD.

The Colorado River deliveries to CVWD at the Imperial Dam/Coachella Canal from 2017 through 2021 are shown in **Table 3-4.**

Table 3-4: Colorado River Deliveries to CVWD at the Imperial Dam/Coachella Canal

Diversions (AF)	2018	2019	2020[1]	2021[1]	2022[1]	2023[1]	2024[1]
Imperial Dam/Coachella Canal	338,035	343,971	350,618	357,543	330,387	286,506	318,380

Source: U.S. Bureau of Reclamation, Lower Colorado Region, Colorado River Accounting and Water Use Reports for Arizona, California, and Nevada.

[1] 15,000 AFY of 1988 MWD/IID Approval Agreement water was delivered at WWR-GRF from 2020 to 2023. CVWD's recharge volumes of Colorado River water from 2017 through 2025 are shown in **Table 3-5**. The source of replenishment water for the Palm Desert GRF and Thomas E. Levy GRF is Colorado River water via the Coachella Canal. CWA receives benefits from the Thomas E. Levy GRF.

Table 3-5: CVWD Groundwater Recharge of Colorado River Water

Groundwater Recharge (AF)	2017	2018	2019	2020	2021	2022	2023	2024	2025
Thomas E. Levy GRF	34,614	33,348	36,143	37,536	37,971	27,993	2,076	2,076	2,076
Palm Desert GRF	0	0	7,757	9,700	10,633	10,949	11,178	11,292	10,013
Total	**34,614**	**33,348**	**43,900**	**47,236**	**48,604**	**38,942**	**13,254**	**13,368**	**12,089**

Source: 2026-2027 CVWD Annual Engineer's Reports on Water Supply and Replenishment Assessment

3.3 Surface Water

CWA does not currently use, nor does it have plans to use, any local surface water for its urban potable drinking water supply. Local runoff is collected and utilized for the purpose of recharging groundwater.

3.3.1 River/Stream Diversion

Precipitation that falls in the San Jacinto, Santa Rosa, and Little San Bernardino Mountains is the primary source of natural recharge in the Indio Subbasin with only minor recharge from precipitation in the Little San Bernardino Mountains. Mountain-front recharge includes subsurface inflow from canyons and surface runoff from minor tributaries along the mountain fronts. The Whitewater River is the major stream channel contributing recharge with additional infiltration along other channels such as Snow and Falls Creeks in the upper valley and several smaller streams in the lower portion of the valley that only flow during wet years. The annual volume of natural recharge varies significantly as the annual volume of precipitation varies widely. The 50-year hydrologic period from 1970 to 2019 had an annual average watershed runoff of 52,506 AFY, with approximately 43,300 AFY in natural infiltration. Runoff during the 25-year period from 1995 to 2019 was below average, with 39,196 AFY in watershed runoff and 29,200 AFY in natural infiltration. During normal and wet years, mountain front recharge from these streams and smaller watersheds percolate into the Subbasin as additional subsurface flow.

3.3.2 Stormwater Capture

The Coachella Valley drainage area is approximately 65 percent mountainous and 35 percent typical desert valley with alluvial fan topography buffering the valley floor from the steep mountain slopes. The mean annual precipitation ranges from 30 inches or more in the San Bernardino Mountains to less than 3 inches at the Salton Sea. Three types of storms produce precipitation in the drainage area: general winter storms, general thunderstorms, and local thunderstorms. Longer duration, lower intensity rainfall events tend to have higher recharge rates, but runoff from flash flooding can result from all three types of storms. Otherwise, there is little to no flow in most of the streams in the drainage area.

Large-scale stormwater capture is not expected to yield sufficient water to be worth the investment as a single purpose project. Small-scale stormwater retention systems located in

areas of suitable geology to allow percolation could capture small intensity storms as well as street runoff. The potential yield of these systems is not known at this time, but stormwater capture should be considered in conjunction with projects that construct stormwater and flood control facilities.

3.4 Wastewater and Recycled Water

Wastewater that has been highly treated and disinfected can be reused for landscape irrigation and other purposes. Recycled wastewater has historically been used for irrigation of golf courses and municipal landscaping in the Coachella Valley since as early as the 1960s. As growth occurs in the eastern Coachella Valley, the supply of recycled water is expected to increase, creating an additional opportunity to maximize local water supply.

The City of Coachella manages the Coachella Sanitary District that operates a 4.5 MGD secondary treatment wastewater facility. In addition, the City also plans to develop a recycled water system in the future and is currently participating in a recycled water feasibility study spearheaded by the Coachella Valley Regional Water Management Group (CVRWMG) as part of the Coachella Valley Integrated Regional Water Management (IRWM) Plan. The Coachella Water Reclamation Facility has a 4.5 MGD capacity and current average daily discharge of 2.9 MGD. The plant is a full secondary treatment facility with oxidation ditches for denitrification. Waste activated sludge is sent to drying beds for dewatering and then hauled away to landfill for alternate daily cover material.

In addition to the wastewater percolation that occurs at wastewater treatment ponds, some inflow occurs from septic tank/leach field systems that are used to treat and percolate wastewater. These are grouped with return flows because they are individually small and distributed across rural portions of the Indio Subbasin and a few urban areas without access to sewer systems. There are also some septic systems in areas with access to sewer services that have not connected.

3.5 Conservation

Water conservation, and the reduced groundwater production associated with water conservation, benefits the groundwater basin and is an important element of the Alternative Plans and the 2025 Regional Coachella Valley UWMP.

The City of Coachella has a prohibition for wasting water in Municipal Code Section 13.03.044 which states it is unlawful for any person to willfully or neglectfully waste water in any manner whatsoever. Additionally, the City has mandatory prohibitions on water wasting that they enforce during a water shortage. These prohibitions include voluntary and mandatory provisions, audits, and fines that can be imposed. CWA also implements comprehensive water conservation practices such as tiered water rates, turf rebate programs, outreach, and education.

The City's Utilities Director serves the City as its water conservation coordinator along with the staff Environmental/Regulatory Program Manager. They work closely with agencies in the region,

particularly through the CVRWMG and CV Watercounts, to implement and provide successful execution of water conservation programs in the City. The City continues to investigate Federal, State, and local funding to develop new programs throughout its service area.

3.6 Landscape Ordinance

The City of Coachella abides by the Model Water Efficient Landscape Ordinance (MWELO) developed by the California Department of Water Resources (DWR). DWR worked with local agencies, water suppliers, landscape industry groups and public interested parties to prepare the current (2025) updated MWELO. The ordinance encourages limited use of turf areas and reduces landscape irrigation consumption by mandating high efficiency irrigation systems and low water use landscaping. The City conducts plan checking for compliance with the landscape ordinance prior to the construction of new and/or rehabilitated landscape sites.

3.7 Water Shortage Contingency Planning

The RUWMP participating agencies have elected to use the six standard shortage levels included in guidance documents prepared by DWR. The six standard water shortage levels correspond to progressively increasing estimated shortage conditions (up to 10-, 20-, 30-, 40-, 50- percent, and greater than 50-percent shortage compared to the normal reliability condition). These levels are identified in **Table 3-6**.

Table 3-6: Urban Water Shortage Contingency Plan Levels

Shortage Level	Percent Shortage Range	Description	Narrative Summary of Shortage Response Actions
1	Up to 10%	Normal water supplies	Mandatory prohibitions defined by the State, ongoing rebate programs
2	Up to 20%	Slightly limited water supplies	Outdoor water use restrictions on time of day, increased water waste patrols
3	Up to 30%	Moderately limited water supplies	Outdoor water use restrictions on days per week, restrictions on filling swimming pools
4	Up to 40%	Limited water supplies	Limits on new landscaping, expanded public information campaign
5	Up to 50%	Significantly limited water supplies	Limits on watering of parks or school grounds
6	Greater than 50%	Severe shortage or catastrophic incident	No potable water use for outdoor purposes

Source: 2025 Coachella Water Authority Water Shortage Contingency Plan

These supply reductions could be the result of a variety of potential causes including natural forces, system component failure or interruption, regulatory actions, contamination, or any combination of factors. CWA may need to activate shortage levels across its entire service area or within certain areas that are impacted by an event. The levels involve voluntary and mandatory conservation measures and restrictions, depending on the causes, severity, and anticipated

duration of the water supply shortage. The locally appropriate shortage response actions that would be taken at each level to address the resulting gap between supplies and demands.

4 Public Water System – Projected Supply and Demand

Coachella Water Authority (CWA) projects that water use for the City will generally increase at a similar rate to that of the projected population increase within the City and its sphere of influence (SOI). For long-range planning, CWA continues to evaluate opportunities for transfers, exchanges, and other purchases of imported water to increase supply reliability.

CVWD and DWA collaborate to replenish the groundwater aquifer with imported water, creating a stored supply that can be used for emergencies or longer-term shortages. The RUWMP participating agencies continue to implement water conservation measures and increase use of recycled water usage to reduce groundwater demand.

4.1 Projected Urban Demand and Supply

The following table from the 2025 Coachella Valley Regional UWMP provides the CWA's future water demand projections by water use sector over the next 20+ years. Potable water demand projections for the CWA service area are summarized in **Table 4-1**.

Table 4-1: CWA Projected Demands for Water

Use Type	Additional Description	Projected Water Use (AFY)				
		2030	2035	2040	2045	2050
Single Family	Potable	4,938	5,790	6,696	7,613	8,531
Multi-Family	Potable	791	892	1,001	1,115	1,229
Commercial / Industrial / Institutional	Potable	1.055	1.214	1.332	1.451	1.570
Landscape	Potable	1,250	1,508	1,808	2,108	2,400
Other	Potable	83	83	83	83	83
Losses	Potable	435	512	602	693	783
Total		**8,552**	**9,999**	**11,522**	**13,063**	**14,604**

Source: 2025 Coachella Valley Regional UWMP

4.2 Normal, Single-Dry, Multiple-Dry Year Comparison

The following tables from the 2025 Regional UWMP provide CWA's projected water supplies and demands in a normal year, single-dry year, and multiple-dry years. During normal years, CWA will be able to meet current and future urban water demand needs projected in the 2025 Regional UWMP as shown in **Table 4-2**.

Table 4-2: Normal Year Supply and Demand Comparison

	2030	2035	2040	2045	2050
Supply Totals (AFY)	8,552	9,999	11,522	13,063	14,604
Demand Totals (AFY)	8,552	9,999	11,522	13,063	14,604
Difference	**0**	**0**	**0**	**0**	**0**

Source: 2025 Regional Urban Water Management Plan

Note: CWA and the other Regional UWMP agencies collaborate on groundwater management plans for long-term sustainability. During a normal year, single-dry year, or five-dry year period, the agencies could produce additional groundwater if demands exceeded the estimates shown here.

During single-dry years, CWA will be able to meet current and future urban water demand needs as shown in **Table 4-3**. Water supplies during the single-dry year are 100 percent reliable. CVWD's groundwater replenishment program replenishes the basin to increase groundwater storage during wet years and that supply is available for use during dry years which benefits all water districts using groundwater, including CWA. Thus, the supply and demand comparison for the single-dry year is the same as the normal year.

Table 4-3: Single-Dry Year Supply and Demand Comparison

	2030	2035	2040	2045	2050
Supply Totals (AFY)	9,447	11,045	12,729	14,431	16,133
Use Totals (AFY)	9,447	11,045	12,729	14,431	16,133
Difference	**0**	**0**	**0**	**0**	**0**

Source: 2025 Regional Urban Water Management Plan

Note: CWA and the other Regional UWMP agencies collaborate on groundwater management plans for long-term sustainability. During a normal year, single-dry year, or five-dry year period, the agencies could produce additional groundwater if demands exceeded the estimates shown here.

During multiple-dry years, CWA will be able to meet current and future urban water demand needs as shown in **Table 4-4**. Similar to the single-dry year, the multiple-dry year water supply reliability is 100 percent. Thus, the supply and demand comparison for the multiple-dry years is the same as the normal year. CWA and the other Regional UWMP agencies collaborate on groundwater management plans for long-term sustainability. During a normal year, single-dry year, or five-dry year period, the agencies could produce additional groundwater if demands exceeded the estimates shown here.

Table 4-4: Multiple-Dry Years Supply and Demand Comparison

		2030	2035	2040	2045	2050
First Year	Supply Totals (AFY)	8,809	10,298	11,868	13,455	15,042
	Demand Totals (AFY)	8,809	10,298	11,868	13,455	15,042
	Difference	**0**	**0**	**0**	**0**	**0**
Second Year	Supply Totals (AFY)	8,980	10,498	12,099	13,717	15,334
	Demand Totals (AFY)	8,980	10,498	12,099	13,717	15,334
	Difference	**0**	**0**	**0**	**0**	**0**
Third Year	Supply Totals (AFY)	9,151	10,698	12,329	13,978	15,626
	Demand Totals (AFY)	9,151	10,698	12,329	13,978	15,626
	Difference	**0**	**0**	**0**	**0**	**0**
Fourth Year	Supply Totals (AFY)	9,322	10,898	12,560	14,239	15,918
	Demand Totals (AFY)	9,322	10,898	12,560	14,239	15,918
	Difference	**0**	**0**	**0**	**0**	**0**
Fifth Year	Supply Totals (AFY)	9,493	11,098	12,790	14,500	16,211
	Demand Totals (AFY)	9,493	11,098	12,790	14,500	16,211

	Difference	0	0	0	0	0

Source: 2025 Regional Urban Water Management Plan

Note: The RUWMP participating agencies collaborate on groundwater management plans for long-term sustainability. During a normal year, single-dry year, or five-dry year period, the agencies could produce additional groundwater if demands exceeded the estimates shown here. Conversely, any water use reduction as a result of WSCP implementation will result in reduced groundwater production and groundwater will remain in storage for future use.

5 Project Description

The COVA Project (Project) is located in the southwestern portion of the incorporated limits of the City of Coachella, in Riverside County as shown in **Figure 5-1: Project Regional Location Map**. The Project will be accessible from the northern frontage along Avenue 52, the eastern frontage along Van Buren Street, and the western frontage along Calhoun Street. The Project is bounded by agricultural properties to the south. The vicinity map is shown in **Figure 5-2: Project Vicinity Map**. The Project proposes to develop approximately 87 acres of agricultural land in the Coachella Valley to include the development of a mixed-use community, as shown below in **Figure 5-3: Project Site Plan** and **Table 5-1: Project Land Use Summary**. These accommodations will be complemented by on-site resort amenities (i.e., recreation center, courts, spa/pool, beaches, bar and entertainment, library, restaurant), which will be used by guests/owners of this sector. The public sector will consist of a beach club, restaurant, and event tent.

Figure 5-1: Project Regional Location Map

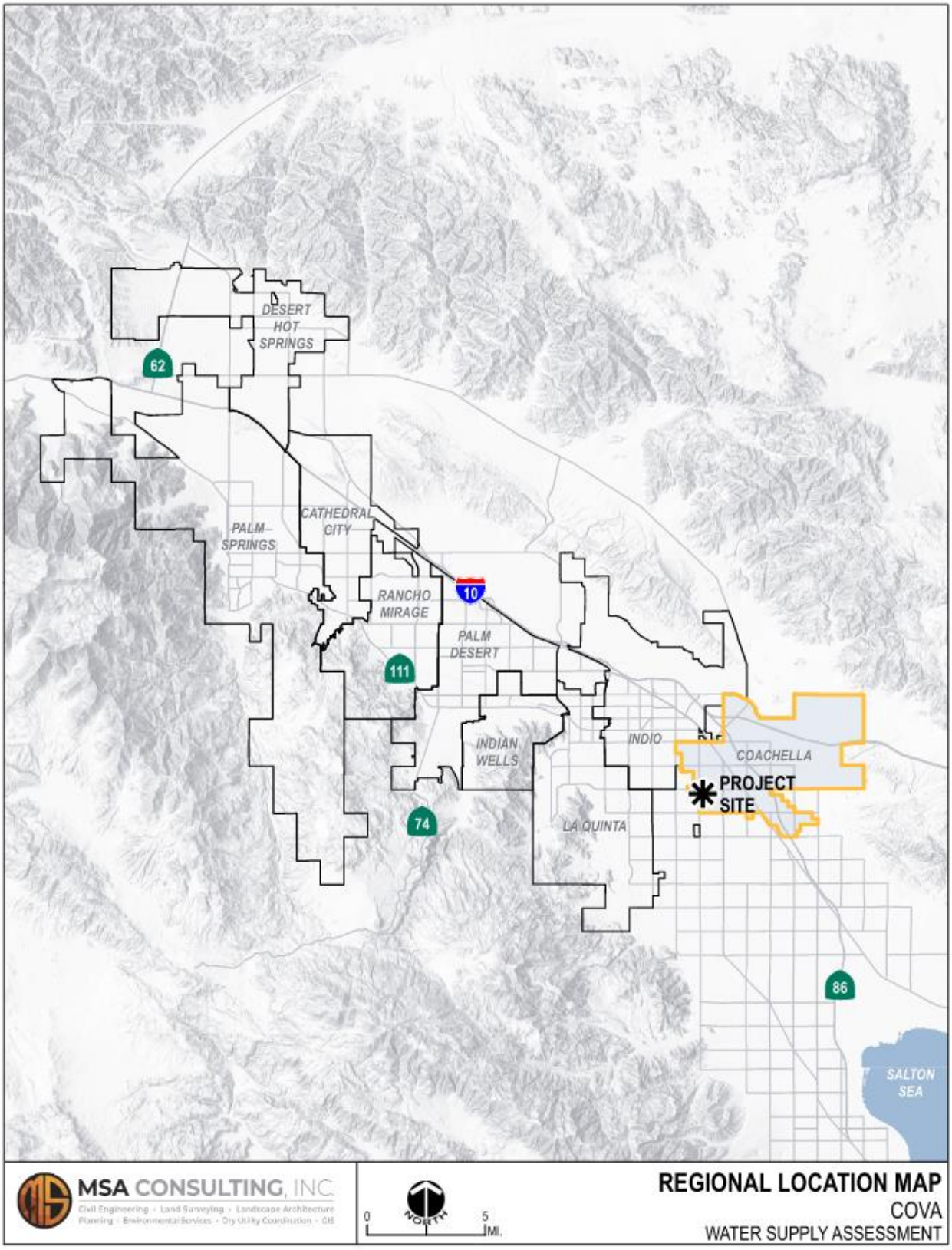


Figure 5-2: Project Vicinity Map

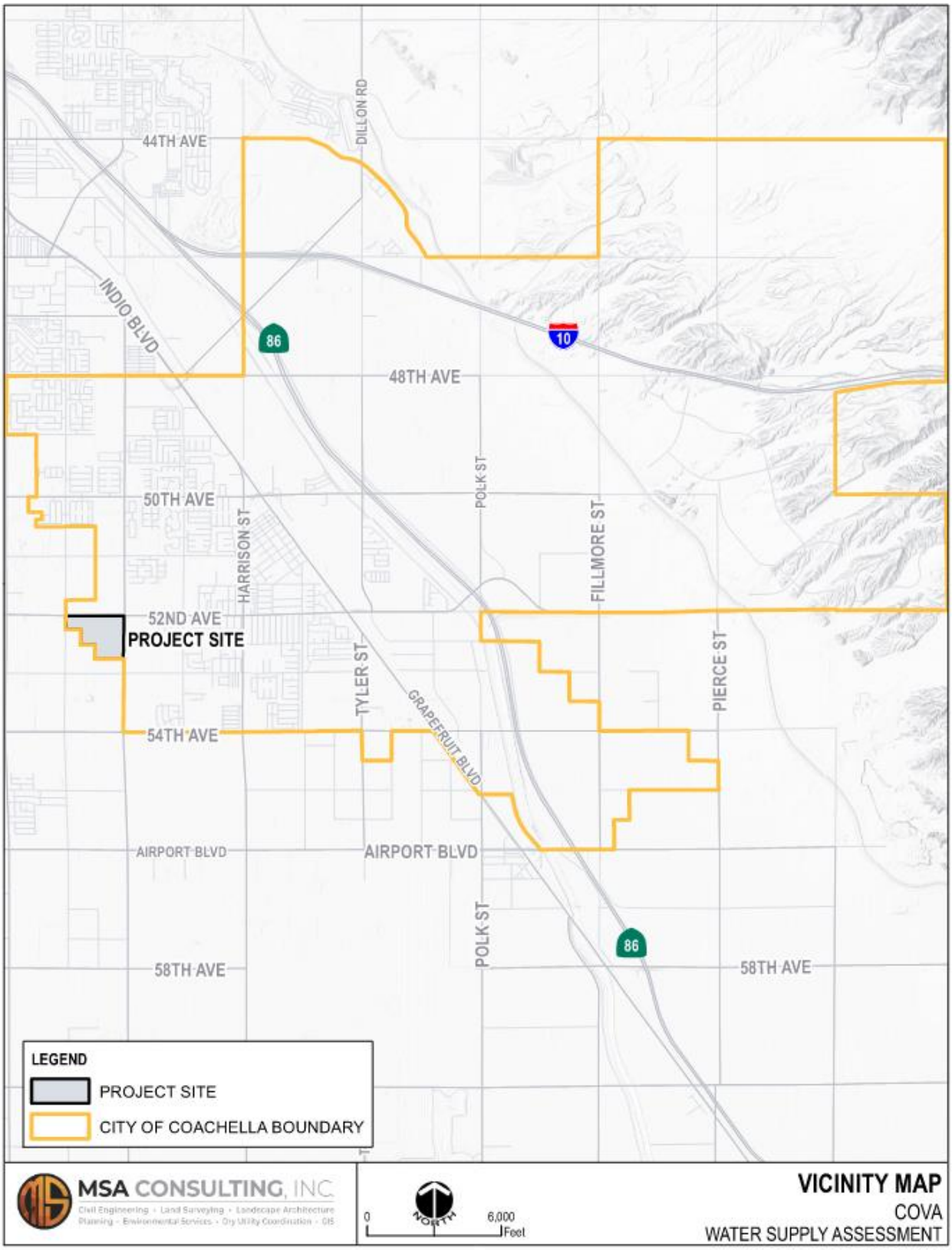


Figure 5-3: Project Site Plan

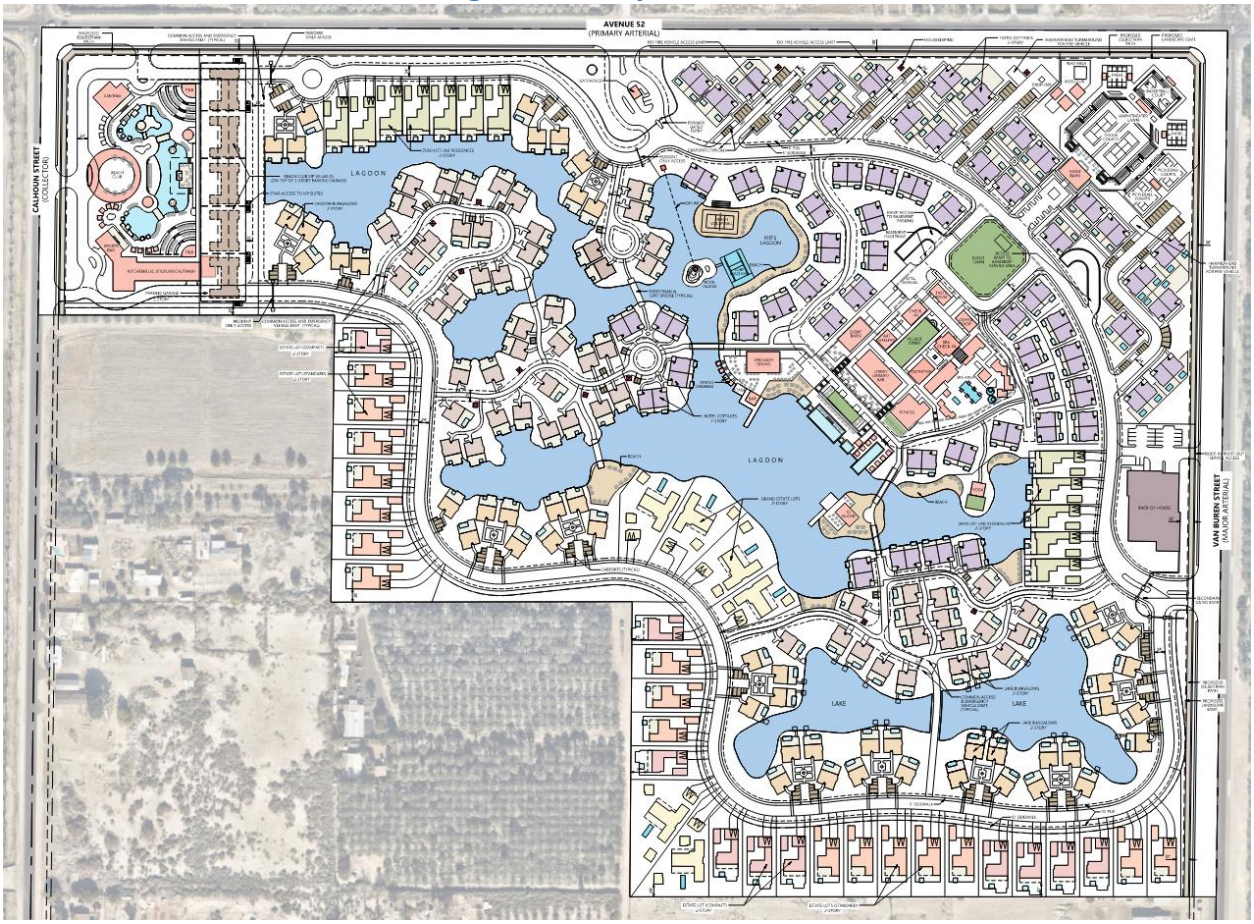


Table 5-1: Project Land Use Summary

Specific Plan/Land Use Designation	Land Area (Acres)	Non-Residential Building Area (ft^2)
Single Family Residential		
6 Bedroom – Grand Estate Lot	3.09	0
4-5 Bedroom – Estate Lot (Long)	5.86	0
4-5 Bedroom – Estate Lot (Compact)	3.10	0
4-5 Bedroom – Zero Lot Line (Long)	2.50	0
3-4 Bedroom – Bungalow (Cart Access)	3.64	0
3-4 Bedroom – Bungalow (Vehicular Access)	3.04	0
Commercial		
Condo Hotel	5.00	287,640
Beach Club VIP Suites	3.00	32,245
Open Space	19.92	0
Other		
Amenity Spaces	6.40	277,804
Water Amenities	12.30	0
Open Space	4.30	0
Private Streets	9.10	0
Total	**81.25**	**597,689**

Acreages from Technical Site Plan and Tentative Tract Map.

6 Project Water Demands

The COVA Project (Project) proposes to develop approximately 86 acres of agricultural land in the Coachella Valley to include 165 single-family residential units, 244 condo hotel recreational home units, and 278,784 square feet (sf) of commercial amenities (30,461-sf analyzed for water use). The Project also proposes 12.3 acres of water amenities, including a 9.4-acre hotel lagoon, a 2.5-acre irrigation lake, and 0.4-acre beach club lagoon. Additionally, the project will have open space areas.

The Project proposes a 287,640 square feet (sf) Condo Hotel, 32,640-sf of Beach Club Suites, and a total of 277,804-sf amenity facilities. However, only 18,444-sf of Club Amenities and 12,017-sf of Public Amenities were determined to impact water demand, resulting in a total of 30,461-sf of amenity facilities being analyzed.

6.1 Projected Indoor Residential Water Demand

The Project proposes residential uses, so the indoor residential water usage for this Water Supply Assessment (WSA) is 30.84 AFY. The proposed residential uses include 165 single family units, consisting of six-bedroom units, four- and five-bedroom units, and three- and four-bedroom units.

Table 6-1: Projected Indoor Residential Water Demand

Planning Area	Land Area (Acres)	Estimated Dwelling Units (EDUs)	Estimated Occupants per Home[1]	Gallons per Day per Occupant[2]	Water Demand (gpd)	Water Demand (AFY)[3]
Single Family Residential	21.23	165	3.55	47	27,530.25	30.84
Total	**21.23**	**165**			**27,530.25**	**30.84**

[1] Fehr and Peers population estimates.

[2] CA Indoor Water Use Performed Standards.

[3] One AFY = 892.742 gallons per day; Conversion used above.

6.2 Projected Indoor Commercial and Industrial Water Demand

The projected indoor commercial and industrial unit usage for this WSA are based on the American Water Works Association Research Foundations (AWWARF's) Commercial and Industrial End Uses of Water.

The Project proposes a 287,640 square feet (sf) Condo Hotel, 32,640-sf of Beach Club Suites, and 277,804-sf of total amenities. However, only 18,444-sf of Club Amenities and 12,017-sf of Public Amenities were found to impact overall water demand, for a total of 30,461-sf of amenity space analyzed. The combined total of commercial space analyzed, including the Condo Hotel, Beach Club Suites, and applicable amenities, was 350,346-sf. The Project does not propose industrial uses. The projected indoor commercial water demand for the Project totals 26.57 AFY as shown in **Table 6-2**.

Table 6-2: Projected Indoor Commercial Water Demand

Planning Area	Indoor Area (ft^2)	Water Demand Factor [1] (gal/sf/year)	Water Demand (gpd)	Water Demand [2] (AFY)
Condo Hotel / Beach Club VIP Suites	319,885	162	108.30	0.12
Club Amenity Spaces (Food)	12,960	331	11,752.77	13.16
Club Amenity Spaces (Retail)	5,484	64	961.58	1.08
Public Beach Club/Restaurants	12,017	331	10,897.61	12.21
Total	**350,346**		**23,720.25**	**26.57**

[1] AWWARF Commercial and Industrial End Uses of Water, 2000.

[2] One AFY = 892.742 gallons per day; Conversion used above.

6.3 Projected Outdoor Irrigation Water Demand

The projected outdoor irrigation water usage is based on the Maximum Applied Water Allowance (MAWA) equation from Appendix D of Coachella Valley Water District's (CVWD's) Landscape Ordinance No. 1302.5, which meets the water conservation goals of the California Department of Water Resources (DWR) Model Efficient Landscape Ordinance (MWELO). The projected outdoor irrigation water demand is 99.32 AFY as shown in **Table 6-3** below.

Table 6-3: Projected Outdoor Irrigation Water Demand

Planning Area	Landscaped Area (ft^2)	ETo (in/yr) [1]	ETAF [2]	Conversion Factor (gal/ft^2) [3]	Water Demand (gpd)	Water Demand (AFY)
Single Family Residential						
Single Family Residential	323,672.58	76.46	0.45	0.62	18,916.97	21.19
Commercial						
Condo Hotel / Beach Club VIP Suites	87,120.00	76.46	0.45	0.62	5,091.71	5.70
Open Space[4]	780,943.68	76.46	0.45	0.62	45,624.16	51.11
Other						
Amenity Spaces	97,574.40	76.46	0.45	0.62	5,702.71	6.39
Open Space	168,577.20	76.46	0.45	0.62	9,852.46	11.04
Private Streets	59,459.40	76.46	0.45	0.62	3,475.09	3.89
Total	**1,517,347.26**				**88,663.1**	**99.32**

[1] Reference Evapotranspiration (ETo) for ETo Zone 4 from CVWD Landscape Ordinance 1302.5, Appendix C

[2] Evapotranspiration Adjustment Factor (ETAF) from CVWD Landscape Ordinance 1302.5, Appendix D

[3] Conversion Factor from CVWD Landscape Ordinance 1302.5, Appendix D

[4] Commercial Open Space exhibits grove, dense landscaping

6.4 Projected Outdoor Water Features Demand

The Project proposes 12.3 acres of water features, consisting of a 9.4-acre hotel lagoon, a 2.5-acre irrigation lake, and 0.4-acre beach club lagoon. The projected outdoor water features demand for the Project is 69.23 AFY, as shown in **Table 6-4** below.

Table 6-4: Projected Outdoor Recreation Water Demand

Planning Area	Water Feature Area (ft^2)	ETo (in/yr) [1]	Plant Factor [2]	Conversion Factor (gal/ft^2) [3]	Water Demand (gpd)	Water Demand (AFY)
Hotel Lagoon	409,464	76.46	1	0.62	53,180.06	59.57
Irrigation and Stormwater Lake	108,900	76.46	0.45	0.62	6,364.64	7.13
Beach Club Lagoon	17,424	76.46	1	0.62	2,262.98	2.53
Total	**535,788**				**61,807.68**	**69.23**

[1] Reference Evapotranspiration (ETo) for ETo Zone 4 from CVWD Landscape Ordinance 1302.5, Appendix C

[2] Evapotranspiration Adjustment Factor (ETAF) from CVWD Landscape Ordinance 1302.5, Appendix D

[3] Conversion Factor from CVWD Landscape Ordinance 1302.5, Appendix D

6.5 Projected Total Water Demand

The total projected water demand for the Project is 225.96 AFY as shown in **Table 6-5** below.

Table 6-5: Projected Total Water Demand

Planning Area	Land Area (Acres)	Indoor Residential Demand (AFY)	Indoor Commercial and Industrial Demand (AFY)	Outdoor Irrigation Demand (AFY)	Outdoor Recreation Demand (AFY)	Total Water Demand (AFY)
Single Family Residential						
Single Family Residential	21.23	30.84	0	21.19	0	52.03
Commercial						
Condo Hotel / Beach Club VIP Suites	8.00	0	0.12	5.7	0	5.82
Open Space	19.92	0	0	51.11	0	51.11
Other						
Amenity Spaces	6.40	0	26.45	6.39	0	32.84
Water Amenities	12.30	0	0	0	69.23	69.23
Open Space	4.30	0	0	11.04	0	11.04
Private Streets	9.10	0	0	3.89	0	3.89
Total	**81.25**	**30.84**	**26.57**	**99.32**	**69.23**	**225.96**

6.6 Projected Water Sources

The Project is anticipated to utilize the CWA Domestic System to provide water to a majority of the project. A private, on-site well will be utilized for the hotel lagoon. A breakdown of water sources can be seen in **Table 6-6.**

Table 6-6: Projected Water Sources

Planning Area	Land Area (Acres)	Water Source
Residential Single Family		
6 Bedroom – Grand Estate	3.09	CWA Domestic System
4-5 Bedroom – Estate	11.46	CWA Domestic System
3-4 Bedroom – Bungalow	6.68	CWA Domestic System
Commercial		
Condo Hotel	5.00	CWA Domestic System
Beach Club VIP Suites	3.00	CWA Domestic System
Open Space	19.92	CWA Domestic System
Other		
Amenity Spaces	6.40	CWA Domestic System
Open Space	4.30	CWA Domestic System
Private Streets	9.10	CWA Domestic System
Water Amenities		
Hotel Lagoon	9.40	Private Water Well
Irrigation and Stormwater Lake	2.50	CWA Domestic Water
Beach Club Lagoon	0.40	CWA Domestic Water

6.7 Conservation Measures

The following section describes the water conservation measures to be implemented by the proposed Project.

6.7.1 Project Specific Water Conservation Measures

Project developers will be required to implement the following measures in order to assure the most efficient use of water resources and to meet and maintain the most recent UWMP goals throughout the life of the Project:

1. In addition to following DWR's MWELO, to the greatest extent practicable, native plant materials and other drought-tolerant plants shall be used in all non-turf areas of Project landscaping. Large expanses of lawn and other water-intensive landscaped areas shall be kept to the minimum necessary and consistent with the functional and aesthetic needs of the Project, while providing soil stability to resist erosion.

2. In the event recycled water becomes available to the Project, the potential use of tertiary treated water will be reviewed to determine feasibility of its use for on-site landscaped areas to reduce the use of groundwater for irrigation.

3. The installation and maintenance of efficient on-site irrigation systems will minimize runoff and evaporation and maximize effective watering of plant roots. Drip irrigation

and moisture detectors will be used to the greatest extent practicable to increase irrigation efficiency.

4. The use of low-flush toilets and water-conserving faucets shall be required in conformance with Section 17921.3 of the Health and Safety Code, Title 20, California Code of Regulations Section 1601(b), and applicable sections of Title 24 of the State Code.

7 Assessment – Availability of Sufficient Supplies

7.1 Water Supply Assessment

Based on the analysis in this Water Supply Assessment (WSA), the projected total water demand for the COVA (Project) will be 225.96 acre-feet per year (AFY). CWA's long-term water management planning ensures that adequate water supplies are available to meet existing and future water needs within its service area. CWA's urban water demand for 2025 was 7,782 Acre Feet (AF). The water demand presented for 2025 was obtained from the 2025 Regional UWMP document. Additionally, CWA's projected urban water demand for 2045 is 13,063 AF.

This Project's water demand of 225.96 AFY accounts for approximately 4.28 percent of the total planned increase in demand of 5,281 AF from 2025 to 2045.

This WSA provides an assessment of the availability of sufficient water supplies during normal, single-dry, and multiple-dry years over a 20-year projection to meet the projected demands of the Project, in addition to existing and planned future water demands of CVWD, as required by Senate Bill (SB) 610 and SB 1262. This WSA also includes identification of existing water supply entitlements, water rights, water service contracts, and agreements relevant to the identified water supply for the Project and quantities of water received in prior years pursuant to those entitlements, rights, contracts, and agreements.

This WSA has been prepared in compliance with the requirements of SB 610 and SB 1262 by MSA Consulting Inc. in consultation with CWA and the City of Coachella. This WSA does not relieve the Project from complying with all applicable state, county, city, and local ordinances or regulations including the Department of Water Resources (DWR) Model Water Efficient Landscape Ordinance (MWELO), and indoor water use performance standards provided in the California Water Code now or in the future.

Consistent with the provisions of SB 610, neither this WSA nor its approval shall be construed to create a right or entitlement to water service or any specific level of water service, and shall not impose, expand, or limit any duty concerning the obligation of CVWD to provide certain service to its existing customers or to any future potential customers.

This WSA does not constitute an agreement to provide water service to the Project, and does not entitle the Project, Project applicant, or any other person or entity to any right, priority, or allocation in any supply, capacity, or facility. To receive water service, the Project will be subject

to an agreement with CVWD, together with any and all applicable fees, charges, plans and specifications, conditions, and any and all other applicable CVWD requirements in place and as amended from time to time. Nor does anything in this WSA prevent or otherwise interfere with CVWD's discretionary authority to declare a water shortage emergency in accordance with the Water Code.

This WSA will be reviewed every five years, or in the event that the water planning assumptions have changed, until the Project begins construction to ensure it remains accurate and no significant changes to either the Project or available water supply has occurred. The Project applicant shall notify CVWD when construction of the Project begins.

7.2 Requirement for Written Verification of Water Supply Availability

Government Code §66473.7 requires that a Written Verification of Water Supply (WV) be prepared in connection with the approval of a development agreement or tentative map that includes a subdivision. A subdivision is defined as a proposed residential development of more than 500 units, except that for a water agency with fewer than 5,000 service connections, a subdivision includes a residential development project that would account for an increase of 10 percent or more in the number of the agency's existing service connections. The COVA Project proposes 409 residential units, consisting of 165 single family resort residential units and 244 hotel units. It also includes a variety of public and private Water Amenities and Open Space. The entirety of the project was anticipated to include water use comparable to at least 500 residential uses.

This WSA is not a WV. If the City of Coachella determines that the Project or any planning area meets the definition of a subdivision and therefore requires preparation of a WV, a WV shall be prepared by CWA in compliance with the requirements of SB 221. This WSA may be used to support the WV. Depending on circumstances including but not limited to new water efficiency regulations or changes in water supply availability, CWA may recommend preparation of an updated supply and demand assessment to support the WV.

8 References

American Water Works Association Research Foundation, *Commercial and Institutional End Uses of Water*, 2000

California Department of Water Resources, *Final State Water Project Delivery Capability Report 2019*, August 2020

Coachella Valley Water District, Coachella Water Authority, Desert Water Agency, Indio Water Authority, Mission Springs Water District, Myoma Dunes Mutual Water Company, *2020 Coachella Valley Regional Urban Water Management Plan*, Water Systems Consulting, Inc., June 2021

Coachella Valley Water District, Coachella Water Authority, Desert Water Agency, Indio Water Authority, Mission Springs Water District, Myoma Dunes Mutual Water Company, *2025 Coachella Valley Regional Urban Water Management Plan*, Todd Groundwater, Rincon Consultants, Inc., May 2026

City of Coachella Website, Utilities Department Water Division page

Coachella Valley Water District, *2026-2027 Engineer's Report on Water Supply and Replenishment Assessment*, Wildermuth Environmental Inc., April 2026

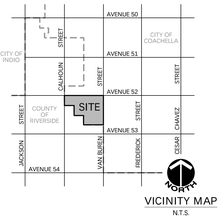
Coachella Valley Water District, *Landscape Ordinance 1302.5*, July 2020

Department of Water Resources, Model Water Efficient Landscape Ordinance

Coachella Valley Water District, Coachella Water Authority, Desert Water Agency, and Indio Water Authority, *Indio Subbasin Annual Report for Water Year 2023-2024*, Todd Groundwater Inc., March 2025

Coachella Valley Water District, Coachella Water Authority, Desert Water Agency, and Indio Water Authority, *2022 Indio Subbasin Water Management Plan Update/Alternative Plan Update*, Todd Groundwater Inc., December 2021

United States Bureau of Reclamation, *Colorado River Accounting and Water Use Reports for Arizona, California, and Nevada*



VICINITY MAP
N.T.S.

NO PARKING - FIRE LANE

CONTRACTOR TO PAINT CURB/PAVEMENT EDGE WITH OSHA SAFETY RED SEMI GLOSS. CONTRACTOR TO PAINT "NO PARKING FIRE LANE" AT 30' INTERVALS. ALL LETTERS AND NUMBERS SHALL BE A MINIMUM OF 3" ON TOP OF CURB

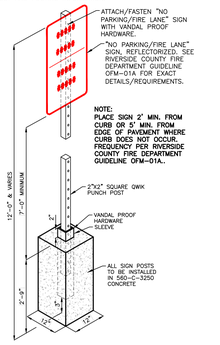
OR

LEGEND

INSTALL NO PARKING/FIRE LANE SIGN PER RIVERSIDE COUNTY FIRE DEPARTMENT GUIDELINE OFM-01A **ATTACHMENT 12**: SPECIFICATIONS FOR FIRE LANE NO PARKING SIGNS.



NO PARKING/FIRE LANE SIGN. SEE **RIVERSIDE COUNTY FIRE DEPARTMENT GUIDELINE OFM-01A ATTACHMENT 12** FOR EXACT SIGNAGE DETAILS. SEE NO PARKING POST DETAIL FOR POST AND FOOTING INFORMATION.



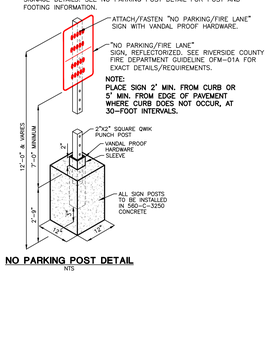
NO PARKING POST DETAIL
NTS

FIRE LEGEND

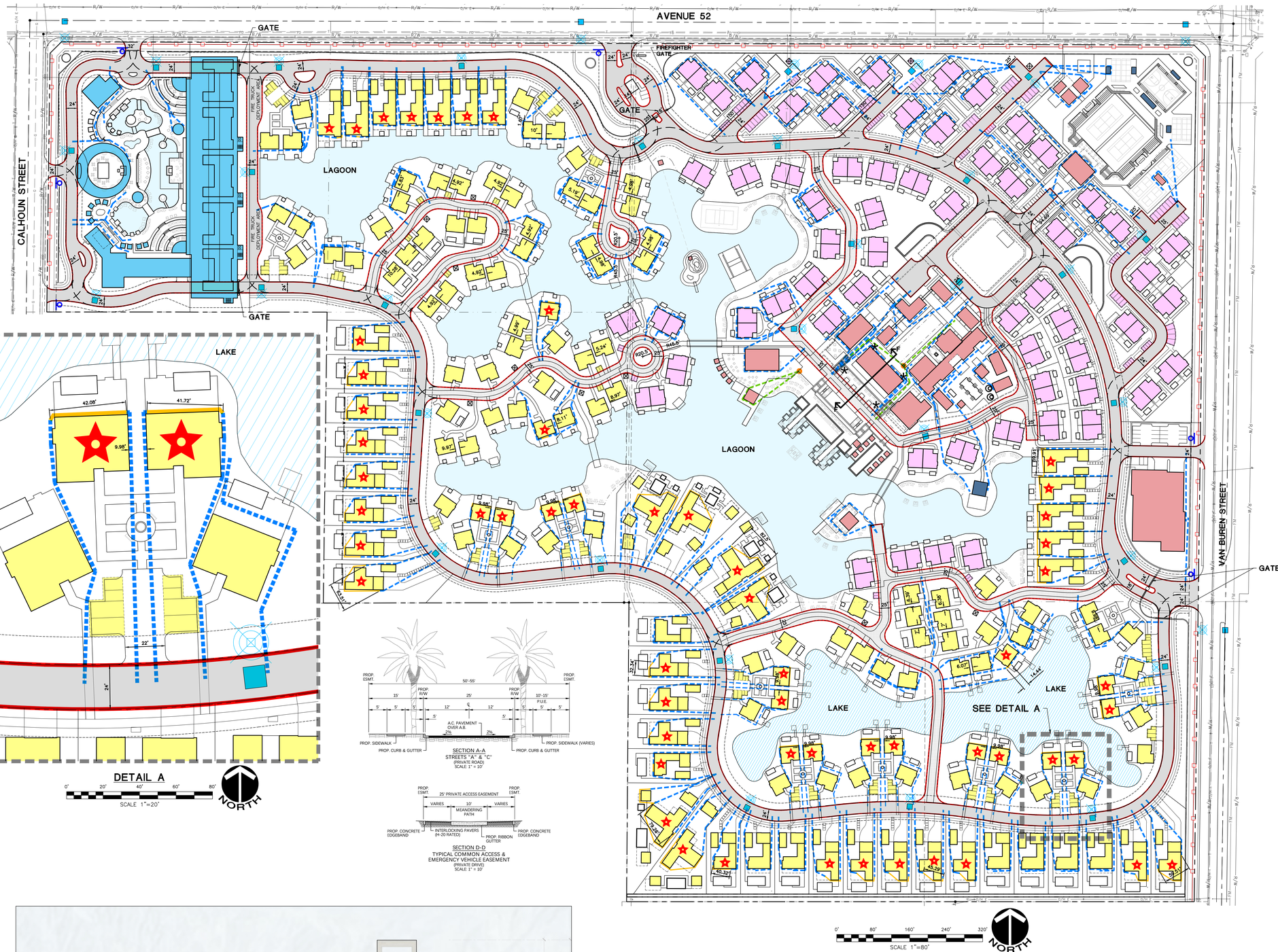
ALL ENTRANCES FROM PUBLIC STREETS INTO FIRE LANE AREAS SHALL BE POSTED WITH NO PARKING/FIRE LANE SIGNAGE PER RIVERSIDE COUNTY FIRE DEPARTMENT GUIDELINE OFM-01A **ATTACHMENT 10** FIRE LANE REQUIREMENTS.



NO PARKING/FIRE LANE SIGN. SEE **RIVERSIDE COUNTY FIRE DEPARTMENT GUIDELINE OFM-01A ATTACHMENT 10** FOR EXACT SIGNAGE DETAILS. SEE NO PARKING POST DETAIL FOR POST AND FOOTING INFORMATION.

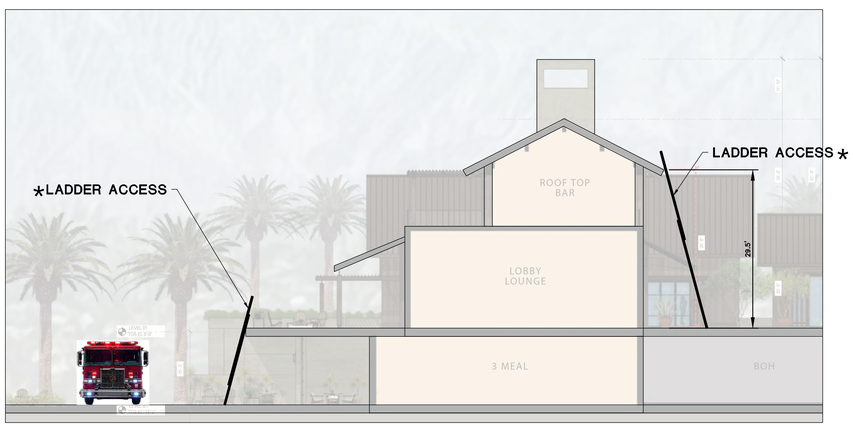


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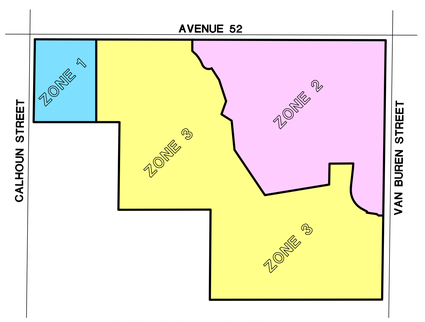


LEGEND

- UNCOVERED AREA
- 150' FROM FIRE ACCESS LANE
- W — PROPOSED WATER MAIN
- FIRE HYDRANT
- PROPOSED FIRE HYDRANT BLUE REFLECTIVE MARKER
- GATE VALVE OR BUTTERFLY VALVE
- PROPOSED WATER SERVICE WITH BACKFLOW DEVICE
- REDUCER VALVE AND BLOW-OFF ASSEMBLY
- PROPOSED REDUCER
- W — EXISTING WATER MAIN
- U — EXISTING UTILITIES
- NO PARKING FIRE LANE ENTRANCE SIGN SEE DETAIL
- BEACH CLUB COMMERCIAL (NON-GATED)
- RESIDENTIAL SINGLE FAMILY / CONDO
- HOTEL AMENITIES COMMERCIAL (PRIVATE / GATED)
- CONDO HOTEL RESIDENCES
- NON-FLAMMABLE SHADE/TRELLIS STRUCTURE
- NO PARKING RED STRIPING OR SIGNAGE
- PROPOSED 24FT ASPHALT FIRE LANE H20 RATED
- PROPOSED 24-FT FIRE LANE COMBINATION OF CONCRETE AND INTERLOCKING CONCRETE PAVERS H20 RATED
- 45' RADIUS, 24' RADIUS — TYPICAL FIRE TRUCK MIN. TURNING RADIUS
- RESIDENTIAL UNIT UNCOVERED BY 150-FT HOSE PULL — 57 TOTAL
  REQUIRED ALTERNATE MATERIAL AND METHOD APPLICATION FOR ADDITIONAL HOSE PULL LENGTH BY ENHANCING STANDARD FIRE SPRINKLER SYSTEM NFPA 13D/R313.3 AND ADDING FIRE SPRINKLERS IN ALL CLOSETS, ALL BATHROOMS, ALL COVERED PATIOS/PORCHES, AND ATTICS THROUGHOUT
- 150-FT HOSE PULL — STAND PIPE/WHARF HYDRANT FOR UNCOVERED ZONES — 2 TOTAL
  REQUIRED ALTERNATE MATERIAL AND METHOD APPLICATION FOR ADDITIONAL HOSE PULL LENGTH BY ADDING STAND PIPE/WHARF HYDRANT CONNECTION OF PRIVATE FIRE SERVICE MAIN



HOTEL LOBBY - SECTION F-F



FIRE FLOW ZONES MAP

STREET GENERAL NOTES

1. ALL STREETS IN TRACT MAP NO. 39330 ARE PRIVATE.
2. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CITY-APPROVED STREET PLAN, THE STANDARD DRAWINGS AND SPECIFICATIONS OF THE CITY OF COACHELLA, THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION AND THE CALTRANS STANDARD PLANS AND SPECIFICATIONS (WHEN APPLICABLE).
3. ALL FIRE ACCESS ROADS WITHIN TRACT MAP NO. 39330 ARE DESIGNED TO COMPLY WITH THE AGENCIES NOTED ABOVE. THE CITY OF COACHELLA STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, AND CALTRANS STANDARD PLANS AND SPECIFICATIONS ARE DESIGNED TO BE H-20 RATED (DESIGNED TO MAINTAIN THE IMPOSED LOADS OF FIRE APPARATUS OF 80,000 LBS)

SITE FIRE FLOW AND HYDRANT REQUIREMENTS

ZONE 1 BEACH CLUB: BLDG SIZE 118,020 SF = 1,875 GPM FOR 2 HOUR DURATION AT 20 PSI (BASED ON CA FIRE APPENDIX B AND ORD. 787, TYPE 1.)

ZONE 2 HOTEL: BLDG SIZE 183,345 SF = 2,250 GPM FOR 2 HOUR DURATION AT 20 PSI (BASED ON CA FIRE APPENDIX B AND ORD. 787, TYPE 1.)

ZONE 3 RESIDENTIAL: MAXIMUM BLDG SIZE 8,665 SF MAX. = 1,250 GPM FOR 1.0 HR DURATION AT 20 PSI (BASED ON CA FIRE APPENDIX B AND ORD. 787, TYPE V-B.)

FIRE HYDRANT SPACING: BASED ON CA FIRE APPENDIX C, FIRE-FLOW REQUIREMENT OF 2,250 , AVERAGE SPACING BETWEEN HYDRANTS = 450 FEET.

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PROJECT NAME:	COVA/THE RANCH
PLAN:	FIRE ACCESS, HYDRANT AND HOSE REACH EXHIBIT
EXHIBIT DATE:	OCTOBER 2025

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Civil Engineering • Land Surveying • Landscape Architecture
Planning • Environmental Services • Dry Utility Coordination • GIS
34200 Bob Hope Drive Rancho Mirage, CA 92270 | 760.320.9811 | MSAConsultinginc.com

DESIGN BY: CC
DRAWN BY: CC
CHECK BY: MP

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