CITY OF STAR, IDAHO

CITY COUNCIL REGULAR MEETING AGENDA

City Hall - 10769 W State Street, Star, Idaho
Tuesday, December 05, 2023 at 7:00 PM

PUBLIC NOTICE: THIS MEETING IS RECORDED AND PLACED IN AN ONLINE FORMAT. PERSONS MAY EITHER VIEW OR LISTEN TO VIDEO / AUDIO OF THIS MEETING UNTIL SUCH TIME THE RECORDING IS DESTROYED UNDER THE CITY'S RETENTION POLICY.

1. **CALL TO ORDER –** Welcome/Pledge of Allegiance
2. **INVOCATION –** Pastor Tim Nay, LifeSpring Church
3. **ROLL CALL**
4. **PRESENTATIONS**
   - A. **Operations Grateful Hearts Check Presentation**
   - B. **Middleton / Star Fire Protection District Chief Presentation -** Fire Chief Timinsky Report
   - C. **Star Police Chief Presentation -** Police Chief Hessing Police Report & Introduction of Deputy Lonnie Neill

     Ada County Sheriff Clifford - Sheriff Clifford would like to address the Citizens and City Council
5. **CONSENT AGENDA (ACTION ITEM)** **All matters listed within the Consent Agenda have been distributed to each member of the Star City Council for reading and study, they are considered to be routine and will be enacted by one motion of the Consent Agenda or placed on the Regular Agenda by request.*
   - A. **Approval of Minutes:** October 17, 2023; August 1, 2023 & June 27, 2023 City Council Meeting Minutes
   - B. **Approval of Claims**
   - C. **Final Plat** - Fountain Park Subdivision Phase 1 **(FP-23-17)**
   - D. **Final Plat** - Maddenford Estates Subdivision Number 2 **(FP-23-15)**
   - E. **Final Plat** - Moon Valley Subdivision Phase 8 **(FP-23-18)**
   - F. **Findings of Fact / Conclusions of Law** - Falcon Storage **(FILE: CU-23-01)**
6. **PUBLIC HEARINGS with ACTION ITEMS:**
   - A. **Public Hearing - Milled Olive (CUP-23-06) -** The Applicant is requesting approval for a Conditional Use Permit for a mixed-commercial use to include a retail-store, wine & beer lounge, retail storage area, outdoor concessions, and event space. The property is located at 1133 S. Main Street in Star, Ada County, Idaho, and consists of 2.0 acres in a central business district (CBD) zoning designation. **(ACTION ITEM)**
   - B. **PUBLIC HEARING: Talega Village Subdivision (Files: AZ-22-11, RZ-22-03, CUP-22-05, DA-22-12, PP-22-15 & PR-22-08) -** The Applicant is requesting approval of an Annexation and Zoning (Residential R-10-DA), a Rezone (from R-1 & C-2 to Residential R-10-DA) a Development Agreement, a Conditional Use Permit for a proposed multifamily residential use (340 units), a Preliminary Plat for proposed residential and commercial uses consisting of 162 buildable lots (1 commercial lot, 1 multi-family lot, 65 single-family residential lots, 95 townhome lots and multiple common lots), and private streets. A residential density of 10 du/acres is proposed. The property is located at 58 N. Truman Place and 8370 W. Shultz Court in Star, Idaho. **TABLED FROM NOVEMBER 21, 2023 (ACTION ITEM)**
   - C. **PUBLIC HEARING - Starpointe Subdivision Phase 2 (AZ-23-03, DA-21-09 MOD, PP-23-02, PR-23-02 & PP-21-10) -** The Applicant is requesting approval of an Annexation and Zoning (R-4), a Development Agreement Modification, a Preliminary Plat for a proposed residential subdivision consisting of 12 residential lots and 2 common lots, a private street and an amendment to the original Starpointe Subdivision Preliminary Plat. The property is located at 6777 and 6825 N. Star Road in Star, Idaho, and consists of 3.08 acres with a proposed density of 3.08 dwelling units per acre. **(Previously Noticed for October 3, 2023 / Requesting Postponement to January 16, 2024) (ACTION ITEM)**
   - D. **PUBLIC HEARING: STAR CITY COUNCIL / STAR FIRE PROTECTION DISTRICT (CAPITAL IMPROVEMENT PLAN & DEVELOPMNET IMPACT FEE STUDY)**- To receive comments regarding the City Council's intent to consider adoption of the *Capital Improvement Plan and Development Impact Fee Study* submitted to Star Fire Protection District dated August 23, 2023 (the "Star Capital Improvements Plan") for the purpose of:

     * Entering into an amended intergovernmental agreement by and between the City of Star and the Star Fire Protection District for the collection and expenditure of development impact fees for the Fire District's systems improvements as identified in the Capital Improvements Plan.

Any person needing special accommodation to participate in the above noticed meeting should contact the City Clerk's Office at 208-286-7247, at least 24 hours in advance of the meeting date.

E. **PUBLIC HEARING: STAR CITY COUNCIL / STAR FIRE PROTECTION DISTRICT (UPDATED / NEW DEVELOPMENT IMPACT FEES)** - To receive comments regarding the City of Star City Council's intent to make a decision to impose the below described new development impact fees. **New Fee Summary:** The Fire District Board of Commissioners intend to establish the following new Fire District Development Impact Fees within the boundaries of the City of Star all of which lie within the boundaries of the Star Fire Protection District: **(AS ATTACHED)**

F. **PUBLIC HEARING: STAR CITY COUNCIL / STAR FIRE PROTECTION DISTRICT (COMPREHENSIVE PLAN)** - To receive comments regarding the City of Star City Council's intent to make a decision to make the following amendments to the City's Comprehensive Plan:

* Comprehensive Plan component ***Public Services, Facilities, and Utilities*** by amending section 11.2.2 Public Safety/Fire Protection Comprehensive Plan by referencing the Star Fire Protection District Development Impact Fee Ordinance and intergovernmental agreement; and by the addition to the Comprehensive Plan as Appendix A the *Capital Improvement Plan and Development Impact Fee Study* submitted to: Star Fire Protection District dated August 23, 2023.

G. **PUBLIC HEARING: STAR CITY COUNCIL / STAR FIRE PROTECTION DISTRICT (AMENDING CITY CODE)** - To receive comments regarding the City of Star City Council's intent to make a decision to amend the Star City Code as follows:

* Replacing Exhibit B on file in the City as referenced in Star City Code § 7-3A-2 Definitions "Intergovernmental Agreement"; and

* Amending Section 3, Article A of Chapter 3 of Title 7 by the addition of the impact fees schedule.

* Amending Section 16, Article A of Chapter 3 of Title 7 regarding the City of Star/Star Fire Protection District Joint Development Impact Fee Advisory Standing Committee membership and nomination.

7. ACTION ITEMS:(The Council at its option may suspend the rules requiring three separate readings on three separate days for ordinances on the agenda for approval. This may be by a single motion to suspend the rules under Idaho Code 50-902; second of the motion; ROLL CALL VOTE; Title of the Ordinance is read aloud; motion to approve; second of the motion: ROLL CALL VOTE.)

A. **Request to adopt Resolution 2023-006** of The City Council of the City of Star for the purpose of approving the Capital Improvement Plan and Development Impact Fee Study submitted to Star Fire Protection District August 23, 2023; Directing the City Clerk; and Setting an Effective Date. **(ACTION ITEM)**

B. **Request to adopt Resolution 2023-007** of The City Council Of City of Star For the purpose of entering into the *City of Star/Star Fire Protection District First Amended and Reformed Intergovernmental Agreement and Joint Powers Agreement for the Collection and Expenditure of Development Impact Fees for Fire District Systems Improvements* by and between the City of Star and the Star Fire Protection District for the collection and expending of development impact fees for the Fire District's systems improvements as identified in the Capital Improvements Plan. **(ACTION ITEM)**

C. **Request to adopt Resolution 2023-008** of The City Council of the City of Star Amending the *City of Star Comprehensive Plan* by:

* amending the Comprehensive Plan component *Public Services, Facilities, and Utilities* by amending section 11.2.2 *Public Safety/Fire Protection Comprehensive Plan* by referencing the Star Fire Protection District Development Impact Fee Ordinance and intergovernmental agreement; and by the addition to the Comprehensive Plan as Appendix A the Capital Improvement Plan and Development Impact Fee Study submitted to: Star Fire Protection District dated August 23, 2023. **(ACTION ITEM)**

D. **Request Adoption Ordinance: 396-2023** AN ORDINANCE AMENDING SECTION 2 OF ARTICLE A OF CHAPTER 3 TITLE 7 OF THE STAR CITY CODE BY MAKING A TECHNICAL CORRECTION TO THE DEFINITIONS; AND PROVIDING AN EFFECTIVE DATE AND PUBLICATION.**(ACTION ITEM)**

E. **Request Adoption Ordinance 397-2023: A**N ORDINANCE AMENDING SECTION 3 OF ARTICLE A OF CHAPTER 3 TITLE 7 OF THE STAR CITY CODE BY MAKING A TECHNICAL CORRECTION AND BY THE ADDITION OF STAR FIRE PROTECTION DISTRICT IMPACT FEE SCHEDULE; AND PROVIDING AN EFFECTIVE DATE AND PUBLICATION. **(ACTION ITEM)**

F. **Request Adoption Ordinance: 398-2023** AN ORDINANCE AMENDING SECTION 16 OF ARTICLE A OF CHAPTER 3 TITLE 7 OF THE STAR CITY CODE BY THE ADDITION OF STAR FIRE PROTECTION DISTRICT IMPACT FEE SCHEDULE; AND PROVIDING AN EFFECTIVE DATE AND PUBLICATION. **(ACTION ITEM)**

G. **FY 2022/2023 Audit Engagement Approval -** Approval of Engaging Zwygart John & Associates PLLC for the Fiscal Year Ending 9/30/2023 Audit **(ACTION ITEM)**

H. **Sweeper Purchase -** Approve Purchase of Sweeper in the amount of $21,692.65 under Sourcewell Government Contract (031121-ACO Pricing **(ACTION ITEM)**

I. **Maintenance Vehicle Purchase -** Approve Purchase of Used Maintenance Truck (Ford F250 VIN # 1FTBF2B64KED47454) in the amount of $27,100.00 from Star Sewer and Water District **(ACTION ITEM)**

J. **Resolution 2023-009 Asset Disposal (B&G)** - A resolution of the city of star, Idaho within Ada and Canyon Counties, certain City Owned personal property declaring them surplus and disposing in certain manners. **(ACTION ITEM)**

8. ADJOURNMENT

The meeting can be viewed via a link posted to the City of Star website at *staridaho.org*. Information on how to participate in a public hearing remotely will be posted to *staridaho.org* under the meeting information. The public is always welcomed to submit comments in writing.

Land Use Public Hearing Process

Public signs up to speak at the public hearing

Mayor Opens the Public Hearing

Mayor asks council if there is any Ex Parte Contact

Applicant has up to **20 minutes** to present their project

Council can ask the applicant questions and staff questions

Public Testimony **(3 minutes per person)**

1. Those for the project speak
2. Those against the project speak
3. Those who are neither for or against but wish to speak to the project
4. Council may ask the individual speaking follow-up questions that does not count towards their 3 minutes

Applicant rebuttal **(10 minutes)**

Council can ask the applicant and staff questions

Mayor closes the public hearing

Council deliberates

Motion is made to approve, approve with conditions, deny or table the application to a date certain in the future

Thank you for coming to the Star City Council meeting, public involvement is fantastic and helps in shaping our city for the future. As this is a public hearing, there will be no cheering, clapping, jeering or speaking out during the hearing. Only the person at the podium has the floor to speak during their allotted time. If someone does speak out, cheer, claps, etc. they will be asked to leave the hearing and or escorted out of the hearing. We want to keep these hearings civil so everyone can be heard.

Thank you for your participation.

Mayor Trevor Chadwick

Mayor Report 1

Fire Incidents

Filter statement

Filters **Days in Alarm DateTime** 9/1/23 to 11/27/23 | **Is Active** true | **Is Locked**

2023 Incidents Y...	AVG Response T...	Acres Burned	Dollar Loss
368	6.97	1.1	Total Est... 50,500 | Total Est... 300,000

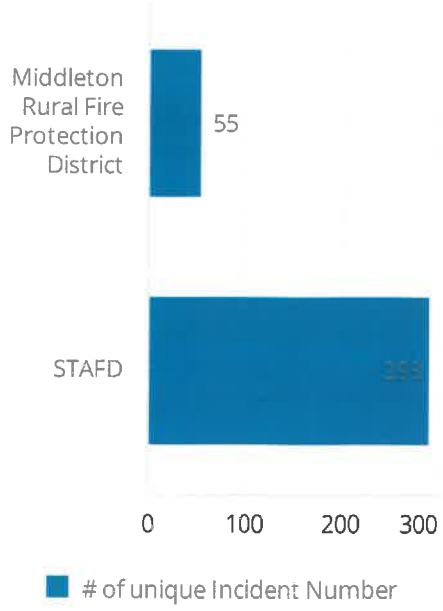
Incident Count By Year Group Comparison

Incident Type Group	# of unique Incident Number		
	2021	2022	2023
100 - Fire	96	100	123
200 - Overpressure Rupture, Explosion, Overheat	2		1
300 - Rescue & EMS	636	784	703
400 - Hazardous Condition	17	54	49
500 - Service Call	249	261	225
600 - Good Intent Call	179	182	196
700 - False Alarm	50	74	90
900 - Special Incident			1
Other	6	4	14
Grand Total	1,235	1,459	1,402

Count By Specific Call Types

Incident Type Group	Count
100 - Fire	23
200 - Overpressure Rupture, Explosion, Overheat	1
300 - Rescue & EMS	196
400 - Hazardous Condition	15
500 - Service Call	53
600 - Good Intent Call	43
700 - False Alarm	33
Other	4
Count	368

District



October 2023 Police Report

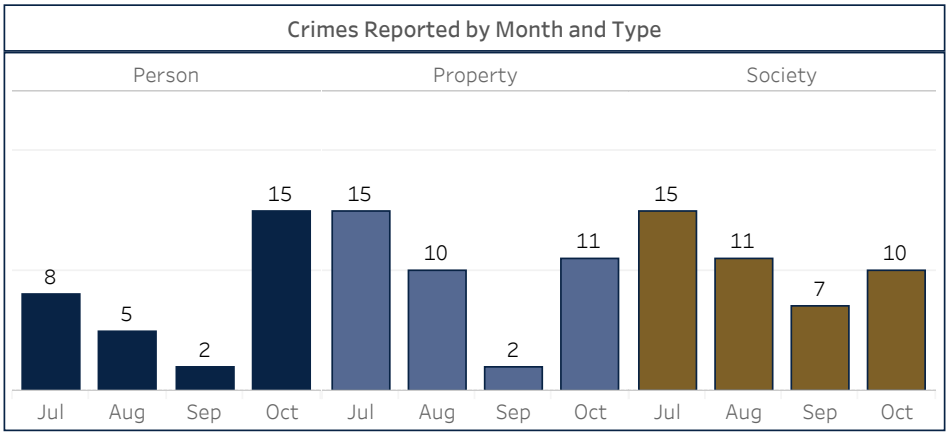
Release Date 2023-11-16

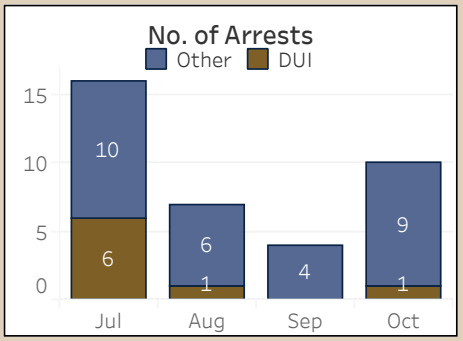
Offenses Reported[1]

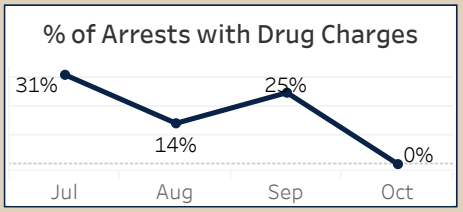
Type	2020	2021	2022	2023 YTD
Person	62	74	110	70
Property	99	59	92	87
Society	50	52	67	110
Total Crimes	211	185	269	267
Crimes/1,000 Pop	19.0	13.8	17.7	

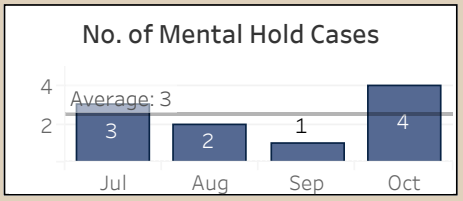
Case Report Types

- **Person Crimes** = murder, manslaughter, rape/sodomy, assault, intimidation and kidnapping offenses
- **Property Crimes** = robbery, burglary, larceny/theft, arson, destruction of property, counterfeiting, fraud, embezzlement, blackmail and stolen property offenses
- **Society Crimes** = drugs/narcotics, gambling, pornography, prostitution and weapons law violations







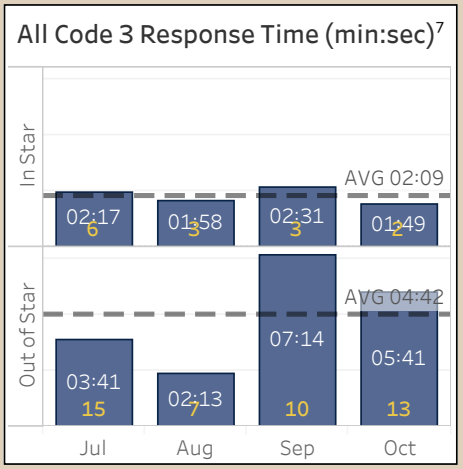


Police Activity[2]

	2023 Monthly Avg[3]	Jul	Aug	Sep	Oct	October 2022
Citizen Calls for Service (CFS)	319	371	352	310	307	329
Proactive Policing	1,466	1,348	2,005	1,622	1,611	862

Select Call Types

	2023 Monthly Avg[3]	Jul	Aug	Sep	Oct	October 2022
Crash Response	25	28	29	25	22	30
Crisis/Mental Health[4]	10	9	14	14	14	13
Domestic Violence	6	5	7	2	5	4
Juvenile Activity	13	12	20	24	19	12
Location Checks[5]	451	351	518	430	394	337
Property Crime Calls[6]	19	23	21	13	26	21
School Checks	62	54	72	72	49	38
Traffic Stops	313	271	415	284	254	172
Welfare Checks	22	12	24	19	24	22



[1]Offense Reports are compiled from NIBRS RMS. [2]Police Activity reflects calls within the City of Star and all calls dispatched with a Star deputy. [3]Monthly averages are based on all prior months of the current year. [4]Calls are for Crisis, Mental Holds, and Suicidal Subjects. [5]Location checks include Construction Site, Property, and Security checks. [6]Property Crime Calls include Theft, Vandalism, Burglary, Fraud. [7]Code 3 Calls represent all incidents that are routed at Priority 3, where Priority 3 calls require an immediate emergency response.

Last Updated: 9/14/23 VB Crime Analysis Unit

September 2023 Police Report

Release Date 2023-10-19

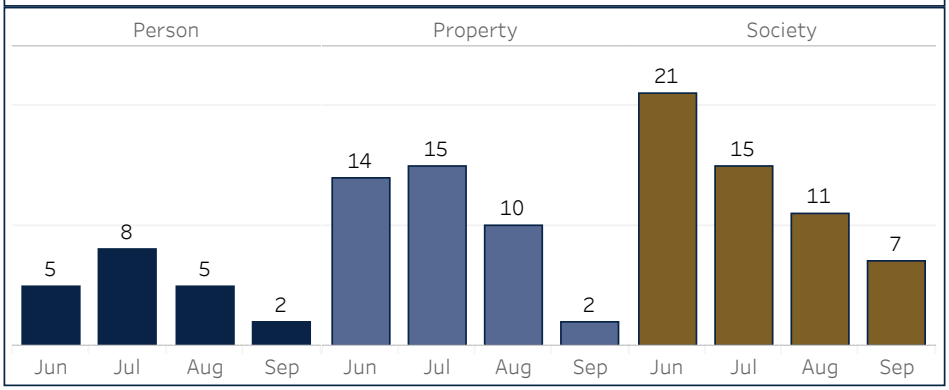
Offenses Reported[1]

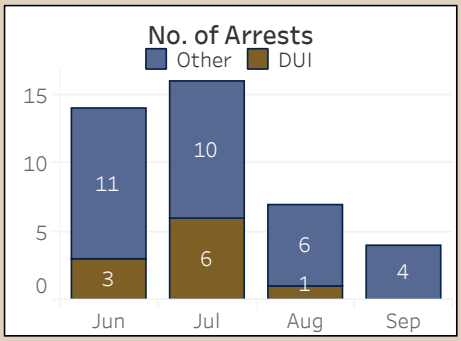
Type	2020	2021	2022	2023 YTD
Person	62	74	110	55
Property	99	59	92	76
Society	50	52	67	100
Total Crimes	211	185	269	231
Crimes/1,000 Pop	19.0	13.8	17.7	

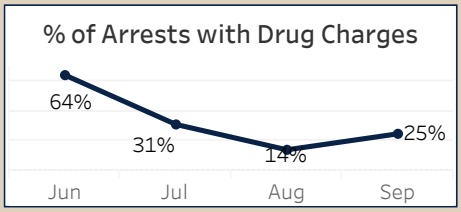
Case Report Types

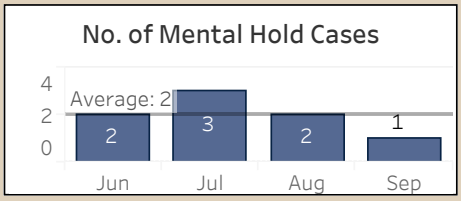
- **Person Crimes** = murder, manslaughter, rape/sodomy, assault, intimidation and kidnapping offenses
- **Property Crimes** = robbery, burglary, larceny/theft, arson, destruction of property, counterfeiting, fraud, embezzlement, blackmail and stolen property offenses
- **Society Crimes** = drugs/narcotics, gambling, pornography, prostitution and weapons law violations

Crimes Reported by Month and Type









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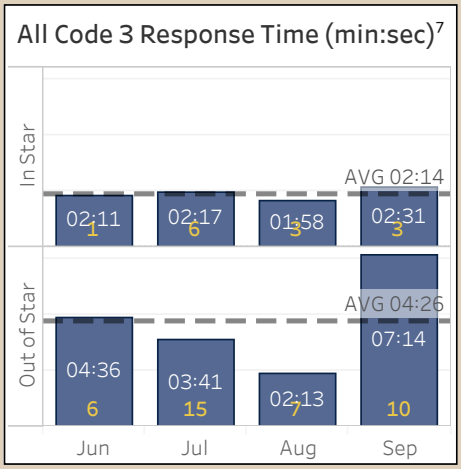
Select Call Types

	2023 Monthly Avg[3]	Jun	Jul	Aug	Sep	September 2022
Crash Response	25	22	28	29	25	36
Crisis/Mental Health[4]	10	9	9	14	14	9
Domestic Violence	6	4	5	7	2	8
Juvenile Activity	13	14	12	20	24	8
Location Checks[5]	451	408	351	518	430	362
Property Crime Calls[6]	19	18	23	21	13	18
School Checks	62	41	54	72	72	52
Traffic Stops	313	278	271	415	284	236
Welfare Checks	22	22	12	24	19	27



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Last Updated: 9/14/23 VB Crime Analysis Unit

CITY OF STAR, IDAHO

CITY COUNCIL REGULAR MEETING MINUTES

City Hall - 10769 W State Street, Star, Idaho
Tuesday, August 01, 2023 at 7:00 PM

1. CALL TO ORDER – Welcome/Pledge of Allegiance

Mayor Trevor Chadwick called the meeting order at 7:00 p.m.

2. INVOCATION –

Host Coordinator Harroll Wiley of LifeSpring Church provided the invocation.

3. ROLL CALL

City Council members present:

Council President David Hershey (participated via remote for full meeting), Council Member Kevan Wheelock (participated via remote while en route from travel and entered meeting in-person partway into the budget presentation), Mayor Trevor Chadwick, Council Member Jennifer Salmonsen and Council Member Kevin Nielsen were all present.

Staff present:

City Clerk - Treasurer Jacob Qualls, City Planner & Zoning Administrator Shawn Nickel, Assistant City Planner & Code Enforcement Ryan Field, Public Information Officer Dana Partridge, and City Engineer Ryan Morgan were all present. City Attorney Chris Yorgason was absent (excused).

4. CONSENT AGENDA (ACTION ITEM)

A. **Pending / Paid Claims to be Approved:**

B. Findings of Fact / Conclusions of Law - **Dude Dewalt Winery Annexation, Comprehensive Plan Amendment & Conditional Use Permit (FILE: AZ-23-02 / DA-23-04 / CPA-23-01 / CU-23-05)**

- Council Member Nielsen moved to approve the Consent Agenda; Council Member Salmonsen seconded the motion. **ROLL CALL VOTE:** Nielsen – aye; Salmonsen – aye; Wheelock – aye; Hershey – aye. Motion carried.

5. PUBLIC HEARINGS with ACTION ITEMS: (The Council at its option may suspend the rules requiring three separate readings on three separate days for ordinances on the agenda for approval. This may be by a single motion to suspend the rules under Idaho Code 50-902; second of the motion; ROLL CALL VOTE; Title of the Ordinance is read aloud; motion to approve; second of the motion: ROLL CALL VOTE.)

A. **PUBLIC HEARING: BUDGET HEARING FY23/24** - A Public Hearing pursuant to Idaho Code 50-1002 was held this evening for consideration of the proposed budget for the Fiscal Year October 1, 2023 to September 30, 2024, in the amount of $13,542,388.70 with a proposed levy amount of $1,869,337 from Ada and Canyon County Assessed Property Taxes.

Mayor Chadwick opened the public hearing at 7:04 p.m. and utilized a slide presentation (on file) to review the proposed budget.

Presentation Summary:

Chadwick discussed reliable income vs. mandatory expenses. He said that sources of reliable income in the City of Star include property taxes, revenue sharing (State of Idaho sales tax), liquor revenue, and franchise fees. Chadwick explained that mandatory expenses are those items that the City is required to pay, such as police, city staff, legal, animal control, and liability insurance. He addressed pass-through income and pass-through expenses.

The Mayor stated that the City is very healthy financially, with approximately $21 million dollars in the City's bank accounts. He reviewed Police, Fire, and Park mitigation fees. For business taxes, Chadwick noted that the City of Star has had a lot of new businesses start in the past year, so the City is now at a 93 percent residential to 7 percent commercial tax burden. For revenue sharing, Chadwick noted the City received approximately $1.2 million last year and this next fiscal year is projected to be at $1.5 million.

Chadwick reviewed the City's success in receiving some recent grants and providing additional services. The City was awarded a $250,000 pathways grant for creation of walkways leading to Star Middle School and various community partner funding of approximately $55,000 for the Hometown Celebration. He also called out the success of the Parks and Recreation Department in being able to provide more camps to children, noting that Annie Pew successfully applied for a $40,000 grant for camps this past summer and that the Department planned to apply to hopefully continue that funding. Chadwick further noted a new City service, the City Clerk-Treasurer Department's Passport Desk, which provides passport service to the local community and generates revenue via the U.S. State Department-mandated passport fee and photo-taking.

Chadwick reviewed various staffing expenses. He explained that legal costs would go down greatly this next year since the lawsuit with Middleton was successfully concluded. For Police, two more patrol officers and one detective are being added in order to achieve the correct response time metrics in accordance with Star's proactive policing model. For Animal Control, he noted the City is looking at a new contract with the Idaho Humane Society to maintain the dog and cat issues as opposed to the prior process, which placed responsibility on local police to take the animals in to Star Veterinary. Chadwick noted that another groundskeeper and custodian would be added to the Building and Grounds department. For the building inspector role, this was previously a contract position and will become a staff position in January 2024.

For improvements, a new pickleball court will be constructed at Pavilion Park near the splash pad, batting cages are being considered for a city park, and various landscaping and pathway improvements are planned around the City. He thanked City Committees such as the Transportation Committee, Parks, Arts & Beautification Committee, and the Historical Committee for their work on various projects, noting that Committee projects were at about $61,000 total.

Mayor Chadwick stood for questions.

Public Comment:

Pablo Sclafemi of 11391 W. Threadgrass Street, Star, said he was very happy living in Star and enjoyed investing. He suggested that Star consider issuing bonds so people could invest in City projects.

Mayor Chadwick and Council Member Nielsen clarified that the City is open to donations for various projects and initiatives, but that the topic of bonds would need to be reviewed by the City Attorney and would need to be in compliance with State of Idaho regulations.

Teresa Tinsley of 10459 W. Achilles Street, Star, asked about Valley Regional Transit busing. Mayor Chadwick and Council Member Nielsen explained a little about the service costs and historical lack of use of such service, noting the costs did not match well with Star's population size. One problem is the lack of funding at the state level for such service, which causes the entity to go to participating local municipalities and levy fees. Teresa Tinsley also asked about the impact fee committee; Mayor Chadwick explained that Chris Yorgason is reviewing the matter so people can be invited to be a part of the new committee (old committee makeup is no longer allowed).

Sue Spear of South Streamleaf Avenue, Star, said that she felt Star was in a great financial position with $21.4 million dollars in cash and asked how the City decides where it invests its funds. City Clerk-Treasurer Jacob Qualls explained the City's approach to pursuing the best interest rate with banking and CD's.

Mayor Chadwick closed the Public Hearing at 8:03 p.m.

Mayor Chadwick reminded Council of the steps next needed in the Budget Hearing approval process, that based upon approval this evening, at upcoming City Council meetings the budget ordinance and the ordinance for the property tax side would need to be voted on.

- Council Member Nielsen moved to approve the budget as proposed and directed City Staff to provide a copy of the ordinance (once made official) to the State Controller's Office along with a copy of the presentation noted as the 2023-2024 City of Star Budget; Council Member Salmonsen seconded the motion. **ROLL CALL VOTE:** Nielsen – aye; Salmonsen – aye; Wheelock – aye; Hershey – aye. Motion carried.

6. ACTION ITEMS:(The Council at its option may suspend the rules requiring three separate readings on three separate days for ordinances on the agenda for approval. This may be by a single motion to suspend the rules under Idaho Code 50-902; second of the motion; ROLL CALL VOTE; Title of the Ordinance is read aloud; motion to approve; second of the motion: ROLL CALL VOTE.)

A. **Ordinance 385-2023 & DEVELOPMENT AGREEMENT (Hood Rats Rezone)** AN ORDINANCE REZONING CERTAIN REAL PROPERTY LOCATED IN THE CITY OF STAR, ADA COUNTY, IDAHO; MORE SPECIFICALLY LOCATED AT 11525 W. STATE STREET IN STAR, IDAHO (ADA COUNTY PARCEL R1842701715); THE PROPERTY IS OWNED BY NEWELL AND ELIZABETH PRICE; ESTABLISHING THE ZONING CLASSIFICATION OF THE REZONED PROPERTY AS CENTRAL BUSINESS DISTRICT WITH A DEVELOPMENT AGREEMENT (CBD-DA) ON APPROXIMATELY .19 ACRES; DIRECTING THAT CERTIFIED COPIES OF THIS ORDINANCE BE FILED AS PROVIDED BY LAW; PROVIDING FOR RELATED MATTERS; AND PROVIDING FOR AN EFFECTIVE DATE. **(ACTION ITEM)**

- Council Member Nielsen moved to introduce Ordinance 385-2023 and, pursuant to Idaho Code Section 50-902 the rule requiring an ordinance be read on three different days with one reading in full to be dispensed with, and that Ordinance 385-2023 be considered after reading once by title only; Council Member Wheelock seconded the motion. **ROLL CALL VOTE:** Nielsen – aye; Salmonsen – aye; Wheelock – aye; Hershey – aye. Motion carried.
- Council Member Salmonsen read the title and moved to approve Ordinance 385-2023 and the associated Development Agreement (Hood Rats Rezone); Council Member Wheelock seconded the motion. **ROLL CALL VOTE:** Nielsen – aye; Salmonsen – aye; Wheelock – aye; Hershey – aye. Motion carried.

B. **ORDINANCE 375-2023 & DEVELOPMENT AGREEMENT (Madenford Subdivision Annexation)** AN ORDINANCE ANNEXING TO THE CITY OF STAR CERTAIN REAL PROPERTY LOCATED IN THE UNINCORPORATED AREA OF ADA COUNTY, IDAHO; MORE SPECIFICALLY LOCATED AT 3605 N. POLLARD LANE, IN STAR, IDAHO (ADA COUNTY PARCELS R5455720020) AND CONTIGUOUS TO THE CITY OF STAR; THE PROPERTY IS OWNED BY NORTH POLLARD LANE LLC; ESTABLISHING THE ZONING CLASSIFICATION OF THE ANNEXED PROPERTY AS RESIDENTIAL WITH A DEVELOPMENT AGREEMENT (R-3-DA) OF APPROXIMATELY 5.0 ACRES; DIRECTING THAT CERTIFIED COPIES OF THIS ORDINANCE BE FILED AS PROVIDED BY LAW; PROVIDING FOR RELATED MATTERS; AND PROVIDING FOR AN EFFECTIVE DATE. **(ACTION ITEM)**

- Council Member Nielsen moved to introduce Ordinance 375-2023 and, pursuant to Idaho Code Section 50-902 the rule requiring an ordinance be read on three different days with one reading in full to be dispensed with, and that Ordinance 375-2023 be considered after reading once by title only; Council Member Wheelock seconded the motion. **ROLL CALL VOTE:** Nielsen – aye; Salmonsen – aye; Hershey – aye; Wheelock – aye. Motion carried.
- Council Member Salmonsen read the title and moved to approve Ordinance 375-2023 (Madenford Subdivision Annexation); Council Member Wheelock seconded the motion. **ROLL CALL VOTE:** Nielsen – aye; Salmonsen – aye; Wheelock – aye; Hershey – aye. Motion carried.

C. **ORDINANCE 384-2023 & DEVELOPMENT AGREEMENT (Red Barn Inn Rezone)** AN ORDINANCE REZONING CERTAIN REAL PROPERTY LOCATED IN THE CITY OF STAR, ADA COUNTY, IDAHO; MORE SPECIFICALLY LOCATED AT 309 S. MAIN STREET IN STAR, IDAHO (ADA COUNTY PARCEL R1842701715); THE PROPERTY IS OWNED BY LEI FAMILY LIVING TRUST 08/16/2005; ESTABLISHING THE ZONING CLASSIFICATION OF THE REZONED PROPERTY AS CENTRAL BUSINESS DISTRICT WITH A DEVELOPMENT AGREEMENT (CBD-DA) ON APPROXIMATELY .70 ACRES; DIRECTING THAT CERTIFIED COPIES OF THIS ORDINANCE BE FILED AS PROVIDED BY LAW; PROVIDING FOR RELATED MATTERS; AND PROVIDING FOR AN EFFECTIVE DATE. **(ACTION ITEM)**

- Council Member Nielsen moved to introduce Ordinance 384-2023 and, pursuant to Idaho Code Section 50-902 the rule requiring an ordinance be read on three different days with one reading in full to be dispensed with, and that Ordinance 384-2023 be considered after reading once by title only; Council Member Wheelock seconded the motion. **ROLL CALL VOTE:** Nielsen – aye; Salmonsen – aye; Wheelock – aye; Hershey – aye. Motion carried.
- Council Member Salmonsen read the title and moved to approve Ordinance 384-2023 and the associated Development Agreement (Red Barn Inn Rezone); Council Member Wheelock seconded the motion. **ROLL CALL VOTE:** Nielsen – aye; Salmonsen – aye; Wheelock – aye; Hershey – aye. Motion carried.

D. **Master Pathways Agreement - Middleton Mill Ditch Company / Middleton Irrigation Association Inc / City of Star** - Agreement between parties to utilize Rights-Of-Ways, Ditch Easements along Irrigation and Ditch Company with the City of Star for Pathways. **(ACTION ITEM)**

Mayor Chadwick gave a brief overview of the recommended Master Pathways Agreement, stating that the agreement had been vetted by City Attorney Chris Yorgason. He noted that Yorgason was absent owing to travel and asked if the City Council wanted to discuss the agreement further.

Council Member Salmonsen asked to clarify that the agreement was not pertaining to HOA pathways, and that developers would be responsible for negotiating their own agreements with the ditch company. Mayor Chadwick stated yes, the agreement was only for the City of Star Master Pathway system that the City would be responsible for maintaining, and that there are only certain canals and ditches that are applicable.

Council Member Salmonsen noted that the draft agreement called for the City to place and maintain trash cans, and pointed out that Council would need to consider funding and what is needed for future pathways. Council Member Wheelock asked for clarity on what percentage of pathways would be HOA responsibility vs. City responsibility in terms of maintenance.

Mayor Chadwick advised that the master pathway plan will lay that out as the City moves forward and that the ones the City will be responsible for will be designated as public pathways, noting that public easements can be built in to subdivision agreements for HOA-maintained paths.

Council Member Salmonsen noted the importance of doing this planning in advance so both construction and future maintenance can be considered. Mayor Chadwick explained that part of the importance of the master pathway plan is to be able to take it in front of the impact fee committee and utilize that to help create an impact fee for the permanent garbage cans, etc.

Council discussion ensued on the wording of the Hours of Use clause, debating daylight hours vs. a half hour before sunrise and a half hour before sunset. Council Member Nielsen pointed out the State wording from Fish and Game regulation and advised remaining consistent with State of Idaho wording.

- Council Member Salmonsen moved to approve the Master Pathways Agreement – Middleton Mill Ditch Company / Middleton Irrigation Association, Inc. / City of Star; Council Member Wheelock seconded the motion. **ROLL CALL VOTE:** Nielsen – aye; Salmonsen – aye; Wheelock – aye; Hershey – aye. Motion carried.

E. **Photocopier Leases** - Approve Photocopier Leases **(ACTION ITEM)**

Mayor Chadwick gave a brief overview of the proposal for a new copier lease, noting that City Hall's first-floor machine is old and does not work well. He stated that the lease would be for a new copier for City Hall and also one for the Rec Center. Chadwick noted that it would be a cost savings of about a penny a sheet from what the original (old copier) agreement stated, and said he felt the City would have better service because the new machines can be monitored online. He noted that the second floor of City Hall currently has a newer copier under lease, but that once that one hits the five-year mark, that a new copier for that floor could be rolled into the agreement in order to have a consistent vendor and consistent maintenance.

- Council Member Wheelock moved to approve the photocopier lease; Council Member Nielsen seconded the motion. **ROLL CALL VOTE:** Nielsen – aye; Salmonsen – aye; Wheelock – aye; Hershey – aye. Motion carried.

7. ADJOURNMENT

Mayor Chadwick adjourned the meeting at 8:23 p.m.

_____ ATTEST:_____

Trevor A Chadwick, Mayor Jacob M Qualls, City Clerk - Treasurer

CITY OF STAR, IDAHO

CITY COUNCIL BUDGET WORKSHOP SUMMARY MINUTES

City Hall - 10769 W State Street, Star, Idaho
Tuesday, June 27, 2023 at 7:00 PM

1. CALL TO ORDER – Welcome/Pledge of Allegiance

Mayor Chadwick opened the meeting at 7:01 p.m., led the Pledge of Allegiance, and welcomed those in attendance. Council Member Wheelock provided the invocation.

2. ROLL CALL

City Council Members present:

Council President David Hershey, Council Member Kevan Wheelock, Mayor Trevor Chadwick, Council Member Jennifer Salmonsen, and Council Member Kevin Nielsen were all present.

Staff present:

City Clerk-Treasurer Jacob Qualls, Planning & Zoning Administrator Shawn Nickel, Assistant City Planner/Code Enforcement Ryan Field, Star Police Chief Zach Hessing, Public Information Officer Dana Partridge, and Parks, Arts, & Beautification Committee Member Sue Speer were also present.

3. PRESENTATIONS -

A. **FY 23/24 Budget Workshop** – Discussion

Mayor Chadwick presented the Draft Fiscal Year 2023/2024 Budget, balanced at $13,197,361.04. Chadwick noted that the City has north of $12 million dollars in savings, and went on to detail the income and expense sides of the proposed budget.

Chadwick highlighted several areas within the budget, and Council discussion ensued on the following matters: concerns over Idaho House Bill 389 were noted as leaving potential funds from new construction on the table; liquor revenue sharing is expected to drop next year due to changes from the State legislature; overview discussion of City facility and park rental fees; donation income for the annual Hometown Celebration; a potential transportation grant to look at Downtown Parking, and uses for Park Impact fees. Chadwick noted that City Clerk Qualls has pursued getting the most value for the City in terms of interest revenue.

With respect to Staffing matters, for Buildings and Maintenance, Council discussion noted increased needs for a new janitor role to help now that the new Police station and Recreation Center are online, as well as the Riverhouse. Potential need for a Parks maintenance role to help maintain the sixty-acre park area by Riverhouse. Council Members discussed the exponential growth of the City, and whether or not it was logical to consider splitting the role of City Clerk-Treasurer into two roles; it was decided that further study was needed. Chadwick reviewed overall employee costs, noting raises and requests for professional training. Council discussion noted that City Attorney Chris Yorgason is not raising his fees for next year, and that it will reflect lower with no lawsuits on the horizon as the amount in last year's budget was owing to a lawsuit that occurred with the City of Middleton.

Chadwick proposed increasing the dollar amount for Mayor's Youth Council scholarships given, in support of helping high school graduates who are Star residents as they pursue professional training through colleges and trade schools.

Chadwick reviewed various computer software and infrastructure costs.

For City Committees, a potential license for Signup Genius was discussed. Mayor Chadwick thanked the members of the Parks, Arts, and Beautification Committee that were present. The Council asked various questions about the potential Ethan's Smile Tulip Program, traffic box art wraps program, and City beautification.

For the History Committee, the potential for purchasing and developing the historic Grange Building as a Star History Museum was discussed.

For Parks, a potential partnership between the City and the Friends Community Church was discussed in terms of the historic Star Barn. It was noted that City representatives have been meeting with the Elders of the church and working on creating a partnership agreement that would allow the City to provide maintenance to the facility and make improvements, and in return the City would be able to utilize the facility to host more programs and events for the community. No further improvement is planned at Blake Haven Park for this fiscal year; Hunters Creek Park will have batting cages added; Pavilion Park will have pickleball added.

For Police, Chief Zach Hessing provided a projection of service level need given the rapid population growth in the City. He stated that the force is looking at adding two additional deputies. With caseload, he said the next thing that would come up may be adding an additional Person Crimes Detective, and as another future role, likely an Administrative Sergeant. Hessing mentioned that the police are working on applying for grants to help fund some of the roles.

For Animal Control, Mayor Chadwick noted the current policy is for animal control to be handled through police deputies taking stray animals to the local Star Veterinary Clinic. For the following budget year, discussion ensured the City will consider a move to working with the Idaho Humane Society in order to free up the deputies from this task. The Idaho Humane Society would also provide some services with relation to cats, wildlife, and stray farm animals.

Council discussion moved back to City facilities. Chadwick noted the disc golf project at Freedom Park was already underway. Various potential improvements such as a future piano for the Star Riverhouse, were touched on, and Chadwick noted that more research was needed on this potential purchase.

CITY COUNCIL BUDGET WORKSHOP SUMMARY MINUTES

City Hall - 10769 W State Street, Star, Idaho
Tuesday, June 27, 2023 at 7:00 PM

4. ADJOURNMENT

Mayor Chadwick adjourned the Star City Council budget workshop at 9:52 p.m.

_____ ATTEST: _____

Trevor A Chadwick, Mayor Jacob M Qualls, City Clerk - Treasurer

CITY OF STAR, IDAHO

CITY COUNCIL REGULAR MEETING MINUTES

City Hall - 10769 W State Street, Star, Idaho
Tuesday, October 17, 2023 at 7:00 PM

1. CALL TO ORDER – Welcome/Pledge of Allegiance

Mayor Chadwick called the meeting to order at 7:00 p.m.

2. INVOCATION –

Relief Society President Kristi Dyer of the Church of Jesus Christ of Latter-Day Saints provided the invocation.

3. ROLL CALL

City Council members present:

Council President David Hershey, Council Member Kevan Wheelock, Mayor Trevor Chadwick, Council Member Jennifer Salmonsen, and Council Member Kevin Nielsen were all present.

Staff present:

City Clerk / Treasurer Jacob Qualls, City Engineer Ryan Morgan, Assistant City Engineer Tim Clark, City Planner / Zoning Administrator Shawn Nickel (via remote), Assistant Planner / Code Enforcement Ryan Field, Public Information Officer Dana Partridge, and Captain Jake Vogt of the Ada County Sheriff's Office were all present.

4. PRESENTATIONS

A. **Parks Art & Beautification Committee Presentation -** Dog Brick Donation - Hand & Paw

Council Member Salmonsen (Council Liaison for Star's Parks, Art, & Beautification Committee) presented a check for $1661.67 (from proceeds from P.A.B.'s Dog Brick fundraiser) to the local Star non-profit organization Hand & Paw. Founder / President Kristina Calise and Vice President Jason Laase of Hand & Paw were present to receive the donation.

Kristina Calise gave an overview of Hand & Paw's work to City Council. Per Ms. Calise, the organization's goal is helping provide pet aid to families facing food insecurity and financial hardship. Hand & Paw is a registered 501 (c) (3) non-profit that works to help keep pets with their families.

Calise explained this addresses two areas of need, keeping animals out of shelters and keeping the animal with the family as studies show that pets are key both for the health of the individual and animal. Hand & Paw works with various organizations in Star and surrounding communities to help cast a wide net for pet families in need, including cancer patients at St. Luke's, the Boise Chapter of Pets for Vets, and the Community Pet Pantry at LifeSpring Church. Calise explained that because the service is mobile and not brick-and-mortar, 100% of donations go directly into the community.

Mayor Chadwick, the Council, and members of the Parks, Arts, & Beautification Committee who were present commended Hand & Paw for their service to the community and pets in Star.

B. **Ada County Sheriff - Jail General Bond Presentation**

Captain Jake Vogt, Jail Services Captain of the Ada County Sheriff's Department utilized a video from Ada County Sheriff Matt Clifford to give an overview of the proposed Jail General Bond.

Salient points of Captain Vogt's presentation include that Ada County's population growth has impacted jail services and that improvements are needed. Per Vogt, the last time jail beds or infrastructure were improved was back in 2013. In 2013, the population of Ada County was approximately 416,000 and is now at 544,000. The current jail was completed in 1977 and various improvements have been made over the years, with that last improvement being in 2013.

Council Member Salmonsen expressed concern for people who might be brought in and not have beds available. Captain Vogt explained the temporary housing/temporary bunks process.

Council discussion moved to the State surplus and whether any negotiation or discussion with the Governor's office or State legislators about how to find the funding, with Mayor Chadwick noting House Bill 389 as a continuing problematic issue that impacts cities.

Captain Vogt answered Council questions on alternative sentencing, and provided web resources on the subject so people could learn more. He verified the position that if the bond does not go through, it will need to be pursued again in the future as infrastructure improvements are necessary.

5. CONSENT AGENDA (ACTION ITEM)

A. Final Plat – **Legado Phase 1 (Formerly North Star River Ranch Subdivision) (FILE: FP-23-13)**

B. Final Plat – **Cranefield Phase 2 (FILE: FP-23-14)**

C. **September 19, 2023 City Council Meeting Minutes**

D. **September 5, 2023 City Council Meeting Minutes**

E. **Claims to Approve**

- Council Member Salmonsen moved to approve the Consent Agenda; Council President Hershey seconded the motion. **ROLL CALL VOTE:** Hershey – aye; Wheelock – aye; Salmonsen – aye; Nielsen – aye. Motion carried.

6. PUBLIC HEARINGS with ACTION ITEMS:

A. **PUBLIC HEARING: Falcon Storage (File: CUP-23-01) -** The Applicant is seeking approval of a Conditional Use Permit for a storage facility to include traditional private storage options and storage condominiums. The property is located at 8323 W. Moon Valley Road in Star, Idaho. **PREVIOUSLY TABLED AT THE APRIL 18, 2023 CITY COUNCIL MEETING. (ACTION ITEM - Table to November 21, 2023)**

- Council President Hershey moved to table the Public Hearing for Falcon Storage (File: CUP-23-01) to the Star City Council meeting date of November 21, 2023; Council Member Salmonsen seconded the motion. **ROLL CALL VOTE:** Hershey – aye; Wheelock – aye; Salmonsen – aye; Nielsen – aye. Motion carried.

7. ACTION ITEMS: (The Council at its option may suspend the rules requiring three separate readings on three separate days for ordinances on the agenda for approval. This may be by a single motion to suspend the rules under Idaho Code 50-902; second of the motion; ROLL CALL VOTE; Title of the Ordinance is read aloud; motion to approve; second of the motion: ROLL CALL VOTE.)

A. **ITD Cooperative Agreement (Key #21863) Star Road to Can/Ada Road** - Approve / Authorize the Mayor to sign a Cooperative Agreement with ITD (**ACTION ITEM)**

Mayor Chadwick summarized that the ITD Cooperative Agreement was needed for ITD to accept the road and for ITD to send funding to the City with respect to change orders. Council discussion noted that the project was completed and that there has already been some alleviation of rush hour traffic.

Mayor Chadwick noted that the project came forward via proportional share agreements, and that such agreements were a useful funding mechanism in terms of having growth pay for growth.

- Council President Hershey moved to approve the ITD Cooperative Agreement (Key #21863) Star Road to Can Ada Road; Council Member Nielsen seconded the motion. **ROLL CALL VOTE:** Hershey – aye; Wheelock – aye; Salmonsen – aye; Nielsen – aye. Motion carried.

B. **Star Middle School Pathway Project -** Approval of Bid & Notice of Award **(ACTION ITEM)**

Mayor Chadwick asked Assistant City Engineer Tim Clark to summarize this evening's proposed action on the project. Clark stated that the bid opening had been held last Wednesday afternoon and that the City had advertised the project for the required two weeks. The City received one qualified bid, which Clark said that Staff recommended be awarded to Pathways Concrete and Landscape LLC for $280,000.

Clark noted that this was being partly paid for by the grant the City received from ELTAC. Chadwick stated that the City had already budgeted $600,000 for this project in this year's budget, so when considering the $30,000 not covered by the grant, the City is well under budget.

City Engineer Ryan Morgan remarked that although only one bid was received, it was from a firm that has done multiple successful projects for the City previously. Some of these include the new Splash Pad/Dog Park, work at Hunters Creek Park, work at Blake Haven Park, and most recently, the pathway at Freedom Park. Morgan said he was pleased with the firm's work, and noted the importance of pursuing the project now in order to avoid the grant fund's imminent expiration on January 19, 2024.

- Council Member Wheelock moved to approve the awarding of the Star Middle School Pathway Project bid to Pathways Concrete and Landscape LLC in the not-to-exceed amount of $280,000 and directed Staff to issue the Notice of Award. Council Member Salmonsen seconded the motion. **ROLL CALL VOTE:** Hershey – aye; Wheelock – aye; Salmonsen – aye; Nielsen – aye. Motion carried.

C. **Ordinance 388-2023 (Willowbrook Annexation & Development Agreement AZ-21-12 / DA-21-20)** AN ORDINANCE ANNEXING TO THE CITY OF STAR CERTAIN REAL PROPERTY LOCATED IN THE UNINCORPORATED AREA OF ADA COUNTY, IDAHO; MORE SPECIFICALLY LOCATED AS DESCRIBED IN EXHIBIT A, IN STAR, IDAHO, AND CONTIGUOUS TO THE CITY OF STAR; THE PROPERTY IS OWNED BY WILLOWBROOK DEVELOPMENT, INC; ESTABLISHING THE ZONING CLASSIFICATION OF THE ANNEXED PROPERTY AS RESIDENTIAL WITH A DEVELOPMENT AGREEMENT (R-2-DA) OF APPROXIMATELY 719.3 ACRES; DIRECTING THAT CERTIFIED COPIES OF THIS ORDINANCE BE FILED AS PROVIDED BY LAW; PROVIDING FOR RELATED MATTERS; AND PROVIDING FOR AN EFFECTIVE DATE. **(ACTION ITEM - Previously tabled 10/3/2023)**

Mayor Chadwick noted that the ordinance was previously tabled from the October 3, 2023 City Council meeting as a correction was needed in the legal description.

- Council Member Nielsen moved to introduce Ordinance 388-2023 (Willowbrook Annexation & Development Agreement AZ-21-12 / DA-21-20) and suspend the rules requiring three readings and for 388-2023 to be considered after reading once by title; Council President Hershey seconded the motion. ROLL CALL VOTE: Hershey – aye; Wheelock – aye; Salmonsen – aye; Nielsen – aye. Motion carried.

- Council Member Nielsen read the title and moved to approve Ordinance 388-2023 (Willowbrook Annexation & Development Agreement AZ-21-12 / DA-21-20; Council Member Hershey seconded the motion. ROLL CALL VOTE: Hershey – aye; Wheelock – aye; Salmonsen – nay; Nielsen – aye. Motion carried, 3 / 1.

D. **ECAMP Map Update** - Update of the Star Economic Corridors Access and Roadway Connection Management Plan Development Map as recommended by the Star Transportation and Pathways Committee **(ACTION ITEM)**

City Engineer Ryan Morgan summarized the proposed update of the Star Economic Corridors and Roadway Connection Management Plan (ECAMP) Development Map.

- Council Member Salmonsen moved to approve the ECAMP Map Update with the following condition of approval: Map Item 5, wording about certain roadway segments of Plummer and Pollard being re-classified as minor arterials be re-worded for clarity; Council President Hershey seconded the motion. **ROLL CALL VOTE:** Hershey – aye; Wheelock – aye; Salmonsen – aye; Nielsen – aye. Motion carried.

E. **Star Transportation and Pathways Committee Appointment** - Steve Burton **(ACTION ITEM)**

Mayor Chadwick thanked Steve Green for his service to the Star Transportation and Pathways Committee and noted Green had recently resigned after several years of service. Chadwick said the new Committee Member coming forward for consideration was Steve Burton, which Chadwick noted was helpful in that Burton lives in the Canyon County portion of Star, so his appointment would add additional perspective to the committee.

- Council Member Wheelock moved to approve Mr. Steve Burton's appointment to the Star Transportation and Pathways Committee; Council Member Salmonsen seconded the motion. **ROLL CALL VOTE:** Hershey – aye; Wheelock – aye; Salmonsen – aye; Nielsen – aye. Motion carried.

F. **Code Update Workshop** - Discussing a Workshop Date to discuss Code Updates **(Discussion / Consensus)**

The Council discussed various possible November 2023 dates for a Workshop in order to discuss updating the City Code. City Planner Shawn Nickel stated the goal of having the draft ordinance completed in time for consideration at a December 2023 City Council meeting. Council consensus was to call a meeting on November 14, 2023, at 7:00 p.m. at Star City Hall for a Code Updates Workshop.

CITY COUNCIL REGULAR MEETING MINUTES

City Hall - 10769 W State Street, Star, Idaho
Tuesday, October 17, 2023 at 7:00 PM

8. EXECUTIVE SESSION

A. **Executive Session 74-206 (f):** To communicate with legal counsel for the public agency to discuss the legal ramifications of and legal options for pending litigation, or controversies not yet being litigated but imminently likely to be litigated.

Mayor Chadwick explained for the viewers that once the Council moved into Executive Session, any members of the public and staff that were not invited participants would exit the Council Chamber and the City Council would return to take any potential needed action in public session before Adjournment.

- Council Member Nielsen moved that pursuant to Idaho Code Section 74-206 (f), that the Council would move into Executive Session for purposes of communication with legal counsel; Council Member Salmonsen seconded the motion. **ROLL CALL VOTE:** Hershey – aye; Wheelock – aye; Salmonsen – aye; Nielsen – aye. Motion carried.

The Star City Council moved into Executive Session at 7:58 p.m. Invited participants included City Clerk / Treasurer Jacob Qualls and City Planner / Zoning Administrator Shawn Nickel.

ACTION ITEM - Actions after Executive Session

The Star City Council resumed the Regular Meeting at 8:25 p.m.

- Council Member Nielsen moved to approve the agreement with the firm of White Peterson Attorneys at Law. Council Member Wheelock seconded the motion. **ROLL CALL VOTE:** Hershey – aye; Wheelock – aye; Salmonsen – aye; Nielsen – aye. Motion carried.

9. ADJOURNMENT

Mayor Chadwick adjourned the Star City Council meeting at 8:28 p.m.

_____ ATTEST: _____

Trevor A Chadwick, Mayor Jacob M Qualls, City Clerk - Treasurer

CITY OF STAR
Claim Approval List
For the Accounting Period: 11/23
For Pay Date: 11/17/23

Claim/	Check	Vendor #/Name/ Invoice #/Inv Date/Description	Document $/ Line $	Disc $	PO #	Fund	Org	Acct	Object	Proj	Cash Account
2804		21 ADA COUNTY LANDFILL	15.00								
	2311140057	11/14/23 Landfill Fees	15.00*			10	41540		411		10110
		Total for Vendor:	**15.00**								
2805		1449 ALTA TERRA INC	390.00								
		11/16/23 Refund - Incorrect Permit	390.00*			10	41510		698		10110
		Total for Vendor:	**390.00**								
2806		117 BOISE RIGGING SUPPLY	1,268.58								
	147072	11/09/23 Harness, Sling, Hooks	1,268.58*			10	41540		737		10110
		Total for Vendor:	**1,268.58**								
2807		1450 BOISE VALLEY HABITAT FOR	4,302.00								
		11/16/23 Refund - Permit Fees	4,302.00*			10	41510		698		10110
		Total for Vendor:	**4,302.00**								
2808		212 COSTCO	60.00								
Member Number 000111918803602											
		11/21/22 Annual Membership Renewal	60.00*			10	41810		570		10110
		Total for Vendor:	**60.00**								
2816		777 HERITAGE LANDSCAPE SUPPLY GROUP	1,310.70								
	*3409-001	11/09/23 Cords and LED Bulbs	1,046.78*			10	41810		585		10110
	*3427-001	11/09/23 LED Lights	180.60*			10	41810		585		10110
	*3967-001	11/13/23 Plug	19.43*			10	41540		434		10110
	*2827-001	11/15/23 Cord	63.89*			10	41540		434		10110
		Total for Vendor:	**1,310.70**								
2810		1298 KAMI PAHLAS	26.40								
		11/06/23 Pasta & Macaron Class Balance	26.40*			10	44022		352		10110
		Total for Vendor:	**26.40**								
2809		502 KEELY ELECTRIC	6,625.22								
	154	11/10/23 Deck Lighting Riverhouse	6,625.22*			10	41540		737		10110
		Total for Vendor:	**6,625.22**								

CITY OF STAR
Claim Approval List
For the Accounting Period: 11/23
For Pay Date: 11/17/23

Claim/ Check	Vendor #/Name/ Invoice #/Inv Date/Description	Document $/ Line $	Disc $	PO #	Fund	Org	Acct	Object	Proj	Cash Account
2811	635 MOUNTAIN ALARM	105.00								
	4095460 12/01/23 Fire Alarm Inspect/Monitor	72.50*			10		41810	344		10110
	4095459 12/01/23 Security Backup/Monitoring	32.50*			10		41810	344		10110
	Total for Vendor:	**105.00**								
2812	670 PATHWAY CONCRETE & LANDSCAPING	15,000.00								
	153 11/17/23 Concrete Star City Hall	15,000.00*			10		45110	741		10110
	Total for Vendor:	**15,000.00**								
2813	686 PORTAPROS LLC	518.20								
	112049AQ-1 11/10/23 River Walk Park	518.20*			10		41540	411		10110
	Total for Vendor:	**518.20**								
2814	1243 RIVER VALLEY WOODWORKS	200.00								
	11/15/23 Tree House Door Repair	200.00*			10	703	45110	737		10110
	Total for Vendor:	**200.00**								
2815	1238 ROYALTY ELECTRIC LLC	887.00								
	23102-4 11/09/23 Rec Center TV Signage	887.00*			10	850	45110	741		10110
	Total for Vendor:	**887.00**								
2817	772 SHERWIN WILLIAMS	15.95								
	3946-0 11/13/23 Paint	15.95*			10		41540	434		10110
	Total for Vendor:	**15.95**								
2819	1295 VALLEY OFFICE SYSTEMS	238.42								
	AR1233323 11/14/23 Monthly Lease - Copier	163.93*			10		41810	610		10110
	AR1233323 11/14/23 Contract Overage Charge	74.49*			10		41810	610		10110
	Total for Vendor:	**238.42**								
2820	1129 WESTERN HEATING & AIR	891.75								
	174167957 11/13/23 Changed out Capacitor	891.75*			10		41540	434		10110
	Total for Vendor:	**891.75**								

CITY OF STAR
Claim Approval List
For the Accounting Period: 11/23
For Pay Date: 11/17/23

Claim/	Check	Vendor #/Name/ Invoice #/Inv Date/Description	Document $/ Line $	Disc $	PO #	Fund	Org	Acct	Object	Proj	Cash Account
2821		1451 WESTERN STATES EQUIPMENT CO	539.77								
	11/03/23	Air Compressor Rental	539.77*			10		41540	442		10110
		Total for Vendor:	**539.77**								
		# of Claims 17	**Total:**	**32,393.99**	**# of Vendors 17**						

CITY OF STAR
Claim Approval List
For the Accounting Period: 11/23
For Pay Date: 11/21/23

Claim/	Check	Vendor #/Name/ Invoice #/Inv Date/Description	Document $/ Line $	Disc $	PO #	Fund	Org	Acct	Object	Proj	Cash Account
2824		1067 ANNIE PEW	1,636.07								
Ion Grant											
	11/20/23	Reimburse Comm Christmas Fund	1,636.07*			10		41810	598		10110
		Total for Vendor:	**1,636.07**								
2822		1035 BILLS MACHINE SHOP	17,550.00								
	23-2955 11/20/23	Dock Section with Platform	7,750.00*			10	703	45110	737		10110
+											
	23-2954 11/20/23	Park Benches	9,800.00*			10	703	45110	737		10110
		Total for Vendor:	**17,550.00**								
2829		231 DANA PARTRIDGE	2,030.19								
	11/21/23	Services Nov 10 - Nov 20 2023	2,030.19*			10		41140	351		10110
		Total for Vendor:	**2,030.19**								
2831		398 IDAHO POWER COMPANY	2,963.46								
	0033022594 11/13/23	1000 S MAIN ST / PUMP	21.69*			10		41540	412		10110
	0033022589 11/13/23	10769 W STATE ST / CITY HA	573.74*			10		41810	412		10110
	0033022563 11/13/23	10775 W STATE ST / STAR OU	91.75*			10		41810	412		10110
	0033022576 11/13/23	11225 W BLAKE DR / BLAKE P	30.91*			10		41540	412		10110
	0033157130 11/13/23	11380 W HIDDEN BROOK	28.25*			10		41540	412		10110
	0033207654 11/13/23	11665 W STATE ST A	189.95*			10		41540	412		10110
	0033207655 11/13/23	11665 W STATE ST A1	189.60*			10		41540	412		10110
	0030885171 11/13/23	11665 W STATE ST C	93.18*			10		41540	412		10110
	0033022554 11/13/23	1250 N STAR RD / HUNTERS P	246.46*			10		41540	412		10110
	0033022592 11/13/23	1300 N STAR RD / HC ENTRY	51.40*			10		41540	412		10110
	0033022572 11/13/23	1310 N LITTLE CAMAS / SHOP	124.57*			10		41540	412		10110
	0033022587 11/13/23	1500 N STAR RD	543.34*			10		41540	412		10110
	0033246240 11/13/23	946 S MAIN ST	5.21*			10		41810	413		10110
	0033075641 11/13/23	HIGHBROOK / HWY 44 STRT LI	45.29*			10		41810	413		10110
	0030204591 11/13/23	HUNTER'S CREEK STRT LIGHTS	15.37*			10		41810	413		10110
	0033022596 11/13/23	BLAKE SPRINKLER ELECT	3.73*			10		41540	412		10110
	0033022580 11/13/23	STATE/PLUMMER STRT LIGHTS	10.79*			10		41810	413		10110
	0033022584 11/13/23	STRT LIGHTS STAR	404.42*			10		41810	413		10110
	0030204606 11/13/23	STRT LIGHTS / BLAKE PARK	17.94*			10		41810	413		10110
	0032863989 11/13/23	960 S MAIN ST	261.39*			10		41810	412		10110

CITY OF STAR
Claim Approval List
For the Accounting Period: 11/23
For Pay Date: 11/21/23

Claim/	Check	Vendor #/Name/ Invoice #/Inv Date/Description	Document $/ Line $	Disc $	PO #	Fund	Org	Acct	Object	Proj	Cash Account
	0032863988	11/13/23 960 S MAIN ST	14.48*			10		41810	412		10110
		Total for Vendor:	**2,963.46**								
2823		399 IDAHO PRESS TRIBUNE	90.03								
	39924	11/19/23 Legal/Pub Notice PH 12/5/23	90.03*			10		41510	530		10110
		Total for Vendor:	**90.03**								
2825		615 MIDDLETON IRRIGATION ASSOCIATION	619.00								
	4 Shares	11/15/23 Assessment - Blake Park	162.00*			10		41810	417		10110
	3 Shares	11/15/23 Assessment - West Point Park	124.00*			10		41810	417		10110
	8.5 Shares	11/15/23 Assessment - Pristine Mead	333.00*			10		41810	417		10110
		Total for Vendor:	**619.00**								
2826		616 MIDDLETON MILL DITCH CO	1,137.84								
	29.68 shar	11/15/23 Assessment - Hunters Creek	1,137.84*			10		41810	417		10110
		Total for Vendor:	**1,137.84**								
2830		670 PATHWAY CONCRETE & LANDSCAPING	20,962.50								
	154	11/19/23 Concrete Star City Hall	20,962.50*			10		45110	741		10110
		Total for Vendor:	**20,962.50**								
2828		721 ROBERT P LITTLE	4,580.82								
	116188	11/21/23 B&G Contracted Services	4,895.84*			10		41540	351		10110
	Life Insur	11/21/23 Life Insurance	-261.02			10		41540	215		10110
	Vision Ins	11/21/23 Spousal Vision Insurance	-13.00*			10		41540	211		10110
	Dental Ins	11/21/23 Spousal Dental Insurance	-41.00*			10		41540	212		10110
		Total for Vendor:	**4,580.82**								
2833		727 RON WESTON	198.17								
	11/17/23	Reimburse Video Game	198.17*			10		44021	612		10110
		Total for Vendor:	**198.17**								
2836		752 SBI CONTRACTING INC	1,140.00								
	10911	11/21/23 Mechanisms Riverhouse	1,140.00*			10		41540	737		10110
		Total for Vendor:	**1,140.00**								

CITY OF STAR
Claim Approval List
For the Accounting Period: 11/23
For Pay Date: 11/21/23

Claim/	Check	Vendor #/Name/ Invoice #/Inv Date/Description	Document $/ Line $	Disc $	PO #	Fund	Org	Acct	Object	Proj	Cash Account
2832		818 STAR STORAGE LLC	330.00								
	12/01/23	Unit C04 December	175.00*			10		41810	699		10110
	12/01/23	Unit C08 December	155.00*			10		41810	699		10110
		Total for Vendor:	**330.00**								
2834		1414 SUE SPEER	323.49								
	11/19/23	Reimburse PAB Make Star Shine	323.49*			10		45130	586		10110
		Total for Vendor:	**323.49**								
2827		857 TATES RENTS	45.00								
	1798392-9	11/17/23 Trailer	45.00*			10		41540	442		10110
		Total for Vendor:	**45.00**								
2835		1355 THE STAR COURIER NEWSPAPER	231.00								
	1896	11/16/23 Rec Dept Advertising	75.60*			10		44022	530		10110
	1896	11/16/23 City Advertising	155.40*			10		41810	530		10110
		Total for Vendor:	**231.00**								
		# of Claims 15	**Total:**	**53,837.57**	**# of Vendors 15**						

CITY OF STAR
Claim Approval List
For the Accounting Period: 11/23
For Pay Date: 11/27/23

Claim/	Check	Vendor #/Name/ Invoice #/Inv Date/Description	Document $/ Line $	Disc $	PO #	Fund	Org	Acct	Object	Proj	Cash Account
2837		1152 GARRETT PARKS AND PLAY	70,050.50								
	22213-1-4	11/22/23 Deposit for Pickleball Cour	70,050.50*			10	704	45110	738		10110
		Total for Vendor:	**70,050.50**								
		# of Claims 1	**Total:**	**70,050.50**	**# of Vendors 1**						

CITY OF STAR
Claim Approval List
For the Accounting Period: 11/23
For Pay Date: 11/27/23

Claim	Check	Vendor #/Name/ Invoice #/Inv Date/Description	Document $/ Line $	Disc $	PO #	Fund	Org	Acct	Object	Proj	Cash Account
2838		253 DOCUTOPIA	11,515.00								
	1005-25	11/08/23 Annual Renewal Docuphase	11,515.00*			10	41810		610		10110
		# of Claims 1	**Total: 11,515.00**								

CITY OF STAR

LAND USE STAFF REPORT

TO: Mayor & Council

FROM: City of Star - Planning & Zoning Department
MEETING DATE: **December 5, 2023**
FILE(S) #: FP-23-17, Final Plat, Fountain Park Subdivision Phase 1

REQUEST

The Applicant is requesting approval of a Final Plat for Fountain Park Subdivision Phase 1 consisting of 88 residential lots and 9 common lots on 25.40 acres. The subject property is generally located on the west side of N. Palmer Lane, approximately ¼ mile north of W. State Street. Ada County Parcel No. S0410315100

REPRESENTATIVE:

Becky McKay
Engineering Solutions, LLP
1029 N. Rosario Street
Meridian, Idaho 83642

OWNER/APPLICANT:

Corey Barton
Challenger Development, Inc.
1977 E. Overland Road
Meridian, Idaho 83642

PROPERTY INFORMATION

Land Use Designation - Residential R-5-DA

	Phase 1
Acres -	25.40 acres
Residential Lots -	88
Common Lots -	9
Commercial Lots -	0

HISTORY

September 7, 2021 Council Tabled applications for Annexation and Zoning (AZ-20-19), Development Agreement (DA-20-24) and Preliminary Plat (PP-20-17) for Fountain Park Subdivision to October 12, 2021.

October 12, 2021 Council approved applications for Annexation and Zoning (AZ-20-19), Development Agreement (DA-20-24), and Preliminary Plat (PP-20-17) for Fountain Park Subdivision. The preliminary plat was approved for 173 single family residential units, 78 townhomes and 27 common lots on 60.21 acres.

GENERAL DISCUSSION

The Final Plat layout generally complies with the approved Preliminary Plat. The preliminary plat was approved with 173 single family residential lots, 78 townhomes and 27 common lots.

Staff Reviewed Comments from the Preliminary Plat Approval/Findings of Fact:

The Preliminary Plat submitted contains 173 single family residential lots, 78 townhomes and 27 common area lots on 60.21 acres. This equates to 4.15 dwelling units per acre. The lots will have access and frontage from public streets. The single-family residential lots will have a range of widths, including 40, 50, 60, and 70 feet with depths ranging from 100 to 120 feet. Lots will range in size from 4,200 square feet to 15,8002 square feet with the average buildable lot being 6,503 square feet. The Townhome lots will range in size from 2,800 square feet to 7,598 square feet with the average buildable lot being 3,769 square feet. The submitted preliminary plat is showing all local roads with a 50-foot wide right of way with paved streets measuring 36 feet from back of curb to back of curb. Sidewalks are proposed to be attached with a 5-foot, concrete sidewalk on the majority of the internal streets, with detached sidewalk along the collector street from Palmer. Street names must be obtained by the Ada County Street Naming Committee prior to signature of the final plat. The applicant is proposing 14.66 acres (24.22%) of open space, including 10.96 acres (18.11%) of usable open space, which satisfies the Unified Development Code.

The Unified Development Code, Section 8-4E-2 requires a development of this size to have a minimum of 6 site amenities. The applicant is proposing a pool facility, playground equipment, a picnic gazebo, a pond, pocket park with a pickleball court and multiple pathways and micro pathways that connect the development to the common areas and amenities. There is also a 1.03-acre open area with a pathway. These amenities satisfy the code requirement for development amenities.

Discussions with ACHD indicate that N. Palmer Lane is designated as a collector road. The applicant will be required to dedicate additional right of way and install curb, gutter and a detached sidewalk along their N. Palmer Lane Frontage.

ADDITIONAL DEVELOPMENT FEATURES:

• Gravel Extraction of Ponds

The development will include the excavation of one new pond. This will be handled through gravel extraction that may include removal of aggregate from the property and onto the public street network. Details including but not limited to noise, haul routes, operation hours, length of time, dust control and other issues shall be discussed with Council and conditioned appropriately with the approval of the application. A temporary use permit shall be required prior to any excavation.

• Ponds

The future water feature within the development shall be designed and maintained in a manner that protects the public safety. This will include aerators to prevent algae and mosquito issues, safety ring stations throughout the water feature locations, safety shelfs and erosion consideration.

• Sidewalks

Internal sidewalks are proposed at five-foot (5') widths and will be both attached and detached. Sidewalks will be detached along N. Palmer Lane and on both sides of W. Wilder Farms Drive. All other sidewalks will be attached within the subdivision.

• Lighting

Streetlights shall reflect the "Dark Sky" criteria with all lighting. The same streetlight design shall continue throughout the entire development. The applicant has A submitted a streetlight plan**. Staff would like to work with the applicant on a few of the streetlight locations.** All other proposed light locations satisfy City code.
Applicant has provided a streetlight design/cut sheet for City approval. The pole is acceptable; however, the fixture type does not meet code requirements of a flush fixture face with no bulb or LED below the fixture face. Applicant will be required to work with Staff and submit an updated cut sheet and design before signature of the final plat.

• Street Names

Applicant has not provided documentation from Ada County that the street names are acceptable and have been approved. This will be required at final plat. Current names on the preliminary plat do not conform to the private road naming standards.

• Subdivision Name

Applicant has not provided a letter from Ada County that the subdivision name has been approved and reserved for this development. This will be required at final plat before the mylar can be signed.

• Landscaping

As required by the Unified Development Code, Chapter 8, Section 8-8C-2- M (2) Street Trees; A minimum of one street tree shall be planted for every thirty-five (35) linear feet of street frontage. The applicant shall use "Treasure Valley Tree Selection Guide", as adopted by the Unified Development Code. Section 8-8C-2, J5 states that a minimum of one deciduous shade tree per four thousand (4,000) square feet of common area shall be provided. **The submitted landscape plan appears to satisfy these requirements for the open areas and detached sidewalks. All other streets in the development do not show street trees. These will need to be added once driveways are designed to receive occupancy permits.**

• Setbacks

The applicant is requesting a setback waiver to accommodate the townhomes, however the requested setbacks for the single-family homes are in compliance with the R-5 zone requirements of the Unified Development Code.

• Block lengths – All blocks meet the 750' block length requirement.

• Mailbox Cluster

Applicant has not provided documentation from a Postmaster depicting the approved location for the mailbox cluster for the development. This will be required prior to signing the final plat.

• Phasing – The development is proposed to be built out in six (6) phases.

Staff analysis of Final Plat Submittal:

Lot Layout

The gross density of Fountain Park Subdivision, Phase 1 is 3.46 du/acre, with lots ranging in size from 4,133 square feet to 13,094 square feet with the average buildable lot size of 6,601 square feet. Phase 1 contains lots of 40', 50', 60' and 70' widths with depths of 110' and 120'.

Common/Open Space and Amenities

- Connected Walking Path
- Open Grass Area

ADDITIONAL DEVELOPMENT FEATURES:

- Sidewalks

This subdivision was approved for internal, five feet (5') wide attached sidewalks on all streets other than Palmer Road and both sides of Wilder Farms Drive. The

Sidewalk along Palmer Lane shall be a minimum of seven feet (7') wide, as required by Council.

- Roadways

  All roads shall be 36 feet from back of curb to back of curb as required in the Unified Development Code Section 8-6B-2. All roads on the final plat meet this requirement.

- Lighting

  Streetlights shall reflect the "Dark Sky" criteria with all lighting. The same streetlight design shall continue throughout the entire development. The applicant has submitted a proposed streetlight plan**.** All proposed light locations satisfy City code. **The Applicant has provided a streetlight plan that satisfies code for location of the streetlights. The Applicant did not supply a streetlight design/cut sheet that meets code at the Preliminary Plat application and has not provided one with this Final Plat application. The Applicant will be required to provide to Staff and receive approval of streetlights to be used in the development prior to signing the final plat.**

- Street Names

  Applicant has provided documentation from Ada County that the majority of the street names are acceptable and have been approved. It was suggested to have 2 new unique names, this approval is needed from Ada County. The Street names shall be reflected accurately on the mylar prior to signing.

- Subdivision Name

  Applicant has provided a letter from Ada County that the subdivision name has been approved and reserved for this development. **The subdivision name approved shall match the final plat prior to signatures on the mylar.**

- Landscaping

  As required by the Unified Development Code, Chapter 8, Section 8-8C-2- M (2) Street Trees; A minimum of one street tree shall be planted for every thirty-five (35) linear feet of street frontage. The applicant shall use "Treasure Valley Tree Selection Guide", as adopted by the Unified Development Code. Section 8-8C-2, J5 states that a minimum of one deciduous shade tree per four thousand (4,000) square feet of common area shall be provided. **The submitted landscape plan appears to satisfy these requirements for the open areas and detached sidewalks. All other streets in the development do not show street trees. These will need to be added once driveways are designed to receive occupancy permits.**

- Setbacks

  The development shall follow the setbacks that were required in the R-5 zoning district for the Residential Uses at the time of preliminary plat approval. This includes 5-foot side yard setbacks. Zero-lot-lines are permitted for the townhome lots.

- Block lengths

  All blocks meet the 750' block length requirement.

- Mailbox Cluster

  Applicant has not provided documentation from a Postmaster depicting the approved location for the mailbox cluster for the development. This will be required prior to signing the final plat. Per Section 8-4A-20, all mailboxes and clusters shall be covered with an architecturally designed cover, to be approved by the Administrator prior to final plat signature. All covers shall be provided with lighting and shall be stained/painted and kept in good condition at all times. The administrator may issue a letter of violation to the HOA when any mailbox cluster or cover falls into disrepair. Maintenance shall be included in the CC&R's.

- Amenities

  This development is required to provide a minimum of 6 site amenities. The applicant is proposing a pool facility, playground equipment, a picnic gazebo, a pond, pocket park with a pickleball court and multiple pathways and micro pathways that connect the development to the common areas and amenities. There is also a 1.03-acre open area with a pathway. These amenities satisfy the code requirement for development amenities. **The applicant is providing internal pathways and pocket parks within this phase of development.**

- Phasing

  The development is proposed to be built out in six (6) phases.

PUBLIC NOTIFICATIONS

Notifications of this application were sent to agencies having jurisdiction on October 24, 2023.

October 30, 2023	ITD	Conditions of Approval

FINDINGS

The Council may **approve**, **conditionally approve**, **deny** or **table** this request. In order to approve this Final Plat, the Unified Development Code requires that Council must find the following:

A. The Plat is in conformance with the Comprehensive Plan.
The Council finds that this subdivision upon Preliminary Plat approval was in conformance with the Comprehensive Plan; no changes have been made to change this status.

B. Public services are available or can be made available and are adequate to accommodate the proposed development.
Staff finds that all public services are available and able to accommodate this development.

C. There is public financial capability of supporting services for the proposed development.
Staff knows of no financial hardship that would prevent services from being provided.

D. The development will not be detrimental to the public health, safety or general welfare; and,
Staff finds no facts to support that this subdivision phase will be detrimental to the public health, safety or general welfare.

E. The development preserves significant natural, scenic or historic features.
Staff finds that existing conditions have not substantially changed from the approved Preliminary Plat of this subdivision.

CONDITIONS OF APPROVAL

- **Per the Development Agreement and prior to signing the final plat, developer is to pay the traffic mitigation fee required by the Idaho Transportation Department. The developer will pay the City $1244.00 per buildable lot within each phase prior to signature on the final plat for the applicable phase, capped at $312,380.00. The City will allocate funds to roadway improvements in the vicinity of the project. This phase has 88 residential lots for a fee of $109,472.00 (88 x $1244.00).**
- **All roads shall be 36 feet from back of curb to back of curb as required in the Unified Development Code Section 8-6B-2.**
- **All internal attached sidewalks shall be a minimum of 5 feet wide as per Council approval. The sidewalk along Palmer Lane shall be a minimum of 7 feet wide and detached. W. Wilder Farms Drive shall be detached.**
- **The Applicant shall provide a public pathway easement along the Drainage District No. 2 main drain.**
- Streetlights shall comply with the Star City Code and shall be of the same design throughout the entire subdivision. Streetlights shall be continuous throughout the subdivision and shall be maintained by the Homeowners Association. **Streetlights shall be installed and energized prior to issuing of building permits.** Design shall follow Code with requirements for light trespass and "Dark Skies" lighting. **Applicant/Owner shall work with staff and submit a streetlight design that meets city standards prior to Final Plat approval. Streetlights shall comply with the Star City Code regarding light trespass**

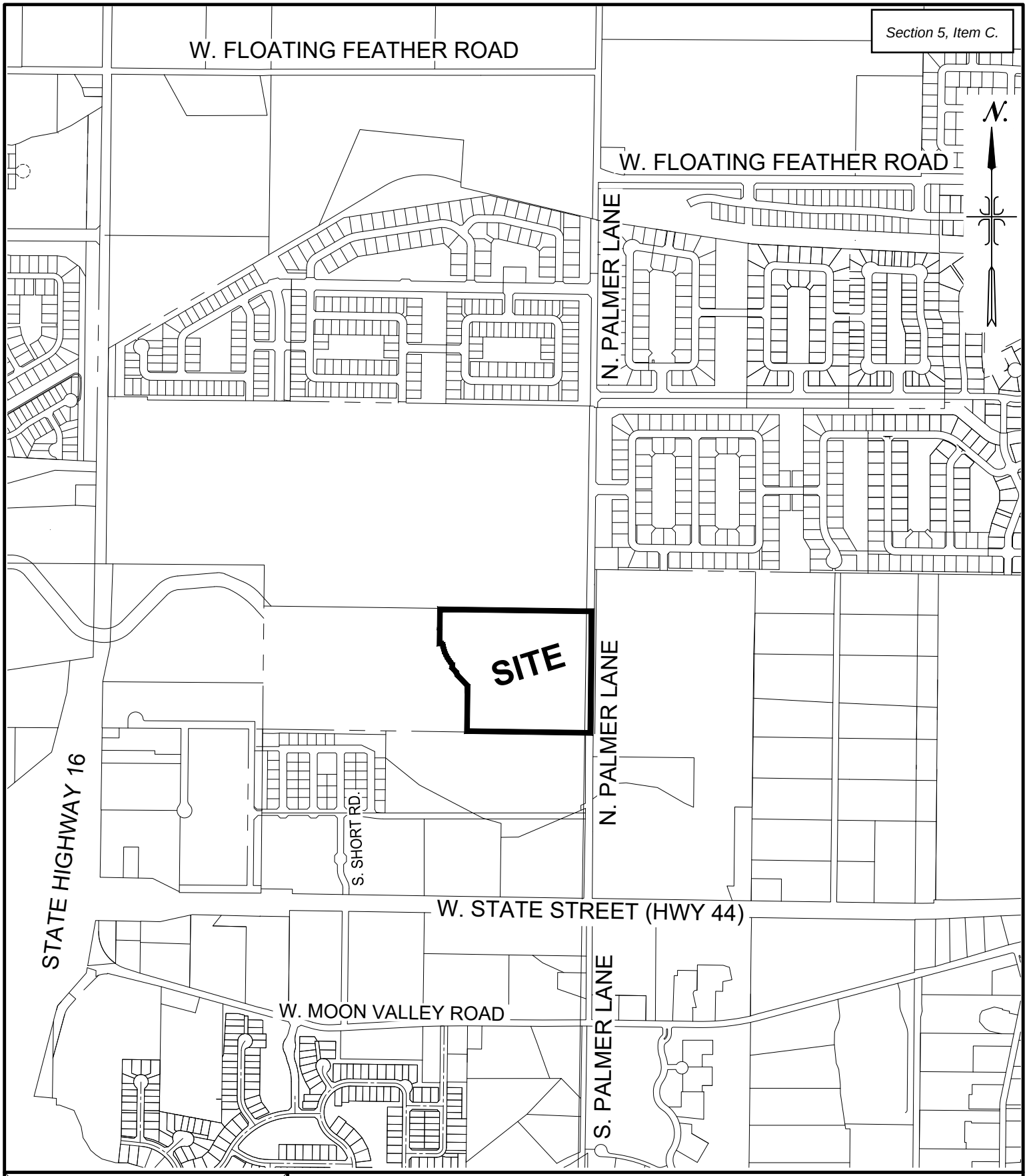
and "Dark Sky" initiative. Even once lights are approved by Staff and meet City guidelines, shields may need to be installed to prevent light trespass, as necessary.

- **The mailbox cluster shall be covered and internally lit with white LED lights. A plan of the cover will be required to be submitted to Staff for review prior to signing the mylar.**
- **A letter from the Postmaster will be required prior to signing the mylar, showing the approved location of the mail cluster(s) in the development.**
- **The Applicant shall provide documentation from Ada County that all street names have been reviewed and approved and the names shall be accurately reflected on the mylar prior to signing.**
- As required by the Unified Development Code, Chapter 8, Section 8-8C-2- M (2) Street Trees; A minimum of one street tree shall be planted for every thirty-five (35) linear feet of street frontage. The applicant shall use "Treasure Valley Tree Selection Guide", as adopted by the Unified Development Code. Section 8-8C-2, J5 states that a minimum of one deciduous shade tree per four thousand (4,000) square feet of common area shall be provided. **The Applicant agrees that builder planted street trees shall be installed or Certificate of Occupancy may be withheld until verified by Staff.**
- The approved Preliminary Plat for Fountain Park Subdivision shall comply with all statutory requirements of applicable agencies and districts having jurisdiction in the City of Star.
- The property associated with this approved Final Plat, in addition to the property of all future phases shall be satisfactorily weed abated at all times, preventing a public nuisance, per Star City Code Chapter 3, Section 3-1-1 through 3-1-7.
- The property associated with this approved Final Plat, in addition to the property of all future phases shall be properly maintained throughout the construction process to include trash picked up and trash receptacles emptied with regular frequency, streets swept and cleaned weekly, including any streets used to access the property and all debris shall be prevented from accumulating on any adjacent property or public right of way and shall remove all debris from public way at least daily.
- All signed Irrigation District Agreements with the Irrigation Districts shall be provided to the City of Star with each subsequent Final Plat application.
- Pressurized irrigation systems shall comply with the Irrigation District(s) and the City of Star Codes. Plans for pressurized irrigation systems shall be submitted to, and approved by the City of Star Engineer, prior to installation.
- The approved Preliminary Plat shall comply with the City of Star Unified Development Code regarding landscaping, both internal buffers and frontages. (See Section 8-4 B Landscaping Requirements)
- A plat note supporting the "Right to Farm Act" as per Idaho Code Title 22, Chapter 45, shall be shown on the Final Plat.
- A plat note shall state that development standards for residential development shall comply with the effective building and zoning requirements at time of building permit issuance.
- The subsequent Final Plats shall comply with and be in accordance with the current City of Star Code, with the exception of any waivers granted by Council.

- Requested surety shall be required at 150% of the total estimated installed cost, as approved by the City Engineer or Administrator. The term of approval shall not exceed 180 days. (See Section 8-1 C-1 of the Unified Development Code for a list of eligible items.)
- A letter from the US Postal Service shall be given to the City at Final Plat stating the subdivision is in compliance with the Postal Service.
- A form signed by the Star Sewer & Water District shall be submitted to the City prior to the signature of the Final Plat stating that all conditions of the District have been met.
- A separate sign application is required for any subdivision sign.
- As built plans for pressurized irrigation systems shall be submitted to the City of Star **prior to signature of the final plat**.
- Applicant shall provide the City with two (2) full size and two (1) 11"x17" copy of the signed recorded final plat with all signatures, prior to any building permits being issued.
- Development standards for single family residential units shall comply with effective building and zoning requirements at time of building permit issuance, or as approved through the Development Agreement or as stated herein.
- The mylar/final plat shall be signed by the owner, Surveyor, Central District Health, ACHD and City Engineer, prior to being delivered to the City of Star for City Clerk's signature.
- A copy of signed irrigation agreements shall be submitted to the City **prior to signature of the final plat.**
- All common areas shall be maintained by the Homeowners Association.
- The applicant shall provide a sign, to be located at all construction entrances, indicating the rules for all contractors that will be working on the property starting at grading and running through home sales that addresses items including but not limited to dust, music, dogs, starting/stopping hours for contractors (7a.m. start time). **Sign shall be approved by the City prior to start of construction.**
- A copy of the recorded CC&R's shall be submitted to the City of Star prior to any building permits being issued.
- **Prior to signature of the final plat**, a signed Irrigation District Agreement with the Irrigation Districts shall be provided to the City of Star. This requirement shall be with each subsequent Final Plat application.
- **Owner/Developer will agree to install a 2" (High Density Polyethylene) HDPE SDR-11 roll pipe in the shared utility trench to be used for future fiber optic and/or copper telecommunication cables.**
- Any additional Condition of Approval as required by Staff and City Council.

COUNCIL DECISION

The Star City Council _____ File # FP-23-17 Fountain Park Subdivision Final Plat, Phase 1 on _____ _____, 2023.



ENGINEERING SOLUTIONS LLP

1029 N. ROSARIO STREET, SUITE 100
MERIDIAN, IDAHO 83642
Phone (208) 938-0980 Fax (208) 938-0941

VICINITY MAP

SCALE = 1" = 1000'

FOUNTAIN PARK SUBDIVISION NO. 1

A PARCEL OF LAND BEING A PORTION OF THE NE 1/4 OF THE SW 1/4 OF SECTION 10,
TOWNSHIP 4 NORTH, RANGE 1 WEST, BOISE MERIDIAN,
CITY OF STAR, ADA COUNTY, IDAHO

FOUNTAIN PARK SUBDIVISION
Final Plat Application
NARRATIVE

Introduction:

Challenger Development Inc. is applying for the final plat of the first phase of Fountain Park Subdivision, 88 single-family lots and 9 common lots on 25.40 acres. The property is located west of N. Palmer Lane and north of State Highway 44. The preliminary plat was approved on December 7, 2021.

Existing Use on the Property:

The property is currently in agricultural production along with an existing cattle operation present on the site. There are an existing 714-square-foot single-family dwelling (constructed in 1944) and agricultural accessory buildings on the site. All structures will be removed.

Residential Lots and Density:

Fountain Park Subdivision No. 1 provides four different types of single-family residential lots. Lot widths include 40, 50 60, and 70 feet with depths ranging from 110 to 120 feet. Single-family lots range in size from 4,133 square feet to 13,094 square feet, with an average lot size of 6,601 square feet. The gross density of this phase is 3.46 dwelling units per acre (du/a), with a net density of 6.60 du/a.

Amenities:

Common lots within this phase total 5.08 acres, or 20 percent of the acreage. Amenities within this phase include linear open space with pathways and micro-paths within other common lots. The Mossman Lateral will be piped with an 18-inch PVD pipe through the linear open space. The Palmer Lateral will be piped with a 30-inch PVC pipe within the 62-foot-wide landscape buffer of Palmer Lane. Approximately 36 feet of the Palmer Lane buffer will be landscaped, along with a 10-foot-wide sidewalk. The landscaping and sidewalk will match the proposed Cascade Springs project which will meet the standards of the City of Eagle.

Phase 1 Final Plat Data:

- Total Site Area: 25.40 acres
- Single-Family Residential Area: 13.35 acres (52.56%)
- Common Area: 5.08 acres (20.00%)
- Public Right-of-way: 6.97 acres (27.44%)
- Minimum Single-Family Residential Lot Size: 4,133 square feet
- Average Residential Lot Size: 6,601 square feet
- Single-Family Lots: 88
- Common Lots: 9
- Total Lots: 97
- Gross Residential Density: 6.60 du/ac

The approved dimensional standards for the Fountain Park development are as follows:

- Minimum Residential Lot Frontage: 20 feet
- Front Setback (Measured from the back of walk or property line): 20 feet to garage or 15 feet to living area.
- Rear Setback: 15 feet
- Interior Side Setback: 5 feet
- Local Street Side Setback: 20 feet
- Maximum Building Height: 35 feet

The final plat complies with the approved preliminary plat and meets all requirements and/or standard conditions of approval thereof. The project conforms with acceptable engineering, architectural and surveying practices, and local standards.

The property can be served adequately by essential public facilities and services, as the developer will extend sanitary sewer and water mains to and through this phase of the subdivision. Road improvements will be made in accordance with Ada County Highway District standards, and impact fees will be paid to Ada County Highway District with each building lot.

Thank you for consideration of our applications. Please let us know if you need additional information.

Submitted by:

ENGINEERING SOLUTIONS, LLP

Becky McKay, Partner and Chief Planner

City of
P.O. Box 130
Star, Idaho 83669
P: 208-286-7247

FINAL PLAT APPLICATION

****All information must be filled out to be processed.*

FILE NO.: _____
Date Application Received: _____ Fee Paid: _____
Processed by: City: _____

Applicant Information:

PRIMARY CONTACT IS: Applicant ___ Owner ___ Representative X

Applicant Name: Challenger Development Inc.
Applicant Address: 1977 E. Overland Road, Meridian, ID Zip: 83642
Phone: (208) 288-5500 Email: jherman@cbhhomes.com

Owner Name: Corey Barton
Owner Address: 1977 E. Overland Road, Meridian, ID Zip: 83642
Phone: (208) 288-5500 Email: cbarton@cbhhomes.com

Representative (e.g., architect, engineer, developer):
Contact: Becky McKay Firm Name: Engineering Solutions, LLP
Address: 1029 N. Rosario Street, Meridian, ID Zip: 83642
Phone: (208) 938-0980 Email: beckym@engsol.org

Property Information:

Subdivision Name: Fountain Park Subdivision Phase: 1
Parcel Number(s): S0410315100
Approved Zoning: R-5 Units per acre: 3.46
Total acreage of phase: 25.40 Total number of lots: 97
Residential: 88 Commercial: _____ Industrial: _____
Common lots: 9 Total acreage of common lots: 5.08 Percentage: 20.00
Percent of common space to be used for drainage: (underground) Acres: _____
Special Flood Hazard Area: total acreage N/A number of homes N/A

Changes from approved preliminary plat pertaining to this phase:

	Preliminary Plat	Final Plat
Number of Residential Lots:	88	88
Number of Common Lots:	9	9
Number of Commercial Lots:	0	0
Roads:	Public - ACHD	Public - ACHD

Amenities: Landscaping and pathways Landscaping and pathways

Flood Zone Data: (This Info Must Be Filled Out Completely Prior to Acceptance):

Subdivision Name: Fountain Park Phase: 1

Special Flood Hazard Area: total acreage 0 number of homes 0

a. A note must be provided on the final plat documenting the current flood zone in which the property or properties are located. The boundary line must be drawn on the plat in situations where two or more flood zones intersect over the property or properties being surveyed.

b. FEMA FIRM panel(s): #160xxxxxxC, 160xxxxxxE, etc.: 16001 Uninc. Ada Co.
FIRM effective date(s): mm/dd/year 6/19/20
Flood Zone(s): Zone X, Zone A, Zone AE, Zone AH, etc.: Zone X
Base Flood Elevation(s): AE____.0 ft., etc.: _____

c. Flood Zones are subject to change by FEMA and all land within a floodplain is regulated by Chapter 10 of the Star City Code.

Application Requirements:

(Applications are required to contain <u>one</u> copy of the following unless otherwise noted.)

Applicant (√)	Description	Staff (√)
x	Completed and signed copy of Final Plat Application	
x	Fee: Please contact the City for current fee. Fees may be paid in person with check or electronically with credit card. Please call City for electronic payment. Additional service fee will apply to all electronic payments.	
x	Electronic copy of letter of intent and statement of compliance (or substantial compliance) with the approved Preliminary Plat and Conditions of Approval. The letter of intent shall include the following: • Gross density of the phase of the Final Plat submitted • Lot range and average lot size of phase • Description of approved open space being provided in the submitted phase including percentage of overall open space, number and type of approved amenities • List any specific approved building setbacks previously approved by Council.	
x	Electronic copy of legal description of the property (word.doc and pdf version with engineer's seal and closure sheet)	
x	Electronic copy of current recorded warranty deed for the subject property	
x	If the signature on this application is not the owner of the property, an **original** notarized statement (affidavit of legal interest) from the owner stating the applicant and/or representative is authorized to submit this application.	
x	Electronic copy of subdivision name approval from Ada County Surveyor's office.	
x	Copy of the "final" street name evaluation/approval or proof of submittal request from Ada County Street Naming	
x	Electronic copy of vicinity map showing the location of the subject property	
x	One (1) 24" X 36" paper copy of the Final Plat & Electronic Copy**	
x	One (1) 11" X 17" paper copy of the Final Plat	
x	Electronic copy of the Final landscape plan**	

x	One (1) 11" X 17" copy of the Final landscape plan	
x	Electronic copy of site grading & drainage plans**	
x	Electronic copy of originally approved Preliminary Plat**	
x	Electronic copy of a Plat with all phases marked with changes, if applicable**	
x	Electronic copy of final engineering construction drawings, stamped and signed by a registered engineer**	
N/A	Storm drainage calculations must be submitted for private streets/drives and parking areas within subdivisions**	
x	Electronic copy of streetlight **design** and **location** information	
N/A	Special Flood Information – Must be included on Preliminary/Final Plat and Application form.	
To be provided	Electronic copy of all easement agreements submitted to the irrigation companies	
x	Electronic copy of the proposed Covenants, Conditions, & Restrictions (CC&R's)	
x	One (1) copy of Electronic versions of submitted applications, including signed Final Plat Application, legal description, recorded warranty deed, vicinity map, final plat, landscape plan, site grading & drainage plans, copy of original Preliminary Plat, plat with phases marked, engineering construction drawings, storm drainage calculations, streetlight design and location, and signed irrigation agreements, CC&R's shall be submitted in original pdf format (no scans for preliminary plat, landscape plans or grading and drainage plans) on a thumb drive only (no discs) with the files named with project name and plan type.	
To be provided	**Upon Recording of Final Plat, the applicant shall submit the following to the Planning Department prior to building permit issuance**: • One (1) 11" X 17" and (1) 18" X 24" **recorded** copy of Final Plat • Electronic copy of final, approved construction drawings • Electronic copy of as-built irrigation plans • Electronic copy of recorded CC&R's • Proof of required Construction Sign installation at entrance to development (as conditioned in Preliminary Plat approval) – Picture of installed sign • Electronic copies shall be submitted in pdf format on a thumb drive with the files named with project name and plan type. **Original pdf's are required for all plans – No Scanned PDF's please.	
	**NOTE: No building permits will be issued until property is annexed into the Star Sewer & Water District and all sewer hookup fees are paid.	

FEE REQUIREMENT:

*** I have read and understand the above requirements. I further understand fees are due at the time of filing. I understand that there may be other fees associated with this application incurred by the City in obtaining reviews or referrals by architect, engineering, or other professionals necessary to enable the City to expedite this application. I understand that I, as the applicant, am responsible for all payments to the City of Star.*

Becky McKay

Applicant/Representative Signature

September 28, 2023

Date

PRELIMINARY PLAT
FOUNTAIN PARK SUBDIVISION
STAR, IDAHO

N 1/2 OF THE SW 1/4, SECTION 10,
T.4N., R.1W., B.M., ADA COUNTY, IDAHO

2021

LEGEND

- BOUNDARY LINE
- CITY LIMITS BOUNDARY
- PHASING BOUNDARY
- RIGHT-OF-WAY LINE
- CENTERLINE
- PROPERTY LOT LINE
- PROPOSED EASEMENT LINE
- PROPERTY SETBACK LINE
- PROPOSED VERTICAL CURB
- PROPOSED ROLLED CURB
- PROPOSED STORM DRAIN LINE & MANHOLE
- EXISTING STORM DRAIN LINE & MANHOLE
- PROPOSED SANITARY SEWER LINE
- EXISTING SEWER LINE AND MANHOLE
- PROPOSED FIRE HYDRANT
- PROPOSED GRAVITY IRRIGATION
- EXISTING GRAVITY IRRIGATION
- PROPOSED PRESSURE IRRIGATION LINE
- EXISTING PRESSURE IRRIGATION LINE
- PROPOSED WATER MAIN
- EXISTING WATER MAIN
- SECTION LINE
- EXISTING BOUNDARY LINE
- EXISTING PROPERTY LOT LINE
- EXISTING EASEMENT LINE
- EXISTING EDGE OF PAVEMENT
- EXISTING EDGE OF GRAVEL
- EXISTING VERTICAL CURB
- EXISTING ROLLED CURB
- EXISTING 5' CONTOUR
- EXISTING 1' CONTOUR
- EXISTING TOP OF BANK
- EXISTING BOTTOM OF BANK
- EXISTING FENCE LINE
- EXISTING OVERHEAD POWER LINE
- EXISTING FIBER OPTIC LINE
- EXISTING GAS LINE
- EXISTING TELEPHONE LINE

PRELIMINARY PLAT NOTES

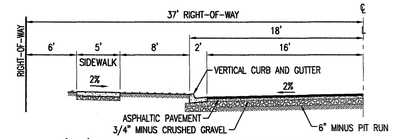
1. SANITARY SEWER AND DOMESTIC WATER SERVICE TO BE PROVIDED BY STAR SEWER AND WATER DISTRICT.
2. SUBJECT PROPERTY DOES NOT FALL WITHIN FEMA FLOOD HAZARD ZONES A AND X. SEE FIRM PANEL 16001C0130J, DATED JUNE 19, 2020.
3. ALL LOTS ARE HEREBY DESIGNATED AS HAVING A PERMANENT EASEMENT FOR PUBLIC UTILITIES, IRRIGATION, AND LOT DRAINAGE OVER THE TEN (10) FEET ADJACENT TO ANY PUBLIC STREET. THIS EASEMENT SHALL NOT PRECLUDE THE CONSTRUCTION OF HARD-SURFACED DRIVEWAYS AND WALKWAYS TO EACH LOT.
4. UNLESS OTHERWISE SHOWN AND DIMENSIONED, ALL LOTS ARE HEREBY DESIGNATED AS HAVING A PERMANENT EASEMENT FOR PUBLIC UTILITIES, IRRIGATION AND LOT DRAINAGE OVER THE FIVE (5) FEET ADJACENT TO ANY INTERIOR SIDE LOT LINE, AND OVER THE TWELVE (12) FEET ADJACENT TO ANY REAR LOT LINE OR SUBDIVISION BOUNDARY.
5. THIS SUBDIVISION WILL BE SUBJECT TO THE TERMS OF A DEVELOPMENT AGREEMENT WITH THE CITY OF STAR.
6. IRRIGATION WATER SHALL BE PROVIDED FROM THE MIDDLETON MILL IRRIGATION DISTRICT IN COMPLIANCE WITH IDAHO CODE 31-3805(B). LOTS WITHIN THE SUBDIVISION SHALL BE ENTITLED TO IRRIGATION WATER RIGHTS, AND THE INDIVIDUAL LOTS SHALL BE SUBJECT TO IRRIGATION WATER ASSESSMENTS.
7. BUILDING SETBACKS AND DIMENSIONAL STANDAROS IN THIS SUBDIVISION SHALL BE IN COMPLIANCE WITH THE APPLICABLE ZONING REGULATIONS OF THE CITY OF STAR.
8. DIRECT LOT ACCESS TO N. PALMER LANE IS PROHIBITED. (EXCEPT EMERGENCY VEHICLE ACCESS)
9. LOT 1, BLOCK 1; LOTS 1 AND 28, BLOCK 2; LOTS 1 AND 5, BLOCK 3; LOTS 1, 2 AND 19, BLOCK 4; LOTS 1, 8, 14, 21, 42, 65, 66, 67 AND 80, BLOCK 5; LOT 1, BLOCK 6; LOT 1, BLOCK 7; LOT 1, BLOCK 8; LOTS 1, 5, 11 AND 19, BLOCK 9; LOTS 16, 17, 24 AND 52, BLOCK 10; LOTS 1, 5, AND 12, BLOCK 11, SHALL BE OWNED AND MAINTAINED BY THE HOMEOWNERS ASSOCIATION.
10. A STAR SEWER & WATER DISTRICT EASEMENT WILL BE PROVIDED ON LOT 8C, BLOCK 5.
11. THE MOSSMAN LATERAL WILL BE RELOCATED AND PIPED. A BLANKET EASEMENT OR A DEFINED EASEMENT WILL BE PROVIDED ON LOT 1C, BLOCK 4; LOT 14C, BLOCK 5; LOT 1C, BLOCK 7; LOT 1C, BLOCK 8; LOTS 16C, 17C, 24C, BLOCK 10 AND LOT 5C, BLOCK 11.

PRELIMINARY PLAT DATA

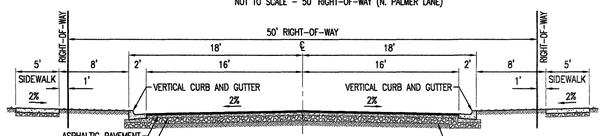
TOTAL ACRES		60.52 AC
SINGLE-FAMILY RESIDENTIAL	(42.68%)	25.83 AC
TOWNHOUSE RESIDENTIAL	(11.15%)	6.75 AC
PUBLIC RIGHT-OF-WAY	(20.24%)	12.25 AC
N. PALMER LANE RIGHT-OF-WAY	(1.70%)	1.03 AC
OPEN SPACE	(24.22%)	14.66 AC
TOTAL LOTS		278
SINGLE-FAMILY RESIDENTIAL LOTS		173
TOWNHOUSE RESIDENTIAL LOTS		78
OPEN SPACE LOTS		27
LOT DISTRIBUTION		251
TOWNHOUSE LOTS	(31.08%)	78
40' WIDE SINGLE-FAMILY LOTS	(13.95%)	35
50' WIDE SINGLE-FAMILY LOTS	(23.90%)	60
60' WIDE SINGLE-FAMILY LOTS	(19.12%)	48
70' WIDE SINGLE-FAMILY LOTS	(11.95%)	30
USEABLE OPEN SPACE	(18.11%)	10.96 AC
CENTRAL AMENITY AREA	(5.91%)	3.58 AC
LINEAR OPEN SPACE	(1.70%)	1.03 AC
COLLECTOR BUFFERS	(4.36%)	2.64 AC
POCKET PARK	(0.94%)	0.57 AC
MEW OPEN SPACE	(1.62%)	0.98 AC
POLLARD LATERAL PATHWAY	(2.15%)	1.30 AC
TOWNHOUSE OPEN SPACE	(1.42%)	0.86 AC
OTHER OPEN SPACE		3.70 AC
END BLOCK BUFFERS	(0.43%)	0.26 AC
DD NO. 2 DRAIN/PATHWAY	(5.52%)	3.34 AC
MISCELLANEOUS LOTS	(0.17%)	0.10 AC
ZONING		
EXISTING: RUT		PROPOSED: R-5
RESIDENTIAL DENSITY (Du/AC)		
GROSS RESIDENTIAL DENSITY		4.15
NET RESIDENTIAL DENSITY		7.70
LOT AREA DATA		
MINIMUM LOT SIZE (SINGLE-FAMILY)		4,200 SF
MINIMUM LOT SIZE (TOWNHOUSE)		2,800 SF
AVERAGE LOT SIZE		5,552 SF

SITE AMENITIES

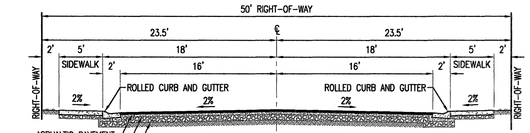
SWIMMING POOL FACILITY, PLAYGROUND EQUIPMENT, PICKLEBALL COURT, PICNIC GAZEBO, POND, AND MULTI-USE PATHS



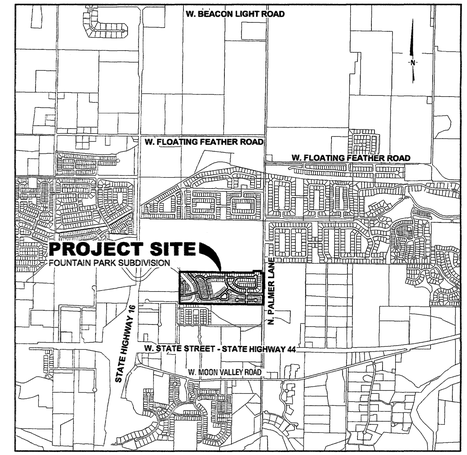
(HALF) COLLECTOR STREET SECTION – DETACHED SIDEWALK
NOT TO SCALE – 50' RIGHT-OF-WAY (N. PALMER LANE)



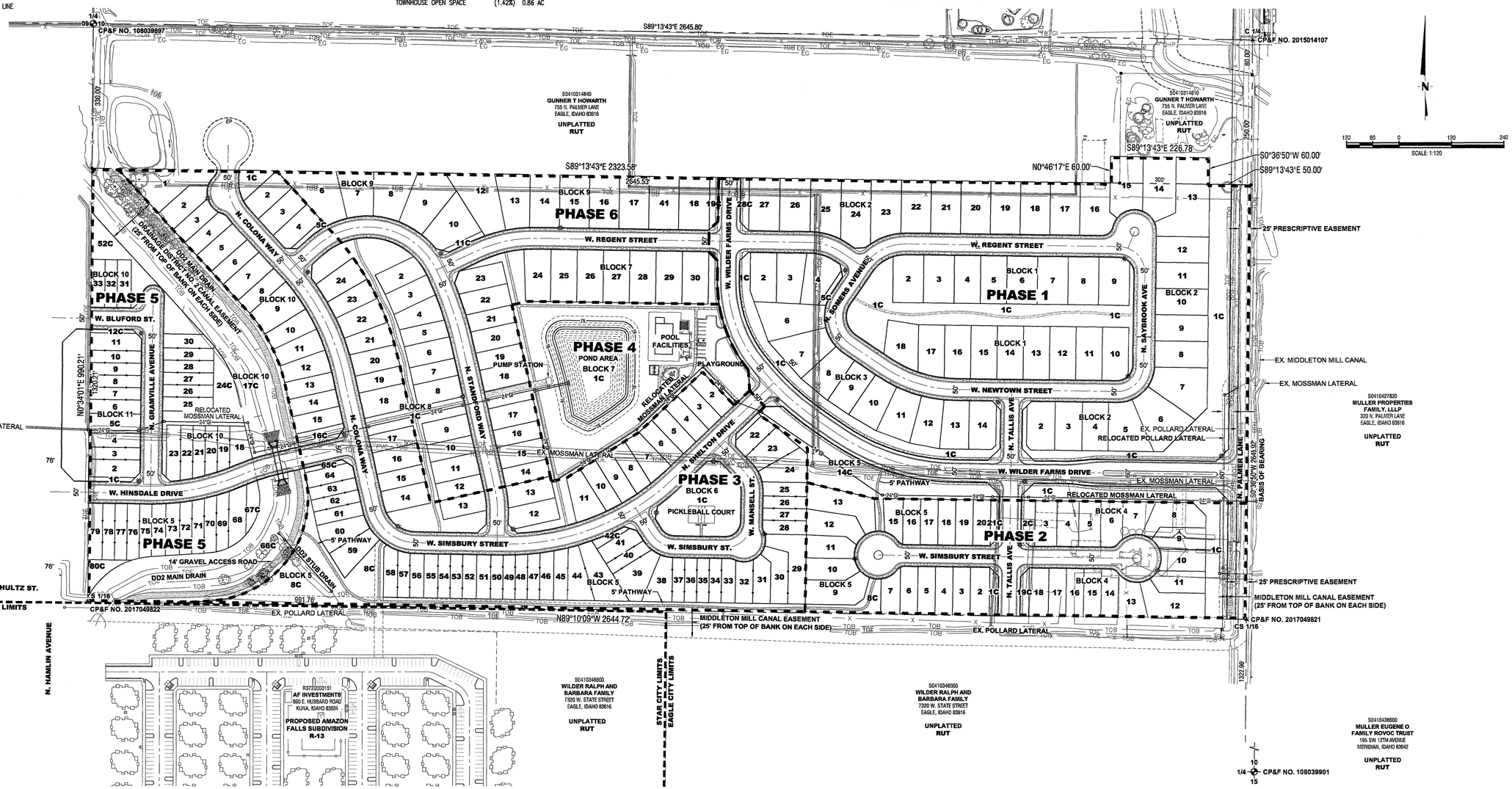
TYPICAL COLLECTOR STREET SECTION – DETACHED SIDEWALK
NOT TO SCALE – 50' RIGHT-OF-WAY
(W. WILDER FARMS ST. & A PORTION OF N. TALLIS AVE.)



TYPICAL LOCAL STREET SECTION – ATTACHED SIDEWALK
NOT TO SCALE – 50' RIGHT-OF-WAY



VICINITY MAP
NOT TO SCALE



OWNERS OF RECORD
COREY BARTON
1977 E. OVERLAND ROAD
MERIDIAN, IDAHO 83642
PHONE: (208) 288-3560

DEVELOPER
CHALLENGER DEVELOPMENT INC
1977 E. OVERLAND ROAD
MERIDIAN, IDAHO 83642
PHONE: (208) 288-3560

PLANNER
BECKY McKAY
ENGINEERING SOLUTIONS
1029 N. ROSARIO STREET, STE. 100
MERIDIAN, ID 83642
PHONE: (208) 938-0980
FAX: (208) 938-0981
EMAIL: becky@engsol.org

PROFESSIONAL ENGINEER LICENSED 20305 8/9/21 STATE OF IDAHO JOSHUA H. MANN

REVISIONS		
DATE	BY	
06-08-2021	rls	
08-09-2021	rls	

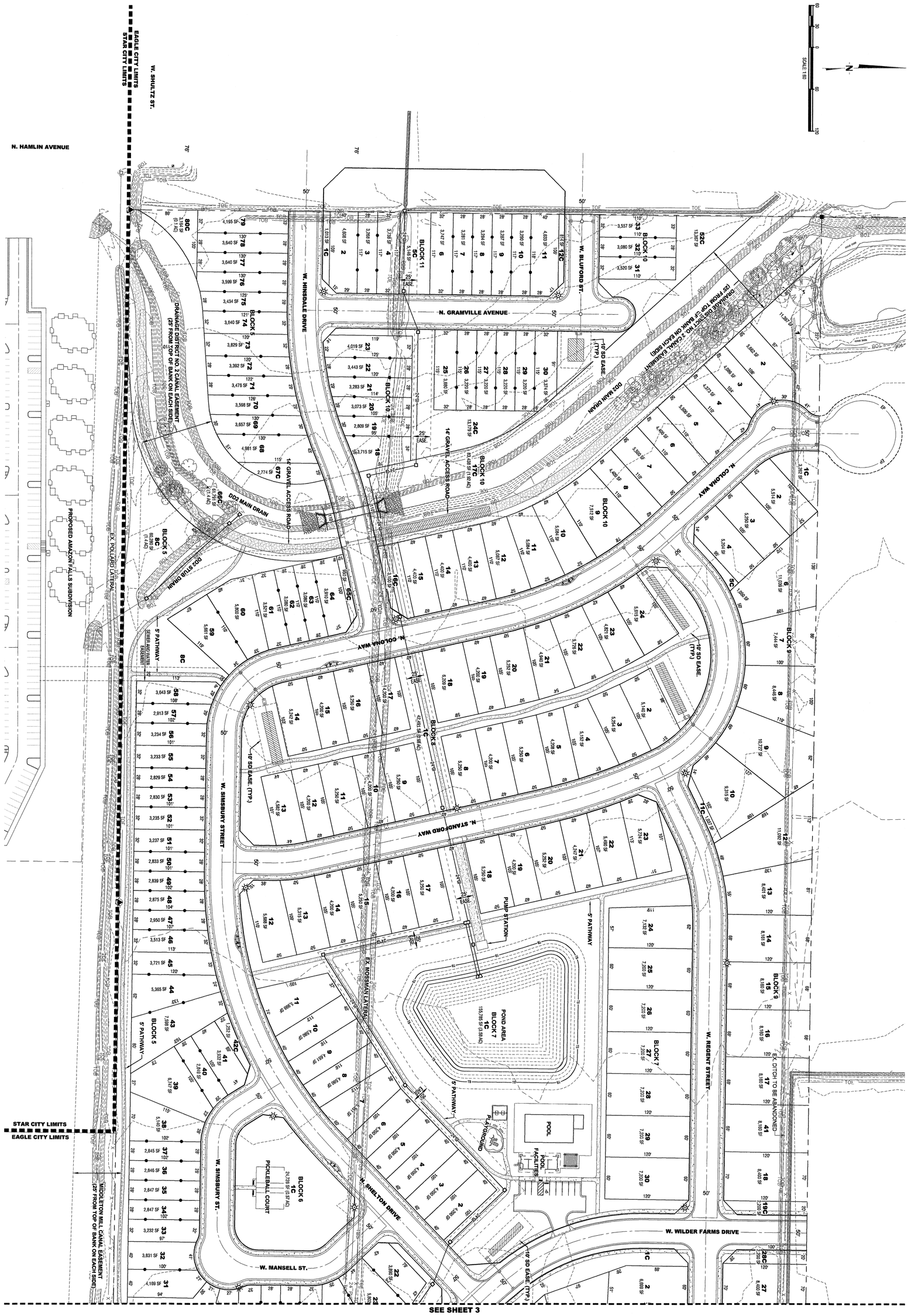
ENGINEERING SOLUTIONS, LLP
1029 N. ROSARIO STREET, SUITE 100
MERIDIAN, IDAHO 83642
PHONE: (208) 938-0980 FAX: (208) 938-0981

FOUNTAIN PARK SUBDIVISION
LOCATED IN THE N 1/2 OF THE SW 1/4 OF SECTION 10, T.4N., R.1W., B.M.

PRELIMINARY PLAT

DATE ISSUED	04-21-2021
PROJECT NO.	191204
DWG. FILE	191204-P-PREL.dwg
SCALE	AS SHOWN
DRAWN BY	KDH
CHECKED BY	BLM

PREL-1
SHEET 01 OF 03



DATE ISSUED	04-21-2021
PROJECT NO.	19120A
DWG. FILE	19120A-PREL.dwg
SCALE	AS SHOWN
DRAWN BY	RDH
CHECKED BY	BJM

PREL-2
SHEET 02 OF 03

FOUNTAIN PARK SUBDIVISION

LOCATED IN THE N 1/2 OF THE SW 1/4 OF SECTION 10, T.4N., R.1W., B.M.

PRELIMINARY PLAT

ENGINEERING SOLUTIONS, LLP
1029 N. ROSARIO STREET, SUITE 100
MERIDIAN, IDAHO 83642
PHONE: (208) 938-0980 FAX: (208) 938-0941

REVISIONS	
DATE	BY
08-06-2021	rls
08-09-2021	rls

PROFESSIONAL ENGINEER — LICENSED — 20305 — STATE OF IDAHO — JOSHUA H. MANN — 8/4/21

PLANNER	DEVELOPER	OWNERS OF RECORD
BECKY McKAY ENGINEERING SOLUTIONS 1029 N. ROSARIO STREET, STE. 100 MERIDIAN, ID 83642 PHONE: (208) 938-0980 FAX: (208) 938-0941 EMAIL: beckym@engsol.org	CHALLENGER DEVELOPMENT INC 1977 E. OVERLAND ROAD MERIDIAN, IDAHO 83642 PHONE: (208) 288-5560	COREY BARTON 1977 E. OVERLAND ROAD MERIDIAN, IDAHO 83642 PHONE: (208) 288-5560

OWNERS OF RECORD

COREY BARTON
1977 E. OVERLAND ROAD
MERIDIAN, IDAHO 83642
PHONE: (208) 288-5580

DEVELOPER

CHALLENGER DEVELOPMENT INC
1977 E. OVERLAND ROAD
MERIDIAN, IDAHO 83642
PHONE: (208) 288-5580

PLANNER

BECKY McKAY
ENGINEERING SOLUTIONS
1029 N. ROSARIO STREET, STE. 100
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PHONE: (208) 938-0980
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EMAIL: becky@engsolut.org

PROFESSIONAL ENGINEER
LICENSED
20305
8/4/21
STATE OF IDAHO
JOSHUA H. MANN

REVISIONS		
DATE		BY
08-06-2021		nls
08-09-2021		nls

ENGINEERING SOLUTIONS, LLP
1029 N. ROSARIO STREET, SUITE 100
MERIDIAN, IDAHO 83642
PHONE: (208) 938-0980 FAX: (208) 938-0941

FOUNTAIN PARK SUBDIVISION

LOCATED IN T 4E N 1/2 OF THE SW 1/4 OF SECTION 10, T.4N., R.1W., B.M.

PRELIMINARY PLAT

DATE ISSUED	04-21-2021
PROJECT NO.	191204
DWG. FILE	191204-P-PREL.dwg
SCALE	AS SHOWN
DRAWN BY	KDH
CHECKED BY	BLM

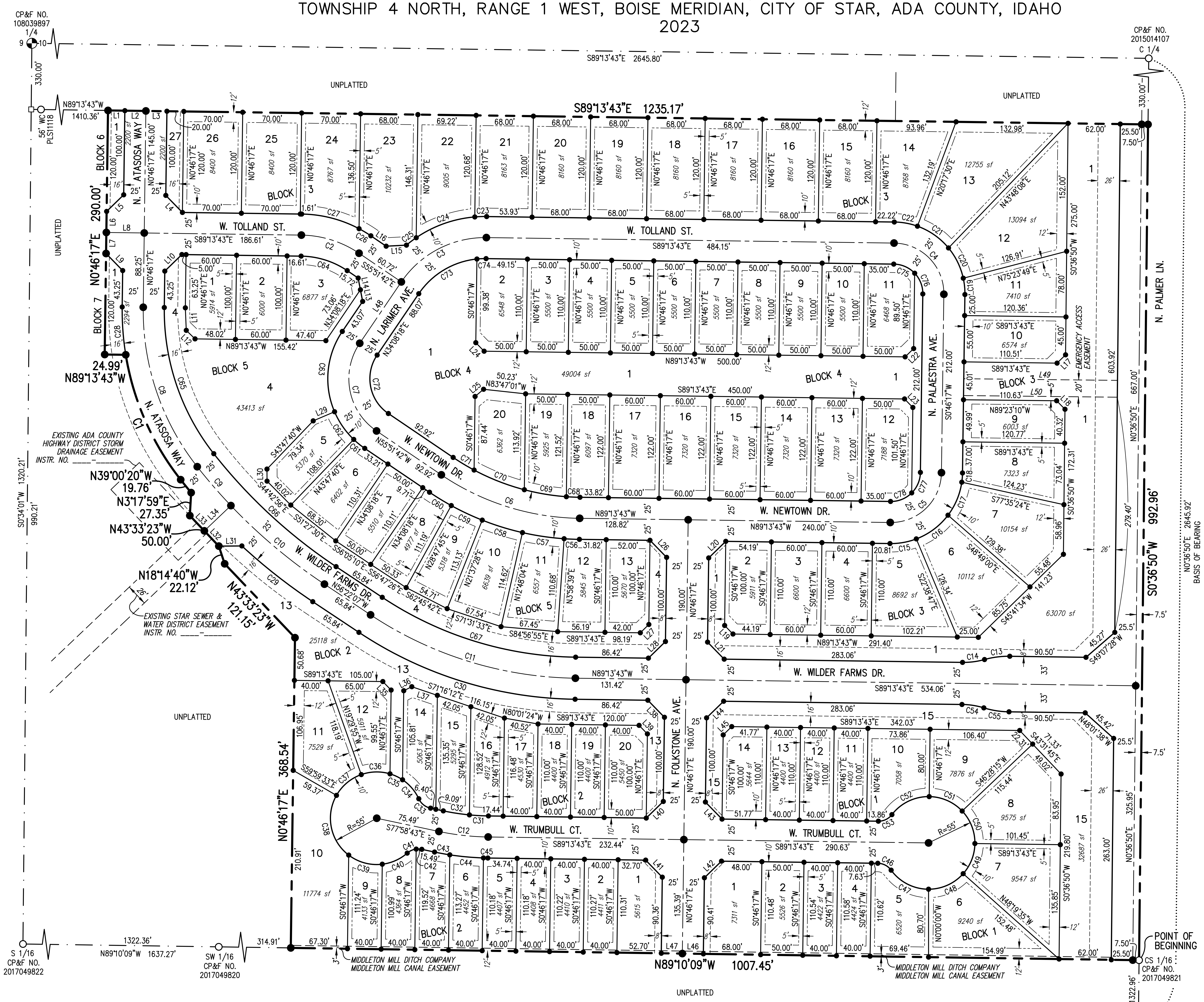
PREL-3

SHEET 03 OF 03

BOOK ____ , PAGE ________

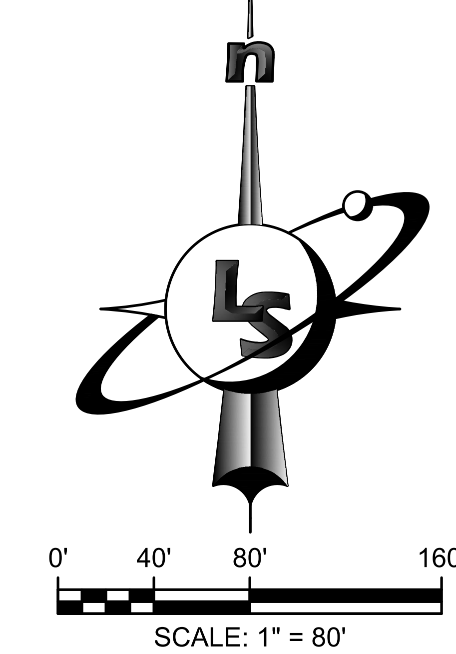
FOUNTAIN PARK SUBDIVISION NO. 1

A PARCEL OF LAND BEING A PORTION OF THE NE 1/4 OF THE SW 1/4 OF SECTION 10,
TOWNSHIP 4 NORTH, RANGE 1 WEST, BOISE MERIDIAN, CITY OF STAR, ADA COUNTY, IDAHO
2023



LEGEND

— — —	SUBDIVISION BOUNDARY
— · —	SECTION LINE
———	RIGHT-OF-WAY LINE
— - —	CENTERLINE
———	LOT LINE
— — —	EXISTING PARCEL LINE
········	SURVEY TIE LINE
-·-·-	PUBLIC UTILITY, PRESSURE IRRIGATION & LOT DRAINAGE EASEMENT LINE – SEE NOTES 1 & 2
- - - -	EXISTING ADA COUNTY HIGHWAY DISTRICT PERMANENT EASEMENT INSTRUMENT NO. _____-______
— — —	OTHER EASEMENT LINE AS NOTED
◉	FOUND BRASS CAP AS NOTED
●	SET 5/8"x24" REBAR w/PLASTIC CAP
•	SET 1/2"x24" REBAR w/PLASTIC CAP
○	FOUND 5/8" REBAR, AS NOTED
□	CALCULATED POINT, NOTHING SET
11	LOT NUMBER



PROFESSIONAL LAND SURVEYOR
REGISTERED
11118
06/17/23
STATE OF IDAHO
CLINTON W. HANSEN

SURVEYOR'S NARRATIVE

THE BOUNDARY FOR THIS SUBDIVISION WAS DEVELOPED FROM SURVEYED TIES TO CONTROLLING SECTION CORNER MONUMENTATION, THE PLATTED SUBDIVISION BOUNDARIES OF R.L. HON SUBDIVISION, INFORMATION FROM RECORD OF SURVEY NUMBER 703, 8102, 10926, 11789, 13136, 13365, 13758, AND CURRENT DEEDS OF RECORD. THE SURVEYED MONUMENTATION AND CONTROLLING BOUNDARIES FIT THE RECORDS WELL AND WERE ACCEPTED TO ESTABLISH THE BOUNDARY FOR THIS SUBDIVISION SHOWN HEREON.

SEE SHEET 2 OF 4 FOR NOTES AND LINE AND CURVE DATA

JOB NO. 19-17
SHEET 1 OF 4

ENGINEERING SOLUTIONS LLP
MERIDIAN, IDAHO

LandSolutions
Land Surveying and Consulting
231 E. 5th St. Ste. A, Meridian ID 83642
(208) 288-2040 – (208) 288-2557 fax

FOUNTAIN PARK SUBDIVISION NO. 1

BOOK ____ , PAGE _____

LINE TABLE		
LINE #	LENGTH	DIRECTION
L1	20.00'	N89°13'43"W
L2	25.00'	N89°13'43"W
L3	25.00'	N89°13'43"W
L4	28.28'	S44°13'43"E
L5	28.28'	S45°46'17"W
L6	25.00'	S0°46'17"W
L7	25.00'	S0°46'17"W
L8	45.00'	S89°13'43"E
L9	28.28'	N44°13'43"W
L10	28.28'	S45°46'17"W
L11	26.80'	S2°18'35"E
L12	14.52'	S45°46'09"E
L13	14.14'	N10°51'42"W
L14	14.14'	N10°51'42"W
L15	24.12'	N87°03'06"E
L16	21.97'	S55°51'42"E
L17	14.12'	N45°41'34"E
L18	14.14'	N44°23'10"W
L19	14.14'	S44°13'43"E
L20	28.28'	S45°46'17"W
L21	28.28'	S44°13'43"E
L22	14.14'	N45°46'17"E
L23	14.14'	N44°13'43"W
L24	14.14'	S44°13'43"E
L25	13.24'	S49°50'11"W

LINE TABLE		
LINE #	LENGTH	DIRECTION
L26	28.28'	N44°13'43"W
L27	14.14'	N45°46'17"E
L28	28.28'	N45°46'17"E
L29	27.58'	S66°52'06"W
L30	14.32'	S0°27'38"E
L31	27.35'	S89°35'14"W
L32	25.00'	S43°33'23"E
L33	25.00'	S43°33'23"E
L34	43.54'	N46°26'37"E
L35	14.14'	N44°13'43"W
L36	10.70'	S63°31'22"W
L37	32.05'	N71°16'12"W
L38	28.28'	N44°13'43"W
L39	14.14'	N44°13'43"W
L40	28.28'	N45°46'17"E
L41	28.28'	N44°13'43"W
L42	28.28'	S45°46'17"W
L43	28.28'	S44°13'43"E
L44	28.28'	S45°46'17"W
L45	14.14'	S45°46'17"W
L46	25.00'	S89°10'09"E
L47	25.00'	S89°10'09"E
L48	88.07'	N34°08'18"E
L49	182.56'	N89°23'10"W
L50	182.62'	N89°23'10"W

CURVE TABLE					
CURVE #	LENGTH	RADIUS	DELTA	BEARING	CHORD
C1	163.83'	325.00'	28°52'55"	N23°43'34"W	162.10'
C2	72.80'	125.00'	33°22'01"	N72°32'43"W	71.77'
C3	118.61'	120.00'	56°37'59"	S62°27'17"W	113.84'
C4	94.25'	60.00'	90°00'00"	N44°13'43"W	84.85'
C5	94.25'	60.00'	90°00'00"	N45°46'17"E	84.85'
C6	174.71'	300.00'	33°22'01"	S72°32'43"E	172.25'
C7	117.81'	75.00'	90°00'00"	S10°51'42"E	106.07'
C8	203.88'	300.00'	38°56'19"	S18°41'52"E	199.98'
C9	61.14'	650.00'	5°23'22"	S40°51'42"E	61.12'
C10	145.35'	650.00'	12°48'44"	S49°57'45"E	145.05'
C11	258.08'	450.00'	32°51'36"	S72°47'55"E	254.56'
C12	58.90'	300.00'	11°15'00"	S83°36'13"E	58.81'
C13	30.37'	107.00'	16°15'37"	S82°38'29"W	30.26'
C14	26.39'	93.00'	16°15'37"	N82°38'29"E	26.30'
C15	31.94'	85.00'	21°31'49"	N80°00'22"E	31.75'
C16	47.62'	85.00'	32°05'58"	N53°11'29"E	47.00'
C17	42.95'	85.00'	28°57'01"	N22°39'59"E	42.49'
C18	11.01'	85.00'	7°25'12"	N4°28'53"E	11.00'
C19	19.52'	85.00'	13°09'29"	N5°48'27"W	19.48'
C20	40.38'	85.00'	27°13'05"	N25°59'44"W	40.00'
C21	45.54'	85.00'	30°41'56"	N54°57'15"W	45.00'
C22	28.08'	85.00'	18°55'30"	N79°45'58"W	27.95'
C23	14.09'	145.00'	5°34'01"	S87°59'16"W	14.08'
C24	74.63'	145.00'	29°29'25"	S70°27'33"W	73.81'
C25	14.55'	145.00'	5°44'57"	S52°50'22"W	14.54'
C26	16.34'	150.00'	6°14'26"	N58°58'55"W	16.33'
C27	71.02'	150.00'	27°07'35"	N75°39'55"W	70.36'
C28	57.04'	325.00'	10°03'23"	S4°15'25"E	56.97'
C29	107.21'	675.00'	9°06'00"	S51°49'08"E	107.09'
C30	272.42'	475.00'	32°51'36"	S72°47'55"E	268.70'
C31	22.59'	275.00'	4°42'22"	S86°52'32"E	22.58'
C32	31.41'	275.00'	6°32'38"	S81°15'02"E	31.39'
C33	18.55'	20.00'	53°07'48"	S51°24'49"E	17.89'
C34	30.07'	55.00'	31°19'28"	N40°30'38"W	29.70'
C35	16.54'	55.00'	17°13'45"	N64°47'15"W	16.48'
C36	34.65'	55.00'	36°05'48"	S88°32'59"W	34.08'
C37	39.27'	55.00'	40°54'49"	S50°02'40"W	38.45'
C38	79.04'	55.00'	82°20'10"	S11°34'49"E	72.41'
C39	42.34'	55.00'	44°06'27"	S74°48'08"E	41.30'
C40	32.88'	55.00'	34°15'10"	N66°01'04"E	32.39'

CURVE TABLE					
CURVE #	LENGTH	RADIUS	DELTA	BEARING	CHORD
C41	11.84'	20.00'	33°55'29"	S65°51'13"W	11.67'
C42	6.70'	20.00'	19°12'20"	N87°34'53"W	6.67'
C43	18.40'	325.00'	3°14'40"	S79°36'03"E	18.40'
C44	40.15'	325.00'	7°04'40"	S84°45'43"E	40.12'
C45	5.26'	325.00'	0°55'40"	S88°45'53"E	5.26'
C46	18.55'	20.00'	53°07'48"	S62°39'49"E	17.89'
C47	51.74'	55.00'	53°54'05"	S63°02'57"E	49.85'
C48	46.39'	55.00'	48°19'35"	N65°50'12"E	45.03'
C49	39.26'	55.00'	40°54'07"	N21°13'21"E	38.43'
C50	42.53'	55.00'	44°18'02"	N21°22'44"W	41.47'
C51	43.87'	55.00'	45°41'58"	N66°22'44"W	42.71'
C52	51.00'	55.00'	53°07'48"	S64°12'23"W	49.19'
C53	18.55'	20.00'	53°07'48"	S64°12'23"W	17.89'
C54	26.39'	93.00'	16°15'37"	N81°05'55"W	26.30'
C55	30.37'	107.00'	16°15'37"	S81°05'55"E	30.26'
C56	18.19'	325.00'	3°12'22"	S87°37'32"E	18.18'
C57	50.05'	325.00'	8°49'24"	S81°36'38"E	50.00'
C58	50.05'	325.00'	8°49'24"	S72°47'14"E	50.00'
C59	40.68'	325.00'	7°10'16"	S64°47'23"E	40.65'
C60	30.30'	325.00'	5°20'33"	S58°31'59"E	30.29'
C61	16.85'	100.00'	9°39'22"	S51°02'01"E	16.83'
C62	40.27'	100.00'	23°04'26"	S34°40'07"E	40.00'
C63	99.95'	100.00'	57°16'12"	S5°30'12"W	95.85'
C64	58.24'	100.00'	33°22'01"	N72°32'43"W	57.42'
C65	186.89'	275.00'	38°56'19"	S18°41'52"E	183.32'
C66	198.55'	625.00'	18°12'06"	S47°16'05"E	197.71'
C67	243.74'	425.00'	32°51'36"	S72°47'55"E	240.42'
C68	16.19'	275.00'	3°22'21"	S87°32'33"E	16.18'
C69	50.65'	275.00'	10°33'08"	S80°34'48"E	50.58'
C70	64.25'	275.00'	13°23'13"	S68°36'38"E	64.11'
C71	29.06'	275.00'	6°03'20"	S58°53'22"E	29.05'
C72	78.54'	50.00'	90°00'00"	S10°51'42"E	70.71'
C73	83.03'	95.00'	50°04'38"	S59°10'37"W	80.41'
C74	10.87'	95.00'	6°33'21"	S87°29'37"W	10.86'
C75	27.85'	35.00'	45°35'05"	N66°26'10"W	27.12'
C76	27.13'	35.00'	44°24'55"	N21°26'10"W	26.46'
C77	27.13'	35.00'	44°24'55"	N22°58'45"E	26.46'
C78	27.85'	35.00'	45°35'05"	N67°58'45"E	27.12'

NOTES

1. UNLESS OTHERWISE SHOWN AND DIMENSIONED, EACH LOT IS HEREBY DESIGNATED AS HAVING A PERMANENT EASEMENT FOR PUBLIC UTILITIES, PRESSURE IRRIGATION AND LOT DRAINAGE OVER THE TEN (10) FEET ADJACENT TO ANY PUBLIC STREET. THIS EASEMENT SHALL NOT PRECLUDE THE CONSTRUCTION OF HARD SURFACED DRIVEWAYS AND WALKWAYS TO EACH BUILDABLE LOT.
2. UNLESS OTHERWISE SHOWN AND DIMENSIONED, EACH LOT IS HEREBY DESIGNATED AS HAVING A PERMANENT EASEMENT FOR PUBLIC UTILITES, PRESSURE IRRIGATION AND LOT DRAINAGE OVER THE FIVE (5) FEET ADJACENT TO ANY INTERIOR SIDE LOT LINE, AND OVER THE TWELVE (12) FEET ADJACENT TO ANY REAR LOT LINE OR SUBDIVISION BOUNDARY.
3. ANY RE-SUBDIVISION OF THIS PLAT SHALL COMPLY WITH THE APPLICABLE ZONING REGULATIONS IN EFFECT AT THE TIME OF THE RESUBDIVISION.
4. IRRIGATION WATER SHALL BE PROVIDED FROM THE MIDDLETON MILL DITCH COMPANY, MIDDELTON MILL IRRIGATION ASSOCIATION, NEW DRY CREEK DITCH COMPANY AND THE FOOTHILLS IRRIGATION DISTRICT IN COMPLIANCE WITH IDAHO CODE 31-3805(b). LOTS WITHIN THE SUBDIVISION WILL BE ENTITLED TO IRRIGATION WATER RIGHTS, AND INDIVIDUAL LOTS WILL REMAIN SUBJECT TO ASSESSMENTS FROM THE APPLICABLE IRRIGATION ENTITIES.
5. MINIMUM BUILDING SETBACKS SHALL BE IN ACCORDANCE WITH THE CITY OF STAR APPLICABLE ZONING AND SUBDIVISION REGULATIONS AT THE TIME OF ISSUANCE OF INDIVIDUAL BUILDING PERMITS OR AS SPECIFICALLY APPROVED AND/OR REQUIRED, OR AS SHOWN ON THIS PLAT.
6. MAINTENANCE OF ANY IRRIGATION OR DRAINAGE PIPE OR DITCH CROSSING A LOT IS THE RESPONSIBILITY OF THE LOT OWNER UNLESS SUCH RESPONSIBILITY IS ASSUMED BY AN IRRIGATION/DRAINAGE ENTITY.
7. LOTS 1 AND 15, BLOCK 1; LOTS 1, 10 AND 13, BLOCK 2; LOTS 1 AND 27, BLOCK 3; LOT 1, BLOCK 4; LOT 4, BLOCK 5; LOT 1, BLOCK 6 AND LOT 1, BLOCK 7 ARE COMMON/OPEN SPACE LOTS TO BE OWNED AND MAINTAINED BY THE FOUNTAIN PARK SUBDIVISION HOMEOWNER'S ASSOCIATION OR ITS ASSIGNS. SAID LOTS ARE SUBJECT TO A BLANKET EASEMENT FOR PUBLIC UTILITIES, PRESSURE IRRIGATION, AND LOT DRAINAGE, AS WELL AS ANY OTHER EASEMENTS AS SHOWN.
8. THIS DEVELOPMENT RECOGNIZES SECTION 22-4503, IDAHO CODE, RIGHT-TO-FARM, WHICH STATES THAT NO AGRICULTURAL OPERATION, AGRICULTURAL FACILITY OR EXPANSION THEREOF SHALL BE OR BECOME A NUISANCE, PRIVATE OR PUBLIC, BY ANY CHANGED CONDITIONS IN OR ABOUT THE SURROUNDING NON-AGRICULTURAL ACTIVITIES AFTER IT HAS BEEN IN OPERATION FOR MORE THAN ONE (1) YEAR, WHEN THE OPERATION, FACILITY OR EXPANSION WAS NOT A NUISANCE AT THE TIME IT BEGAN OR WAS CONSTRUCTED. THE PROVISIONS OF THIS SECTION SHALL NOT APPLY WHEN A NUISANCE RESULTS FROM THE IMPROPER OR NEGLIGENT OPERATION OF AN AGRICULTURAL OPERATION, AGRICULTURAL FACILITY OR EXPANSION THEREOF.
9. REFER TO RECORD OF SURVEY NO. 11789, RECORDS OF ADA COUNTY, IDAHO, FOR ADDITIONAL SURVEY INFORMATION.
10. THIS SUBDIVISION IS SUBJECT TO THE TERMS OF AN ADA COUNTY HIGHWAY DISTRICT TEMPORARY LICENSE AGREEMENT RECORDED AS INSTRUMENT NO. _____-_____, RECORDS OF ADA COUNTY, IDAHO.
11. THIS SUBDIVISION SHALL BE SUBJECT TO THE TERMS OF THE COVENANTS, CONDITIONS AND RESTRICTIONS FOR FOUNTAIN PARK SUBDIVISION, TO BE RECORDED IN ADA COUNTY, IDAHO AND AS SUBSEQUENTLY AMENDED.
12. LOT 1, BLOCK 1; LOTS 1 AND 10, BLOCK 2; LOT 1, BLOCK 4 AND LOT 4, BLOCK 5 ARE SERVIENT TO AND CONTAIN THE ADA COUNTY HIGHWAY DISTRICT STORM WATER DRAINAGE SYSTEM. THESE LOTS ARE ENCUMBERED BY THAT CERTAIN FIRST AMENDED MASTER PERPETUAL STORM WATER DRAINAGE EASEMENT RECORDED ON NOVEMBER 10, 2015 AS INSTRUMENT NO. 2015-103256, OFFICIAL RECORDS OF ADA COUNTY, AND INCORPORATED HEREIN BY THIS REFERENCE AS IF SET FORTH IN FULL (THE "MASTER EASEMENT"). THE MASTER EASEMENT AND THE STORM WATER DRAINAGE SYSTEM ARE DEDICATED TO ADA COUNTY HIGHWAY DISTRICT PURSUANT TO SECTION 40-2302, IDAHO CODE. THE MASTER EASEMENT IS FOR THE OPERATION AND MAINTENANCE OF THE STORM WATER DRAINAGE SYSTEM.
13. EXCEPT FOR LOT 4, BLOCK 5, DIRECT LOT OR PARCEL ACCESS TO N. PALMER LANE, N. FOLKSTONE AVENUE, W. WILDER FARMS DRIVE AND N. GRANBY WAY IS PROHIBITED.
14. DEVELOPMENT STANDARDS FOR RESIDENTIAL DEVELOPMENT SHALL COMPLY WITH THE EFFECTIVE BUILDING AND ZONING REQUIREMENTS AT TIME OF BUILDING PERMIT ISSUANCE.

PROFESSIONAL LAND SURVEYOR
REGISTERED
11118
08/17/23
STATE OF IDAHO
CLINTON W. HANSEN

JOB NO. 19-17
SHEET 2 OF 4

ENGINEERING SOLUTIONS, LLP
MERIDIAN, IDAHO

LandSolutions
Land Surveying and Consulting
231 E. 5th St. Ste. A, Meridian ID 83642
(208) 288-2040 - (208) 288-2557 fax

FOUNTAIN PARK SUBDIVISION NO. 1

BOOK ____ , PAGE _____

CERTIFICATE OF OWNERS

KNOW ALL MEN BY THESE PRESENTS:

THAT WE, THE UNDERSIGNED, ARE THE OWNERS OF THE REAL PROPERTY DESCRIBED BELOW IN ADA COUNTY, IDAHO, AND THAT WE INTEND TO INCLUDE THE FOLLOWING DESCRIBED PROPERTY IN THIS PLAT OF FOUNTAIN PARK SUBDIVISION NO. 1;

A PARCEL BEING LOCATED IN THE NE ¼ OF THE SW ¼ OF SECTION 10, TOWNSHIP 4 NORTH, RANGE 1 WEST, BOISE MERIDIAN, CITY OF STAR, ADA COUNTY, IDAHO AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT A BRASS CAP MONUMENT MARKING THE SOUTHEAST CORNER OF THE SW ¼ OF SAID SECTION 10, FROM WHICH A 5/8 INCH DIAMETER REBAR MARKING THE NORTHEAST CORNER OF SAID SW ¼ BEARS N 0°36'50"E A DISTANCE OF 2645.92 FEET;

THENCE N 0°36'50"E ALONG THE EASTERLY BOUNDARY OF SAID SW ¼ A DISTANCE OF 1322.96 FEET TO A 5/8 INCH DIAMETER REBAR MARKING THE SOUTHEAST CORNER OF SAID NE ¼ OF THE SW ¼ AND THE POINT OF BEGINNING;

THENCE N 89°10'09"W ALONG THE SOUTHERLY BOUNDARY OF SAID NE ¼ OF THE SW ¼ A DISTANCE OF 1007.45 FEET TO A POINT;

THENCE LEAVING SAID BOUNDARY N 0°46'17"E A DISTANCE OF 368.54 FEET TO A POINT;

THENCE N 43°33'23"W A DISTANCE OF 121.15 FEET TO A POINT;

THENCE N 18°14'40"W A DISTANCE OF 22.12 FEET TO A POINT;

THENCE N 43°33'23"W A DISTANCE OF 50.00 FEET TO A POINT;

THENCE N 3°17'59"E A DISTANCE OF 27.35 FEET TO A POINT;

THENCE N 39°00'20"W A DISTANCE OF 19.76 FEET TO A POINT OF CURVATURE;

THENCE A DISTANCE OF 163.83 FEET ALONG THE ARC OF A 325.00 FOOT RADIUS CURVE RIGHT, SAID CURVE HAVING A CENTRAL ANGLE OF 28°52'55" AND A LONG CHORD BEARING N 23°43'34"W A DISTANCE OF 162.10 FEET TO A POINT;

THENCE N 89°13'43"W A DISTANCE OF 24.99 FEET TO A POINT;

THENCE N 0°46'17"E A DISTANCE OF 290.00 FEET TO A POINT;

THENCE S 89°13'43"E A DISTANCE OF 1235.17 FEET TO A POINT ON THE EASTERLY BOUNDARY OF SAID NE ¼ OF THE SW ¼;

THENCE S 0°36'50"W ALONG SAID EASTERLY BOUNDARY A DISTANCE OF 992.96 FEET TO THE POINT OF BEGINNING.

THIS PARCEL CONTAINS 25.40 ACRES MORE OR LESS.

IT IS THE INTENTION OF THE UNDERSIGNED TO HEREBY INCLUDE THE ABOVE–DESCRIBED PROPERTY IN THIS PLAT AND TO DEDICATE TO THE PUBLIC THE PUBLIC STREETS AS SHOWN ON THIS PLAT. THE EASEMENTS AS SHOWN ON THIS PLAT ARE NOT DEDICATED TO THE PUBLIC; HOWEVER, THE RIGHT TO USE SAID EASEMENTS IS HEREBY RESERVED FOR PUBLIC UTILITIES AND SUCH OTHER USES AS DESIGNATED WITHIN THIS PLAT, AND NO PERMANENT STRUCTURES ARE TO BE ERECTED WITHIN THE LINES OF SAID EASEMENTS. ALL LOTS WITHIN THIS PLAT WILL BE ELIGIBLE TO RECEIVE SEWER AND WATER SERVICE FROM THE STAR SEWER AND WATER DISTRICT. SAID DISTRICT HAS AGREED, IN WRITING, TO SERVE ALL THE LOTS WITHIN THIS SUBDIVISION.

IN WITNESS WHEREOF, WE HAVE HEREUNTO SET OUR HANDS THIS _____ DAY OF _____, 20___.

CHALLENGER DEVELOPMENT INC., AN IDAHO CORPORATION

_____

BY COREY D. BARTON, PRESIDENT

ACKNOWLEDGEMENT

STATE OF IDAHO)
) SS
COUNTY OF ADA)

ON THIS _____ DAY OF _____, 20_____, BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR SAID STATE, PERSONALLY APPEARED COREY D. BARTON, KNOWN OR IDENTIFIED TO ME TO BE THE PRESIDENT OF CHALLENGER DEVELOPMENT INC., AN IDAHO CORPORATION, WHO SUBSCRIBED SAID CORPORATION'S NAME TO THE FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME IN SAID CORPORATION'S NAME.

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND AND SEAL THE DAY AND YEAR IN THIS CERTIFICATE FIRST ABOVE WRITTEN.

_____
NOTARY PUBLIC FOR IDAHO

RESIDING AT _____

MY COMMISSION EXPIRES: _____

CERTIFICATE OF SURVEYOR

I, CLINTON W. HANSEN, DO HEREBY CERTIFY THAT I AM A LICENSED PROFESSIONAL LAND SURVEYOR IN THE STATE OF IDAHO, AND THAT THIS PLAT AS DESCRIBED IN THE "CERTIFICATE OF OWNERS" WAS DRAWN FROM THE FIELD NOTES OF A SURVEY MADE ON THE GROUND UNDER MY DIRECT SUPERVISION AND ACCURATELY REPRESENTS THE POINTS PLATTED THEREON, AND IS IN CONFORMITY WITH THE STATE OF IDAHO CODE RELATING TO PLATS AND SURVEYS.

PROFESSIONAL LAND SURVEYOR
REGISTERED
11118
08/17/23
STATE OF IDAHO
CLINTON W. HANSEN

CLINTON W. HANSEN
PLS 11118

JOB NO. 19–17
SHEET 3 OF 4

ENGINEERING SOLUTIONS LLP
MERIDIAN, IDAHO

LandSolutions
Land Surveying and Consulting
231 E. 5th St. Ste. A, Meridian ID 83642
(208) 288–2040 – (208) 288–2557 fax

FOUNTAIN PARK SUBDIVISION NO. 1

BOOK ____ , PAGE _____

ACCEPTANCE OF ADA COUNTY HIGHWAY DISTRICT COMMISSIONERS

THE FOREGOING PLAT WAS ACCEPTED AND APPROVED BY THE BOARD OF ADA COUNTY HIGHWAY DISTRICT COMMISSIONERS ON THE _____ DAY OF _____ 20____.

_____
PRESIDENT
ADA COUNTY HIGHWAY DISTRICT

APPROVAL OF CENTRAL DISTRICT HEALTH

SANITARY RESTRICTIONS AS REQUIRED BY IDAHO CODE, TITLE 50, CHAPTER 13 HAVE BEEN SATISFIED ACCORDING TO THE LETTER TO BE READ ON FILE WITH THE COUNTY RECORDER OR HIS AGENT LISTING THE CONDITIONS OF APPROVAL. SANITARY RESTRICTIONS MAY BE RE-IMPOSED, IN ACCORDANCE WITH SECTION 50-1326, IDAHO CODE, BY THE ISSUANCE OF A CERTIFICATE OF DISAPPROVAL.

_____
CENTRAL DISTRICT HEALTH

CERTIFICATE OF COUNTY TREASURER

I, _____, COUNTY TREASURER IN AND FOR THE COUNTY OF ADA, STATE OF IDAHO, PER THE REQUIREMENTS OF IDAHO CODE 50-1308, DO HEREBY CERTIFY THAT ANY AND ALL CURRENT AND/OR DELINQUENT COUNTY PROPERTY TAXES FOR THE PROPERTY INCLUDED IN THIS SUBDIVISION HAVE BEEN PAID IN FULL. THIS CERTIFICATION IS VALID FOR THE NEXT THIRTY (30) DAYS ONLY.

_____ _____
COUNTY TREASURER DATE

APPROVAL OF CITY ENGINEER

I, THE UNDERSIGNED, CITY ENGINEER IN AND FOR THE CITY OF STAR, ADA COUNTY, IDAHO, ON THIS DAY, _____, HEREBY APPROVE THIS PLAT.

_____
STAR CITY ENGINEER

CERTIFICATE OF COUNTY SURVEYOR

I, THE UNDERSIGNED, PROFESSIONAL LAND SURVEYOR FOR ADA COUNTY, IDAHO, HEREBY CERTIFY THAT I HAVE CHECKED THIS PLAT AND FIND THAT IT COMPLIES WITH THE STATE OF IDAHO CODE RELATING TO PLATS AND SURVEYS.

_____
COUNTY SURVEYOR

CERTIFICATE OF COUNTY RECORDER

INSTRUMENT NO. _____

STATE OF IDAHO)
COUNTY OF ADA) SS

I HEREBY CERTIFY THAT THIS INSTRUMENT WAS FILED AT THE REQUEST OF

_____ AT _____ MINUTES PAST _____ O'CLOCK __M.,

THIS _____ DAY OF _____, 20____, IN MY OFFICE AND WAS DULY

RECORDED IN BOOK _____ OF PLATS AT PAGES _____.

_____ _____
DEPUTY EX-OFFICIO RECORDER

FEE: _____

APPROVAL OF CITY COUNCIL

I, _____, CITY CLERK IN AND FOR THE CITY OF STAR, ADA COUNTY, IDAHO, DO HEREBY CERTIFY THAT AT A REGULAR MEETING OF THE CITY COUNCIL HELD ON THE _____ DAY OF _____, 20____, THIS PLAT WAS DULY ACCEPTED AND APPROVED.

_____
STAR CITY CLERK

PROFESSIONAL LAND SURVEYOR
REGISTERED
11118
8/17/23
STATE OF IDAHO
CLINTON W. HANSEN

JOB NO. 19-17
SHEET 4 OF 4

ENGINEERING SOLUTIONS, LLP
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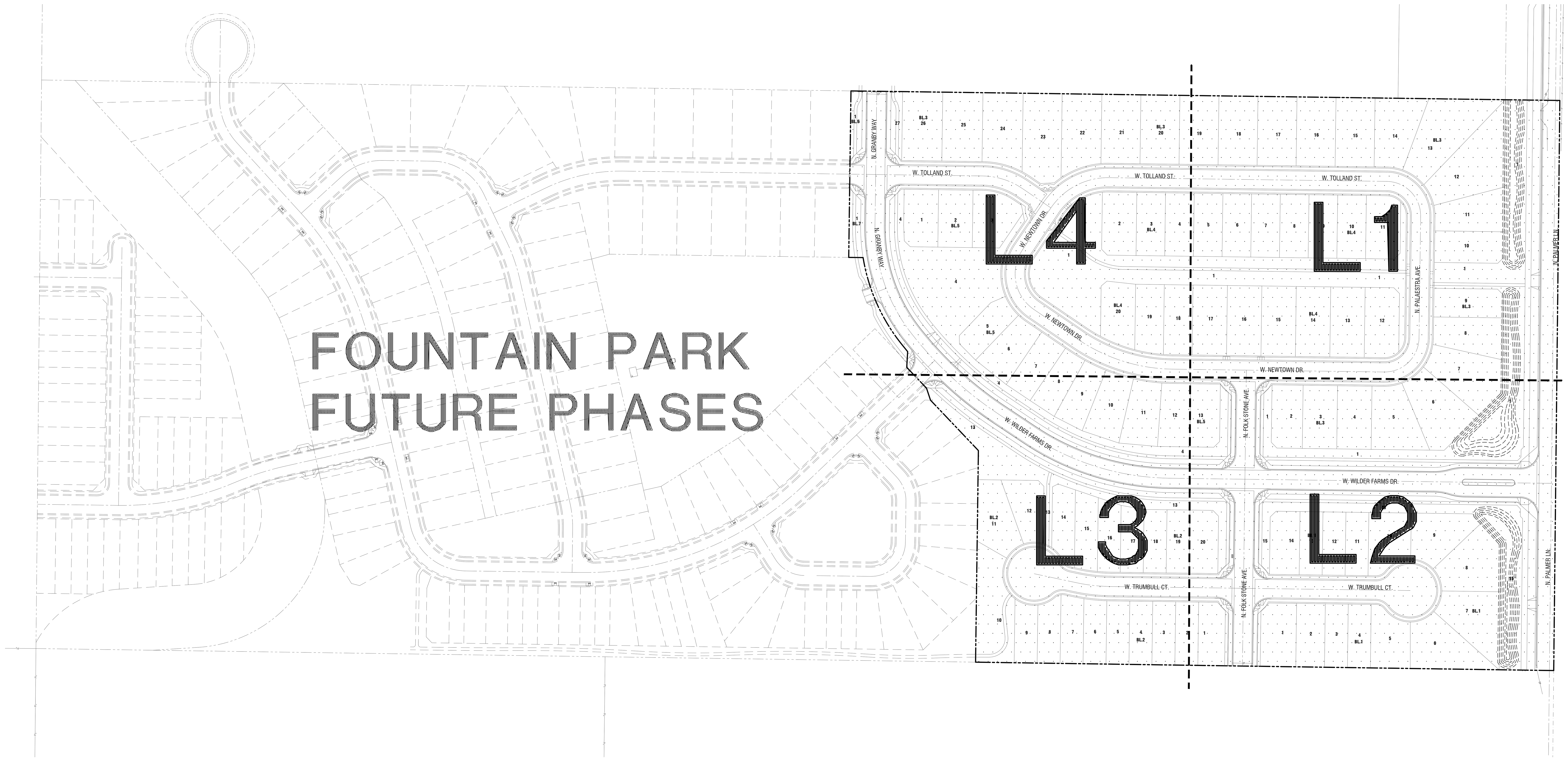


NOTES

1. REFER TO EACH INDIVIDUAL SHEET (L1-L4) FOR COMPLETE LANDSCAPE PLANTING PLANS.
2. REFERENCE SHEETS L5 FOR PLANT SCHEDULE, FENCING DETAILS, LANDSCAPE NOTES & DETAILS, AND LANDSCAPE CALCULATIONS.
3. REFERENCE SHEET L6 FOR LANDSCAPE AND IRRIGATION (PERFORMANCE) SPECIFICATIONS.

JENSENBELTS ASSOCIATES
Site Planning / Landscape Architecture
1509 Tyrell Lane, Ste 130 Boise, ID 83706
Ph. (208) 343-7175 www.jensenbelts.com

NORTH

0' 100' 200' 300'
SCALE 1" = 100'

OWNERS OF RECORD
OPEN DOOR RENTALS, LLC
1977 E. OVERLAND ROAD
MERIDIAN, IDAHO 83642
PHONE: (208) 288-5560

DEVELOPER
CHALLENGER DEVELOPMENT, INC
1977 E. OVERLAND ROAD
MERIDIAN, IDAHO 83642
PHONE: (208) 288-5560

PLANNER
BECKY McKAY
ENGINEERING SOLUTIONS
1029 N. ROSARIO STREET, STE. 100
MERIDIAN, ID 83642
PHONE: (208) 938-0980
FAX: (208) 938-0941
EMAIL: beckym@engsol.org

NO.	DESCRIPTION	DATE	BY
	REVISIONS		

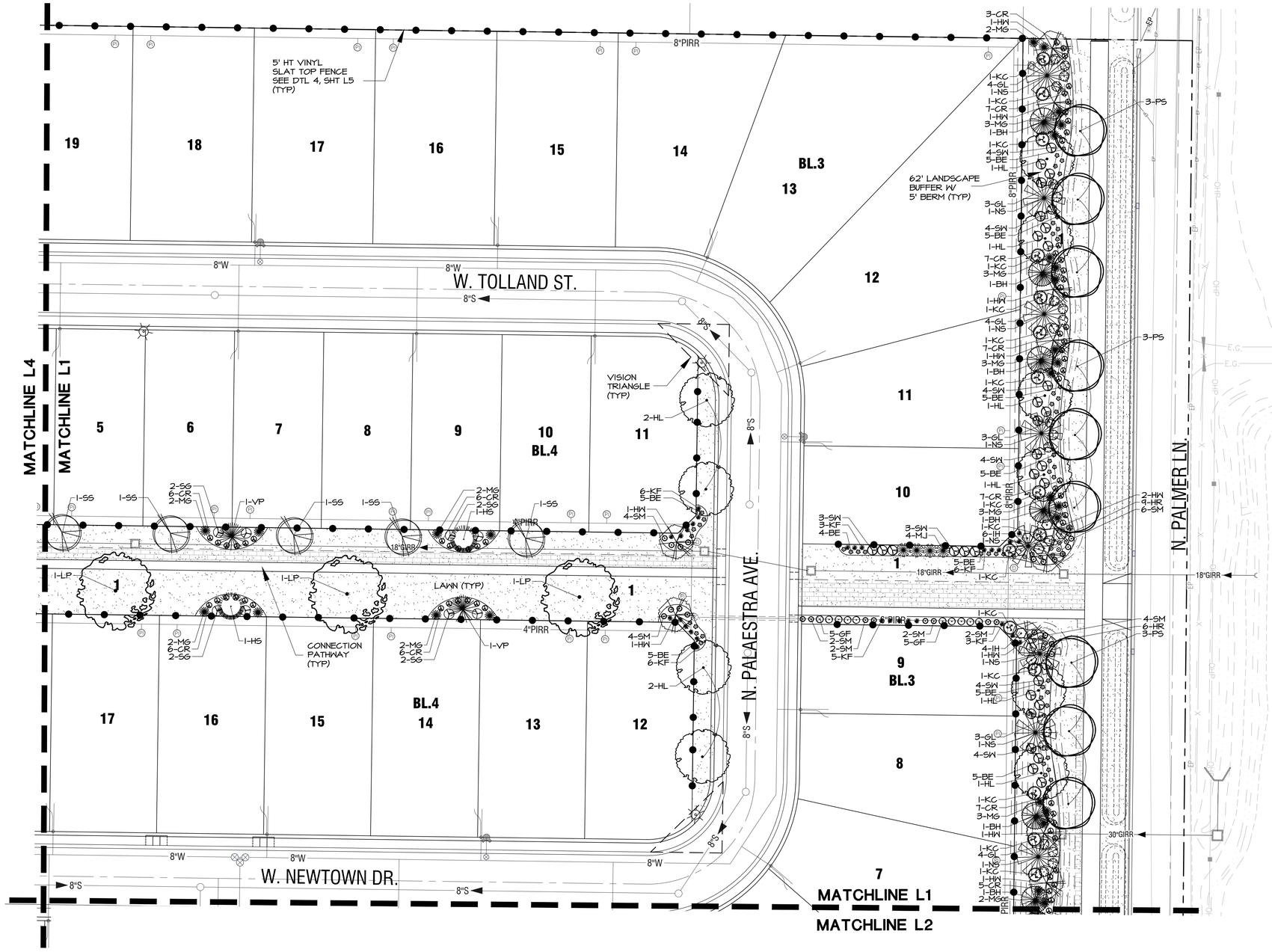
ENGINEERING SOLUTIONS LLP
1029 N. ROSARIO STREET SUITE 100
MERIDIAN, IDAHO 83642
PHONE: (208) 938-0980 FAX: (208) 938-0941

FOUNTAIN PARK SUBDIVISION
LOCATED IN THE N 1/2 OF THE SW 1/4 OF SECTION 10, T.4N., R.1W., B.M.

PHASE 1 FINAL PLAT LANDSCAPE PLAN

DATE ISSUED	09-13-23
PROJECT NO.	JBA-2318
DWG. FILE	Fountain Park.dwg
SCALE	AS SHOWN
DRAWN BY	KCS
CHECKED BY	KCS

L0
SHEET 01 OF 07



PLANT SCHEDULE

(REFERENCE SHEET L5)

SYM	COMMON NAME
EVERGREEN TREES	
BH	BLACK HILLS SPRUCE
HS	HOOP'S BLUE SPRUCE
KC	KARL FUCHS CEDAR
MJ	MOONGLOW JUNIPER
NS	NORWAY SPRUCE
VP	VANDERWOLFS PINE
SHADE TREES (CLASS III)	
LP	BLOODGOOD LONDON PLANETREE
SO	SWAMP OAK
SHADE/STREET TREES (CLASS II)	
CO	CRIMSON SPIRE OAK
HL	SKYLINE HONEYLOCUST
PS	PACIFIC SUNSET MAPLE
TT	TULIP TREE
ORNAMENTAL TREES (CLASS I)	
CG	CANADA RED CHOKECHERRY
CP	CHANTICLEER PEAR
HW	HOTWINGS MAPLE
RR	ROYAL RAINDROPS CRABAPPLE
SS	SPRING SNOW CRABAPPLE
SHRUBS/ORNAMENTAL GRASSES/PERENNIALS	
BE	BLACK EYED SUSAN
BL	BLACK LACE ELDERBERRY
BO	BLUE OAT GRASS
CR	RED FLOWER CARPET ROSE
DG	DARTS GOLD NINEBARK
DL	STELLA DE ORO DAYLILLY
GF	GOLD FLAME SPIRAEA
GL	GRO-LOW SUMAC
HR	HUSKER RED PENSTEMON
IH	IVORY HALO DOGWOOD
KF	KARL FOERSTER REED GRASS
MG	MAIDEN GRASS
SG	SPRING GLORY FORSYTHIA
SM	SLOWMOUND MUGO PINE
SW	SUMMERWINE NINEBARK

LAWN SOD

5' VINYL SLAT TOP FENCE. SEE DTL 4, SHT L5. (TYP)

5' OPEN VISION IRON FENCE SEE DTL 5, SHT L5. (TYP)

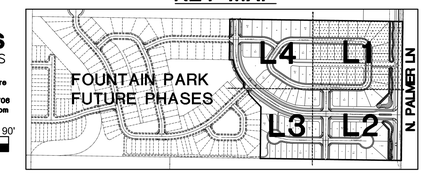
NOTES

1. REFERENCE SHEET L5 FOR PLANT SCHEDULE, FENCING DETAILS, LANDSCAPE NOTES & DETAILS, AND LANDSCAPE CALCULATIONS.
2. REFERENCE SHEET L6 FOR LANDSCAPE AND IRRIGATION PERFORMANCE SPECIFICATIONS.

JENSENBELTS ASSOCIATES
Site Planning / Landscape Architecture
1509 Tyrell Lane, Ste 130 Boise, ID 83706
Ph. (208) 343-7175 www.jensenbelts.com

NORTH
0' 30' 60' 90'
SCALE 1" = 30'

KEY MAP



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CITY OF MERIDIAN — Limitless Elegance — IDAHO — LANDSCAPE ARCHITECT — 6535

NO.	DESCRIPTION	REVISIONS	DATE	BY

ENGINEERING SOLUTIONS, LLP
1029 N. ROSARIO STREET, SUITE 100
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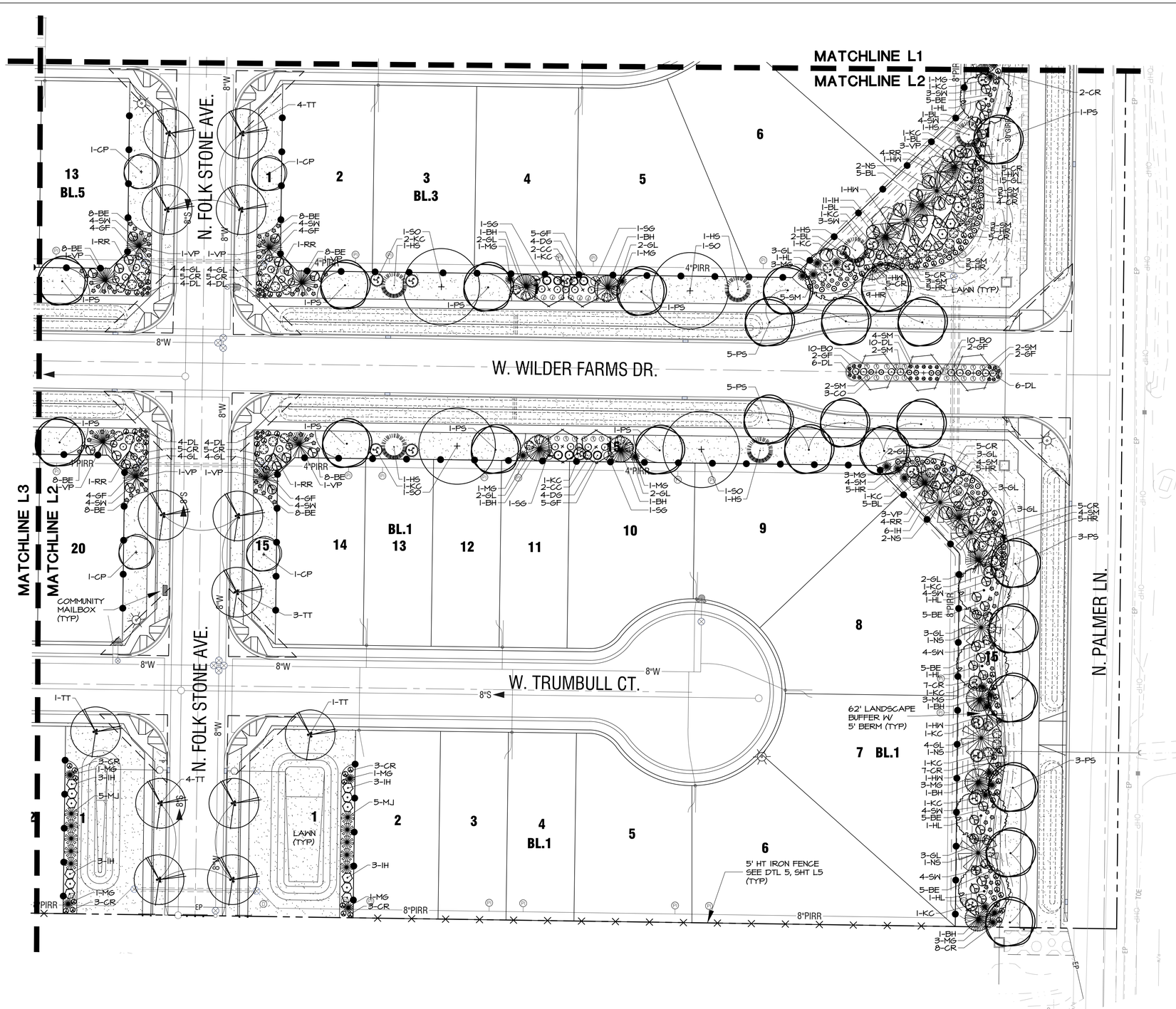
FOUNTAIN PARK SUBDIVISION
LOCATED IN THE N 1/2 OF THE SW 1/4 OF SECTION 10, T.4N., R.1W., B.M.

PHASE 1 FINAL PLAT LANDSCAPE PLAN

DATE ISSUED	09-13-23
PROJECT NO.	JBA-2318
DWG. FILE	Fountain Park.dwg
SCALE	AS SHOWN
DRAWN BY	KCS
CHECKED BY	KCS

L1
SHEET 02 OF 07



PLANT SCHEDULE

(REFERENCE SHEET L5)

SYM	COMMON NAME
EVERGREEN TREES	
BH	BLACK HILLS SPRUCE
HS	HOOP'S BLUE SPRUCE
KC	KARL FUCHS CEDAR
MJ	MOONGLOW JUNIPER
NS	NORWAY SPRUCE
VP	VANDERWOLFS PINE
SHADE TREES (CLASS III)	
LP	BLOODGOOD LONDON PLANETREE
SO	SWAMP OAK
SHADE/STREET TREES (CLASS II)	
CO	CRIMSON SPIRE OAK
HL	SKYLINE HONEYLOCUST
PS	PACIFIC SUNSET MAPLE
TT	TULIP TREE
ORNAMENTAL TREES (CLASS I)	
CG	CANADA RED CHOKECHERRY
CP	CHANTICLEER PEAR
HW	HOTWINGS MAPLE
RR	ROYAL RAINDROPS CRABAPPLE
SS	SPRING SNOW CRABAPPLE
SHRUBS/ORNAMENTAL GRASSES/PERENNIALS	
BE	BLACK EYED SUSAN
BL	BLACK LACE ELDERBERRY
BO	BLUE OAT GRASS
CR	RED FLOWER CARPET ROSE
DG	DARTS GOLD NINEBARK
DL	STELLA DE ORO DAYLILLY
GF	GOLD FLAME SPIRAEA
GL	GRO-LOW SUMAC
HR	HUSKER RED PENSTEMON
IH	IVORY HALO DOGWOOD
KF	KARL FOERSTER REED GRASS
MG	MAIDEN GRASS
SG	SPRING GLORY FORSYTHIA
SM	SLOWMOUND MUGO PINE
SW	SUMMERWINE NINEBARK

LAWN SOD

5' VINYL SLAT TOP FENCE. SEE DTL 4, SHT L5. (TYP)

5' OPEN VISION IRON FENCE SEE DTL 5, SHT L5. (TYP)

NOTES

1. REFERENCE SHEET L5 FOR PLANT SCHEDULE, FENCING DETAILS, LANDSCAPE NOTES & DETAILS, AND LANDSCAPE CALCULATIONS.
2. REFERENCE SHEET L6 FOR LANDSCAPE AND IRRIGATION PERFORMANCE SPECIFICATIONS.

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CITY OF MERIDIAN — Livable & Elegant — LANDSCAPE ARCHITECT — 6535

NO.	DESCRIPTION	DATE	BY
	REVISIONS		

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FOUNTAIN PARK SUBDIVISION

LOCATED IN THE N 1/2 OF THE SW 1/4 OF SECTION 10, T.4N., R.1W., B.M.

PHASE 1 FINAL PLAT LANDSCAPE PLAN

JENSENBELTS ASSOCIATES
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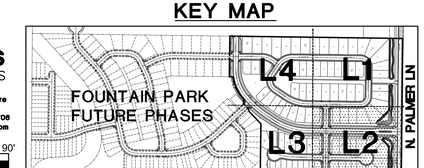
NORTH
0' 30' 60' 90'
SCALE 1" = 30'

KEY MAP



DATE ISSUED	09-13-23
PROJECT NO.	JBA-2318
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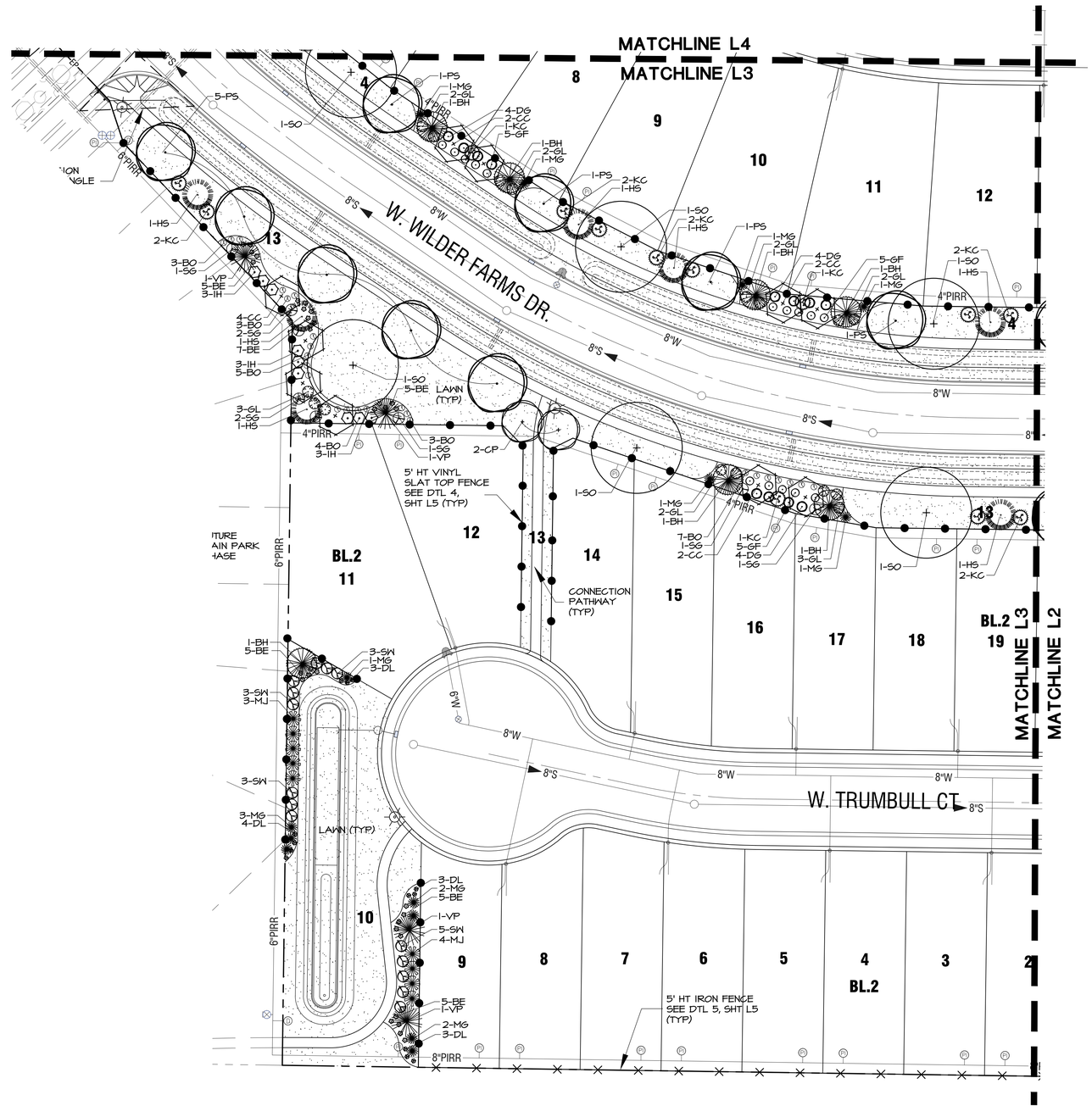
CHECKED BY	KCS

L2
SHEET 03 OF 07



PLANT SCHEDULE

(REFERENCE SHEET L5)

SYM	COMMON NAME
EVERGREEN TREES	
BH	BLACK HILLS SPRUCE
HS	HOOP'S BLUE SPRUCE
KC	KARL FUCHS CEDAR
MJ	MOONGLOW JUNIPER
NS	NORWAY SPRUCE
VP	VANDERWOLFS PINE
SHADE TREES (CLASS III)	
LP	BLOODGOOD LONDON PLANETREE
SO	SWAMP OAK
SHADE/STREET TREES (CLASS II)	
CO	CRIMSON SPIRE OAK
HL	SKYLINE HONEYLOCUST
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TT	TULIP TREE
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LAWN SOD

5' VINYL SLAT TOP FENCE. SEE DTL 4, SHT L5. (TYP)

5' OPEN VISION IRON FENCE SEE DTL 5, SHT L5. (TYP)

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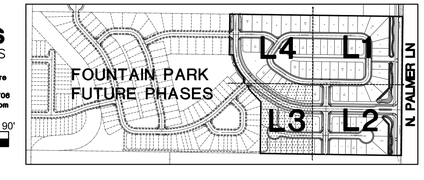
NORTH

0' 30' 60' 90'

SCALE 1" = 30'

KEY MAP



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STATE OF IDAHO — Louise Elizabeth Leggett — 6535 — LANDSCAPE ARCHITECT

NO.	DESCRIPTION	REVISIONS	DATE	BY

ENGINEERING SOLUTIONS, LLP
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FOUNTAIN PARK SUBDIVISION

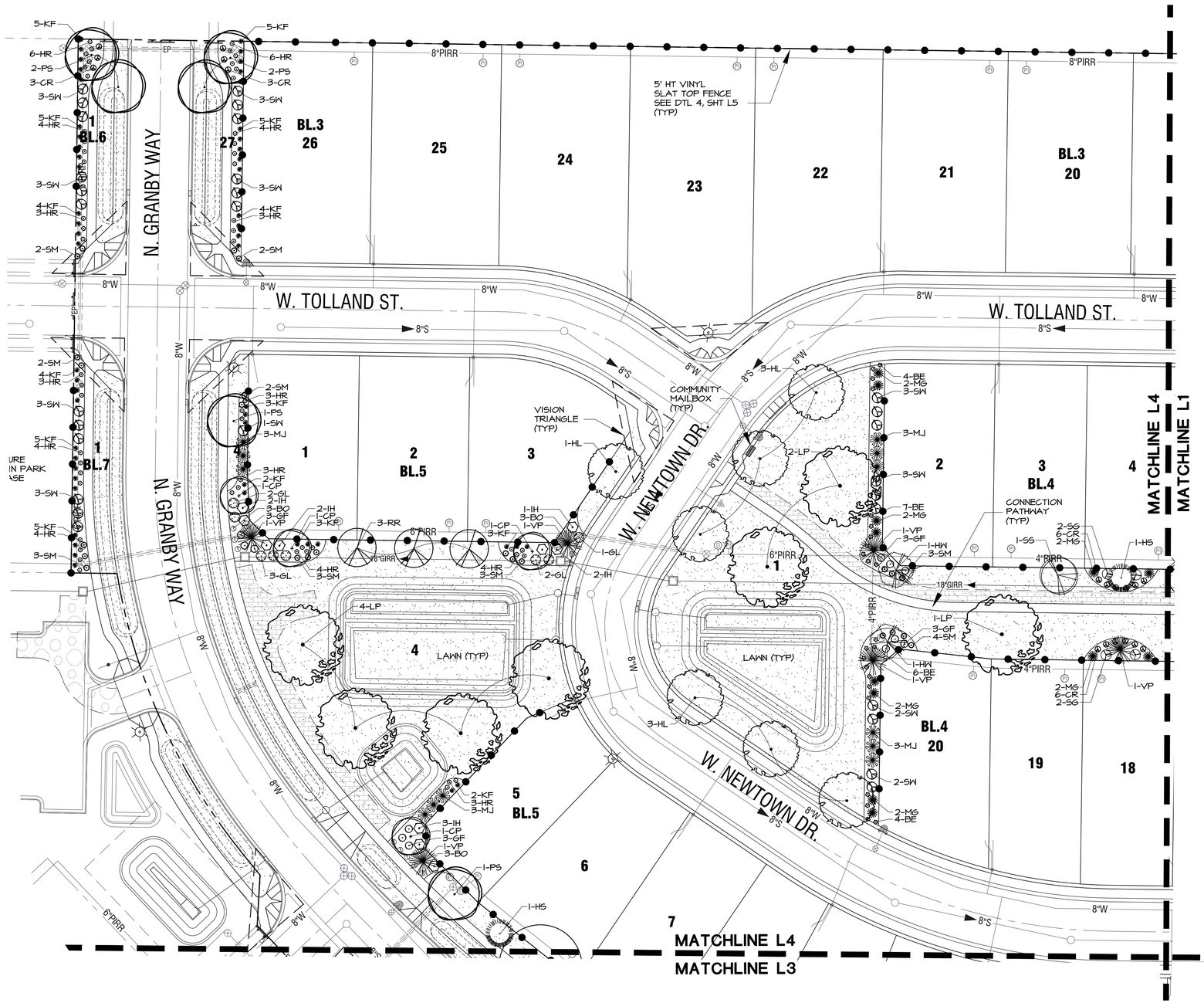
LOCATED IN THE N 1/2 OF THE SW 1/4 OF SECTION 10, T.4N., R.1W., B.M.

PHASE 1 FINAL PLAT LANDSCAPE PLAN

DATE ISSUED	09-13-23
PROJECT NO.	JBA-2318
DWG. FILE	Fountain Park.dwg
SCALE	AS SHOWN
DRAWN BY	KCS
CHECKED BY	KCS

L3

SHEET 04 OF 07



PLANT SCHEDULE

(REFERENCE SHEET L5)

SYM	COMMON NAME
EVERGREEN TREES	
BH	BLACK HILLS SPRUCE
HS	HOOP'S BLUE SPRUCE
KC	KARL FUCHS CEDAR
MJ	MOONGLOW JUNIPER
NS	NORWAY SPRUCE
VP	VANDERWOLFS PINE
SHADE TREES (CLASS III)	
LP	BLOODGOOD LONDON PLANETREE
SO	SWAMP OAK
SHADE/STREET TREES (CLASS II)	
CO	CRIMSON SPIRE OAK
HL	SKYLINE HONEYLOCUST
PS	PACIFIC SUNSET MAPLE
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HW	HOTWINGS MAPLE
RR	ROYAL RAINDROPS CRABAPPLE
SS	SPRING SNOW CRABAPPLE
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BL	BLACK LACE ELDERBERRY
BO	BLUE OAT GRASS
CR	RED FLOWER CARPET ROSE
DG	DARTS GOLD NINEBARK
DL	STELLA DE ORO DAYLILLY
GF	GOLD FLAME SPIRAEA
GL	GRO-LOW SUMAC
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IH	IVORY HALO DOGWOOD
KF	KARL FOERSTER REED GRASS
MG	MAIDEN GRASS
SG	SPRING GLORY FORSYTHIA
SM	SLOWMOUND MUGO PINE
SW	SUMMERWINE NINEBARK

LAWN SOD

5' VINYL SLAT TOP FENCE. SEE DTL 4, SHT L5. (TYP)

5' OPEN VISION IRON FENCE SEE DTL 5, SHT L5. (TYP)

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EMAIL: beckym@engsol.org

STATE OF IDAHO — LOUIS STAUFFER — 6535 — REGISTERED LANDSCAPE ARCHITECT

NO.	DESCRIPTION	REVISIONS DATE	BY

ENGINEERING SOLUTIONS, LLP
1029 N. ROSARIO STREET, SUITE 100
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PHONE: (208) 938-0980 FAX: (208) 938-0941

FOUNTAIN PARK SUBDIVISION

LOCATED IN THE N 1/2 OF THE SW 1/4 OF SECTION 10, T.4N., R.1W., B.M.

PHASE 1 FINAL PLAT LANDSCAPE PLAN

JENSENBELTS ASSOCIATES
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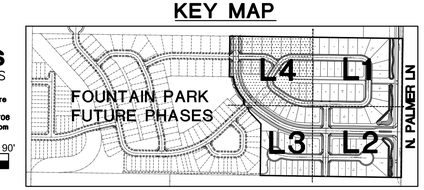
NORTH
0' 30' 60' 90'
SCALE 1" = 30'

KEY MAP



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PROJECT NO.	JBA-2318
DWG. FILE	Fountain Park.dwg
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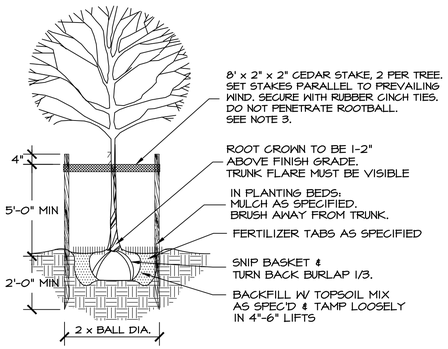
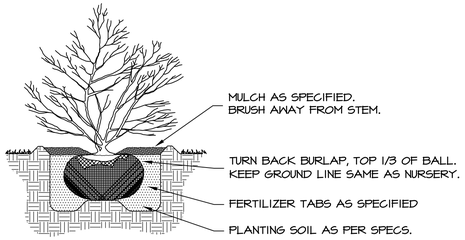
L4
SHEET 05 OF 07



NOTES:
1. REMOVE ALL TWINE, ROPE, OR BINDINGS FROM ALL TRUNKS.
2. REMOVE BURLAP AND WIRE BASKETS FROM THE TOP 1/3 OF ALL ROOT BALLS AFTER PLANTING. IF SYNTHETIC WRAP/BURLAP IS USED, IT MUST BE COMPLETELY REMOVED.
3. STAKING OF TREES TO BE THE CONTRACTOR'S OPTION; HOWEVER, THE CONTRACTOR IS RESPONSIBLE TO INSURE THAT ALL TREES ARE PLANTED STRAIGHT AND REMAIN STRAIGHT FOR A MIN OF 1 YEAR. ALL STAKING SHALL BE REMOVED AT THE END OF THE 1 YEAR WARRANTY PERIOD.
4. TREES PLANTED IN TURF AREAS: REMOVE TURF 3' DIA. FROM TREE TRUNK.

① TREE PLANTING/STAKING

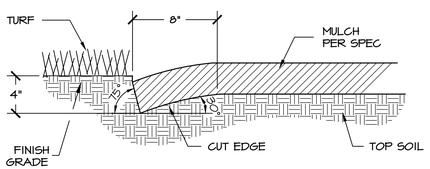
NOT TO SCALE



NOTE: DIG HOLE TWICE THE SIZE OF ROOTBALL.

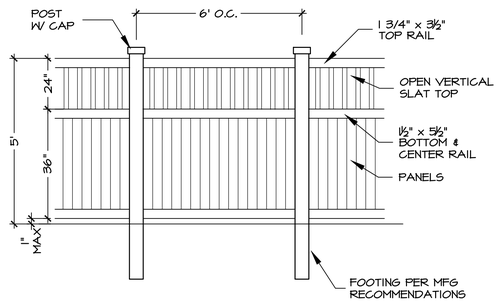
② SHRUB PLANTING

NOT TO SCALE



③ PLANTER CUT BED EDGE

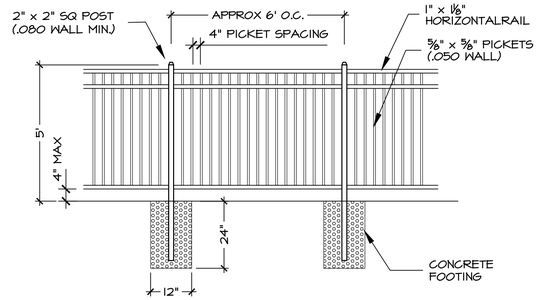
NOT TO SCALE



NOTES:
1. FENCE TO STEP DOWN TO 3' HEIGHT 20' FROM ROW.

④ 5' VINYL SLAT TOP FENCE

NOT TO SCALE



NOTES:
1. WROUGHT IRON FENCE STYLE MAY VARY SLIGHTLY.
2. FENCE TO STEP DOWN TO 3' HEIGHT 20' FROM ROW.

⑤ 5' IRON FENCE

NOT TO SCALE

LANDSCAPE CALCULATIONS

COLLECTOR: TWO (2) SHADE TREES AND TWO (2) EVERGREEN TREES PER 100' LINEAR FEET.

LOCATION	BUFFER WIDTH	LENGTH	REQUIRED	PROVIDED
N. PALMER LANE	62'	932' / 100' =	19 TREES	34.5 TREES (27 SHADE TREES + 15 ORNAMENTAL TREES)
			19 EVERGREENS	44 EVERGREENS
W. WILDER FARMS DR. (NORTH SIDE)	25'	1350' / 100' =	27 TREES	28 TREES (23 SHADE TREES + 10 ORNAMENTAL TREES)
			27 EVERGREENS	30 EVERGREENS
W. WILDER FARMS DR. (SOUTH SIDE)	25'	1000' / 100' =	20 TREES	23.5 TREES (19 SHADE TREES + 9 ORNAMENTAL TREES)
			20 EVERGREENS	20 EVERGREENS
COMMON OPEN SPACE				133 TREES
TOTAL NUMBER OF TREES:				330 TREES

PLANT SCHEDULE

SYM	COMMON NAME	BOTANICAL NAME	SIZE
EVERGREEN TREES			
BH	BLACK HILLS SPRUCE	PICEA GLAUCA 'DENSATA'	6-8' HT B&B
HS	HOOP'S BLUE SPRUCE	PICEA PUNGENS 'HOOPSII'	6-8' HT B&B
KC	KARL FUCHS CEDAR	CEDRUS DEODARA 'KARL FUCHS'	6-8' HT B&B
MJ	MOONGLOW JUNIPER	JUNIPERUS SCOPULORUM 'MOONGLOW'	6-8' HT B&B
NS	NORWAY SPRUCE	PICEA ABIES	6-8' HT B&B
VP	VANDERWOLFS PINE	PINUS FLEXILIS 'VANDERWOLFS'	6-8' HT B&B
SHADE TREES (CLASS III)			
LP	BLOODGOOD LONDON PLANETREE	PLATANUS x ACERIFOLIA 'BLOODGOOD'	2" CAL B&B
SO	SWAMP OAK	QUERCUS BICOLOR	2" CAL B&B
SHADE/STREET TREES (CLASS II)			
CO	CRIMSON SPIRE OAK	QUERCUS ROBUR x Q. ALBA 'CRIMSCHMIDT'	2" CAL B&B
HL	SKYLINE HONEYLOCUST	GLEDITSIA TRIACANTHOS INERMIS 'SKYCOLE'	2" CAL B&B
PS	PACIFIC SUNSET MAPLE	ACER TRUNCATUM x A. PLATANOIDES 'WARRENRED'	2" CAL B&B
TT	TULIP TREE	LIRIODENDRON TULIPIFERA	2" CAL B&B
ORNAMENTAL TREES (CLASS I)			
CC	CANADA RED CHOKECHERRY	PRUNUS VIRGINIANA 'CANADA RED'	6-8' HT. MULTI-STEM
CP	CHANTICLEER PEAR	PYRUS CALLERYANA 'GLEN'S FORM'	2" CAL B&B
HW	HOTWINGS MAPLE	ACER TATARICUM 'GARANN'	6-8' HT. MULTI-STEM
RR	ROYAL RAINDROPS CRABAPPLE	MALUS x 'JFS-KW5'	2" CAL B&B
SS	SPRING SNOW CRABAPPLE	MALUS 'SPRINGSNOW'	2" CAL B&B
SHRUBS/ORNAMENTAL GRASSES/PERENNIALS			
BE	BLACK EYED SUSAN	RUDBECKIA FULGIDA 'GOLDSTRUM'	1 GAL
BL	BLACK LACE ELDERBERRY	SAMBUCUS NIGRA 'EVA'	5 GAL
BO	BLUE OAT GRASS	HELICTOTRICHON SEMPERVIRENS	1 GAL
CR	RED FLOWER CARPET ROSE	ROSA 'FLOWER CARPET- NOARE'	2 GAL
DG	DARTS GOLD NINEBARK	PHYSOCARPUS OPULIFOLIUS 'DART'S GOLD'	5 GAL
DL	STELLA DE ORO DAYLILLY	HEMEROCALLIS 'STELLA D'ORO'	1 GAL
GF	GOLD FLAME SPIRAEA	SPIRAEA x BUMALDA 'GOLDFLAME'	3 GAL
GL	GRO-LOW SUMAC	RHUS AROMATICA 'GRO-LOW'	5 GAL
HR	HUSKER RED PENSTEMON	PENSTEMON DIGITALIS 'HUSKER RED'	1 GAL
IH	IVORY HALO DOGWOOD	CORNUS ALBA 'BAILHALO'	5 GAL
KF	KARL FOERSTER REED GRASS	CALAMAGROSTIS ARUNDINACEA 'K.F.'	1 GAL
MG	MAIDEN GRASS	MISCANTHUS SINENSIS 'GRACILLIMUS'	1 GAL
SG	SPRING GLORY FORSYTHIA	FORSYTHIA x INTERMEDIA 'SPRING GLORY'	5 GAL
SM	SLOWMOUND MUGO PINE	PINUS MUGO 'SLOWMOUND'	3 GAL
SW	SUMMERWINE NINEBARK	PHYSOCARPUS OPULIFOLIA 'SEWARD'	5 GAL

LAWN SOD

5' VINYL SLAT TOP FENCE. SEE DTL 4, THIS SHT. (TYP)

5' OPEN VISION IRON FENCE SEE DTL 5, THIS SHT. (TYP)

NOTES

1. ALL PLANTING AREAS SHALL BE INSTALLED BE IN ACCORDANCE WITH CITY OF KUNA CODE. REFER TO SHEET L6 - SPEC SECTION 32 90 00 - LANDSCAPE SPECIFICATIONS.
2. ALL PLANTING AREAS TO BE WATERED WITH AN AUTOMATIC UNDERGROUND IRRIGATION SYSTEM. REFER TO SHEET L6 - SPEC SECTION 32 84 00 - IRRIGATION PERFORMANCE SPECIFICATIONS.
3. LOCATE AND PROTECT ALL UTILITIES DURING CONSTRUCTION.
4. TREES SHALL NOT BE PLANTED WITHIN THE 10-FOOT CLEAR ZONE OF ALL ACHD STORM DRAIN PIPE, STRUCTURES, OR FACILITIES. ACCESS TO INLETS AND OUTLETS OF ACHD DRAINAGE AREAS SHALL NOT BE PLANTED WITH TREES, SHRUBS, OR ANY LANDSCAPING THAT WOULD IMPEDE HEAVY EQUIPMENT VEHICLE ACCESS. SEEPAGE BEDS MUST BE PROTECTED FROM ANY AND ALL CONTAMINATION DURING THE CONSTRUCTION AND INSTALLATION OF THE LANDSCAPE IRRIGATION SYSTEM. ALL SHRUBS PLANTED OVER OR ADJACENT TO SEEPAGE BEDS TO HAVE A ROOT BALL THAT DOES NOT EXCEED 18" IN DIAMETER. NO LAWN SOD TO BE PLACED OVER DRAINAGE SWALE SAND WINDOWS. LANDSCAPING WITHIN ACHD STORMWATER BASINS AND SWALES MUST COMPLY WITH THE ACHD VEGETATION GUIDANCE MANUAL AND SECTION 8200 OF THE ACHD POLICY MANUAL.
5. NO TREES SHALL IMPEDE THE 40' VISION TRIANGLE AT ALL INTERSECTIONS. NO CONIFEROUS TREES OR SHRUBS OVER 3' HIGH AT MATURITY WILL BE LOCATED WITHIN SIGHT TRIANGLE OR ROW. AS TREES MATURE, THE OWNER SHALL BE RESPONSIBLE FOR PRUNING TREE CANOPIES TO MEET REQUIREMENTS FOR MAINTAINING CLEAR VISIBILITY WITHIN 40' STREET VISION TRIANGLE.
6. TREES SHALL BE PLANTED NO CLOSER THAN 50' FROM INTERSECTION STOP SIGNS.
7. TREE LOCATIONS MAY BE ALTERED TO ACCOMMODATE DRIVEWAYS AND UTILITIES. TREES MUST BE CLASS II AND SHALL NOT BE PLANTED WITHIN 5' OF WATER METERS OR UNDERGROUND UTILITY LINES.
8. PLAYGROUND, PICNIC STRUCTURE, AND AMENITIES ARE SHOWN SCHEMATICALLY. FINAL DESIGN BY OTHERS. AMENITIES MAY VARY SLIGHTLY IN FINAL DESIGN FOR AMENITY CONFIGURATIONS AND ADA COMPLIANCE.
9. PLANT LIST IS SUBJECT TO SUBSTITUTIONS OF SIMILAR SPECIES DUE TO PLANT MATERIAL AVAILABILITY. BURLAP AND WIRE BASKETS TO BE REMOVED FROM ROOT BALL AS MUCH AS POSSIBLE, AT LEAST HALFWAY DOWN THE BALL OF THE TREE. ALL NYLON ROPES TO BE COMPLETELY REMOVED FROM TREES.
10. THERE ARE NO EXISTING TREES IN THIS PHASE. EXISTING TREES ADJACENT TO DRAINS IN FUTURE PHASE SHALL BE RETAINED.

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REVISIONS

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FOUNTAIN PARK SUBDIVISION

LOCATED IN THE N 1/2 OF THE SW 1/4 OF SECTION 10, T.4N., R.1W., B.M.

PHASE 1 FINAL PLAT LANDSCAPE PLAN

DATE ISSUED	09-13-23
PROJECT NO.	JBA-2318
DWG. FILE	Fountain Park.dwg
SCALE	AS SHOWN
DRAWN BY	KCS
CHECKED BY	KCS

L5

SHEET 06 OF 07

SECTION 32 90 00 - LANDSCAPE WORK

PART 1 - GENERAL

1.1 RELATED DOCUMENTS
A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections.

1.2 SUMMARY
A. This Section includes provisions for the following items:
1. Trees.
2. Shrubs; Ground cover.
3. Lawns.
4. Topsoil and Soil Amendments.
5. Miscellaneous Landscape Elements.
6. Initial maintenance of landscape materials.
B. Related Sections: The following sections contain requirements.
1. Underground sprinkler system is specified in Section 32 84 00 - Irrigation

1.3 QUALITY ASSURANCE
A. Subcontract landscape work to a single firm specializing in landscape work.
B. Source Quality Control:
1. General: Ship landscape materials with certificates of inspection required by governing authorities. Comply with regulations applicable to landscape materials.
2. Do not make substitutions. If specified landscape material is not obtainable, submit proof of non-availability to Architect, with proposal for use of equivalent material.
3. Analysis and Standards: Package standard products with manufacturer's certified analysis. For other materials, provide analysis by recognized laboratory made in accordance with methods established by the Association of Official Agriculture Chemists, wherever applicable.
4. Trees, Shrubs and Groundcovers: Provide trees, shrubs, and groundcovers of quantity, size, genus, species, and variety shown and scheduled for work complying with recommendations and requirements of ANSI Z60.1 "American Standard for Nursery Stock". Provide healthy, vigorous stock, grown in recognized nursery in accordance with good horticultural practice and free of disease, insects, eggs, larvae, and defects such as knots, sun-scald, injuries, abrasions, or disfigurement.
5. Label at least one tree and one shrub of each variety with attached waterproof tag with legible designation of botanical and common name.
a. Where formal arrangements or consecutive order of trees or shrubs are shown, select stock for uniform height and spread.
6. Inspection: The Architect may inspect trees and shrubs either at place of growth or at site before planting, for compliance with requirements for genus, species, variety, size, and quality. Architect retains right to further inspect trees and shrubs for size and condition of balls and root systems, insects, injuries and latent defects, and to reject unsatisfactory or defective material at any time during progress of work. Remove rejected trees or shrubs immediately from project site.

1.4 SUBMITTALS
A. General: Submit the following in accordance with Conditions of Contract and Division 1 Specification Sections.
B. Plant and Material Certifications:
1. Certificates of inspection as required by governmental authorities.
2. Manufacturer's or vendor's certified analysis for soil amendments and fertilizer materials.
3. Label data substantiating that plants, trees, shrubs and planting materials comply specified requirements.
C. Mulch: Submit 1 gal bag of mulch sample for approval.

1.5 DELIVERY, STORAGE AND HANDLING
A. Sod: Time delivery so that sod will be placed within 24 hours after stripping. Protect sod against drying and breaking of rolled strips.
B. Trees and Shrubs: Provide freshly dug trees and shrubs. Do not prune prior to delivery unless otherwise approved by Architect. Do not bend or bind-tie trees or shrubs in such manner as to damage bark, break branches, or destroy natural shape. Provide protective covering during delivery. Do not drop balled and burlapped stock during delivery.
C. Deliver trees and shrubs after preparations for planting have been completed and plant immediately. If planting is delayed more than 6 hours after delivery, set trees and shrubs in shade, protect from weather and mechanical damage, and keep roots moist by covering with mulch, burlap or other acceptable means of retaining moisture.
D. Do not remove container-grown stock from containers until planting time.
E. Do not drop or dump materials from vehicles during delivery or handling. Avoid any damage to rootballs during deliver, storage and handling.

1.6 JOB CONDITIONS
A. Utilities: Determine location of underground utilities and work in a manner which will avoid possible damage. Hand excavate, as required. Maintain grade stakes until removal is mutually agreed upon by parties concerned.
B. Excavation: When conditions detrimental to plant growth are encountered, such rubble fill, adverse drainage conditions, or obstructions, notify Architect before planting.
C. Adjacent Landscape: Protect planted areas adjacent to construction area. Replace or recondition to prior conditions at project completion.

1.7 SEQUENCING AND SCHEDULING
A. Planting Time: Proceed with, and complete landscape work as rapidly as portions of site become available, working within seasonal limitations for each kind of landscape work required.
1. Plant or install all plant materials during normal planting seasons from 15 March to 15 November.
2. Correlate planting with specified maintenance periods to provide maintenance from date of substantial completion.
B. Coordination with Lawns: Plant trees and shrubs after final grades are established and prior to planting of lawns, unless otherwise acceptable to Architect. If planting of trees and shrubs occurs after lawn work, protect lawn areas and promptly repair damage to lawns resulting from planting operations.

1.8 SPECIAL PROJECT WARRANTY
A. Warranty lawns through specified lawn maintenance period, until Final Project Acceptance.
B. Warranty trees and shrubs, for a period of one year after date of substantial completion, against defects including death and unsatisfactory growth, except for defects resulting from neglect by Owner, abuse or damage by others, or unusual phenomena or incidents beyond Landscape Installer's control.
C. Remove and replace trees, shrubs, or other plants dead or in unhealthy condition during warranty period. Make replacements during growth season following end of warranty period. Replace trees and shrubs which are in doubtful condition at end of warranty period; unless, in opinion of Architect, it is advisable to extend warranty period for a full growing season.

PART 2 - PRODUCTS

2.1 TOPSOIL
A. If deemed usable, native topsoil shall be stockpiled for re-use in landscape work. Topsoil shall be fertile, friable, natural loam, surface soil, reasonable free of subsoil, clay lumps, brush, weeds, roots, stumps, stones larger than 1 inch in any dimension, and other extraneous or toxic matter harmful to plant growth.
1. Contractor shall send a minimum of three (3) representative topsoil samples for testing. See testing requirements below. Contractor is responsible for whatever soil additives are recommended by the tests. Submit to Architect for approval. Compost will be added to other additives and added regardless of test results.
B. If quantity of stockpiled topsoil is insufficient, contractor to provide imported topsoil that is fertile, friable, natural loam, surface soil, reasonably free of subsoil, clay lumps, brush, weeds and other litter, and free of roots, stumps, stones larger than 1 inches in any dimension, and other extraneous or toxic matter harmful to plant growth.
1. Obtain topsoil from local sources or areas with similar soil characteristics to that of project site. Obtain topsoil only from naturally well-drained sites where topsoil occurs in a depth of not less than 4 inches. Do not obtain from bogs or marshes.
2. Composition: Topsoil shall contain from 1 to 20% organic matter as determined by the Organic Carbon, 6A, Chemical Analysis Method described in USDA Soil Survey Investigation Report No. 1. Maximum particle size, 3/4-inch, with maximum 3% retained on 1/4-inch screen.
Other components shall conform to the following limits:

pH	6.5 to 7.5
Soluble Salts	600 ppm maximum
Silt	25-50%
Clay	10-30%
Sand	20-50%

3. Contractor shall submit representative soil report on imported topsoil proposed for use for approval. Report shall meet standards below. Contractor is responsible for whatever soil additives are recommended by the test. Compost will be in addition to other additives and added regardless of test results.

C. Soil Testing
1. Soil tests are required for this project (see above for requirements). Test shall be provided as follows:
a. Provide certified analysis at time of sample submitted (three samples imported topsoil). Amend soils per chemist's recommendations and as herein specified unless otherwise approved by Architect.
2. Test shall include, but not limited to recommendations on chemical distributions, organic contents, pH factors, and sieve analysis as necessary. Test #1T by Western Laboratories (1-800-658-3858) is required.
3. Contractor is responsible for whatever soil additives are recommended by the soil testing laboratory.
4. Contractor shall coordinate, obtain and pay for all soil tests.
5. If regenerative noxious weeds are present in the soil, remove all resultant growth including roots throughout one-year period after acceptance of work, at no cost to Owner.

2.2 pH ADJUSTERS
A. When pH does not comply with this specification, commercial grade aluminum sulfate shall be used to adjust soil pH.

2.3 SOIL AMENDMENTS
A. Compost: Compost: “Cascade Compost” from Cloverdale Nursery (208) 375-5262 and NuSoil Compost (208) 629-6912 or approved equal in equal amounts by volume.
B. Commercial Fertilizer: Fertilizer shall be complete, standard commercial brand fertilizer. It shall be free-flowing and packaged in new waterproof, non-overlaid bags clearly labeled as to weight, manufacturer, and content. Protect materials from deterioration during delivery and while stored at site.
1. Commercial fertilizer "A" for trees and shrubs during planting; slow release Agriform Planting 5-gram tablets 20-10-5 type or equal.
2. Commercial fertilizer "B" for lawn areas, applied to bed prior to sodding, to be 16-16-17 applied at the rate of ten pounds per acre.
3. Commercial fertilizer "C" for lawn areas three to four weeks after planting sod. Organic Fertilizer Milorganite (6-0-2) type or equal.
C. Herbicide: Pre-emergent for topical application in planting beds. Oxiadiazon 2G brand or pre-approved equal. Use in accordance with manufacturer's recommendation on all planting beds.

2.4 PLANT MATERIALS
A. Quality: Provide trees, shrubs, and other plants of size, genus, species, and variety shown for landscape work and complying with recommendations and requirements of ANSI Z60.1 "American Standard for Nursery Stock".
B. Deciduous Trees: Provide trees of height and caliper scheduled or shown with branching configuration recommended by ANSI Z60.1 for type and species required. Single stem trees except where special forms are shown or listed.
C. Deciduous Shrubs: Provide shrubs of the height shown or listed, not less than minimum number of canes required by ANSI Z60.1 for type and height of shrub.
D. Coniferous and Broadleafed Evergreens: Provide evergreens of sizes shown or listed. Dimensions indicate minimum spread for spreading and semi-spreading type evergreens and height for other types, such as globe, dwarf, cone, pyramidal, broad upright, and columnar. Provide normal quality evergreens with well balanced form complying with requirements for other size relationships to the primary dimension shown.

2.5 GRASS MATERIALS
A. Lawn sod: Provide strongly rooted sod, not less than 1 growing season old, and free of weeds and undesirable native grasses. Provide only sod capable of growth and development when planted (viable, not dormant).
1. Provide sod of uniform pad sizes with maximum 5% deviation in either length or width. Broken pads or pads with uneven ends will not be acceptable. Sod pads incapable of supporting their own weight when suspended vertically with a firm grasp on upper 10% of pad will be rejected.
B. Provide sod composed of: Rhizomatous Tall Fescue (RTF) from the The Turf Company, Meridian, ID (208) 888-3760 or approved equal.

2.6 MISCELLANEOUS LANDSCAPE MATERIALS
A. Anti-Desiccant: Emulsion type, film-forming agent designed to permit transpiration, but retard excessive loss of moisture from plants. Deliver in manufacturer's fully identified containers and mix in accordance with manufacturer's instructions.
B. Mulch: Rock mulch for planting beds to be: Crushed Stone Perma Bark - dark color. 1/2" max size. 3" thick in all areas. Provide samples of rock mulch for approval by architect and ownership group prior to installation. Rock mulch to be placed over woven weed barrier fabric installed per manufacturer's instructions.
C. Stakes and Guys: Provide stakes and deadmen of sound new hardwood, treated softwood, or redwood, free of knot holes and other defects. Provide wire ties and guys of 2-strand, twisted, pliable galvanized iron wire, not lighter than 12 ga. with zinc-coated turnbuckles. Provide not less than 2 inch diameter rubber or plastic hose, cut to required lengths and of uniform color, material, and size to protect tree trunks from damage by wires.

PART 3 - EXECUTION

3.1 PREPARATION - GENERAL
A. General Contractor shall be responsible for excavating planting areas to appropriate depths for placement of topsoil as specified herein.
B. Lay out individual tree and shrub locations and areas for multiple plantings. Stake locations and outline areas and secure Architect's acceptance before start of planting work. Make minor adjustments as may be required.

3.2 PREPARATION OF PLANTING SOIL
A. Before mixing, clean topsoil of roots, plants, sod, stones, clay lumps, and other extraneous materials harmful or toxic to plant growth.
B. Mix specified compost and fertilizers with topsoil at rates specified. Delay mixing fertilizer if planting will not follow placing of planting soil in a few days.
Compost: Lawn Areas: 1/4 compost, : 3/4 topsoil.
Shrub Areas: 1/3 compost, 2/3 topsoil.
Fertilizer: Per soil test and manufacture's recommendations.
C. For shrub and lawn area, mix planting soil either prior to planting or apply on surface of topsoil and mix thoroughly before planting.

3.3 PREPARATION FOR PLANTING LAWNS
A. After excavating and removing surface material to proper depth, loosen subgrade of lawn areas to a minimum depth of 4 inches. Remove stones measuring over 1-1/2 inches in any dimension. Remove sticks, roots, rubbish, and other extraneous matter. Limit preparation to areas which will be planted promptly after preparation.
1. Spread topsoil mix to minimum depth of 4 inches for sodded lawns as required to meet lines, grades, and elevations shown, after light rolling, addition of amendments, and natural settlement. Place approximately 1/2 of total amount of topsoil required. Work into top of loosened subgrade to create a transition layer and then place remainder of planting soil. Add specified soil amendments as required and mix thoroughly into upper 4 inches of topsoil.

3.4 PREPARATION OF PLANTING BEDS
A. Loosen subgrade of planting areas to a minimum depth of 6 inches using a culti-mulcher or similar equipment. Remove stones measuring over 1 1/2 inches in any dimension. Remove stocks, stones, rubbish, and other extraneous matter.
B. Spread planting soil mixture to minimum 12 inch depth required to meet lines, grades, and elevations shown, after light rolling and natural settlement. Add 1 1/2 inches of specified compost over entire planting area and mix thoroughly into upper 6 inches of topsoil. Place approximately 1/2 of total amount of planting soil required. Work into top of loosened subgrade to create a transition layer, then place remainder of the planting soil.
C. Apply Pre-Emergent per manufacturer's recommendation.

3.5 PLANTING TREES AND SHRUBS
A. Set balled and burlapped (B&B) stock on layer of compacted planting soil mixture, plumb and in center of pit or trench with top of ball at same elevation as adjacent finished landscape grades. Remove burlap from sides of balls; retain on bottoms. When set, place additional backfill around base and sides of ball, and work each layer to settle backfill and eliminate voids and air pockets. Place fertilizer tablets in excavated area per manufacture's written instructions. When excavation is approximately 2/3 full, water roughly before placing remainder of backfill. Repeat watering until no more is absorbed. Water again after placing final layer of backfill. Remove all ties from around base of trunk.
B. Set container grown stock, as specified, for balled burlapped stock, except cut cans on 2 sides with an approved can cutter and remove can; remove bottoms of wooden boxes after partial backfilling so as not to damage root balls.
C. Trees planted in turf area: Remove turf 3' dia around tree trunk. Dish top of backfill to allow for mulching.
D. Mulch pits, and planted areas. Provide not less than following thickness of mulch, and work into top of backfill and finish level with adjacent finish grades.
1. Provide 3 inches thickness of mulch.
E. If season and weather conditions dictate, apply anti-desiccant, using power spray, to provide an adequate film over trunks, branches, stems, twigs and foliage.
F. Prune, thin out, and shape trees and shrubs in accordance with standard horticultural practice. Prune trees to retain required height and spread. Unless otherwise directed by Architect, do not cut tree leaders, and remove only injured or dead branches from flowering trees, if any. Prune shrubs to retain natural character.
G. Remove and replace excessively pruned or misformed stock resulting from improper pruning.
H. Guy and stake trees immediately after planting, as indicated.
I. Apply approved herbicide to all shrub bed areas at manufacture specified rate. Re-apply as necessary for elimination of weeds.

3.6 SODDING NEW LAWNS
A. General: Install lawn sod in all areas designated on the drawings.
B. Soil Preparation
1. Any sod lawn areas that may have become compacted prior to sodding must be scarified to a depth of eight (8) inches by approved means, then finish graded as hereinbefore described.
C. Lay sod within 24 hours from time of stripping. Do not plant dormant sod or if ground is frozen.
D. Sod Placement
1. Sod will be brought onto lawn areas by wheeled means with proper protection of sod beds. Sod layers shall be experienced, or if inexperienced, shall be constantly supervised by an experienced foreman. The Contractor shall insure that the base immediately ahead of sod layer is moist. Sod shall be laid tight with not gaps. Allowance shall be made for shrinkage. Lay sod with long edges perpendicular to primary slope.
2. Lay to form a solid mass with tightly fitted joints. Butt ends and sides of strips; do not overlap. Stagger strips to offset joints in adjacent courses. Work on boards to avoid damage to subgrade or sod. Tamp or roll lightly to ensure contact with subgrade. Work sifted soil into minor cracks between pieces; remove excess to avoid smothering of adjacent grass.
3. Sod shall be rolled with a two hundred (200) pound roller after installation to insure proper contact between soil and sod. Final rolling must provide a uniform surface. After final rolling, the sod lawn shall be mowed and watered. Approval of sod lawns shall be based on uniform, healthy and vigorous growth with no dry or dead spots.
4. Add fertilizer "B" at the manufacturer's recommended application rate.
E. Water sod thoroughly with a fine spray immediately after planting.
F. Sodded Lawn Establishment
1. The Contractor shall be responsible for first mowing, subsequent mowings and fertilizing of sod lawn areas until Final Acceptance of the project.
2. Mowing shall be done by an approved "reel" type mower. Mower blades shall be set at two (2) inches high for all mowings.
3. Subsequent fertilizing shall occur three to four weeks after installation. Apply fertilizer as per the Manufacturer's recommended application rate. Verify all methods of application. Contractor shall notify the Architect in writing that the fertilizer applications have occurred and on what dates.

3.7 MAINTENANCE
A. Begin landscape maintenance immediately after planting. Maintenance shall continue until Project Final Acceptance.
B. Maintain trees, shrubs, and other plants by pruning, cultivating, and weeding as required for healthy growth. Restore planting saucers. Tighten and repair stake and guy supports and reset trees and shrubs to proper grades or vertical position as required. Restore or replace damaged wrappings. Spray as required to keep trees and shrubs free of insects and disease.
C. Maintain lawns by watering, fertilizing, weeding, mowing, trimming, and other operations such as tolling, regrading and replanting as required to establish a smooth, acceptable lawn, free of eroded or bare areas.
D. Maintain lawns for no less than period stated above, or longer as required to establish acceptable lawn.

3.8 CLEANUP AND PROTECTION
A. During landscape work, keep pavements clean and work area in an orderly condition.
B. Protect landscape work and materials from damage due to landscape operations, operations by other contractors and trades, and trespassers. Maintain protection during installation and maintenance periods. Treat, repair, or replace damaged landscape work as directed.

3.9 INSPECTION AND ACCEPTANCE
A. When landscape work is completed, including maintenance, Architect will, upon request, make an inspection to determine acceptability.
B. When inspected landscape work does not comply with requirements, replace rejected work and continue specified maintenance until reinspected by Architect and found to be acceptable. Remove rejected plants and materials promptly from project site.

END OF SECTION

SECTION 32 84 00 - IRRIGATION (PERFORMANCE)

PART 1 - GENERAL

1.1 CONDITIONS AND REQUIREMENTS:
A. General and Supplementary Conditions, and Division 1 General Requirements.

1.2 SUMMARY
A. Work included:
1. Provide and install a complete and operating automatic irrigation system for all lawn and planting areas.
2. Connect to main water supply at existing site stubout as provided.
3. Sleeving under paved areas (by others)
4. Obtain and pay for all permits and fees for the work of this section.
5. Perform work on a design/construct basis, subject to the requirements of the Contract Documents, applicable codes, and good design practice.
6. Winterization of system.

1.3 SUBMITTALS
A. Within 30 days after Contractor's receipt of Owner's Notice to Proceed, submit:
1. Manufacturer's printed product information and catalog cut sheets for all system components; five copies.
B. Shop Drawings: Submit shop drawings for underground irrigation system including plan layout and details illustrating location and type of head, type and size of valve, piping circuits, circuit GPM, pipe size, controls, and accessories.
C. Record Drawings: At completion of this work, submit to the Contractor:
1. Record Drawings; reproducible and five prints.
2. Operations and Maintenance information (2 copies), including:
a. Information including descriptive details, parts list, specifications, maintenance schedules and procedures for system components.
b. Operation, adjustment of system and components instructions.
c. Winterization procedures.
d. Schedule indicating required open valve time to produce given precipitation amounts and seasonal adjustments.
e. Warranties and guarantees.
f. Submit five copies.

1.4 GUARANTEE
A. Guarantee in writing all materials, equipment and workmanship furnished to be free of all defects of workmanship and materials. Within one year after date of Substantial Completion repair or replace all defective parts or workmanship that may be found at no additional cost to Owner.
B. Fill and repair all depressions and replace all necessary lawn and planting which result from the settlement of irrigation trenches for one year after date of Substantial Completion.
C. Supply all manufacturer's printed guarantees.

1.5 QUALITY ASSURANCE
A. Contractor shall be licensed in the State in which this work is being performed.
B. Contractor shall have at least two years prior experience in projects of equal or larger scope. Provide minimum of three references and list of similar projects with owners' names, addresses, and phone numbers, when requested by Owner.
C. Contractor shall employ on site at all times a foreman who is thoroughly experienced and competent in all phases of the work of this Section.

1.6 SYSTEM DESCRIPTION
A. Design requirements:
1. Minimum water coverage: Planting areas - 85%, Lawn areas - 100%
2. Layout system to obtain optimum coverage using manufacturer's standard heads. Spray on walks, walls or paved areas is not acceptable.
3. Zoning shall be designed for optimum use of available pressure and efficient distribution for types of plantings and shapes of planting areas.
4. Design pressures: Install pressure regulating equipment as necessary.
5. Provide/install approved fixed tee or coupling device for air blow winterization. Location shall be on main supply line downstream from main shut off valve.
6. Install approved backflow prevention device in conformance with local or prevailing codes, and in approved site location. Provide for drainage without erosive damage.

1.7 EXTRA EQUIPMENT
A. In addition to installed system, furnish owner with the following:
1. Valve operating key and marker key.
2. Wrench for each sprinkler head cover type.
3. Two (2) sprinkler head bodies of each size and type.
4. Two (2) nozzles for each size and type used.
B. Store above items safely until Substantial Completion.
C. Deliver above items at Substantial Completion.

PART 2 - PRODUCTS

2.1 PIPE AND FITTINGS
A. PVC 1120, ASTM D-1784, permanently marked with manufacturer's name, schedule rating, size, type. Solvent-weld type:
1. Pipe:
a. Pressure lines: Schedule 40 solvent weld.
b. Lateral lines: Class 200 pvc.
c. Sleeving: Class 200 pvc.
2. Fittings: Schedule 40 PVC, solvent-weld type. Install threaded joints where required at valves, risers, etc.
3. Risers: Lawn and shrub heads - flexible and damage-resistant plastic "polypipe" riser.
4. Solvent: NSF approved solvent for Type I & II PVC.
B. Polyethylene Pipe
1. Pipe: Class 100, 3/4" lateral line, for use on drip irrigation zone(s) where drip tubing is not otherwise used.
2. Fittings: Schedule 80 PVC.
3. Clamps: Stainless Steel.
C. Drip Line: Netafim Techline Dripperline, with .6 GPH drippers at 18" spacing.

2.2 SPRINKLER HEADS
A. Description: Appropriate for application in throw, pressure and discharge. Each type of head shall be of a single manufacturer.
1. Lawn heads: pop-up type.
B. Manufacturer: Rainbird, Hunter, Weathermatic Irrigation Company.

2.3 AUTOMATIC CONTROL SYSTEM
A. General; Furnish low voltage system manufactured expressly for control of automatic circuit valves of underground irrigation systems. Provide unit of capacity to suit number of circuits as indicated.
B. Control Enclosure: Manufacturer's standard wall mount with locking cover, complying with NFPA 70.
C. Circuit Control: each circuit variable from approximately 5 to 60 minutes. Including switch for manual or automatic operation of each circuit.
D. Timing Device: Adjustable 24-hour and 7 or 14 day clocks to operate any time of day and skip any day in a 7 or 14 day period.
E. Wiring: Solid or stranded direct-burial type as recommended by manufacturer of control unit; type AWG-UF, UL approved.

2.4 VALVING
A. Manual valves: brass or bronze for direct burial, gate valves, 150 pound class, threaded connection with cross type handle designed to receive operating key.
B. Automatic circuit valves: high impact plastic with corrosion-resistant internal parts. Low power solenoid control, normally closed, with manual flow adjustment; same manufacturer as control unit.
1. Standard sprinkler valve shall be Rainbird PEB-PRS-B. Use scrubber valve if not connected to potable water.
2. Drip Control Zone Kit: Hunter PCZ-101.
C. Quick coupler valve: brass or bronze construction with hinged top. One per zone or valve grouping.
D. Manual drain valves:
1. Bronze construction, straight type, 150 pound class, threaded connections, with cross type operating handle designed to receive operating key. Calco, Champion 100, or approved equal.
2. Size: 3/4 inch.
E. Pressure Regulator: Netafim Model PRV075HF35, 3/4", one per zones.
F. Flushing Valve: Netafim Model TLFV-1, two per zone (each end).
G. Filter: Netafim Model DF075-120, 3/4" filter; one per drip zone.
H. Air Relief Valve: Netafim Model TLAVRV,

2.5 MISCELLANEOUS
A. Chemicals: primer and solvent glue as required by pipe manufacturer.
B. Valve box - high impact plastic, green in color.
C. Valve cover and frame - compatible with valve box with provision for locking.
D. Drainage backfill - clean gravel or crushed stone, graded from 3" maximum to 3/4" minimum.

PART 3 - EXECUTION

3.1 GENERAL
A. Install system to provide for adequate protection against freeze damage.
B. Install system in accordance with approved Contractor design drawings. All deviations from the plans must be approved, and clearly recorded on record drawing.
C. Install system and components in strict accordance with manufacturer's recommendations.
D. Install quick coupler(s) on main supply line, approximately equal spacing, at valve box locations or intervals of approximately 200 feet, whichever is greater. Locate adjacent to paved surfaces, at valve boxes where practical.

3.2 SURFACE CONDITIONS
A. Examine the areas and conditions under which work will be performed. Notify Contractor of conditions detrimental to timely and proper completion of Section work. Do not proceed until unsatisfactory conditions are corrected.
B. Locate all underground utilities and structures and notify Architect of any conflict with Section work. Protect structures and utilities. Repair or replace said structures or utilities damaged by this work at no cost to the Owner.

3.3 SLEEVING
A. Sleeving installed by others. Coordinate with other trades.

3.4 TRENCHING AND BACKFILLING
A. Trenching and backfilling shall be per applicable ISPWC Section.
B. Cut trenches straight and without abrupt grade changes to allow the following minimum cover:
1. Main Lines and Sleeving: 18 inches.
2. PVC Laterals: 12 inches.
C. Surround lines with 2 inches of clean rock-free material on all sides.

3.5 MISCELLANEOUS VALVES
A. Install manual drain valves up stream. Install devise at mainline tap in accordance with manufacturer requirements for complete operation. Install backflow provision and connect to controller.

3.6 CIRCUIT VALVES
A. Install in valve box, arranged for easy adjustment and removal.
1. Provide union on downstream side.
2. Adjust automatic control valves to provide flow rate of rated operating pressure required for each sprinkler circuit.

3.7 PIPE INSTALLATION
A. Lay PVC pipe in accordance with standard and acceptable practice. Thrust blocks to be used at points of intersection and change of direction in main line pipe as per manufacturer's recommended specifications. Install manual drains.
B. PVC pipe joints, solvent welded except as indicated. Cut pipe square, deburr, wipe from surface all saw chips, dust, dirt, moisture and any foreign matter which may contaminate the cemented joint. Apply cleaner/primer and solvent cement, make joints in accordance with manufacturer's recommendations. Use Teflon thread sealant (tape) at all threaded joints.
C. Contractor shall size pipe according to schedule provided. Flow velocities shall not exceed 5 feet/second in all cases. Lateral lines shall be laid out and installed per zone to balance the pressure loss and provide minimum fluctuation in system operating pressures.

Pipe Size	Pipe Section	Pipe Size	Pipe Section
3/4"	0-9 GPM	1 1/2"	26-34 GPM
1"	10-17 GPM	2"	35-50 GPM
1 1/4"	18-25 GPM	2 1/2"	51-80 GPM

D. Techline Drip Line: Place in shallow furrow at 1"-2" below finish topsoil grade, below layer of specified mulch. Lay in uniform grid pattern in groundcover/shrub areas (rows 18"-24" apart max). Coil 20 linear feet at each balled and burlapped tree around base and to allow for tree removal if required. Staple drip line every 36" max. Flush all lines with full head of water prior to installation of flush valves at end of circuit runs.
E. Flush Valves: Install flush valve at end of each drip line run.

3.8 SPRINKLER HEADS
A. Flush circuit lines with full head of water prior to head installation.
1. Install heads at level with mulch
2. Locate part-circle shrubbery heads to maintain a minimum distance of six inches (6") from walls and four inches (4") from other boundaries unless otherwise indicated. Keep overspray to a minimum.

3.9 CONTROL WIRE INSTALLATION
A. Bury wires beside or below main line pipe in same trench.
B. Bundle multiple wires together with tape at ten feet (10') maximum intervals.
C. Provide 36 inch loop in wires at each valve where controls are connected and at 100' maximum intervals between.
D. Make all electrical joints (splices) in boxes only. Make electrical joints waterproof. Scotch-Lock connectors, or approved.

3.10 AUTOMATIC CONTROLLER
A. Install on site as approved. Verify location with Owner Representative.
B. Install typewritten legend inside controller door.

3.11 TESTING
A. Do not allow or cause any work of this Section to be covered up or enclosed until it has been inspected and tested.
B. Pressure testing:
1. Make necessary provision for thoroughly bleeding the line of air and debris.
2. Before testing, cap all risers, and install all valves.
3. Fill all main supply lines with water. Pressurize to 100 psi. Close air supply and test for leakage. Test shall be approved if no greater than 5 psi loss occurs in 15 minutes.
4. Fill all zone lines with water to static pressure. Hold for 15 minutes. Inspect for leakage.
5. Contractor shall provide all required testing equipment and personnel. Test shall be performed in presence of Architect. Contractor shall make notice of test (48) hours in advance.
6. Provide required testing equipment and personnel.
7. Repair leaks, and retest until acceptance by the Architect.
C. Coverage inspection: upon completion of all systems, perform a coverage test to determine if coverage of water afforded all areas is complete, adequate and uniform. Change heads, nozzles, orifices and/or adjustment as directed to provide uniform coverage.
D. Final inspection:
1. Clean, adjust, and balance all systems. Verify that:
a. Remote control valves are properly balanced;
b. Heads are properly adjusted for radius and arc of coverage;
c. The installed system is workable, clean and efficient.
E. Winterization: Winterize system at the end of first season of system operation. Review procedures with Owner Representative.

END OF SECTION

JENSENBELTS ASSOCIATES
Site Planning / Landscape Architecture
1606 Tyrell Lane, Ste 130 Boise, ID 83706
Ph. (208) 345-7276 www.jensenbelts.com

OWNERS OF RECORD
OPEN DOOR RENTALS, LLC
1977 E. OVERLAND ROAD
MERIDIAN, IDAHO 83642
PHONE: (208) 288-3560

DEVELOPER
CHALLENGER DEVELOPMENT, INC
1977 E. OVERLAND ROAD
MERIDIAN, IDAHO 83642
PHONE: (208) 288-3560

PLANNER
BECKY McKAY
ENGINEERING SOLUTIONS
1029 N. ROSARIO STREET, STE. 100
MERIDIAN, ID 83642
PHONE: (208) 938-0980
FAX: (208) 938-0941
EMAIL: beckym@engsol.org

STATE OF IDAHO — Kenneth Lee Jensen — 6535 — LANDSCAPE ARCHITECT

NO.	DESCRIPTION	REVISIONS	DATE	BY

ENGINEERING SOLUTIONS, LLP
1029 N. ROSARIO STREET, SUITE 100
MERIDIAN, IDAHO 83642
PHONE: (208) 938-0980 FAX: (208) 938-0941

FOUNTAIN PARK SUBDIVISION
LOCATED IN THE N 1/2 OF THE SW 1/4 OF SECTION 10, T.4N., R.1W., B.M.

PHASE 1 FINAL PLAT LANDSCAPE PLAN

DATE ISSUED	09-13-23
PROJECT NO.	JBA-2318
DWG. FILE	Fountain Park.dwg
SCALE	AS SHOWN
DRAWN BY	KCS
CHECKED BY	KCS

L6
SHEET 07 OF 07

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Your Economic Opportunity

IDAHO TRANSPORTATION DEPARTMENT
P.O. Box 8028 • Boise, ID 83707-2028
(208) 334-8300 • itd.idaho.gov

May 25, 2021

Challenger Development, Inc.
Corey Barton
1977 E. Overland Road
Meridian, ID 83642

Engineering Solutions LLP
Becky McKay, Partner
1029 N Rosario St., #100
Meridian, ID 83642
Beckym@engsol.org
Phone: 208-938-0980

VIA EMAIL

RE: Fountain Park Subdivision – ITD Development Condition Memo

Dear Mr. Barton and Ms. McKay,

The Idaho Transportation Department (ITD) appreciated the opportunity to review the Foutnain Park Subdivision Traffic Impact Study (TIS) located north of SH-44 between Hamlin Ave and Palmer Lane. ITD has completed out review of the TIS. Although we do not have any technical questions, we do have concern for the development's added trips and associated congestion to the intersections of SH-44 / SH-16 and SH-44 / Palmer Lane.

ITD has entered into an agreement with the city of Star to collect a proportionate share contribution from each new development for impacts to the State highway system. As two agencies we are working together to accelerate highway construction within Star's area of impact to accommodate new development growth. ITD values your contribution to the transportation system so we can help keep goods, services and the public moving at an efficient pace.

Per the TIS, the intersection of SH-44 / Palmer Lane fails by 2025 full buildout without signalization improvements. ITD programmed the SH-44 / Palmer Lane widening and signalization project in 2027 with the understanding that the department would request proportionate share contributions from new nearby developments to help accelerate the project.

At full buildout, the intersection of SH-16 / SH-44 exceeds ITDs operational thresholds for the several turning movements even with widening improvemnts on SH-44 scheduled for construction in 2023. ITD's SH-44 Corridor plan identifies the ultimate configuration of this intersection to be an interchange.

ITD determined Fountain Park Subdivision's proportionate share contribution at both intersections as the following. Details of the proportionate share calculation are included in the attached *ITD Staff Technical Report.*

Your Safety • Your Mobility
Your Economic Opportunity

IDAHO TRANSPORTATION DEPARTMENT
P.O. Box 8028 • Boise, ID 83707-2028
(208) 334-8300 • itd.idaho.gov

Intersection	Proportionate Share Contribution
SH-44 / Hamlin Road	NA
SH-44 / Palmer Lane	$152,380
SH-16 / SH-44	$160,000
TOTAL	**$312,380**
Approximate per household unit	***$1,244***

Maintaining safety and mobility for Idaho's motorists is of utmost importance to ITD. We appreciate your improvements to livability in Star, ID as we want all residents to travel safely and efficiently around the Treasure Valley. If you have any questions please contact me by email at Erika.Bowen@itd.idaho.gov or 208-265-4312 extension #7.

Sincerely,

Erika R. Bowen, P.E.
ITD – District 3
Development Services Manager

Cc:
Shawn Nickel – City of Star
Paige Bankhead – ACHD
Chhang Ream – CR Engineering

CITY OF STAR

LAND USE STAFF REPORT

TO: Mayor & Council

FROM: City of Star - Planning & Zoning Department

MEETING DATE: **December 5, 2023**

FILE(S) #: FP-23-15, Final Plat, Madenford Estates Subdivision, Unit 2

REQUEST

The Applicant is requesting approval of a Final Plat for Madenford Estates Subdivision No. 2, consisting of 15 residential lots and 3 common lots on 5.00 acres. The subject property is located at 9424 W. Madenford Lane, generally located north of Beacon Light Road and west of N. Pollard Road. Ada County Parcel No. R5432520200.

REPRESENTATIVE:
Antonio Conti
Ackerman-Estvold
7661 W. Riverside Dr., Ste. 102
Garden City, Idaho 83714

OWNER/APPLICANT:
Brad Candau
345 N. Stony Brook Way
Eagle, Idaho 83616

PROPERTY INFORMATION

Land Use Designation - Residential R-3-DA

Acres - 5.00 acres
Residential Lots - 15
Common Lots - 3
Commercial Lots - 0

HISTORY

October 4, 2022 Council approved applications for Annexation and Zoning (AZ-22-06), Development Agreement (DA-22-06), and Preliminary Plat (PP-22-11) for Madenford Estates Subdivision, Unit 2. The preliminary plat was approved for 15 single family residential lots, 3 common lots on 5 acres.

GENERAL DISCUSSION

The Final Plat layout generally complies with the approved Preliminary Plat. The preliminary plat was approved with 15 residential lots.

Staff Reviewed Comments from the Preliminary Plat Approval/Findings of Fact:

The Preliminary Plat submitted contains 15 single family residential lots and 4 common area lots on 5.0 acres with a proposed density of 3.0 dwelling units per acre. The lots will have access and frontage from a public street. Lots will range in size from 9,304 square feet to 11,283 square feet with the average buildable lot being 10,218 square feet. The submitted preliminary does not identify street widths or size of the proposed sidewalk. All roads must be in a 50-foot wide right of way with paved streets measuring 36 feet from back of curb to back of curb. All internal sidewalks must be detached, concrete and a minimum of five feet wide. Primary access for the development will be on W. Trident Ridge Drive through the Cresta Del Sol development to the west. Street names must be obtained by the Ada County Street Naming Committee prior to signature of the final plat. Open space must be 15 percent of the gross parcel size with 10 percent of the gross parcel size in usable open space.

The Unified Development Code, Section 8-4E-2 requires a development of this size to have a minimum of 1 site amenity. The applicant is proposing a walking path that goes around the perimeter of the development and connects into the sidewalk of Cresta Del Sol on the west.

ADDITIONAL DEVELOPMENT FEATURES:

- Sidewalks

  Internal sidewalks shall be detached, concrete and a minimum of five feet (5') wide throughout the development.

- Lighting

  Streetlights shall reflect the "Dark Sky" criteria with all lighting. The same streetlight design shall continue throughout the entire development. The applicant has submitted a proposed streetlight plan**.** All proposed light locations satisfy City code. **Applicant has provided a streetlight plan but has not provided a street light design/cut sheet for City approval. The plan meets City code for light locations. Applicant will be required to work with Staff and submit a cut sheet and design before signature of the final plat**.

- Street Names

  Applicant has not provided documentation from Ada County that the street names are acceptable and have been approved. This will be required at final plat.

- Subdivision Name

  Applicant has provided a letter from Ada County that the subdivision name has been approved and reserved for this development. **The subdivision name approved shall match the final plat prior to signatures on the mylar.**

- Landscaping - As required by the Unified Development Code, Chapter 8, Section 8-8C-2-M (2) Street Trees; A minimum of one street tree shall be planted for every thirty-five (35) linear feet of street frontage. The applicant shall use "Treasure Valley Tree Selection Guide", as adopted by the Unified Development Code. Section 8-8C-2, J5 states that a minimum of one deciduous shade tree per four thousand (4,000) square feet of common area shall be provided. **The submitted landscape plan appears to satisfy these requirements for both the open space and street trees.**

- Setbacks – **The subdivision will adhere to the setbacks of the R-3 zoning designation noted earlier in this report.**

- Block lengths – The only block in the development meets the 750' block length requirement.

- Mailbox Cluster – Applicant has provided documentation from the Star Postmaster depicting the approved location for the mailbox cluster. This shall be located on lot 18 with the cluster facing north and accessible from W. Trident Ridge Court.

Phasing – The development is proposing to be built out in two phases however, Phase 1 will be the lot to the east and not annexed into the City of Star but split in the county. Phase 2 will be this development, annexed into the City of Star as proposed in this report.

Staff analysis of Final Plat Submittal:

Lot Layout – The gross density of Madenford Estates Subdivision, Unit 2 is 3.0 du/acre, with lots ranging in size from 9,304 square feet to 11,283 square feet.

Common/Open Space and Amenities

- Connected Walking Path

ADDITIONAL DEVELOPMENT FEATURES:

- Sidewalks

  Internal sidewalks shall be a minimum of five feet (5') wide, detached concrete with an eight-foot (8') landscape strip.

- Roadways

All roads shall be 36 feet from back of curb to back of curb as required in the Unified Development Code Section 8-6B-2.

- Lighting

  Streetlights shall reflect the "Dark Sky" criteria with all lighting. The same streetlight design shall continue throughout the entire development. The applicant has submitted a proposed streetlight plan**.** All proposed light locations satisfy City code. **Applicant has provided a streetlight plan but has not provided a street light design/cut sheet for City approval. The plan meets City code for light locations. Applicant will be required to work with Staff and submit a cut sheet and design before signature of the final plat**.

- Street Names

  The Applicant has provided documentation from Ada County that the street name proposed has been changed to West Novato Court. This will need to be reflected accurately on the final plat prior to signing the mylar.

- Subdivision Name

  Applicant has provided a letter from Ada County that the subdivision name has been approved and reserved for this development. **The subdivision name approved shall match the final plat prior to signatures on the mylar. The applicant shall revise the subdivision name to read "Madenford Estates Subdivision No.2".**

- Landscaping - As required by the Unified Development Code, Chapter 8, Section 8-8C-2-M (2) Street Trees; A minimum of one street tree shall be planted for every thirty-five (35) linear feet of street frontage. The applicant shall use "Treasure Valley Tree Selection Guide", as adopted by the Unified Development Code. Section 8-8C-2, J5 states that a minimum of one deciduous shade tree per four thousand (4,000) square feet of common area shall be provided. **The submitted landscape plan appears to satisfy these requirements for both the open space and street trees.**

- Setbacks – The subdivision will adhere to the setbacks of the R-3 zoning designation and no waivers have been granted.

- Block lengths – The only block in the development meets the 750' block length requirement.

- Mailbox Cluster – Applicant has provided documentation from the Star Postmaster depicting the approved location for the mailbox cluster. This shall be located on lot 18 with the cluster facing north and accessible from W. Novato Court. **The mailbox cluster needs to be covered and internally lit with white LED lights. A plan of the cover will be required prior to signing the mylar.**

Phasing – The development is proposed to be built out in two phases. However, Phase 1 will be the lot to the east and not annexed into the City of Star but split in the county. Phase 2 will be this development, annexed into the City of Star as proposed in this report.

PUBLIC NOTIFICATIONS

Notifications of this application were sent to agencies having jurisdiction on October 24, 2023.

October 25, 2023	ITD	No Objections
October 24, 2023	City & SSWD Engineer	No Objections

FINDINGS

The Council may **approve**, **conditionally approve**, **deny** or **table** this request. In order to approve this Final Plat, the Unified Development Code requires that Council must find the following:

A. The Plat is in conformance with the Comprehensive Plan.
The Council finds that this subdivision upon Preliminary Plat approval was in conformance with the Comprehensive Plan; no changes have been made to change this status.

B. Public services are available or can be made available and are adequate to accommodate the proposed development.
Staff finds that all public services are available and able to accommodate this development.

C. There is public financial capability of supporting services for the proposed development.
Staff knows of no financial hardship that would prevent services from being provided.

D. The development will not be detrimental to the public health, safety or general welfare; and,
Staff finds no facts to support that this subdivision phase will be detrimental to the public health, safety or general welfare.

E. The development preserves significant natural, scenic or historic features.
Staff finds that existing conditions have not substantially changed from the approved Preliminary Plat of this subdivision.

CONDITIONS OF APPROVAL

- **Per the Development Agreement and prior to signing the final plat, developer is to pay the traffic mitigation fee required by the Idaho Transportation Department. The developer will pay the City $1000.00 per buildable lot within each phase prior to signature on the final plat for the applicable phase, capped at $15,000.00. The City will allocate funds to roadway improvements in the vicinity of the project. This phase has 15 residential lots for a fee of $15,000.00 (15 x $1000.00).**

- **All roads shall be 36 feet from back of curb to back of curb as required in the Unified Development Code Section 8-6B-2.**
- **All sidewalks shall be a minimum of 5 feet wide and detached as required by the Unified Development Code Section 8-4A-17.**
- Streetlights shall comply with the Star City Code and shall be of the same design throughout the entire subdivision. Streetlights shall be continuous throughout the subdivision and shall be maintained by the Homeowners Association. **Streetlights shall be installed and energized prior to issuing of building permits.** Design shall follow Code with requirements for light trespass and "Dark Skies" lighting. **Applicant/Owner shall work with staff and submit a streetlight design that meets city standards prior to Final Plat approval. Streetlights shall comply with the Star City Code regarding light trespass and "Dark Sky" initiative.**
- **The mailbox cluster shall be covered and internally lit with white LED lights. A plan of the cover will be required prior to signing the mylar.**
- **Provide solid, livestock fencing along the entire northern boundary of development and coordinate with neighbor to the north on the exact type.**
- **Add right-to-Farm Act note to the Final Plat.**
- **Lots 2 & 17 shall be limited to one-story homes**
- **The Applicant shall use a "sheepsfoot" when practical during compaction of the pond area on the site.**
- **Proposed landscape berm shall be constructed at a 3:1 slope.**
- The approved Preliminary Plat for Madenford Estates Subdivision, Unit 2 shall comply with all statutory requirements of applicable agencies and districts having jurisdiction in the City of Star.
- The property associated with this approved Final Plat, in addition to the property of all future phases shall be satisfactorily weed abated at all times, preventing a public nuisance, per Star City Code Chapter 3, Section 3-1-1 through 3-1-7.
- The property associated with this approved Final Plat, in addition to the property of all future phases shall be properly maintained throughout the construction process to include trash picked up and trash receptacles emptied with regular frequency, streets swept and cleaned weekly, including any streets used to access the property and all debris shall be prevented from accumulating on any adjacent property or public right of way and shall remove all debris from public way at least daily.
- All signed Irrigation District Agreements with the Irrigation Districts shall be provided to the City of Star with each subsequent Final Plat application.
- Pressurized irrigation systems shall comply with the Irrigation District(s) and the City of Star Codes. Plans for pressurized irrigation systems shall be submitted to, and approved by the City of Star Engineer, prior to installation.
- The approved Preliminary Plat shall comply with the City of Star Unified Development Code regarding landscaping, both internal buffers and frontages. (See Section 8-4 B Landscaping Requirements)
- A plat note supporting the "Right to Farm Act" as per Idaho Code Title 22, Chapter 45, shall be shown on the Final Plat.

- A plat note shall state that development standards for residential development shall comply with the effective building and zoning requirements at time of building permit issuance.
- The subsequent Final Plats shall comply with and be in accordance with the current City of Star Code, with the exception of any waivers granted by Council.
- Requested surety shall be required at 150% of the total estimated installed cost, as approved by the City Engineer or Administrator. The term of approval shall not exceed 180 days. (See Section 8-1 C-1 of the Unified Development Code for a list of eligible items.)
- A letter from the US Postal Service shall be given to the City at Final Plat stating the subdivision is in compliance with the Postal Service.
- A form signed by the Star Sewer & Water District shall be submitted to the City prior to the signature of the Final Plat stating that all conditions of the District have been met.
- A separate sign application is required for any subdivision sign.
- As built plans for pressurized irrigation systems shall be submitted to the City of Star **prior to signature of the final plat**.
- Applicant shall provide the City with two (2) full size and two (1) 11"x17" copy of the signed recorded final plat with all signatures, prior to any building permits being issued.
- Development standards for single family residential units shall comply with effective building and zoning requirements at time of building permit issuance, or as approved through the Development Agreement or as stated herein.
- The mylar/final plat shall be signed by the owner, Surveyor, Central District Health, ACHD and City Engineer, prior to being delivered to the City of Star for City Clerk's signature.
- A copy of signed irrigation agreements shall be submitted to the City **prior to signature of the final plat.**
- All common areas shall be maintained by the Homeowners Association.
- The applicant shall provide a sign, to be located at all construction entrances, indicating the rules for all contractors that will be working on the property starting at grading and running through home sales that addresses items including but not limited to dust, music, dogs, starting/stopping hours for contractors (7a.m. start time). **Sign shall be approved by the City prior to start of construction.**
- A copy of the recorded CC&R's shall be submitted to the City of Star prior to any building permits being issued.
- **Prior to signature of the final plat**, a signed Irrigation District Agreement with the Irrigation Districts shall be provided to the City of Star. This requirement shall be with each subsequent Final Plat application.
- **Owner/Developer will agree to install a 2" (High Density Polyethylene) HDPE SDR-11 roll pipe in the shared utility trench to be used for future fiber optic and/or copper telecommunication cables.**
- Any additional Condition of Approval as required by Staff and City Council.

COUNCIL DECISION

The Star City Council _____ File # FP-23-15 Madenford Estates Subdivision, Unit 2 Final Plat, on _____ _____, 2023.

PRELIMINARY PLAT FOR

MADENFORD ESTATES UNIT 2

A PORTION OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 33, T.5N., R.1W., BOISE MERIDIAN, CITY OF STAR, ADA COUNTY, IDAHO.

SEPTEMBER 2023 SCALE: 1" = 750' SHEET 1 OF 1

N

Graphic Scale:

Attention is Drawn to the Fact That Drawing Scales May be Altered During Reproduction Processes. Scales Shown Hereon are Based on a Full Scale Sheet Size of 8.5" x 11".

Scale: 1" = 750'

ACKERMAN ESTVOLD
7661 West Riverside Drive, Ste. 102 · Garden City, ID 83714
208.853.6470 · www.ackerman-estvold.com
Minot, ND | Fargo, ND | Williston, ND | Boise, ID

MADENFORD ESTATES UNIT 2
VICINITY MAP
3605 N POLLARD LANE, STAR, ID

DRAWN BY: AMC
CHECKED BY: AMC

DATE: 09/05/2023

#	--/--/----
#	--/--/----
#	--/--/----

PROFESSIONAL LAND SURVEYOR LICENSED 18350 STATE OF IDAHO ANTONIO M. CONTI

FINAL PLAT

1.0

ACKERMAN ESTVOLD

WWW.ACKERMAN-ESTVOLD.COM

September 5, 2023

City of Star
Planning and Zoning
10769 W. State Street
Star, ID 83669

RE: Letter of Intent and Statement of Compliance

To whom it may concern,

This is a Letter of Intent for Madenford Estates Unit 2 Subdivision, consisting of a 5.00-acre parcel at 3605 North Pollard Lane, Star, Idaho. The proposed plat consists of 15 single-family residential lots and has a gross density of 3.0 dwelling units per acre. The single-family lots vary from 0.21 acres to 0.26 acres, with an average of 0.23 acres.

The open space consists of an 8' wide concrete pedestrian walkway located in common lots 1 and 18. The total open space makes up approximately 15.8% of the entire area of the property.

The final plat maintains substantial compliance with the approved Preliminary Plat and Conditions of Approval, notwithstanding the following changes:

1. The bearing for each lot was adjusted accordingly to be parallel to reference R1.

Respectfully submitted,

Antonio M Conti, P.E., P.L.S.

City
P.O
Star, Idaho 83669
P: 208-286-7247

FINAL PLAT APPLICATION

****All information must be filled out to be processed.*

FILE NO.: FP-23-15
Date Application Received: 9-12-2023 Fee Paid: $2480.00
Processed by: City: Barbara Norgrove

Applicant Information:

PRIMARY CONTACT IS: Applicant ___ Owner ___ Representative ☒

Applicant Name: Brad Candau
Applicant Address: 345 N. Story Brook Way, Eagle, ID Zip: 83616
Phone: 925-963-3788 Email: bradca@aol.com

Owner Name: Brad Candau
Owner Address: 345 N. Story Brook Way, Eagle, ID Zip: 83616
Phone: 925-963-3788 Email: bradca@aol.com

Representative (e.g., architect, engineer, developer):
Contact: Antonio Conti Firm Name: Ackerman-Estvold
Address: 7661 W. Riverside Dr., Ste 102, Garden City, ID Zip: 83714
Phone: 208-853-6470 Email: antonio.conti@ackerman-estvold.com

Property Information:

Subdivision Name: Madenford Estates Unit 2 Subdivision Phase: 1

Parcel Number(s): R5432520200

Approved Zoning: R-3 Units per acre: 3.0

Total acreage of phase: 5.00 Total number of lots: 18

Residential: ☒ Commercial: ___ Industrial: ___

Common lots: 3 Total acreage of common lots: 0.79 Percentage: 15.8%

Percent of common space to be used for drainage: TBD Acres: TBD

Special Flood Hazard Area: total acreage 0.00 number of homes 0

Changes from approved preliminary plat pertaining to this phase:

	Preliminary Plat	Final Plat
Number of Residential Lots:	15	15
Number of Common Lots:	3	3
Number of Commercial Lots:	0	0
Roads:	W. Trident Ridge Court	W. Trident Ridge Court

Amenities: 8' Wide Meandering Concrete Pedestrian Walkway in Lots 1 and 18. | 8' Wide Meandering Concrete Pedestrian Walkway in Lots 1 and 18.

Flood Zone Data: (This Info Must Be Filled Out Completely Prior to Acceptance):

Subdivision Name: Madenford Estates Unit 2 Subdivision Phase: 1

Special Flood Hazard Area: total acreage 0.00 number of homes 0

a. A note must be provided on the final plat documenting the current flood zone in which the property or properties are located. The boundary line must be drawn on the plat in situations where two or more flood zones intersect over the property or properties being surveyed.

b. FEMA FIRM panel(s): #160xxxxxxC, 160xxxxxxE, etc.: 16001C0130J
FIRM effective date(s): mm/dd/year 06/19/2020
Flood Zone(s): Zone X, Zone A, Zone AE, Zone AH, etc.: Zone X
Base Flood Elevation(s): AE____.0 ft., etc.: N/A

c. Flood Zones are subject to change by FEMA and all land within a floodplain is regulated by Chapter 10 of the Star City Code.

Application Requirements:

(Applications are required to contain one copy of the following unless otherwise noted.)

Applicant (√)	Description	Staff (√)
✔	Completed and signed copy of Final Plat Application	
	Fee: Please contact the City for current fee. Fees may be paid in person with check or electronically with credit card. Please call City for electronic payment. Additional service fee will apply to all electronic payments.	
✔	Electronic copy of letter of intent and statement of compliance (or substantial compliance) with the approved Preliminary Plat and Conditions of Approval. The letter of intent shall include the following: • Gross density of the phase of the Final Plat submitted • Lot range and average lot size of phase • Description of approved open space being provided in the submitted phase including percentage of overall open space, number and type of approved amenities • List any specific approved building setbacks previously approved by Council.	
✔	Electronic copy of legal description of the property (word.doc and pdf version with engineer's seal and closure sheet)	
✔	Electronic copy of current recorded warranty deed for the subject property	
	If the signature on this application is not the owner of the property, an **original** notarized statement (affidavit of legal interest) from the owner stating the applicant and/or representative is authorized to submit this application.	
✔	Electronic copy of subdivision name approval from Ada County Surveyor's office.	
✔	Copy of the "final" street name evaluation/approval or proof of submittal request from Ada County Street Naming	
✔	Electronic copy of vicinity map showing the location of the subject property	
	One (1) 24" X 36" paper copy of the Final Plat & Electronic Copy**	
	One (1) 11" X 17" paper copy of the Final Plat	
✔	Electronic copy of the Final landscape plan**	

✔	One (1) 11” X 17” copy of the Final landscape plan	
✔	Electronic copy of site grading & drainage plans**	
✔	Electronic copy of originally approved Preliminary Plat**	
	Electronic copy of a Plat with all phases marked with changes, if applicable**	
✔	Electronic copy of final engineering construction drawings, stamped and signed by a registered engineer**	
✔	Storm drainage calculations must be submitted for <u>private</u> streets/drives and parking areas within subdivisions**	
✔	Electronic copy of streetlight **design** and **location** information	
✔	Special Flood Information – Must be included on Preliminary/Final Plat and Application form.	
	Electronic copy of all easement agreements submitted to the irrigation companies	
	Electronic copy of the proposed Covenants, Conditions, & Restrictions (CC&R's)	
	One (1) copy of Electronic versions of submitted applications, including signed Final Plat Application, legal description, recorded warranty deed, vicinity map, final plat, landscape plan, site grading & drainage plans, copy of original Preliminary Plat, plat with phases marked, engineering construction drawings, storm drainage calculations, streetlight design and location, and signed irrigation agreements, CC&R’s <u>shall be submitted in original pdf format (no scans for preliminary plat, landscape plans or grading and drainage plans) on a thumb drive only (no discs)</u> with the files named with project name and plan type.	
	Upon Recording of Final Plat, the applicant shall submit the following to the Planning Department prior to building permit issuance: • One (1) 11” X 17” and (1) 18” X 24” **recorded** copy of Final Plat • Electronic copy of final, approved construction drawings • Electronic copy of as-built irrigation plans • Electronic copy of recorded CC&R’s • Proof of required Construction Sign installation at entrance to development (as conditioned in Preliminary Plat approval) – Picture of installed sign • Electronic copies shall be submitted in pdf format on a thumb drive with the files named with project name and plan type. **Original pdf’s are required for all plans – No Scanned PDF’s please.	
	**NOTE: No building permits will be issued until property is annexed into the Star Sewer & Water District and all sewer hookup fees are paid.	

FEE REQUIREMENT:

*** I have read and understand the above requirements. I further understand fees are due at the time of filing. I understand that there may be other fees associated with this application incurred by the City in obtaining reviews or referrals by architect, engineering, or other professionals necessary to enable the City to expedite this application. I understand that I, as the applicant, am responsible for all payments to the City of Star.*

_____ _____

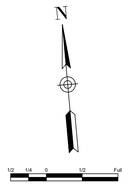
Applicant/Representative Signature Date

PRELIMINARY PLAT FOR

MADENFORD ESTATES UNIT 2

A PORTION OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 33, T.5N., R.1W., BOISE MERIDIAN, ADA COUNTY, IDAHO.

SEPTEMBER 2022 SCALE: 1" = 30' SHEET 1 OF 1



Graphic Scale:

Attention is Drawn to the Fact That Drawing Scales May be Altered During Reproduction Processes. Scales Shown Hereon are Based on a Full Scale Sheet Size of 24" x 36".

Scale: 1" = 30'

LEGEND:

- ● SET 5/8" REBAR WITH PLASTIC CAP MARKED LS 18350
- ▲ FOUND MONUMENT AS NOTED
- ○ CALCULATED POINT - NOTHING FOUND OR SET

B.O.B. BASIS OF BEARING

CP&F CORNER PERPETUATION AND FILING RECORD

- SUBJECT PARCEL
- PROPERTY LINE
- REFERENCE BOUNDARIES
- EASEMENT

PRELIMINARY PLAT DATA

TOTAL SITE AREA	5.00 ACRES
SINGLE-FAMILY RESIDENTIAL (70.40%)	3.52 ACRES
RIGHT-OF-WAY (13.80%)	0.69 ACRES
COMMON AREA (15.80%)	0.79 ACRES
EXISTING ZONING	RUT
PROPOSED ZONING	R-3
SINGLE-FAMILY RESIDENTIAL LOTS	15
OPEN SPACE/COMMON LOTS	3
PUBLIC ROAD	1
TOTAL LOTS	19
GROSS RESIDENTIAL DENSITY	3.00 DU/ACRE
NET RESIDENTIAL DENSITY (EXCLUDES PUBLIC STREET & OPEN SPACE)	4.26 DU/ACRE

AMENITIES
1. WALKING PATHWAYS

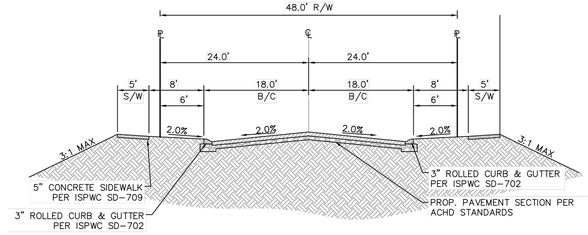
NOTES

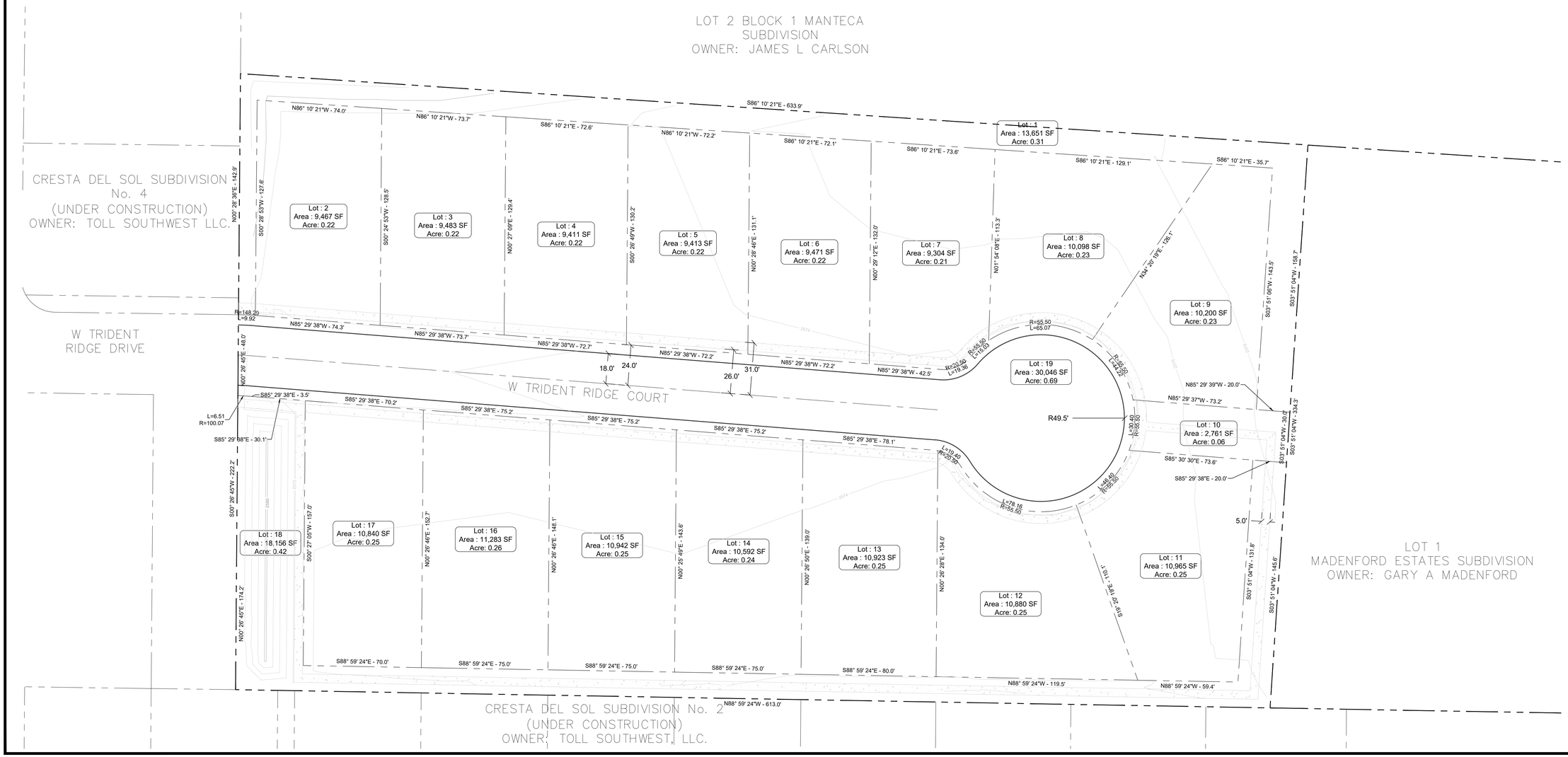
1. SANITARY SEWER AND DOMESTIC WATER SERVICES TO BE PROVIDED BY EXTENSION OF STAR SEWER & WATER DISTRICT
2. SUBJECT PROPERTY DOES NOT FALL WITHIN ANY FEMA FLOOD HAZARD ZONE - SEE FIRM PANEL 16001C0130J DATED 06/19/2020.
3. ALL LOTS ARE HEREBY DESIGNATED AS HAVING A PERMANENT EASEMENT FOR PUBLIC UTILITIES, IRRIGATION, AND LOT DRAINAGE OVER THE FIFTEEN (15) FEET ADJACENT TO ANY PUBLIC STREET. THIS EASEMENT SHALL NOT PRECLUDE THE CONSTRUCTION OF HARD-SURFACED DRIVEWAYS AND WALKWAYS TO EACH LOT.
4. UNLESS OTHERWISE SHOWN AND DIMENSIONED, ALL LOTS ARE HEREBY DESIGNATED AS HAVING A PERMANENT EASEMENT FOR PUBLIC UTILITIES, IRRIGATION, AND LOT DRAINAGE OVER THE FIVE (5) FEET ADJACENT TO ANY INTERIOR SIDE LOT LINE, AND OVER THE TWELVE (12) FEET ADJACENT TO ANY REAR LOT LINE OR SUBDIVISION BOUNDARY.
5. THIS SUBDIVISION WILL BE SUBJECT TO THE TERMS OF A DEVELOPMENT AGREEMENT WITH THE CITY OF STAR.
6. IRRIGATION WATER SHALL BE PROVIDED FROM THE FARMERS UNION DITCH COMPANY IN COMPLIANCE WITH IDAHO CODE 31-3805(B). LOTS WITHIN THE SUBDIVISION WILL BE ENTITLED TO IRRIGATION WATER RIGHTS, AND THE INDIVIDUAL LOTS WILL BE SUBJECT TO IRRIGATION WATER ASSESSMENTS.
7. BUILDING SETBACKS AND DIMENSIONAL STANDARDS IN THIS SUBDIVISION SHALL BE IN COMPLIANCE WITH THE APPLICABLE ZONING REGULATIONS OF THE CITY OF STAR OR AS OTHERWISE APPROVED IN THE DEVELOPMENT AGREEMENT.
8. LOTS 1, 10, AND 18 ARE COMMON/OPEN SPACE LOTS TO BE OWNED AND MAINTAINED BY MADENFORD ESTATES UNIT 2 HOMEOWNERS ASSOCIATION OR ITS ASSIGNS.
9. LOT 10 HAS BEEN PROVIDED FOR THE FARMERS UNION DITCH COMPANY AND IS SUBJECT TO MAINTENANCE AND EASEMENTS FOR THE FARMERS UNION DITCH COMPANY.
10. LOT 19 IS A PUBLIC ROAD LOT FOR ACESS TO LOTS 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, AND 17. THIS LOT WILL BE COVERED BY A BLANKET EASEMENT FOR UTILITIES AND DRAINAGE. THIS LOT SHALL BE OWNED AND MAINTAINED BY ADA COUNTY.
11. LOT 18 WILL CONTAIN AN UNDERGROUND SEEPAGE BED FOR DRAINAGE OF THE SUBDIVISION.

OWNER OF RECORD
GARY MADENFORD
3605 N POLLARD LANE
STAR, ID 83669

DEVELOPER
BRAD CANDAU
349 N STORY BOOK WAY
EAGLE, ID 83616

ENGINEER
ANTONIO CONTI
7661 WEST RIVERSIDE DR., STE 102
GARDEN CITY, ID 83714





ACKERMAN ESTVOLD
7661 West Riverside Drive, Ste. 102 · Garden City, ID 83714
208.853.6470 · www.ackerman-estvold.com
Minot, ND | Fargo, ND | Williston, ND | Boise, ID

MADENFORD ESTATES UNIT 2
PRELIMINARY PLAT
3605 N POLLARD LANE, STAR, ID

DRAWN BY: KES
CHECKED BY: AMC

DATE: 09/30/2022

#	--/--/----
#	--/--/----
#	--/--/----

PRELIMINARY PLAT

1.0

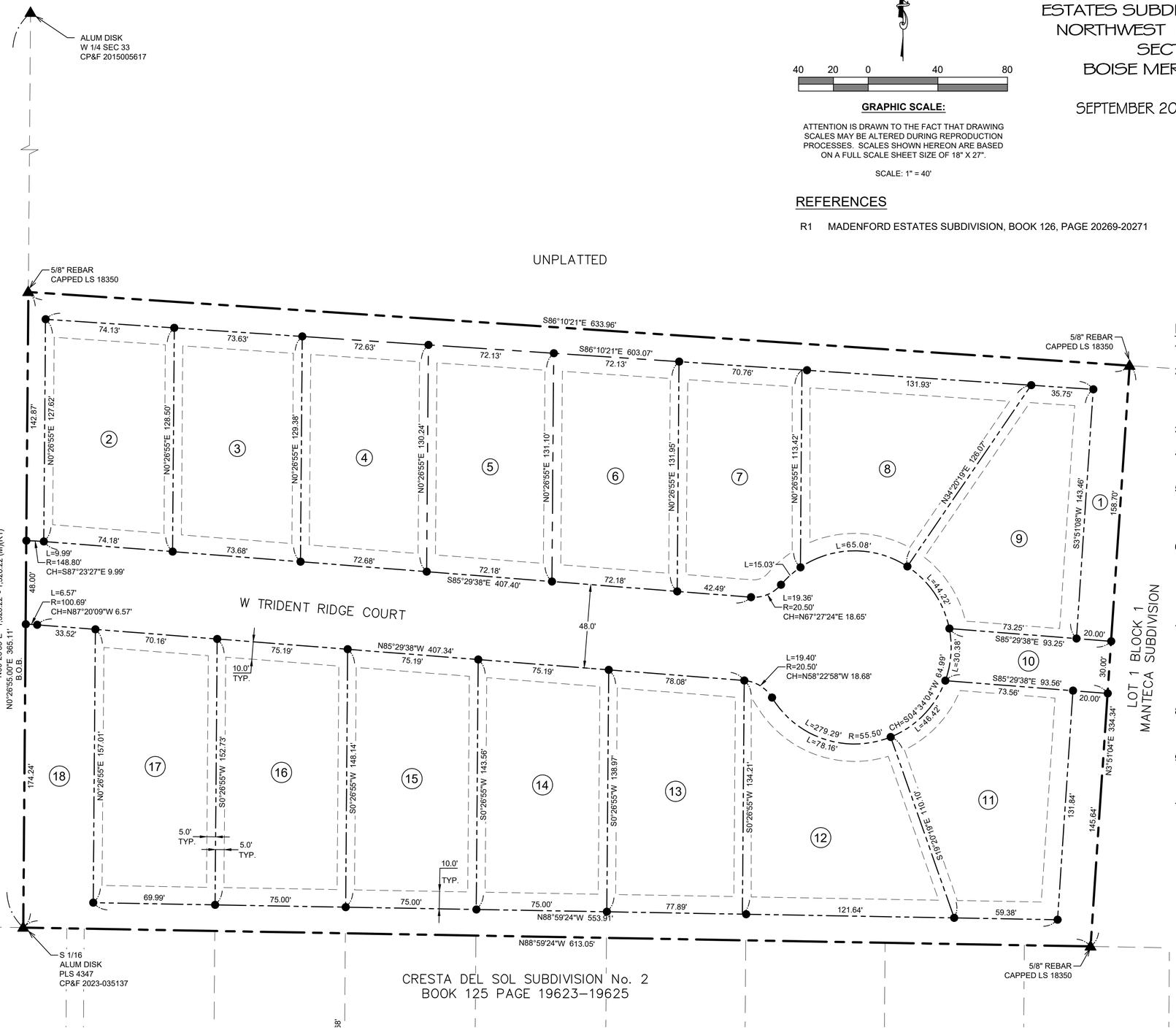
PROFESSIONAL LAND SURVEYOR LICENSED 18350 STATE OF IDAHO ANTONIO M. CONTI

FINAL PLAT FOR

MADENFORD ESTATES UNIT 2 SUBDIVISION

A RESUBDIVISION OF LOT 2 BLOCK 1 MADENFORD ESTATES SUBDIVISION BEING A PORTION OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 33, T.5N., R.1W., BOISE MERIDIAN, ADA COUNTY, IDAHO.

SEPTEMBER 2023 SCALE: 1" = 40' SHEET 1 OF 3



40 20 0 40 80

GRAPHIC SCALE:

ATTENTION IS DRAWN TO THE FACT THAT DRAWING SCALES MAY BE ALTERED DURING REPRODUCTION PROCESSES. SCALES SHOWN HEREON ARE BASED ON A FULL SCALE SHEET SIZE OF 18" X 27".

SCALE: 1" = 40'

REFERENCES

R1 MADENFORD ESTATES SUBDIVISION, BOOK 126, PAGE 20269-20271

LEGEND:

- ● SET 5/8" REBAR WITH PLASTIC CAP MARKED LS 18350
- ▲ FOUND MONUMENT AS NOTED
- B.O.B. BASIS OF BEARING
- M MEASURED DISTANCE
- SUBJECT PARCEL
- PROPERTY LINE
- REFERENCE BOUNDARIES
- EASEMENT LINE

NOTES:

1. BASIS OF BEARING: WEST LINE SW 1/4 OF SECTION 33 SHOWN AS N00°26'55"E.
2. MINIMUM BUILDING SETBACKS SHALL BE IN ACCORDANCE WITH THE CITY OF STAR APPLICABLE ZONING AND SUBDIVISION REGULATIONS AT THE TIME OF THE ISSUANCE OF INDIVIDUAL BUILDING PERMITS OR AS SPECIFICALLY APPROVED AND/OR REQUIRED, OR AS SHOWN ON THIS PLAT.
3. EASEMENTS TO BE PROVIDED PER CITY OF STAR STANDARDS.
4. ANY RE-SUBDIVISION OF THIS PLAT SHALL COMPLY WITH THE APPLICABLE ZONING REGULATIONS IN EFFECT TO THE TIME OF RE-SUBDIVISION.
5. LOTS 1, 10, AND 18 ARE COMMON AREA LOTS HAVING A BLANKET EASEMENT FOR ACCESS, PUBLIC UTILITIES, PRESSURE IRRIGATION AND DRAINAGE, AND WILL BE OWNED AND MAINTAINED BY _____ HOMEOWNERS ASSOCIATION.
6. THE OWNER HAS PROVIDED IRRIGATION WATER TO EACH LOT THROUGH A PRESSURE IRRIGATION SYSTEM TO BE OWNED AND MAINTAINED BY _____ HOMEOWNERS ASSOCIATION IN COMPLIANCE WITH IDAHO CODE SECTION 31-3805(1)(b). ALL LOTS WILL BE SUBJECT TO ASSESSMENTS FROM THE _____ HOMEOWNERS ASSOCIATION .
7. ALL LOT LINES COMMON TO ANY PRIVATE ROADS, REAR LOT LINES, EXTERIOR BOUNDARY LINES ARE HEREBY DESIGNATED AS HAVING A PERMANENT TEN FOOT WIDE (10') EASEMENT FOR PUBLIC UTILITIES, IRRIGATION, AND LOT DRAINAGE. INTERIOR LOT LINES ARE HEREBY DESIGNATED AS HAVING A PERMANENT FIVE FOOT WIDE (5') EASEMENT FOR PUBLIC UTILITIES, IRRIGATION, AND LOT DRAINAGE.
8. INDIVIDUAL LOT OWNERS SHALL BE RESPONSIBLE FOR ALL STORMWATER AND DRAINAGE FACILITIES TO CONTAIN ALL WATER TO THE PROPERTY. NO DISCHARGE SHALL ENTER THE RIGHT-OF-WAY DITCHES.
9. DEVELOPMENT STANDARDS FOR RESIDENTIAL DEVELOPMENT SHALL COMPLY WITH THE EFFECTIVE BUILDING AND ZONING REQUIREMENTS AT TIME OF BUILDING PERMIT ISSUANCE.
10. THIS DEVELOPMENT RECOGNIZES IDAHO CODE SECTION 22-4503, RIGHT TO FARM ACT, WHICH STATES:" NO AGRICULTURAL OPERATION, AGRICULTURAL FACILITY OR EXPANSION THEREOF SHALL BE OR BECOME A NUISANCE, PRIVATE OR PUBLIC, BY ANY CHANGED CONDITIONS IN OR ABOUT THE SURROUNDING NONAGRICULTURAL ACTIVITIES AFTER IT HAS BEEN IN OPERATION FOR MORE THAN ONE (1) YEAR, WHEN THE OPERATION, FACILITY OR EXPANSION, WAS NOT A NUISANCE AT THE TIME IT BEGAN OR WAS CONSTRUCTED. THE PROVISIONS OF THIS SECTION SHALL NOT APPLY WHEN A NUISANCE RESULTS FROM THE IMPROPER OR NEGLIGENT OPERATION OF ANY AGRICULTURAL OPERATION, AGRICULTURAL FACILITY OR EXPANSION THEREOF."

PROFESSIONAL LAND SURVEYOR
LICENSED
18350
STATE OF IDAHO
ANTONIO M. CONTI

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Minot, ND | Fargo, ND | Williston, ND | Boise, ID

Shawn Nickel

From: Ryan Morgan
Sent: Tuesday, October 24, 2023 1:44 PM
To: Barbara Norgrove; Shawn Nickel
Cc: Ryan Field
Subject: RE: Agency Transmittal - Madenford Estates Subdivision No. 2 Final Plat

I have no comments from City or SSWD.

Ryan V. Morgan, PE, CFM
City Engineer
City of Star
P.O. Box 130
Star, ID 83669
Office: 208-908-5458
Mobile: 208-440-1534

"The brightest jewel in the Gem State"

From: Barbara Norgrove <bnorgrove@staridaho.org>
Sent: Tuesday, October 24, 2023 1:33 PM
To: jboal@adaweb.net; sheriff@adaweb.net; Daniel.Weed@cableone.biz; Terence.Alsup@cableone.biz; Lbadigian@cdhd.idaho.gov; Mreno@cdhd.idaho.gov; Gloria Stokes <drain.dist.2@gmail.com>; GIS@tax.idaho.gov; D3Development.Services@itd.idaho.gov; Ryan Morgan <rmorgan@staridaho.org>; Ryan Morgan <rmorgan@starswd.com>; bryce@sawtoothlaw.com; gtiminsky@starfirerescue.org; Melvin.B.Norton@usps.gov; harp.kimberly@westada.org; farmers.union.ditch@gmail.com; ERIC.GRZEBINSKI@mdu.com; planningreview@achdidaho.org; hday@starswd.com; bmoore@adacounty.id.gov; BRO.Admin@deq.idaho.gov; samuel.flores@sparklight.biz; PDickerson@idahopower.com; permits@starfirerescue.org; info@pioneerirrigation.com; irrigation.mm.mi@gmail.com; syarrington@adacounty.id.gov; westerninfo@idwr.idaho.gov; gmprdtim@gmail.com; gmprdjulie@gmail.com; Andy Waldera <andy@sawtoothlaw.com>; brandon.flack@idfg.idaho.gov; Ryan Field <rfield@staridaho.org>; file@idwr.idaho.gov; Cheryl.imlach@intgas.com; irr.water.3@gmail.com; Mwallace@achdidaho.org; Richard Girard <rgirard@staridaho.org>; Kerry.schmidt@intgas.com; Chris Todd <ctodd@staridaho.org>; John Tensen <jtensen@staridaho.org>; gis@compassidaho.org; Vincent.Trimboli@itd.idaho.gov; zsmith@adacounty.id.gov; CalahanH <CalahanH@landproDATA.com>; Brian.Duran@itd.idaho.gov; Saran Becker <Saran.Becker@itd.idaho.gov>
Cc: Shawn Nickel <snickel@staridaho.org>
Subject: FW: Agency Transmittal - Madenford Estates Subdivision No. 2 Final Plat

Shawn Nickel

From: Saran Becker <Saran.Becker@itd.idaho.gov>
Sent: Wednesday, October 25, 2023 12:47 PM
To: Barbara Norgrove; Shawn Nickel
Subject: RE: Agency Transmittal - Madenford Estates Subdivision No. 2 Final Plat

Hi Barbara and Shawn,

ITD does not object to the proposed application as presented at this time.

Thank you,

Saran J Becker
District 3 - Development Services Coordinator

8150 W Chinden Blvd, Garden City, ID 83714
Phone: (208) 334-8377
Email: saran.becker@itd.idaho.gov

Your Safety • Your Mobility
Your Economic Opportunity

From: Barbara Norgrove <bnorgrove@staridaho.org>
Sent: Tuesday, October 24, 2023 1:33 PM
To: jboal@adaweb.net; sheriff@adaweb.net; Daniel.Weed@cableone.biz; Terence.Alsup@cableone.biz; Lbadigian@cdhd.idaho.gov; Mreno@cdhd.idaho.gov; Gloria Stokes <drain.dist.2@gmail.com>; GIS@tax.idaho.gov; D3 Development Services <D3Development.Services@itd.idaho.gov>; Ryan Morgan <rmorgan@staridaho.org>; Ryan Morgan <rmorgan@starswd.com>; bryce@sawtoothlaw.com; gtiminsky@starfirerescue.org; Melvin.B.Norton@usps.gov; harp.kimberly@westada.org; farmers.union.ditch@gmail.com; ERIC.GRZEBINSKI@mdu.com; planningreview@achdidaho.org; hday@starswd.com; bmoore@adacounty.id.gov; BRO.Admin@deq.idaho.gov; samuel.flores@sparklight.biz; PDickerson@idahopower.com; permits@starfirerescue.org; info@pioneerirrigation.com; irrigation.mm.mi@gmail.com; syarrington@adacounty.id.gov; westerninfo@idwr.idaho.gov; gmprdtim@gmail.com; gmprdjulie@gmail.com; Andy Waldera <andy@sawtoothlaw.com>; brandon.flack@idfg.idaho.gov; Ryan Field <rfield@staridaho.org>; file@idwr.idaho.gov; Cheryl.imlach@intgas.com; irr.water.3@gmail.com; Mwallace@achdidaho.org; Richard Girard <rgirard@staridaho.org>; Kerry.schmidt@intgas.com; Chris Todd <ctodd@staridaho.org>; John Tensen <jtensen@staridaho.org>; gis@compassidaho.org; Vincent Trimboli <Vincent.Trimboli@itd.idaho.gov>; zsmith@adacounty.id.gov; CalahanH <CalahanH@landproDATA.com>; Brian Duran <Brian.Duran@itd.idaho.gov>; Saran Becker <Saran.Becker@itd.idaho.gov>
Cc: Shawn Nickel <snickel@staridaho.org>
Subject: FW: Agency Transmittal - Madenford Estates Subdivision No. 2 Final Plat

CITY OF STAR

LAND USE STAFF REPORT

TO: Mayor & Council

FROM: City of Star Planning Department
MEETING DATE: **December 5, 2023**
FILE(S) #: FP-23-18 Final Plat, Moon Valley Subdivision Phase 8

REQUEST

The Applicant is requesting approval of a Final Plat for Moon Valley Subdivision Phase 8 consisting of 20 residential lots and 6 common lots on 42.45 acres.
The property is zoned Mixed Use (MU-DA).

The subject property is generally located southeast of the intersection of State Highway 44 and State Highway 16, Star, Idaho 83669. Ada County Parcel Numbers: S04161317600, R5793101300, S0416427800, S0416417400.

APPLICANT/OWNER/REPRESENTATIVE

REPRESENTATIVE
Wendy Shrief
JUB Engineers
2760 W. Excursion Lane, Ste. 400
Meridian, Idaho 83642

APPLICANT
M-3 ID Moon Valley, LLC
1673 Shoreline Drive, Ste. 200
Boise, ID 83702

PROPERTY INFORMATION

Land Use Designation - Mixed Use (M-U)

	Phase 8
Acres -	42.45
Residential Lots -	20
Common Lots -	6
Commercial -	0

HISTORY

The property was annexed into the City of Star and zoned Commercial (C1), Mixed Use (MU), Limited Office (LO) and Residential (R2) all with a development agreement on July 7, 2009. On April 16, 2019, the Council approved a Comprehensive Plan Map Amendment to Mixed Use, a Rezone to Mixed Use (MU), a Development Agreement Modification to allow waivers to the design standards of the Unified Development Code, a Conditional Use Permit to allow residential uses in the Mixed-Use zone and limited gravel crushing as part of the creation of the pond amenities, and approval of a Preliminary Plat for Moon Valley Subdivision.

On November 19, 2019, City Council approved Phase 1 of Moon Valley Subdivision.

On March 17, 2020, City Council approved Phase 2 of Moon Valley Subdivision.

On June 16, 2020, City Council approved a Preliminary Plat for Moon Valley Commons Subdivision, modifying portions of the original Preliminary Plat and adding additional area.

On December 1, 2020, City Council approved the Final Plat (FP-20-21) Phase 3 of Moon Valley Subdivision.

On June 1, 2021, City Council approved the Final Plat (FP-20-21), Phase 4/5 of Moon Valley Subdivision.

On May 3, 2022, City Council approved the Final Plat (FP-21-32), Phase 6 of Moon Valley Subdivision.

On May 9, 2023 City Council approved Final Plat (FP-23-02), Phase 7 of Moon Valley Subdivision.

GENERAL DISCUSSION

The Final Plat layout for Phase 8 complies with the approved Preliminary Plat of Moon Valley Commons and the original revised Moon Valley Subdivision.

This subdivision is located in a special flood hazard zone per FEMA FIRM panel #16027C0300f and 16601C0140 H. Base flood elevation in AE zone is 2496-2493 All floodway issues and permits shall be completed prior to signature of the final plat.

Specific setbacks, as discussed and agreed upon by staff and the applicant, and as approved by the City Council in the Development Agreement to include the following:

> **Single Family Residential Setbacks**. Notwithstanding anything in the Development Agreement or in Star City Code to the contrary, the setbacks for single-family residential lots within any of the real property encumbered by the Development Agreement shall be, as follows:

Residential Setbacks		
Less than 5,000 SF, Multi-Family, or Attached		
	Front	N/A
	Rear	N/A
	Side	N/A
	Street Side	N/A
Cluster Lot Setback (4 lot cluster on shared driveway)		
	Front (to street)	10 feet
	Rear	10 feet
	Side (interior)	5 feet
	To Common Drive	3 feet
5,000 SF - 12,000 SF		
	Front	10 feet to living or side load garage, 20 feet to garage door
	Rear	20 feet
	Side	5 feet
	Street Side	12 feet
Greater than 12,000 SF		
	Front	15 feet to living or side load garage, 25 feet to garage door
	Rear	30 feet
	Side	5 feet single story/ 7.5 feet if 2 story element is more than 50% of side
	Street Side	15 feet

Staff Reviewed Comments from the Preliminary Plat Approval/Findings of Fact:

The Preliminary Plat consists of 267 single family residential lots, 22 common lots, 8 driveway lots and one private road lot. The common area is approximately 62.15 acres or 42.8% of the overall property. Lot sizes range from the smallest at 5,454 sq. ft. to the largest at 34,727 sq. ft., with the average lot size at 10,202 square feet, creating a density of 1.84 dwelling units per acre. The main access point for this development will come from one main access point from W. Moon Valley Road at S. Blue Moon Avenue. There are two emergency access roads planned, one to the west of the property and one on the eastern side of the property.

- Private Streets
  All private streets shall be built to ACHD roadway standards and shall be constructed to a minimum of 33 feet of improved width.

- Blocks Lengths exceeding 500'
  The Applicant has received a waiver of the block length requirement for this development.

- Sidewalks
  Sidewalks are proposed at five-foot (5') widths and will be detached throughout the development.

- Lighting
  Streetlights shall reflect the "Dark Sky" criteria with all lighting. The same streetlight design shall continue throughout the entire development.

- Street Names
  Street names will be approved by the Ada Street Naming Committee prior to signature of final plat.

- Mailbox Clusters
  The City of Eagle, Idaho Postmaster has provided approval for the mail clusters in a previous phase.

- The Council voted unanimously to approve the Comprehensive Plan Map Amendment to Mixed Use, the Rezone to Mixed Use (MU), the Development Agreement Modification to allow waivers to the design standards of the Unified Development Code, the Conditional Use Permit to allow residential uses in the Mixed Use zone and limited gravel crushing as part of the creation of the pond amenities, and approval of the Preliminary Plat for Moon Valley Subdivision on June 4, 2019.

    - Site Specific Conditions of Approval included the following:

1. The applicant shall provide public access to the greenbelt from Highway 44 to the river by means of a permanent access easement. The easement(s) shall be recorded and provided to the City prior to approval of the final plat.
2. The applicant shall tile the irrigation ditch along Moon Valley Road, with the HOA being responsible for the maintenance of the ditch.
3. Street lights shall be of a design intended to direct lighting downward and protect the dark sky.
4. All private streets shall be built to ACHD roadway standards and shall be constructed to a minimum of 33 feet of improved width.

Staff analysis of Final Plat Submittal:

Common/Open Space and Amenities – The open space and amenities for the subdivision have been included in previous phases of the development.

Landscaping - As required by the Unified Development Code, Chapter 4, Section B-7-C-3 Street Trees; the minimum density of one (1) tree per thirty-five (35) linear feet is required within the landscape strips of the detached sidewalks. The applicant shall use "Tree Selection Guide for Streets and Landscapes throughout Idaho", as adopted by the Unified Development Code.

Streetlights – Streetlight design specifications were submitted as a part of Phase 1 final plat approval. Streetlights should be consistent throughout the development. The proposed streetlight locations for Phase 8 satisfy the requirements of the Unified Development Code.

Street Names – The Applicant has provided documentation from Ada County that the proposed street names have been approved and are reflected correctly on the final plat.

Mail Clusters – Mailbox cluster locations have been previously approved for this development and are already installed.

Subdivision Name – The Applicant has provided documentation from Ada County that this portion of the development, Phase 8 does not need a separate name and can indeed continue using phase numbers of Moon Valley Subdivision.

PUBLIC NOTIFICATIONS

Notifications of this application were sent to agencies having jurisdiction on October 20, 2023.

October 26, 2023	DEQ	Standard Letter

FINDINGS

The Council may **approve**, **conditionally approve**, **deny** or **table** this request. In order to approve this Final Plat, the Unified Development Code requires that Council must find

the following:

A. The Plat is in conformance with the Comprehensive Plan.
The Council finds that this subdivision upon Preliminary Plat approval was in conformance with the Comprehensive Plan; no changes have been made to change this status.

B. Public services are available or can be made available and are adequate to accommodate the proposed development.
Council finds that all public services are available and able to accommodate this development.

C. There is public financial capability of supporting services for the proposed development.
Council knows of no financial hardship that would prevent services from being provided.

D. The development will not be detrimental to the public health, safety or general welfare; and,
Council finds no facts to support that this subdivision phase will be detrimental to the public health, safety or general welfare.

E. The development preserves significant natural, scenic or historic features.
Council finds that existing conditions have not substantially changed from the approved Preliminary Plat of this subdivision.

CONDITIONS OF APPROVAL

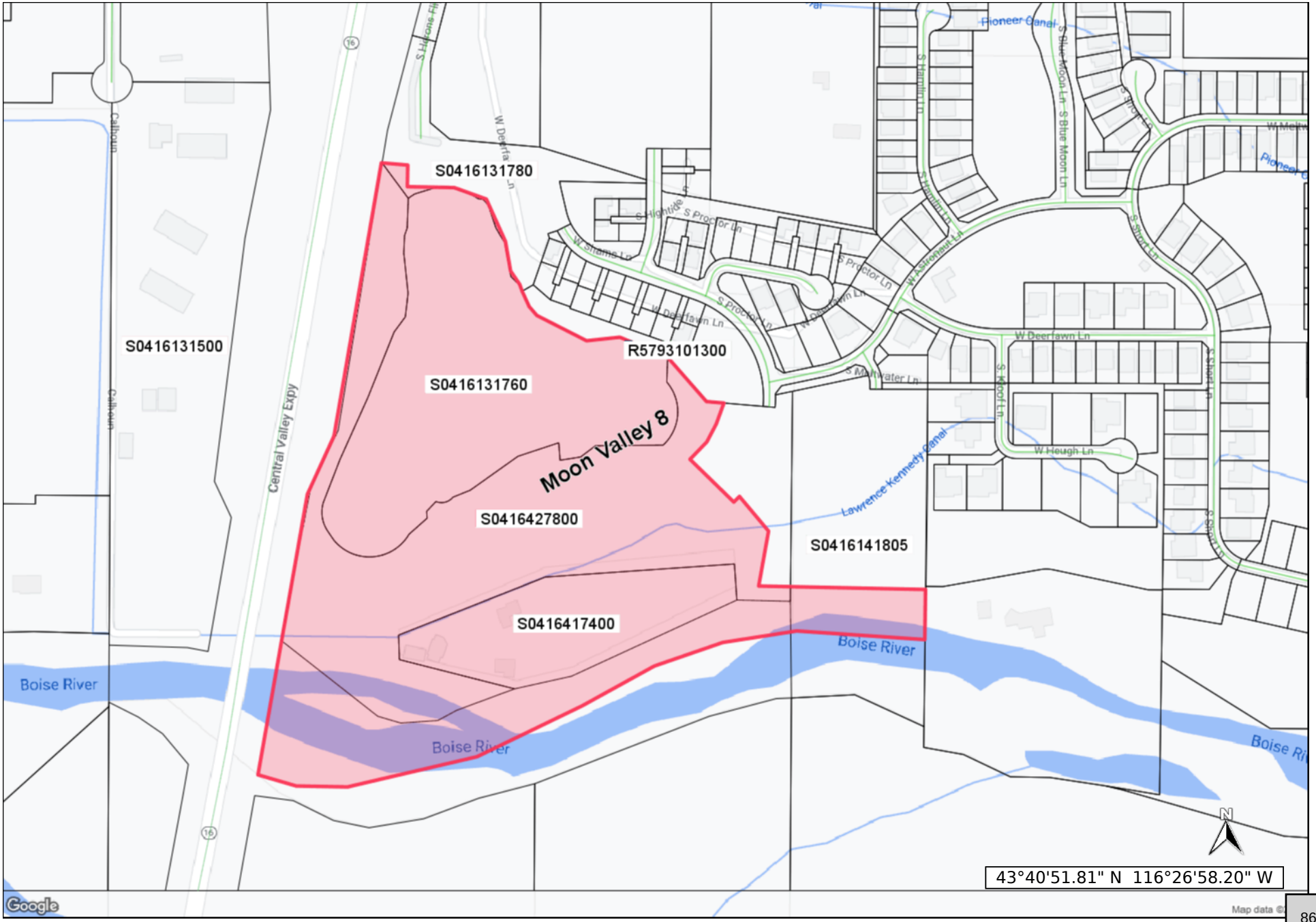
1. The final plat for Moon Valley Subdivision shall comply with all statutory requirements of applicable agencies and districts having jurisdiction in the City of Star.
2. **Prior to construction in any Floodplain or Floodway area the applicant shall meet all requirements of the City Flood Administrator, IDWR and FEMA regarding approval of CLOMR, Hydrology Analysis and No-Rise Certifications.**
3. **Applicant/Owner shall install conduit in the shared utility trench to be used for fiber at a later date. The conduit shall be a minimum of 2-inch diameter or larger to accommodate the needs of the development.**
4. All approvals relating to floodplain/floodway issues and requirements shall be completed and approved by the City Flood Administrator **prior to signature of the final plat.**
5. As built plans for pressurized irrigation systems shall be submitted to the City of Star **prior to signature of the final plat**.
6. **Should any substantial changes be made to this plat, including new phasing, the application may be subject to new Council approval.**
7. Applicant shall provide the City with two (2) full size and two (1) 11"x17" copy of the signed recorded final plat with all signatures, prior to any building permits being issued.
8. Mylar's/final plats must include the statement supporting the "Right to Farm Act" as per Idaho Code Title 22, Chapter 45.
9. Development standards for single family residential units shall comply with effective building and zoning requirements at time of building permit issuance, or as approved through the Development Agreement or as stated herein.

10. The mylar/final plat shall be signed by the owner, Surveyor, Central District Health, ACHD and City Engineer, prior to being delivered to the City of Star for City Clerk's signature.
11. A copy of signed irrigation agreements shall be submitted to the City **prior to signature of the final plat.**
12. All common areas shall be maintained by the Homeowners Association.
13. Streetlights shall be continuous throughout the subdivision and shall be maintained by the Homeowners Association. Streetlights shall be installed prior to any building occupancy. Design shall follow Code with requirements for light trespass and "Dark Skies" lighting.
14. Street trees shall be installed per Unified Development Code Standards for Street Trees.
15. A form signed by the Star Sewer & Water District shall be submitted to the City **prior to signature of the final** stating that all conditions have been met.
16. The applicant shall provide a sign, to be located at all construction entrances, indicating the rules for all contractors that will be working on the property starting at grading and running through home sales that addresses items including but not limited to dust, music, dogs, starting/stopping hours for contractors (7a.m. start time). **Sign shall be approved by the City prior to start of construction.**
17. A copy of the recorded CC&R's shall be submitted to the City of Star prior to any building permits being issued.
18. **Prior to signature of the final plat**, a signed Irrigation District Agreement with the Irrigation Districts shall be provided to the City of Star. This requirement shall be with each subsequent Final Plat application.
19. **Prior to signature of the final plat**, written approval from Boise River Flood Control District #10 shall be provided to the City stating that recordation of necessary maintenance and access easements have been completed, if applicable.
20. The property associated with this approved Final Plat, in addition to the property of all future phases shall be satisfactorily weed abated at all times, preventing a public nuisance, per Star City Code Chapter 3, Section 3-1-1 through 3-1-7.
21. A sign application is required for any subdivision sign.
22. Any additional Condition of Approval as required by Staff and City Council.

COUNCIL DECISION

The Star City Council _____ File # FP-23-18 Moon Valley Subdivision, Final Plat, Phase 8 on _____ _____, 2023.

Moon Valley 8
Vicinity Map



Dec 06, 2022 - landproDATA.com
Scale: 1 inch approx 400 feet

City
P.O.
Star, Idaho 83669
P: 208-286-7247

09/28/2023 3:04:01 PM

FINAL PLAT APPLICATION

***All information must be filled out to be processed.

FILE NO.: FP-23-18
Date Application Received: 9-28-2023 Fee Paid: _____
Processed by: City: Barbara Norgrove

Applicant Information:

PRIMARY CONTACT IS: Applicant X Owner ___ Representative X

Applicant Name: J-U-B Engineers, Inc - Wendy Shrief
Applicant Address: 2760 W Excursion Lane, Ste 400 | Meridian, ID Zip: 83642
Phone: (208) 376-7330 Email: wshrief@jub.com

Owner Name: M3 Companies | Mark Tate
Owner Address: 1673 Shoreline Drive, Ste 200 | Boise, ID Zip: 83642
Phone: (208) 376-7330 Email: mtate@m3companiesllc.com

Representative (e.g., architect, engineer, developer):
Contact: Wendy Shrief Firm Name: J-U-B Engineers, Inc.
Address: 2760 W Excursion Lane, Ste 400 | Meridian, ID Zip: 83642
Phone: (208) 376-7330 Email: wshrief@jub.com

Property Information:

Subdivision Name: Moon Valley Subdivision Phase: No 8
Parcel Number(s): S0416131760O; R5793101300; S0416427800; S0416417400
Approved Zoning: R-2 Units per acre: _____
Total acreage of phase: 42.45 Total number of lots: 26
Residential: 20 Commercial: 0 Industrial: 0
Common lots: 6 Total acreage of common lots: 31.24 Percentage: 73.6 %
including 1 common driveway lot and 1 private road lot
Percent of common space to be used for drainage: 0% Acres: 0
Special Flood Hazard Area: total acreage 42.45 number of homes 20

Changes from approved preliminary plat pertaining to this phase:

	Preliminary Plat	Final Plat
Number of Residential Lots:	267	20
Number of Common Lots:	22	4 including driveway and private road lots
Number of Commercial Lots:	0	0
Roads:	8 Common Driveway Lots 1 Private Road Lot	1 Driveway Lot 1 Private Road

Amenities: Open space with landscaping

Flood Zone Data: (This Info Must Be Filled Out Completely Prior to Acceptance):

Subdivision Name: Moon Valley Subdivision Phase: No 8

Special Flood Hazard Area: total acreage 42.45 number of homes 20

a. A note must be provided on the final plat documenting the current flood zone in which the property or properties are located. The boundary line must be drawn on the plat in situations where two or more flood zones intersect over the property or properties being surveyed.

b. FEMA FIRM panel(s): #160xxxxxxC, 160xxxxxxE, etc.: 16001C0140J
FIRM effective date(s): mm/dd/year June 19, 2020
Flood Zone(s): Zone X, Zone A, Zone AE, Zone AH, etc.: AE, X, Floodway
Base Flood Elevation(s): AE____.0 ft., etc.: 2488.9 Through 2491.2

c. Flood Zones are subject to change by FEMA and all land within a floodplain is regulated by Chapter 10 of the Star City Code.

Application Requirements:

(Applications are required to contain <u>one</u> copy of the following unless otherwise noted.)

Applicant (√)	Description	Staff (√)
X	Completed and signed copy of Final Plat Application	
X	Fee: Please contact the City for current fee. Fees may be paid in person with check or electronically with credit card. Please call City for electronic payment. Additional service fee will apply to all electronic payments.	
X	Electronic copy of letter of intent and statement of compliance (or substantial compliance) with the approved Preliminary Plat and Conditions of Approval. The letter of intent shall include the following: • Gross density of the phase of the Final Plat submitted • Lot range and average lot size of phase • Description of approved open space being provided in the submitted phase including percentage of overall open space, number and type of approved amenities • List any specific approved building setbacks previously approved by Council.	
X	Electronic copy of legal description of the property (word.doc and pdf version with engineer's seal and closure sheet)	
X	Electronic copy of current recorded warranty deed for the subject property	
X	If the signature on this application is not the owner of the property, an **original** notarized statement (affidavit of legal interest) from the owner stating the applicant and/or representative is authorized to submit this application.	
X	Electronic copy of subdivision name approval from Ada County Surveyor's office.	
X	Copy of the "final" street name evaluation/approval or proof of submittal request from Ada County Street Naming	
X	Electronic copy of vicinity map showing the location of the subject property	
X	One (1) 24" X 36" paper copy of the Final Plat & Electronic Copy**	
X	One (1) 11" X 17" paper copy of the Final Plat	
X	Electronic copy of the Final landscape plan**	

X	One (1) 11" X 17" copy of the Final landscape plan	
X	Electronic copy of site grading & drainage plans**	
X	Electronic copy of originally approved Preliminary Plat**	
X	Electronic copy of a Plat with all phases marked with changes, if applicable**	
X	Electronic copy of final engineering construction drawings, stamped and signed by a registered engineer**	
X	Storm drainage calculations must be submitted for private streets/drives and parking areas within subdivisions**	
X	Electronic copy of streetlight **design** and **location** information	
X	Special Flood Information – Must be included on Preliminary/Final Plat and Application form.	
X	Electronic copy of all easement agreements submitted to the irrigation companies	
X	Electronic copy of the proposed Covenants, Conditions, & Restrictions (CC&R's)	
X	One (1) copy of Electronic versions of submitted applications, including signed Final Plat Application, legal description, recorded warranty deed, vicinity map, final plat, landscape plan, site grading & drainage plans, copy of original Preliminary Plat, plat with phases marked, engineering construction drawings, storm drainage calculations, streetlight design and location, and signed irrigation agreements, CC&R's shall be submitted in original pdf format (no scans for preliminary plat, landscape plans or grading and drainage plans) on a thumb drive only (no discs) with the files named with project name and plan type.	
X	**Upon Recording of Final Plat, the applicant shall submit the following to the Planning Department prior to building permit issuance**: • One (1) 11" X 17" and (1) 18" X 24" **recorded** copy of Final Plat • Electronic copy of final, approved construction drawings • Electronic copy of as-built irrigation plans • Electronic copy of recorded CC&R's • Proof of required Construction Sign installation at entrance to development (as conditioned in Preliminary Plat approval) – Picture of installed sign • Electronic copies shall be submitted in pdf format on a thumb drive with the files named with project name and plan type. **Original pdf's are required for all plans – No Scanned PDF's please.	
	**NOTE: No building permits will be issued until property is annexed into the Star Sewer & Water District and all sewer hookup fees are paid.	

FEE REQUIREMENT:

*** I have read and understand the above requirements. I further understand fees are due at the time of filing. I understand that there may be other fees associated with this application incurred by the City in obtaining reviews or referrals by architect, engineering, or other professionals necessary to enable the City to expedite this application. I understand that I, as the applicant, am responsible for all payments to the City of Star.*

Revised 9/26/2023 by WS

Applicant/Representative Signature

7/26/23
Date

J-U-B ENGINEERS, INC.
THE LANGDON GROUP
GATEWAY MAPPING INC.
J-U-B FAMILY OF COMPANIES

September 27, 2023

City of Star
Planning & Zoning Dept
PO Box 130
Star, ID 83669

RE: Moon Valley Subdivision No. 8 | Narrative | Design and Final Plat Submittal

To Whom it may concern:

On behalf of M3 ID Moon Valley, LLC, please accept this request for Final Plat approval for Moon Valley Subdivision No 8 located Southeast of the intersection of State Highway 44 and State Highway 16, Star, ID. The proposed development includes a total of 26 lots on 42.45 acres; 20 lots are single family residential and 6 are common lots (including 1 private driveway lot and 1 private road lot). The Preliminary Plat for this development was originally approved as Moon Valley Subdivision. The overall density for the phase is 2.12 DU/ac, the average lot size is 22,037.60 sf and lots range in size from 14,710 sf to 26,868 sf. Open space for Moon Valley 8 is provided in adjacent phases for Moon Valley including a clubhouse, swimming pool and recreational facilities.

The specific provisions requested in the final plat application are intended to be addressed in the plat and construction documents as described below:

- The final plat conforms to the approved preliminary plat.
- The final plat conforms to the applicable provisions of the City of Star Code.
- The final plat and development plans conform to best management practices and acceptable surveying, engineering, and landscape architectural practices, and local standards.

The enclosed applications have been submitted in accordance with the requirements of the City of Star. The development has also been designed in accordance with the City of Star Code. Please contact me at (208) 376-7330 if you have any questions regarding this application.

Sincerely,

Wendy Shrief, AICP
J-U-B Engineers, Inc

PRELIMINARY PLAT FOR
MOON VALLEY SUBDIVISION

SITUATED IN WEST HALF OF SECTION 15 AND THE EAST HALF OF SECTION 16
TOWNSHIP 4 NORTH, RANGE 1 WEST, BOISE MERIDIAN,

STAR, ADA COUNTY, IDAHO
2019

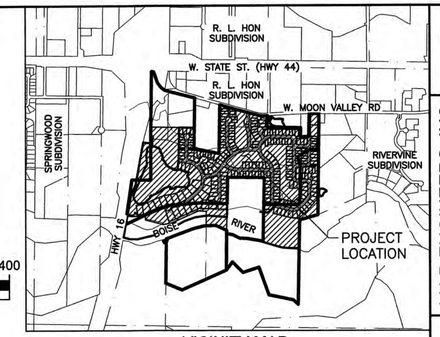
Line Table		
Line #	Direction	Length
L1	N86°50'56"E	61.21'
L2	S00°45'05"W	179.80'
L3	N88°29'03"E	161.24'
L4	S89°52'50"E	53.25'
L5	S62°22'53"E	17.26'
L6	N76°37'43"W	37.06'
L7	S80°03'57"E	156.38'
L8	S71°32'00"W	222.35'
L9	S61°42'20"W	252.98'
L10	N88°28'23"W	157.78'
L11	N73°16'53"W	122.68'
L12	S00°56'49"W	53.65'

Line Table		
Line #	Direction	Length
L13	S88°19'01"E	27.36'
L14	S69°48'37"E	123.04'
L15	S23°52'54"E	142.15'
L16	S09°29'29"E	92.16'
L17	S33°50'44"E	49.99'
L18	S29°26'34"E	66.43'
L19	S48°25'36"E	55.40'
L20	S56°13'59"E	60.61'
L21	S74°27'58"E	112.81'
L22	S88°59'55"E	24.08'
L23	N06°06'18"E	209.06'

SHEET INDEX

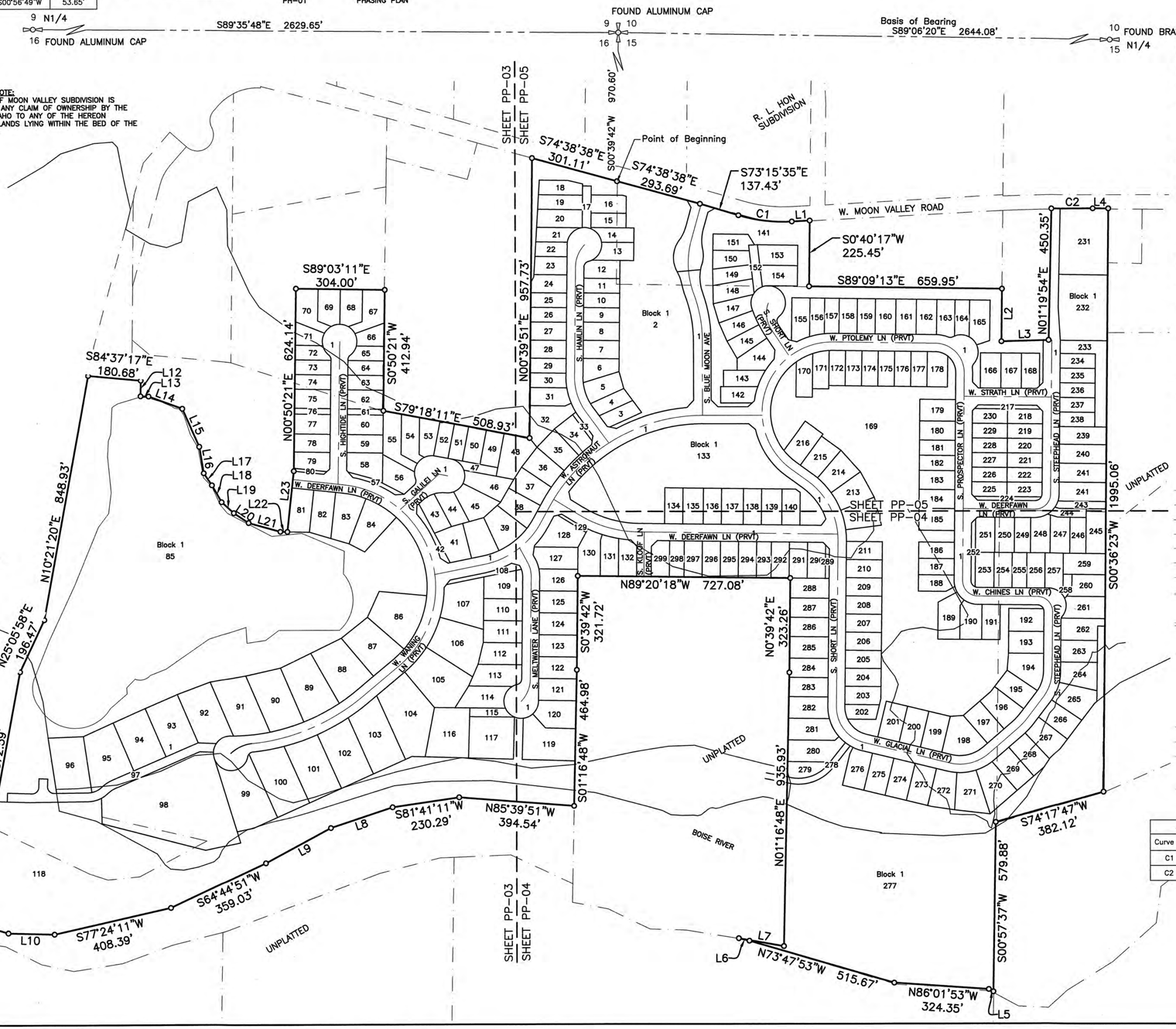
BOUNDARY LEGEND

- Subdivision Boundary Line
- Section Line
- Center Line
- Right-of-way Line
- Existing Parcel Line
- Section Corner
- Quarter-Section Corner
- Property Corner



VICINITY MAP
SCALE: 1"=800'

0 200 400
SCALE IN FEET



NOTES:

1. CONTOUR AND SPOT ELEVATION DATA IS REFERENCED TO NAVD '88 DATUM.
2. ALL STREETS PROPOSED IN THIS DEVELOPMENT ARE PRIVATE STREETS AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH ADA COUNTY HIGHWAY DISTRICT (ACHD) STANDARDS FOR PUBLIC STREETS WITH A MINIMUM GRADIENT OF 0.40%.
3. ALL LOTS ARE RESIDENTIAL BUILDING LOTS EXCEPT LOTS 2, 33, 42, 57, 61, 76, 80, 85, 108, 118, 129, 133, 141, 169, 217, 224, 233, 243, 252, 277, 279, and 289, BLOCK 1, WHICH ARE COMMON AREA\DRAINAGE STORAGE LOTS. LOT 1, BLOCK 1 IS A PRIVATE ROAD. LOTS 17, 47, 97, 115, 244, 258, AND 278, BLOCK 1 ARE SHARED DRIVEWAY LOTS.
4. STORMWATER RUN-OFF GENERATED ON THIS SITE SHALL HAVE A QUALITY CONTROL TREATMENT PRIOR TO BEING CONVEYED TO ONSITE STORAGE FACILITIES.
5. PUBLIC UTILITIES SHALL INCLUDE WATER, SEWER, ELECTRIC POWER, NATURAL GAS, TELEPHONE, AND CABLE TELEVISION.
6. THIS SUBDIVISION WILL RECEIVE PRESSURIZED IRRIGATION FROM A PRESSURE IRRIGATION SYSTEM OWNED AND MAINTAINED BY THE HOME OWNERS ASSOCIATION.
7. THIS DEVELOPMENT RECOGNIZES SECTION 22-4503 OF IDAHO CODE, RIGHT TO FARM ACT, WHICH STATES, "NO AGRICULTURAL OPERATION, AGRICULTURAL FACILITY OR EXPANSION THEREOF SHALL BE OR BECOME A NUISANCE, PRIVATE OR PUBLIC, BY ANY CHANGED CONDITIONS IN OR ABOUT THE SURROUNDING NONAGRICULTURAL ACTIVITIES AFTER IT HAS BEEN IN OPERATION FOR MORE THAN ONE (1) YEAR, WHEN THE OPERATION, FACILITY OR EXPANSION WAS NOT A NUISANCE AT THE TIME IT BEGAN OR WAS CONSTRUCTED. THE PROVISIONS OF THIS SECTION SHALL NOT APPLY WHEN A NUISANCE RESULTS FROM THE IMPROPER OR NEGLIGENT OPERATION OF AN AGRICULTURAL OPERATION, AGRICULTURAL FACILITY OR EXPANSION THEREOF."
8. DOMESTIC AND FIRE PROTECTION WATER SHALL BE PROVIDED BY THE STAR SEWER AND WATER DISTRICT.
9. SANITARY SEWER COLLECTION SHALL BE PROVIDED BY THE STAR SEWER AND WATER DISTRICT.
10. IRRIGATION DITCHES THROUGH THE PROJECT SHALL BE PIPED WHERE THEY CROSS ROADWAYS WITH ALL STRUCTURES LOCATED BEYOND ANY PUBLIC RIGHT-OF-WAY.
11. LANDSCAPED COMMON LOTS ARE LOCATED THROUGHOUT THE PROJECT AND ARE IDENTIFIED ON THE PLAN. THESE LOTS SHALL BE OWNED AND MAINTAINED BY THE HOMEOWNERS ASSOCIATION.
12. BUILDING SETBACKS AND DIMENSIONAL STANDARDS SHALL BE IN ACCORDANCE WITH THE CITY OF STAR STANDARDS IN EFFECT AT THE TIME OF DEVELOPMENT.
13. ANY RE-SUBDIVISION OF THIS PLAT SHALL COMPLY WITH THE APPLICABLE ZONING REGULATIONS IN AFFECT AT THE TIME OF THE RE-SUBDIVISION.
14. THE OWNER SHALL COMPLY WITH IDAHO CODE, SECTION 31-3805 OR ITS PROVISIONS THAT MAY APPLY TO IRRIGATION RIGHTS.
15. A STORMWATER DRAINAGE EASEMENT SHALL BE RESERVED ON THE DRAINAGE LOTS. LANDSCAPING OVER SAID LOTS SHALL BE MAINTAINED BY THE HOMEOWNERS ASSOCIATION AND ACHD SHALL PROVIDE HEAVY MAINTENANCE OF THE STORM DRAINAGE FACILITIES AS DEFINED IN THE COVENANTS, CONDITIONS AND RESTRICTIONS FOR MOON VALLEY SUBDIVISION.
16. THIS PROPERTY HAS PORTIONS LOCATED IN ZONE X AND ZONE AE OF THE FLOOD INSURANCE RATE MAP NO. 16001C0130 H, COMMUNITY PANEL NO. 0130 H, AND PORTIONS LOCATED IN ZONE X, ZONE AE, AND ZONE AE FLOODWAY OF MAP NO. 16001C0140 H,COMMUNITY PANEL NO. 0140 H WHICH BEARS AN EFFECTIVE DATE OF FEBRUARY 19, 2003 AND IS IN A SPECIAL FLOOD HAZARD AREA.

LEGEND

EXISTING		PROPOSED
S	SANITARY SEWER LINE	S S
W	WATER LINE	W W
IRR	GRAVITY IRRIGATION PIPE	IRR
PIRR	PRESSURE IRRIGATION LINE	PIRR
SD SD SD	STORM DRAIN LINE	SD SD SD
	CENTERLINE	
	LOT LINE	
	6" VERTICAL CURB & GUTTER	
	ROLLED CURB & GUTTER	
	5' SIDEWALK	
	SEWER MANHOLE	
	DITCH FLOW LINE	
	IRRIGATION MANHOLE	
	STREET LIGHT	
	TREE DECIDUOUS	
	TREE CONIFER	
EP EP	EDGE OF PAVEMENT	
	GAS LINE	
	FENCE LINE	
	FIRE HYDRANT	
2650	5' CONTOUR LINE	
2651	1' CONTOUR LINE	

Curve Table					
Curve #	Length	Radius	Delta	Chord Bearing	Chord Length
C1	184.80'	533.00'	19°51'56"	S83°11'44"E	183.88'
C2	140.63'	8288.38'	0°58'20"	N89°32'05"E	140.63'

IRRIGATION DISTRICT

LITTLE PIONEER DITCH CO.
PO BOX 70
STAR, ID 83669

LAND SURVEYOR

ROBERT L. KAZARINOFF, P.L.S.
J-U-B ENGINEERS
250 S. BEECHWOOD AVE. STE. 201
BOISE, ID 83709
208-376-7330

CIVIL ENGINEER

SCOTT WONDERS, P.E.
J-U-B ENGINEERS
250 S. BEECHWOOD AVE.
STE. 201
BOISE, ID 83709
208-376-7330

DEVELOPER

M3 COMPANIES
1087 W. RIVER STREET
SUITE 310
BOISE, ID 83702
MARK TATE 208-939-6263

LAND USE SUMMARY (SEE BOUNDARY NOTE)

TOTAL AREA:	145.08 AC.
TOTAL LOTS:	298 LOTS
RESIDENTIAL LOTS:	267 LOTS
COMMON AREA LOTS:	22 LOTS
COMMON DRIVEWAY LOTS:	8 LOTS
PRIVATE ROAD LOT:	1 LOT
RESIDENTIAL DENSITY:	1.84 DU/AC
COMMON AREA	62.15 AC. (42.8%)
QUALIFIED OPEN SPACE	60.85 AC. (41.9%)
AVERAGE LOT SIZE:	10,202 S.F.
SMALLEST LOT:	5,454 S.F.
EXISTING ZONE:	MU, R-2

PROFESSIONAL LAND SURVEYOR REGISTERED 16642 STATE OF IDAHO ROBERT L. KAZARINOFF
11/28/2018
BOUNDARY CERTIFICATION

J-U-B ENGINEERS, INC.
250 S. Beechwood Ave.
Suite 201
Boise, ID 83709-0944
Phone: 208.376.7330
www.jub.com

PROFESSIONAL ENGINEER REGISTERED 10683 STATE OF IDAHO W. SCOTT WONDERS 11/28/18

NO.	REVISION	BY	APPD	DATE

MOON VALLEY SUBDIVISION
STAR, ADA COUNTY, IDAHO

PRELIMINARY PLAT
BOUNDARY AND PROJECT INFORMATION

FILE: 10-18-046_PRE-PLAT
JUB PROJ. #: 10-18-046
DRAWN BY: ---
DESIGN BY: ---
CHECKED BY: ---
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 11/28/2018

SHEET NUMBER:
PP-01

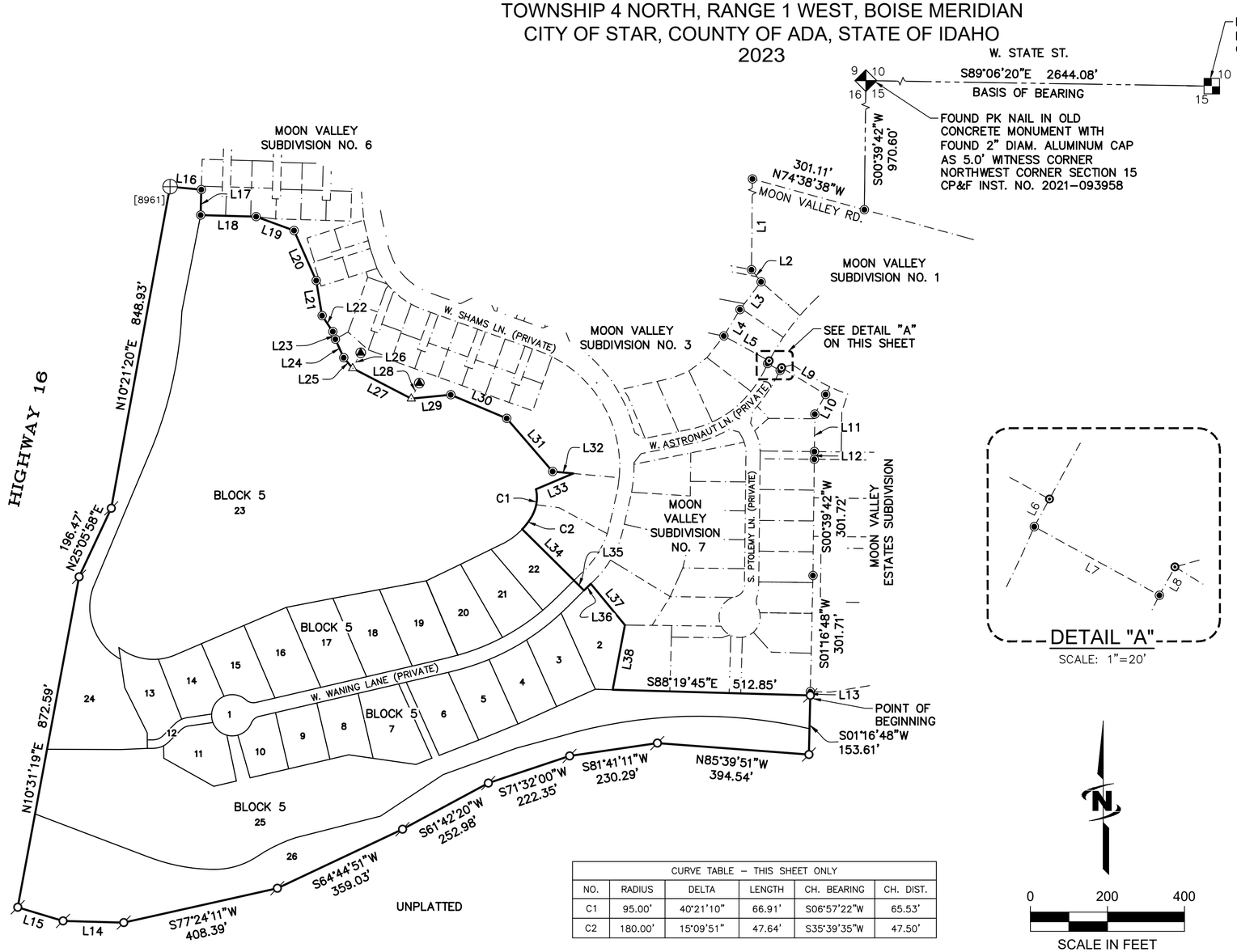
Plot Date:11/28/2018 12:27 PM, Plotted By: Everett Earnest
Data Created:11/28/2018 I:\BOISE\FILES\PLIB\CIP\PROJECTS\JUB\10-18-046\M3 ANDERSON\PRE-PLAT\CAD\SHEET\10-18-046_PRE-PLAT.DWG

PLAT BOOK _____ PAGE _____

PLAT OF

MOON VALLEY SUBDIVISION NO. 8

SITUATED IN THE EAST HALF OF SECTION 16,
TOWNSHIP 4 NORTH, RANGE 1 WEST, BOISE MERIDIAN
CITY OF STAR, COUNTY OF ADA, STATE OF IDAHO
2023



LEGEND

- SUBDIVISION BOUNDARY LINE
- LOT LINE
- RIGHT-OF-WAY LINE
- SECTION LINE
- TIE LINE
- ADJACENT PROPERTY LINE
- UTILITY EASEMENT LINE
- SIDEWALK EASEMENT LINE
- MATCH LINE
- FLOODWAY LINE
- FEMA FLOOD HAZARD ZONE LINE
- SECTION CORNER
- QUARTER SECTION CORNER
- FOUND ALUMINUM CAP AS NOTED
- SET 1/2-INCH 24-INCH REBAR WITH PLASTIC CAP MARKED "J-U-B 20908"
- SET 5/8-INCH 24-INCH REBAR WITH PLASTIC CAP MARKED "J-U-B 20908"
- FOUND 5/8-INCH 24-INCH REBAR WITH PLASTIC CAP MARKED "J-U-B 20908"
- FOUND 1/2-INCH REBAR WITH PLASTIC CAP MARKED "JUB 16642"
- FOUND 5/8-INCH REBAR WITH PLASTIC CAP MARKED "JUB 16642"
- FOUND 5/8-INCH REBAR WITH PLASTIC CAP MARKED "RM J-U-B 16642"
- FOUND 1-3/16-INCH BRASS PLUG IN CONCRETE MARKED "J-U-B 16642"
- POINT NOT SET OR FOUND
- C# - CURVE COURSE NUMBER (TYPICAL)
- L# - LINE COURSE NUMBER (TYPICAL)
- # - LOT NUMBER (TYPICAL)

CURVE TABLE - THIS SHEET ONLY					
NO.	RADIUS	DELTA	LENGTH	CH. BEARING	CH. DIST.
C1	95.00'	40°21'10"	66.91'	S06°57'22"W	65.53'
C2	180.00'	15°09'51"	47.64'	S35°39'35"W	47.50'

LINE TABLE - THIS SHEET ONLY		
NO.	BEARING	DIST.
L1	S00°39'51"W	957.73'
L2	S38°09'21"E	39.95'
L3	S37°12'11"W	90.40'
L4	S31°21'24"W	80.44'
L5	S61°15'54"E	134.11'
L6	S28°44'06"W	8.18'
L7	S61°15'54"E	37.00'
L8	N28°44'06"E	8.39'

LINE TABLE - THIS SHEET ONLY		
NO.	BEARING	DIST.
L9	S58°33'55"E	133.65'
L10	S28°44'06"W	58.23'
L11	S00°39'42"W	97.26'
L12	S00°39'42"W	20.00'
L13	S01°16'48"W	9.66'
L14	N88°28'23"W	157.78'
L15	N73°16'53"W	122.68'
L16	S84°37'17"E	81.66'

LINE TABLE - THIS SHEET ONLY		
NO.	BEARING	DIST.
L17	S01°35'43"W	66.07'
L18	S88°24'17"E	144.16'
L19	S69°48'37"E	104.69'
L20	S23°52'54"E	142.15'
L21	S09°29'29"E	92.16'
L22	S33°50'44"E	49.99'
L23	S18°41'05"E	20.81'
L24	S24°11'20"E	52.80'

LINE TABLE - THIS SHEET ONLY		
NO.	BEARING	DIST.
L25	S40°30'19"E	35.94'
L26	N27°22'11"E	45.00'
L27	S62°37'49"E	171.31'
L28	N27°22'11"E	45.00'
L29	N84°28'35"E	102.76'
L30	S67°08'20"E	157.59'
L31	S40°51'33"E	182.37'
L32	S84°39'24"E	54.08'

LINE TABLE - THIS SHEET ONLY		
NO.	BEARING	DIST.
L33	S67°10'03"W	105.56'
L34	S45°18'30"E	189.13'
L35	S44°46'21"E	37.00'
L36	N45°13'39"E	24.81'
L37	S39°35'25"E	139.06'
L38	S10°42'18"W	170.75'

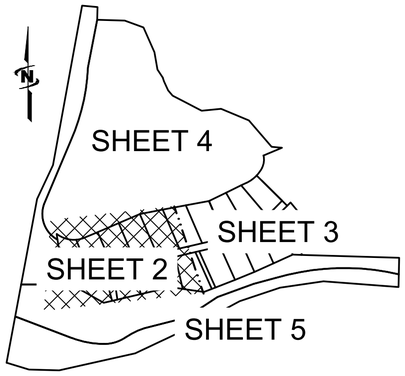
PROFESSIONAL LAND SURVEYOR LICENSED 20908 STATE OF IDAHO BRAD DALEY 8-18-2023

SEE SHEET 6 FOR NOTES, EASEMENT NOTES, REFERENCES, AND SURVEYOR'S NARRATIVE

J-U-B ENGINEERS, INC.
2760 West Excursion Lane, Suite 400, Meridian, ID 83642-5313
p 208 376 7330 w www.jub.com
JOB No. 10-22-112

PLAT OF
MOON VALLEY SUBDIVISION NO. 8

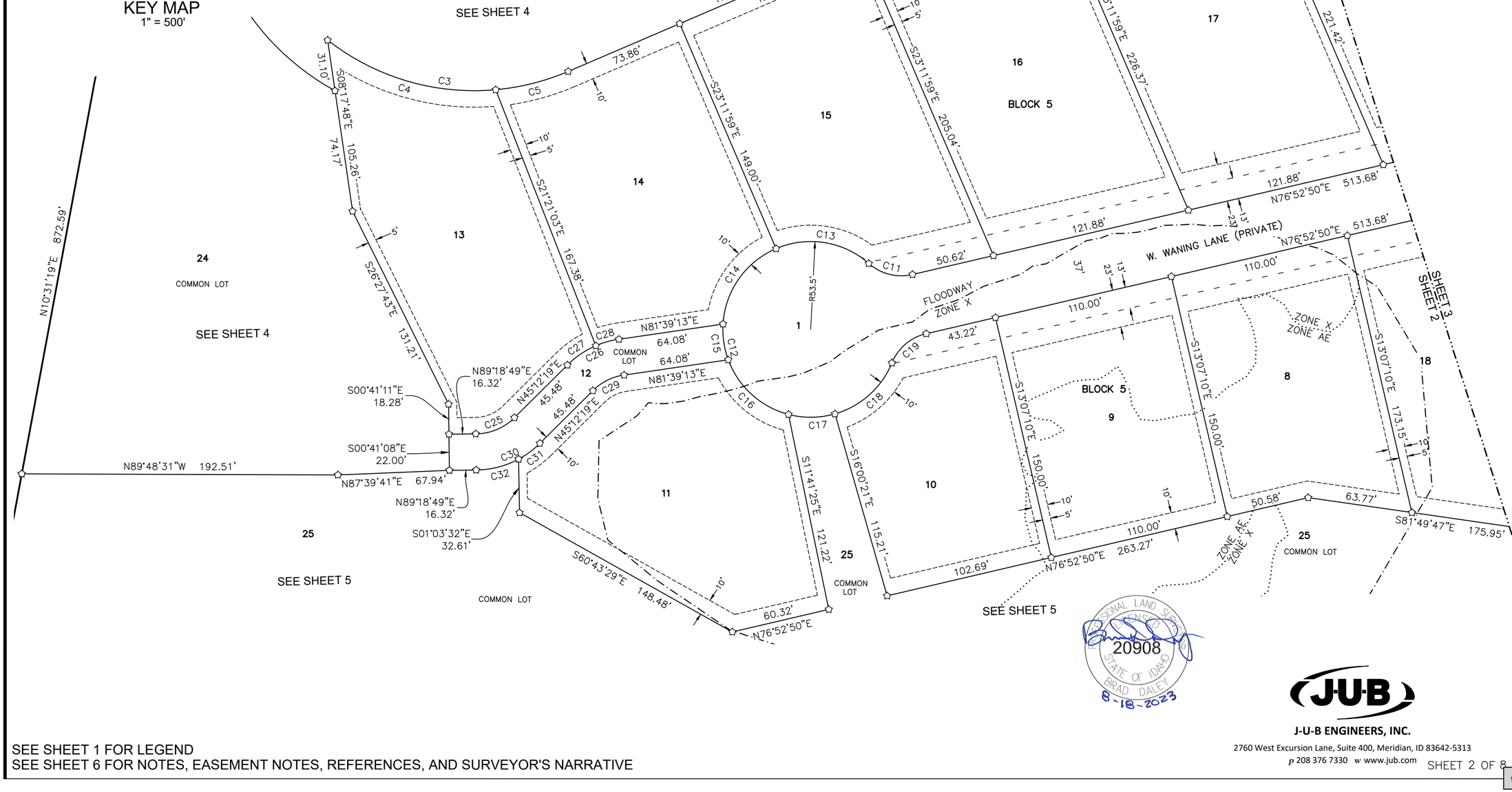
PLAT BOOK _____ PAGE _____



KEY MAP
1" = 500'

CURVE TABLE – THIS SHEET ONLY					
NO.	RADIUS	DELTA	LENGTH	CH. BEARING	CH. DIST.
C3	145.00'	61°14'38"	154.99'	S82°34'40"E	147.72'
C4	145.00'	43°11'17"	109.30'	S73°32'59"E	106.73'
C5	145.00'	18°03'21"	45.69'	N75°49'42"E	45.51'
C11	30.00'	54°29'26"	28.53'	S75°52'27"E	27.47'
C12	53.50'	288°58'51"	269.84'	S13°07'10"E	62.15'
C13	53.50'	64°34'14"	60.29'	N80°54'51"W	57.15'
C14	53.50'	63°16'54"	59.09'	S35°09'34"W	56.13'
C15	53.50'	23°43'48"	22.16'	S08°20'47"E	22.00'
C16	53.50'	55°06'07"	51.45'	S47°45'45"E	49.49'
C17	53.50'	30°41'33"	28.66'	N89°20'25"E	28.32'
C18	53.50'	51°36'14"	48.19'	N48°11'32"E	46.57'
C19	30.00'	54°29'26"	28.53'	S49°38'07"W	27.47'
C25	34.00'	44°06'30"	26.17'	N67°15'34"E	25.53'

CURVE TABLE – THIS SHEET ONLY					
NO.	RADIUS	DELTA	LENGTH	CH. BEARING	CH. DIST.
C26	56.00'	36°26'54"	35.62'	S63°25'46"W	35.03'
C27	56.00'	21°28'19"	20.99'	S55°56'28"W	20.86'
C28	56.00'	14°58'35"	14.64'	S74°09'56"W	14.60'
C29	34.00'	36°26'54"	21.63'	S63°25'46"W	21.27'
C30	56.00'	44°06'30"	43.11'	N67°15'34"E	42.05'
C31	56.00'	16°34'00"	16.19'	N53°29'19"E	16.14'
C32	56.00'	27°32'31"	26.92'	N75°32'34"E	26.66'



SEE SHEET 1 FOR LEGEND
SEE SHEET 6 FOR NOTES, EASEMENT NOTES, REFERENCES, AND SURVEYOR'S NARRATIVE

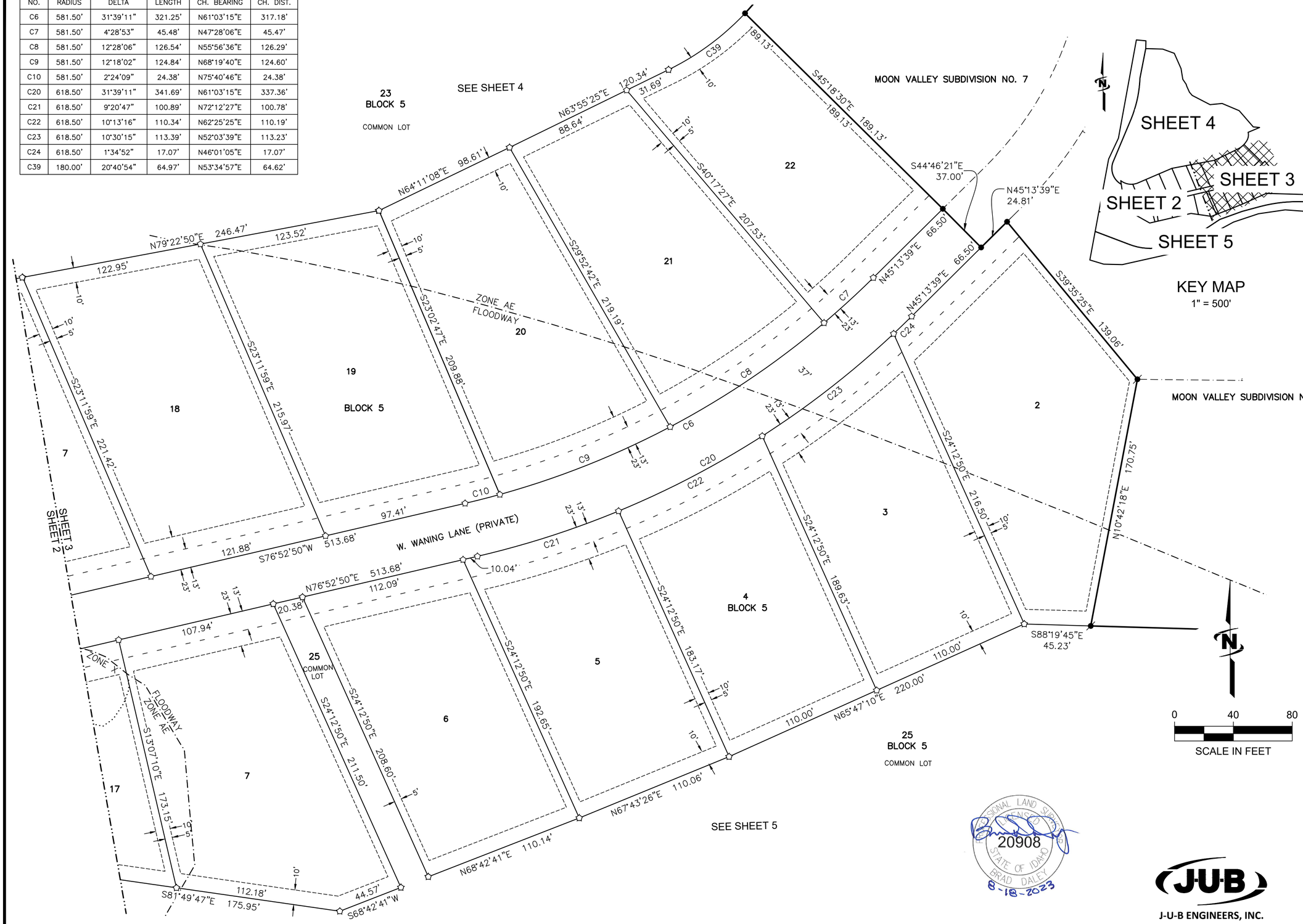
PROFESSIONAL LAND SURVEYOR LICENSED 20908 STATE OF IDAHO BRAD DALEY
8-18-2023

J-U-B ENGINEERS, INC.
2760 West Excursion Lane, Suite 400, Meridian, ID 83642-5313
p 208 376 7330 w www.jub.com

PLAT OF
MOON VALLEY SUBDIVISION NO. 8

PLAT BOOK _____ PAGE _____

CURVE TABLE – THIS SHEET ONLY					
NO.	RADIUS	DELTA	LENGTH	CH. BEARING	CH. DIST.
C6	581.50'	31°39'11"	321.25'	N61°03'15"E	317.18'
C7	581.50'	4°28'53"	45.48'	N47°28'06"E	45.47'
C8	581.50'	12°28'06"	126.54'	N55°56'36"E	126.29'
C9	581.50'	12°18'02"	124.84'	N68°19'40"E	124.60'
C10	581.50'	2°24'09"	24.38'	N75°40'46"E	24.38'
C20	618.50'	31°39'11"	341.69'	N61°03'15"E	337.36'
C21	618.50'	9°20'47"	100.89'	N72°12'27"E	100.78'
C22	618.50'	10°13'16"	110.34'	N62°25'25"E	110.19'
C23	618.50'	10°30'15"	113.39'	N52°03'39"E	113.23'
C24	618.50'	1°34'52"	17.07'	N46°01'05"E	17.07'
C39	180.00'	20°40'54"	64.97'	N53°34'57"E	64.62'



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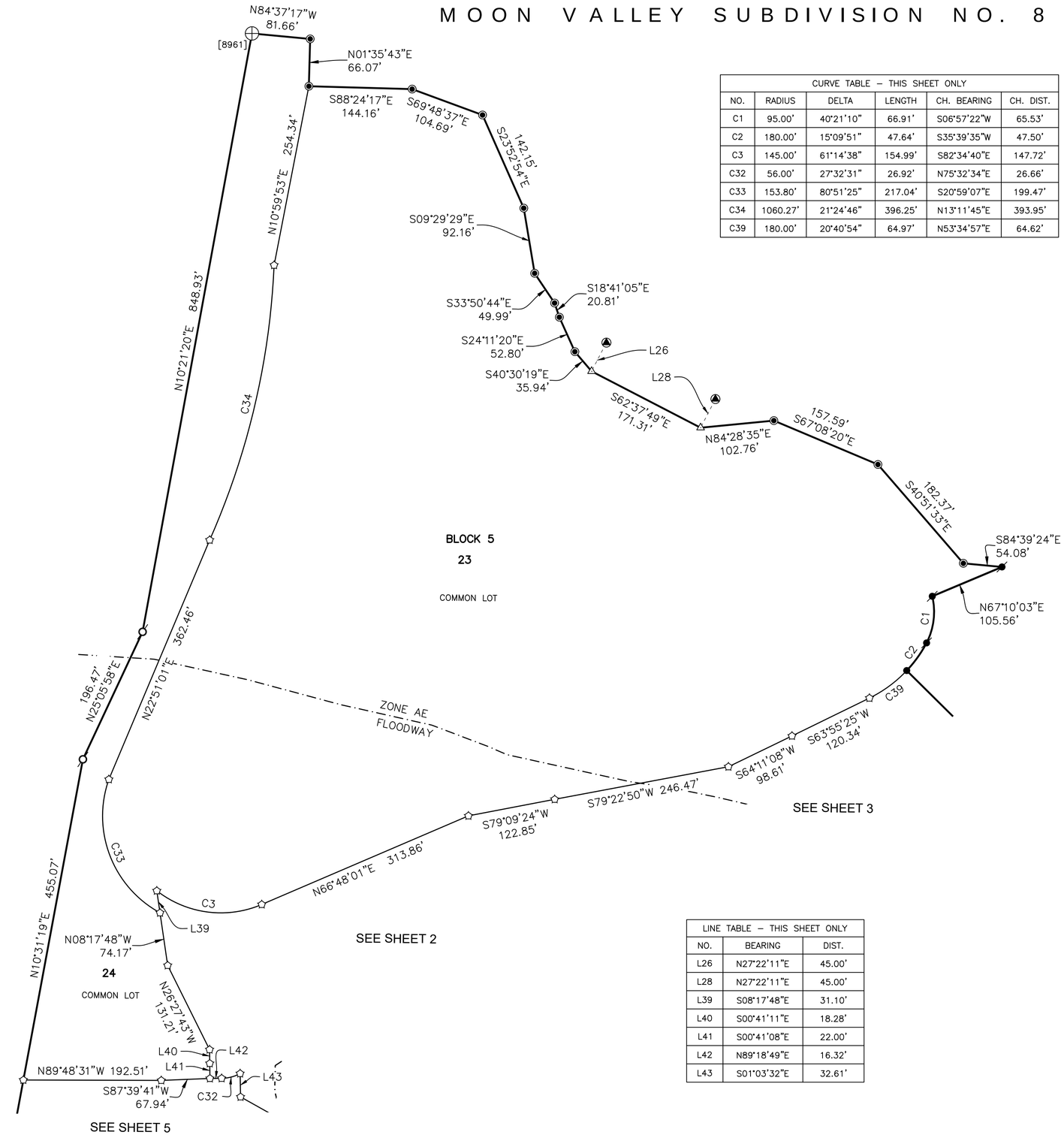
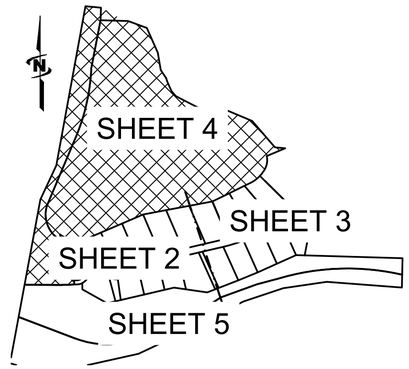
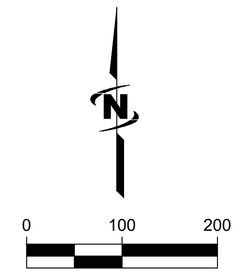


CURVE TABLE – THIS SHEET ONLY					
NO.	RADIUS	DELTA	LENGTH	CH. BEARING	CH. DIST.
C1	95.00'	40°21'10"	66.91'	S06°57'22"W	65.53'
C2	180.00'	15°09'51"	47.64'	S35°39'35"W	47.50'
C3	145.00'	61°14'38"	154.99'	S82°34'40"E	147.72'
C32	56.00'	27°32'31"	26.92'	N75°32'34"E	26.66'
C33	153.80'	80°51'25"	217.04'	S20°59'07"E	199.47'
C34	1060.27'	21°24'46"	396.25'	N13°11'45"E	393.95'
C39	180.00'	20°40'54"	64.97'	N53°34'57"E	64.62'

LINE TABLE – THIS SHEET ONLY		
NO.	BEARING	DIST.
L26	N27°22'11"E	45.00'
L28	N27°22'11"E	45.00'
L39	S08°17'48"E	31.10'
L40	S00°41'11"E	18.28'
L41	S00°41'08"E	22.00'
L42	N89°18'49"E	16.32'
L43	S01°03'32"E	32.61'



KEY MAP
1" = 500'



SCALE IN FEET

SEE SHEET 1 FOR LEGEND
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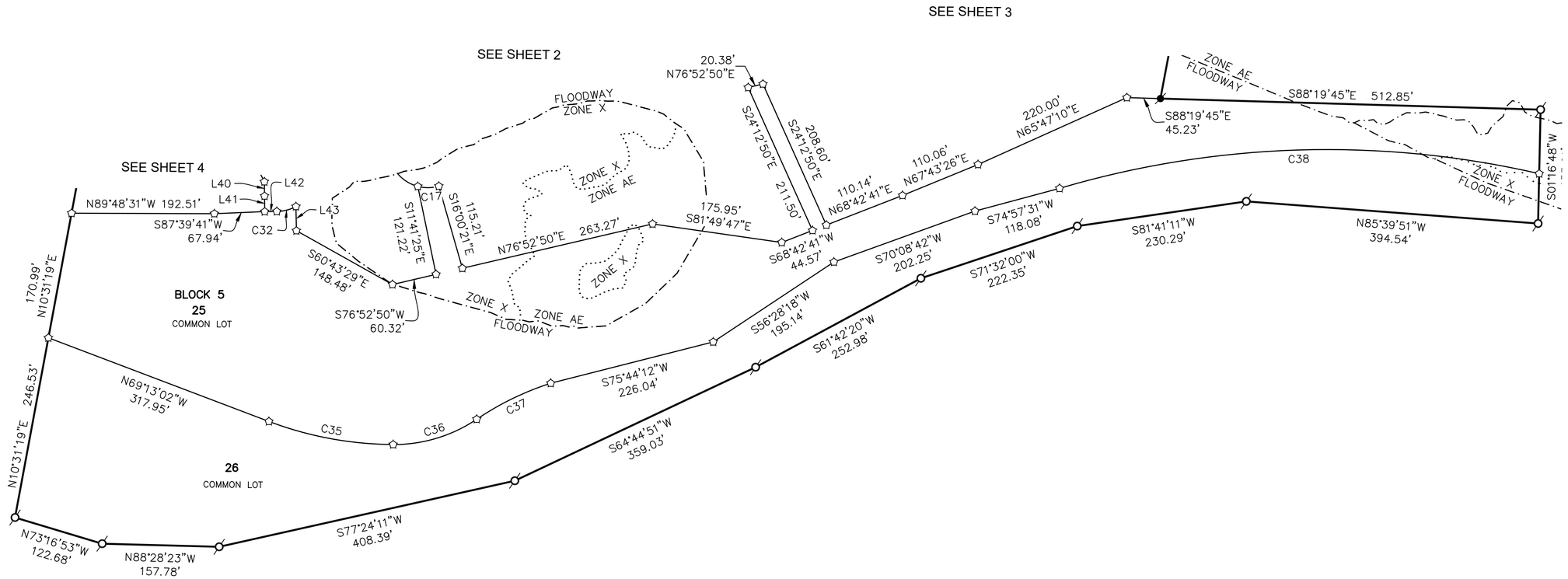
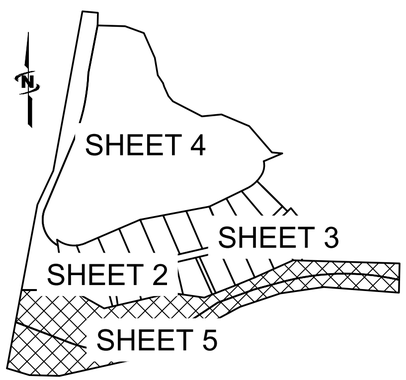


CURVE TABLE – THIS SHEET ONLY					
NO.	RADIUS	DELTA	LENGTH	CH. BEARING	CH. DIST.
C32	56.00'	27°32'31"	26.92'	N75°32'34"E	26.66'
C35	477.60'	20°33'10"	171.32'	S79°28'46"E	170.41'
C36	200.00'	34°13'44"	119.48'	N73°07'47"E	117.71'
C37	396.40'	16°05'57"	111.38'	S64°03'54"W	111.02'
C38	1270.27'	29°30'18"	654.14'	S88°14'44"W	646.94'

LINE TABLE – THIS SHEET ONLY		
NO.	BEARING	DIST.
L40	S00°41'11"E	18.28'
L41	S00°41'08"E	22.00'
L42	N89°18'49"E	16.32'
L43	S01°03'32"E	32.61'



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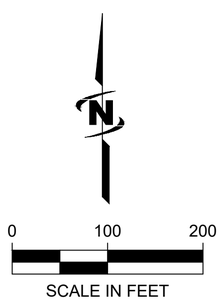

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PLAT OF

MOON VALLEY SUBDIVISION NO. 8

PLAT BOOK _____ PAGE _____

NOTES

1. LOT 1 OF BLOCK 5 IS DESIGNATED AS A PRIVATE ROAD; AND LOTS 23, 24, 25, AND 26 OF BLOCK 5 ARE COMMON LOTS AND SHALL BE OWNED AND MAINTAINED BY RIVERSTONE HOMEOWNERS' ASSOCIATION, INC.
2. LOT 12 OF BLOCK 5 IS DESIGNATED AS A COMMON DRIVEWAY LOT FOR LOT ACCESS TO LOTS 11, 13, AND 14 OF BLOCK 5. THIS COMMON DRIVEWAY LOT SHALL BE OWNED AND MAINTAINED BY RIVERSTONE HOMEOWNERS' ASSOCIATION, INC.
3. THE PRESSURIZED IRRIGATION SYSTEM SHALL BE OWNED AND MAINTAINED BY RIVERSTONE HOMEOWNER'S ASSOCIATION, INC. IRRIGATION WATER WILL BE PROVIDED BY PIONEER DITCH COMPANY LTD. THE LOTS WITHIN THIS SUBDIVISION WILL BE OBLIGATED FOR ASSESSMENTS FROM THE PIONEER DITCH COMPANY LTD.
4. ANY RE–SUBDIVISION OF THIS PLAT SHALL COMPLY WITH THE APPLICABLE ZONING REGULATIONS IN EFFECT AT THE TIME OF THE RE–SUBDIVISION.
5. MINIMUM BUILDING SETBACKS SHALL BE IN ACCORDANCE WITH THE CITY OF STAR APPLICABLE ZONING AND SUBDIVISION REGULATIONS AT THE TIME OF ISSUANCE OF INDIVIDUAL BUILDING PERMITS OR AS SPECIFICALLY APPROVED AND/OR REQUIRED, OR AS SHOWN ON THIS PLAT.
6. THIS DEVELOPMENT IS SUBJECT TO A DEVELOPMENT AGREEMENT INSTRUMENT NO. 2019–0990108, AND AMENDED BY THAT FIRST AMENDMENT TO AMENDED AND RESTATED DEVELOPMENT AGREEMENT INSTRUMENT NO. 2021–076058.
7. LOTS SHALL NOT BE REDUCED IN SIZE WITHOUT PRIOR APPROVAL FROM THE HEALTH AUTHORITY.
8. NO ADDITIONAL DOMESTIC WATER SUPPLIES SHALL BE INSTALLED BEYOND THE WATER SYSTEM APPROVED IN SANITARY RESTRICTION RELEASE.
9. REFERENCE IS MADE TO THE PUBLIC HEALTH LETTER ON FILE WITH ADA COUNTY RECORDER REGARDING ADDITIONAL RESTRICTIONS.
10. THIS DEVELOPMENT RECOGNIZES SECTION 22–4503 OF IDAHO CODE, RIGHT TO FARM ACT, WHICH STATES, "NO AGRICULTURAL OPERATION, AGRICULTURAL FACILITY OR EXPANSION THEREOF SHALL BE OR BECOME A NUISANCE, PRIVATE OR PUBLIC, BY ANY CHANGED CONDITIONS IN OR ABOUT THE SURROUNDING NONAGRICULTURAL ACTIVITIES AFTER IT HAS BEEN IN OPERATION FOR MORE THAN ONE (1) YEAR, WHEN THE OPERATION, FACILITY OR EXPANSION WAS NOT A NUISANCE AT THE TIME IT BEGAN OR WAS CONSTRUCTED. THE PROVISIONS OF THIS SECTION SHALL NOT APPLY WHEN A NUISANCE RESULTS FROM THE IMPROPER OR NEGLIGENT OPERATION OF AN AGRICULTURAL OPERATION, AGRICULTURAL FACILITY OR EXPANSION THEREOF."
11. NO WORK SHALL BE PERFORMED WITHIN THE FEMA FLOODWAY WITHOUT A PERMIT.
12. THIS DEVELOPMENT IS SUBJECT TO PIONEER DITCH COMPANY LICENSE AGREEMENT INSTRUMENT NO. 2019–122483 AND ADDENDUM THERETO RECORDED AS INSTRUMENT NO. 2020–058943.
13. THIS SUBDIVISION IS LOCATED WITHIN SPECIAL FLOOD HAZARD AREA ZONE AE AND ZONE X, AS SPECIFIED ON FEMA FLOOD INSURANCE RATE MAP 16001C0140 J, WITH AN EFFECTIVE DATE OF JUNE 19, 2020.
14. A BUILDING PERMIT SHALL NOT BE ISSUED FOR ANY LOT THAT IS LOCATED WITHIN THE MAPPED FLOODPLAIN UNTIL A FLOOD PLAIN DEVELOPMENT PERMIT IS OBTAINED FOR THE INDIVIDUAL LOT. EACH LOT WITHIN THE MAPPED FLOODPLAIN SHALL REQUIRE AN INDIVIDUAL FLOOD PLAIN DEVELOPMENT PERMIT. NO WORK SHALL BE PERFORMED WITHIN THE FLOODWAY AREA WITHOUT A PERMIT. NO RISE CERTIFICATES WILL BE REQUIRED FOR ANY WORK WITHIN THE FLOODWAY AREA.
15. THIS SUBDIVISION IS SUBJECT TO THE DECLARATION OF COVENANTS, CONDITIONS & RESTRICTIONS CONTAINED IN INSTRUMENT NO. 2020–095409, FIRST SUPPLEMENTAL INSTRUMENT NO. 2020–095415, AND FIRST AMENDMENT TO FIRST SUPPLEMENTAL INSTRUMENT NO. 2021–016388 ALONG WITH ANY AMENDMENTS THERETO.

EASEMENT NOTES

1. LOTS 12, 23, 24, 25, AND 26 OF BLOCK 5 ARE HEREBY DESIGNATED AS HAVING A UTILITY EASEMENT CO–SITUATE WITH SAID LOT.
2. LOT 1 OF BLOCK 5 IS HEREBY DESIGNATED AS HAVING A PRIVATE ROAD EASEMENT AND A STAR SEWER AND WATER DISTRICT EASEMENT CO–SITUATE WITH SAID LOTS.
3. ALL UTILITY EASEMENTS SHOWN OR DESIGNATED HEREON ARE NON–EXCLUSIVE, PERPETUAL, SHALL RUN WITH THE LAND, ARE APPURTENANT TO THE LOTS SHOWN HEREON, AND ARE HEREBY RESERVED FOR THE INSTALLATION, MAINTENANCE, OPERATION, AND USE OF PUBLIC & PRIVATE UTILITIES, PRESSURIZED IRRIGATION, SEWER SERVICE, CABLE TELEVISION/DATA; APPURTENANCES THERETO; AND LOT DRAINAGE.
4. SIDEWALK EASEMENTS AS SHOWN HEREON ARE NON–EXCLUSIVE, PERPETUAL, SHALL RUN WITH THE LAND, ARE APPURTENANT TO THE LOTS SHOWN HEREON, AND ARE HEREBY RESERVED FOR INGRESS AND EGRESS; THE INSTALLATION, MAINTENANCE, OPERATION, AND USE OF SIDEWALKS; AND APPURTENANCES THERETO. RIVERSTONE HOMEOWNERS' ASSOCIATION, INC. SHALL BE RESPONSIBLE FOR MAINTENANCE OF SIDEWALKS.
5. THE PRIVATE ROAD EASEMENT DESIGNATED HEREON IS NON–EXCLUSIVE, PERPETUAL, SHALL RUN WITH THE LAND, IS APPURTENANT TO THE LOTS SHOWN HEREON, AND IS HEREBY RESERVED FOR THE INGRESS AND EGRESS OF EMERGENCY VEHICLES; THE INSTALLATION, MAINTENANCE, OPERATION, AND USE OF ROADWAYS, SIDEWALKS, DRIVEWAYS, AND LANDSCAPING; AND APPURTENANCES THERETO.
6. NO EASEMENT SHOWN OR DESIGNATED HEREON SHALL PRECLUDE THE CONSTRUCTION AND MAINTENANCE OF HARD–SURFACED DRIVEWAYS, LANDSCAPING, PARKING, SIDE & REAR PROPERTY LINE FENCES, OR OTHER SUCH NONPERMANENT IMPROVEMENTS.
7. ALL EASEMENTS ARE PARALLEL (OR CONCENTRIC) TO THE LINES (OR ARCS) THAT THEY ARE DIMENSIONED FROM UNLESS OTHERWISE NOTED.
8. THE ACCESS EASEMENT DESIGNATED HEREON IS NON–EXCLUSIVE, PERPETUAL, SHALL RUN WITH THE LAND, AND IS APPURTENANT TO THE LOTS ADJOINING AND FRONTING THEREON. THE COMMON DRIVEWAY LOT REFERENCED IN NOTE 2 IS HEREBY RESERVED FOR INGRESS AND EGRESS; THE INSTALLATION, MAINTENANCE, OPERATION, AND USE OF A COMMON DRIVEWAY; AND APPURTENANCES TO. SEE THE DECLARATION OF COVENANTS, CONDITIONS & RESTRICTIONS REFERENCED IN NOTE 15 FOR RIGHTS, RESTRICTIONS, MAINTENANCE, AND ASSESSMENTS.

Reference Documents

SUBDIVISIONS: R.L. HON SUBDIVISION (BK. 4 PLATS, PG. 163)
MATT SUBDIVISION (BK. 73 PLATS, PGS. 7509–7510)
MOON VALLEY ESTATES SUBDIVISION (BK. 121 PLATS, PGS. 18915–18918)
MOON VALLEY SUBDIVISION NO. 1 (BK 118 PLATS, PGS. 18219–18229)
MOON VALLEY SUBDIVISION NO. 3 (BK. 122 PLATS, PGS. 19160–19167)
MOON VALLEY SUBDIVISION NO. 6 (BK. 125 PLATS, PGS. 19997–20004)
MOON VALLEY SUBDIVISION NO. 7 (BK. ??? PLATS, PGS. ?????–?????)

SURVEYS: RECORD OF SURVEY 10034 (INSTRUMENT NO. 2015–015318)

DEEDS: 104023529 & 97026153

SURVEYOR'S NARRATIVE

SURVEY PURPOSE: TO DETERMINE THE BOUNDARY OF A PORTION OF PARCEL III OF THAT LAND AS DESCRIBED IN THAT SPECIAL WARRANTY DEED RECORDED UNDER INSTRUMENT NO. 104023529, ADA COUNTY RECORDS, IDAHO AND OF A PORTION OF THAT LAND AS DESCRIBED IN THAT WARRANTY DEED RECORDED UNDER INSTRUMENT NO. 97026153, ADA COUNTY RECORDS, IDAHO, AND TO INCLUDE SAID PORTIONS OF SAID LANDS WITHIN THIS SUBDIVISION.

DOCUMENTS USED:
SEE REFERENCE DOCUMENTS BELOW LEFT.

BOUNDARY CONTROLLED BY:

THE EAST BOUNDARY IS CONTROLLED BY MOON VALLEY ESTATES SUBDIVISION.

THE NORTHERLY BOUNDARY IS CONTROLLED BY MOON VALLEY SUBDIVISION NO. 3.

THE SOUTHERLY AND WESTERLY BOUNDARIES ARE CONTROLLED BY A BOUNDARY LINE CREATED BY THE CLIENT REFLECTING HOW PORTIONS OF THE LANDS OF HEREINABOVE DESCRIBED WARRANTY DEEDS ARE DESIRED TO BE SUBDIVIDED.

PROFESSIONAL LAND SURVEYOR LICENSED 20908 STATE OF IDAHO BRAD DALEY 8-18-2023

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PLAT OF

MOON VALLEY SUBDIVISION NO. 8

PLAT BOOK _____ PAGE _____

CERTIFICATE OF OWNERS

KNOW ALL PEOPLE BY THESE PRESENTS: THAT M3 ID MOON VALLEY, L.L.C. (FORMERLY SUNDANCE INVESTMENTS LIMITED PARTNERSHIP), AN ARIZONA LIMITED LIABILITY LIMITED PARTNERSHIP, DOES HEREBY CERTIFY THAT IT IS THE OWNER OF THAT REAL PROPERTY TO BE KNOWN AS MOON VALLEY SUBDIVISION NO. 8, AND THAT IT INTENDS TO INCLUDE SAID REAL PROPERTY, AS DESCRIBED BELOW, IN THIS PLAT:

THAT PORTION OF THE EAST HALF OF SECTION 16, TOWNSHIP 4 NORTH, RANGE 1 WEST, BOISE MERIDIAN, CITY OF STAR, ADA COUNTY IDAHO, PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE CORNER COMMON TO SECTIONS 9, 10, 15, AND 16, TOWNSHIP 4 NORTH, RANGE 1 WEST, BOISE MERIDIAN, ADA COUNTY, IDAHO, FROM WHICH THE NORTH QUARTER CORNER OF SAID SECTION 15 BEARS SOUTH 89°06'20" EAST, 2644.08 FEET; THENCE ALONG THE LINE COMMON TO SAID SECTIONS 15 AND 16, SOUTH 00°39'42" WEST, 970.60 FEET TO THE SOUTHERLY RIGHT-OF-WAY LINE OF MOON VALLEY ROAD; THENCE, ALONG SAID SOUTHERLY RIGHT-OF-WAY LINE, NORTH 74°38'38" WEST, 301.11 FEET TO THE NORTHEAST CORNER OF THE LANDS OF AKINS AS DESCRIBED IN THAT WARRANTY DEED RECORDED UNDER INSTRUMENT NO. 97066505, ADA COUNTY RECORDS, SAID NORTHEAST CORNER BEING THE MOST NORTHERLY CORNER OF MOON VALLEY SUBDIVISION NO. 1 ACCORDING TO THE OFFICIAL PLAT THEREOF FILED IN BOOK 118 OF PLATS AT PAGES 18219 THROUGH 18229, ADA COUNTY RECORDS; THENCE, ALONG THE WESTERLY BOUNDARY LINE OF SAID MOON VALLEY SUBDIVISION NO. 1 THE FOLLOWING ELEVEN (11) COURSES:

1)SOUTH 00°39'51" WEST, 957.73 FEET; 2)SOUTH 38°09'21" EAST, 39.95 FEET; 3)SOUTH 37°12'11" WEST, 90.40 FEET; 4)SOUTH 31°21'24" WEST, 80.44 FEET; 5)SOUTH 61°15'54" EAST, 134.11 FEET; 6)SOUTH 28°44'06" WEST, 8.18 FEET; 7)SOUTH 61°15'54" EAST, 37.00 FEET; 8)NORTH 28°44'06" EAST, 8.39 FEET; 9)SOUTH 58°33'55" EAST, 133.65 FEET; 10)SOUTH 28°44'06" WEST, 58.23 FEET; 11)SOUTH 00°39'42" WEST, 97.26 FEET TO THE THE SOUTHWEST CORNER OF SAID MOONVALLEY SUBDIVISION NO. 1, SAID POINT ALSO BEING THE NORTHWEST CORNER OF MOON VALLEY ESTATES SUBDIVISION ACCORDING TO THE OFFICIAL PLAT THEREOF FILED IN BOOK 121 OF PLATS AT PAGES 18915 THROUGH 18918, ADA COUNTY RECORDS;

THENCE, ALONG THE WESTERLY LINE OF SAID MOON VALLEY ESTATES SUBDIVISION, SOUTH 00°39'42" WEST, 20.00 FEET;

THENCE, CONTINUING ALONG THE SAID WESTERLY LINE, SOUTH 00°39'42" WEST, 301.72 FEET;

THENCE, CONTINUING ALONG SAID WESTERLY LINE, SOUTH 01°16'48" WEST, 301.71 FEET TO THE SOUTHWESTERLY CORNER OF SAID MOON VALLEY ESTATES SUBDIVISION;

THENCE SOUTH 01°16'48" WEST, 9.66 FEET TO THE POINT OF BEGINNING;

THENCE SOUTH 01°16'48" WEST, 153.61 FEET;
THENCE NORTH 85°39'51" WEST, 394.54 FEET;
THENCE SOUTH 81°41'11" WEST, 230.29 FEET;
THENCE SOUTH 71°32'00" WEST, 222.35 FEET;
THENCE SOUTH 61°42'20" WEST, 252.98 FEET;
THENCE SOUTH 64°44'51" WEST, 359.03 FEET;
THENCE SOUTH 77°24'11" WEST, 408.39 FEET;
THENCE NORTH 88°28'23" WEST, 157.78 FEET;
THENCE NORTH 73°16'53" WEST, 122.68 FEET;
THENCE NORTH 10°31'19" EAST, 872.59 FEET;
THENCE NORTH 25°05'58" EAST, 196.47 FEET;
THENCE NORTH 10°21'20" EAST, 848.93 FEET;
THENCE SOUTH 84°37'17" EAST, 81.66 FEET TO POINT ON THE SOUTHERLY LINE OF MOON VALLEY SUBDIVISION NO. 6 ACCORDING TO THE OFFICIAL PLAT THEREOF FILED IN BOOK 125 OF PLATS AT PAGES 19997 THROUGH 20004, ADA COUNTY RECORDS;

THENCE ALONG THE SOUTHERLY LINE OF SAID MOON VALLEY SUBDIVISION NO. 6 THE FOLLOWING SEVEN (7) COURSES:

THENCE SOUTH 01°35'43" WEST, 66.07 FEET;
THENCE SOUTH 88°24'17" EAST 144.16 FEET;
THENCE SOUTH 69°48'37" EAST, 104.69 FEET;
THENCE SOUTH 23°52'54" EAST, 142.15 FEET;
THENCE SOUTH 09°29'29" EAST, 92.16 FEET;
THENCE SOUTH 33°50'44" EAST, 49.99 FEET;
THENCE SOUTH 18°41'05" EAST, 20.81 FEET TO POINT ON THE SOUTHERLY LINE OF MOON VALLEY SUBDIVISION NO. 3 ACCORDING TO THE OFFICIAL PLAT THEREOF FILED IN BOOK 122 OF PLATS AT PAGES 19160 THROUGH 19167, ADA COUNTY RECORDS;

THENCE ALONG THE SOUTHERLY LINE OF SAID MOON VALLEY SUBDIVISION NO. 3 THE FOLLOWING SEVEN (7) COURSES:

THENCE SOUTH 24°11'20" EAST, 52.80 FEET;
THENCE SOUTH 40°30'19" EAST, 35.94 FEET;
THENCE SOUTH 62°37'49" EAST, 171.31 FEET;
THENCE NORTH 84°28'35" EAST, 102.76 FEET;
THENCE SOUTH 67°08'20" EAST, 157.59 FEET;
THENCE SOUTH 40°51'33" EAST, 182.37 FEET;
THENCE SOUTH 84°39'24" EAST, 54.08 FEET TO POINT ON THE WESTERLY LINE OF MOON VALLEY SUBDIVISION NO. 7 ACCORDING TO THE OFFICIAL PLAT THEREOF FILED IN BOOK ??? PLATS AT PAGES ????? THROUGH ?????. ADA COUNTY RECORDS;

THENCE ALONG THE WESTERLY LINE OF SAID MOON VALLEY SUBDIVISION NO. 7 THE FOLLOWING EIGHT (8) COURSES:

THENCE SOUTH 67°10'03" WEST, 105.56 FEET THE THE BEGINNING OF A NON-TANGENT CURVE;
THENCE ALONG SAID NON-TANGENT CURVE TO THE RIGHT AN ARC LENGTH OF 66.91 FEET, HAVING A RADIUS OF 95.00 FEET, A CENTRAL ANGLE OF 40°21'10", A CHORD BEARING OF SOUTH 06°57'22" WEST AND A CHORD LENGTH OF 65.53 FEET TO THE BEGINNING OF A NON-TANGENT CURVE;
THENCE ALONG SAID NON-TANGENT CURVE TO THE RIGHT AN ARC LENGTH OF 47.64 FEET, HAVING A RADIUS OF 180.00 FEET, A CENTRAL ANGLE OF 15°09'51", A CHORD BEARING OF SOUTH 35°39'35" WEST AND A CHORD LENGTH OF 47.50 FEET;
THENCE SOUTH 45°18'30" EAST, 189.13 FEET;
THENCE SOUTH 44°46'21" EAST, 37.00 FEET;
THENCE NORTH 45°13'39" EAST, 24.81 FEET;
THENCE SOUTH 39°35'25" EAST, 139.06 FEET;
THENCE SOUTH 10°42'18" WEST, 170.75 FEET TO POINT ON THE SOUTHERLY LINE OF SAID MOON VALLEY SUBDIVISION NO. 7;

CERTIFICATE OF OWNERS
(CONTINUED)

THENCE ALONG THE SOUTHERY LINE OF SAID MOON VALLEY SUBDIVISION NO. 7 SOUTH 88°19'45" EAST, 512.85 FEET TO THE POINT OF BEGINNING;

THE ABOVE-DESCRIBED PARCEL CONTAINS AN AREA OF 42.45 ACRES OF LAND, MORE OR LESS.

THE PRIVATE ROADS SHOWN ON THIS PLAT ARE NOT DEDICATED TO THE PUBLIC. THE EASEMENTS SHOWN ON THIS PLAT ARE NOT DEDICATED TO THE PUBLIC, HOWEVER THE RIGHT TO USE SAID EASEMENTS IS HEREBY RESERVED FOR THE USES SPECIFICALLY DEPICTED ON THE PLAT, AND FOR ANY OTHER PURPOSES DESIGNATED HEREON, AND NO PERMANENT STRUCTURES, OTHER THAN FOR SUCH USES AND PURPOSES, ARE TO BE ERECTED WITHIN THE LINES OF SAID EASEMENTS. ALL OF THE LOTS WITHIN THIS SUBDIVISION ARE ELIGIBLE TO RECEIVE WATER AND SEWER SERVICE FROM THE STAR SEWER & WATER DISTRICT AND THE STAR SEWER & WATER DISTRICT HAS AGREED IN WRITING TO SERVE ALL LOTS WITHIN THE SUBDIVISION. IRRIGATION WATER HAS BEEN PROVIDED FROM PIONEER DITCH COMPANY, LTD., IN COMPLIANCE WITH IDAHO CODE 31-3805(1)(B). LOTS WITHIN THIS SUBDIVISION WILL BE ENTITLED TO IRRIGATION WATER RIGHTS, AND WILL BE OBLIGATED FOR ASSESSMENTS FROM THE PIONEER DITCH COMPANY, LTD.

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND:

M3 ID MOON VALLEY, L.L.C.,
AN ARIZONA LIMITED LIABILITY COMPANY

BY: M3 BUILDERS, L.L.C., AN ARIZONA LIMITED LIABILITY COMPANY,
ITS MANAGER

BY: THE M3 COMPANIES, L.L.C., AN ARIZONA LIMITED LIABILITY COMPANY,
ITS SOLE MEMBER

BY: _____
WILLIAM I. BROWNLEE, MANAGER

ACKNOWLEDGEMENT

STATE OF _____ }
COUNTY OF _____ } SS.

ON THIS_____DAY OF_____, IN THE YEAR 20____, BEFORE ME, A NOTARY PUBLIC IN AND FOR THE STATE OF _____, PERSONALLY APPEARED WILLIAM I. BROWNLEE, KNOWN OR IDENTIFIED TO ME TO BE THE MANAGER OF **M3 COMPANIES, LLC,** THE LLC THAT IS THE **SOLE MEMBER** OF **M3 BUILDERS, LLC,** THE LLC THAT IS THE **MANAGER OF M3 ID MOON VALLEY, LLC,** THE LLC THAT EXECUTED THE WITHIN AND FORGOING INSTRUMENT, OR THE PERSON WHO EXECUTED THE INSTRUMENT ON BEHALF OF SAID LLC AND ACKNOWLEDGED TO ME THAT **M3 ID MOON VALLEY, LLC** EXECUTED THE SAME.

_____
NOTARY PUBLIC FOR _____
MY COMMISSION EXPIRES _____

CERTIFICATE OF SURVEYOR

I, BRAD DALEY, DO HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR, LICENSED BY THE STATE OF IDAHO, AND THAT THIS PLAT OF MOON VALLEY SUBDIVISION NO. 8, AS DESCRIBED IN THE CERTIFICATE OF OWNERS AND AS SHOWN ON THE ATTACHED PLAT IS CORRECT AND WAS SURVEYED IN ACCORDANCE WITH IDAHO CODE RELATING TO PLATS AND SURVEYS.

_____
BRAD DALEY, PLS 20908

PROFESSIONAL LAND SURVEYOR LICENSED 20908 STATE OF IDAHO BRAD DALEY 8-18-2023

J-U-B ENGINEERS, INC.
2760 West Excursion Lane, Suite 400, Meridian, ID 83642-5313
p 208 376 7330 w www.jub.com

PLAT OF

MOON VALLEY SUBDIVISION NO. 8

PLAT BOOK _____ PAGE _____

APPROVAL OF CENTRAL DISTRICT HEALTH

SANITARY RESTRICTIONS AS REQUIRED BY IDAHO CODE, TITLE 50, CHAPTER 13 HAVE BEEN SATISFIED ACCORDING TO THE LETTER TO BE READ ON FILE WITH THE COUNTY RECORDER OR HIS AGENT LISTING THE CONDITIONS OF APPROVAL. SANITARY RESTRICTIONS MAY BE RE-IMPOSED, IN ACCORDANCE WITH SECTION 50-1326, IDAHO CODE, BY THE ISSUANCE OF A CERTIFICATE OF DISAPPROVAL.

_____

CENTRAL DISTRICT HEALTH DATE

APPROVAL OF ADA COUNTY HIGHWAY DISTRICT

THE FOREGOING PLAT WAS ACCEPTED AND APPROVED BY THE BOARD OF ADA COUNTY HIGHWAY DISTRICT COMMISSIONERS ON THE_____DAY OF_____, 20___.

_____

COMMISSION PRESIDENT
ADA COUNTY HIGHWAY DISTRICT

APPROVAL OF CITY ENGINEER

I, THE UNDERSIGNED, CITY ENGINEER IN AND FOR THE CITY OF STAR, ADA COUNTY, IDAHO, ON THIS DAY

_____, HEREBY APPROVE THIS PLAT.

_____

CITY ENGINEER

APPROVAL OF CITY COUNCIL

THE FOREGOING PLAT WAS ACCEPTED AND APPROVED THIS _____ DAY OF _____, _____, BY THE CITY OF STAR, IDAHO.

_____

CITY CLERK

CERTIFICATE OF COUNTY SURVEYOR

I, THE UNDERSIGNED, PROFESSIONAL LAND SURVEYOR IN AND FOR ADA COUNTY, IDAHO, DO HEREBY CERTIFY THAT I HAVE CHECKED THIS PLAT AND FIND THAT IT COMPLIES WITH THE STATE OF IDAHO CODE RELATING TO PLATS AND SURVEYS.

_____

ADA COUNTY SURVEYOR DATE

CERTIFICATE OF COUNTY TREASURER

I, THE UNDERSIGNED, COUNTY TREASURER IN AND FOR THE COUNTY OF ADA, STATE OF IDAHO, PER REQUIREMENTS OF IDAHO CODE 50-1308, DO HEREBY CERTIFY THAT ANY AND ALL CURRENT AND/OR DELINQUENT COUNTY PROPERTY TAXES FOR THE PROPERTY INCLUDED IN THIS PROPOSED SUBDIVISION HAVE BEEN PAID IN FULL. THIS CERTIFICATE IS VALID FOR THE NEXT THIRTY (30) DAYS ONLY.

_____

ADA COUNTY TREASURER DATE

COUNTY RECORDER'S CERTIFICATE

STATE OF IDAHO } SS. INSTRUMENT NO._____
COUNTY OF ADA }

I HEREBY CERTIFY THAT THIS INSTRUMENT WAS FILED AT THE REQUEST OF JUB ENGINEERS, INC.

AT _____MINUTES PAST_____O'CLOCK__.M.,

THIS_____DAY OF_____,_____, IN MY OFFICE, AND WAS RECORDED IN

BOOK_____OF PLATS AT PAGES _____ THROUGH _____.

FEE: _____

_____ _____

DEPUTY EX-OFFICIO RECORDER

22 FEB 2023

J-U-B ENGINEERS, INC.
2760 West Excursion Lane, Suite 400, Meridian, ID 83642-5313
p 208 376 7330 w www.jub.com

LANDSCAPE PLANS FOR

RIVERSTONE SUBDIVISION

SUBDIVISION 8

CITY OF STAR, IDAHO
2023

SHEET INDEX

DEVELOPER

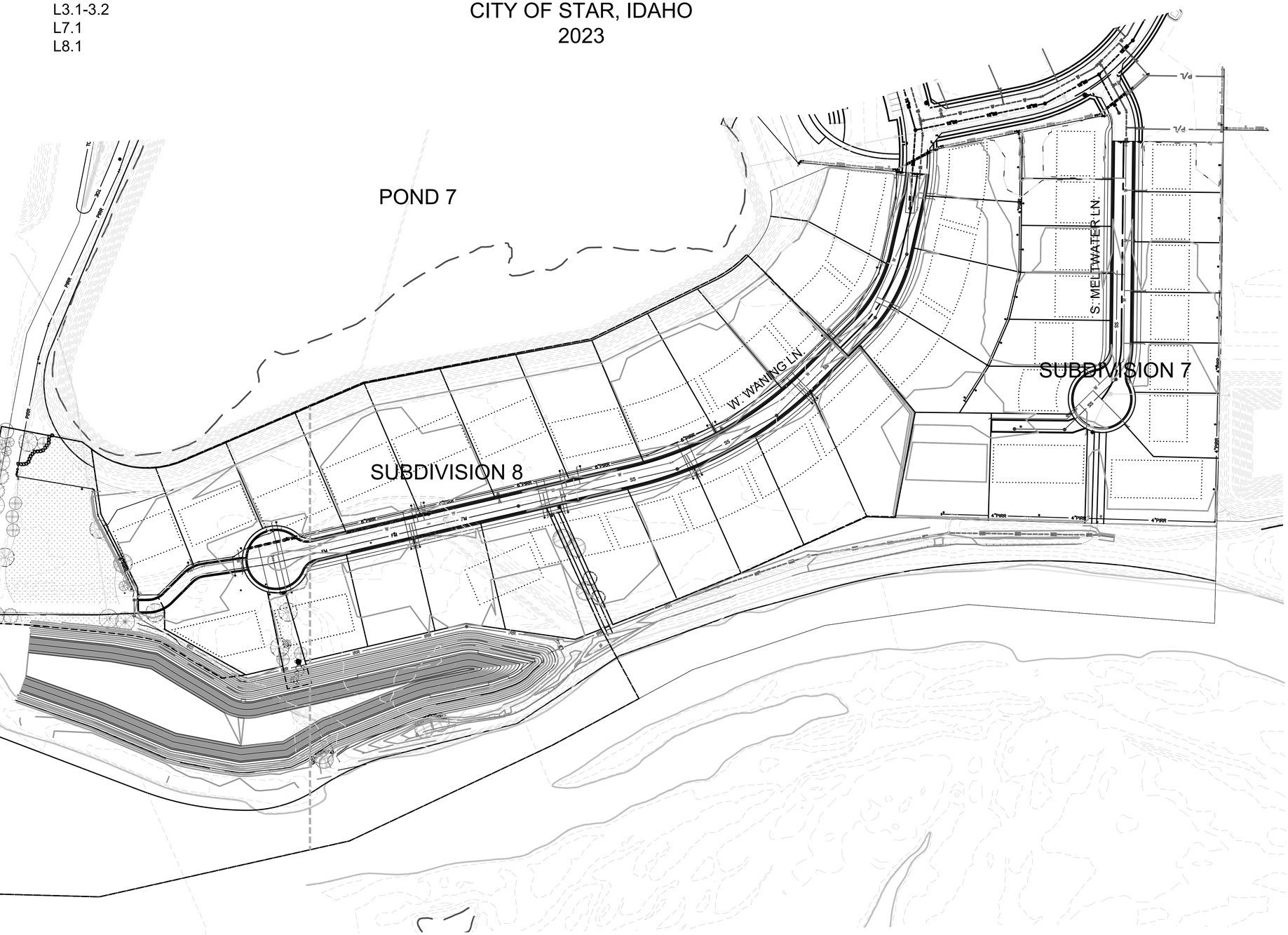
M3 COMPANIES
1087 W. River Street
Suite 310
Boise, Idaho 83702
(208) 939-6263 Fax: 208-939-6752

CIVIL ENGINEERS

J-U-B ENGINEERS, INC.
250 S. Beechwood Ave. Suite 201
Boise, ID 83709-0944
(208) 376-7330 Fax: 208-323-9336

LANDSCAPE ARCHITECT

Greey | Pickett
Landscape Architecture | Community Design
7144 E. Stetson Drive, Suite 205
Scottsdale, Arizona 85251
(480) 609-0009 Fax: (480) 609-0068



OVERALL LANDSCAPE PLAN

Scale: 1" = 80'-0"

GREEY | PICKETT
landscape architecture | community design
7144 e stetson drive, suite 205
scottsdale, arizona 85251
480.609.0009p 480.609.0068f

STATE OF IDAHO
RUSSELL GREEY
LA - 16653
Expires 09/31/23
LICENSED LANDSCAPE ARCHITECT

RIVERSTONE SUBDIVISION
SUBDIVISION 8
Landscape Construction Documents
STAR, IDAHO

revisions:

project #: *MTC069*
scale: *As Shown*
issued for: *REVIEW*
drawn by: *TEAM*
date: *05-02-2023*
drawing: *Overall Landscape Plan*

sheet #
L0.0
1 of 7

PLANTING GENERAL NOTES:

1. THE CONTRACTOR SHALL REVIEW PLANTING PLANS WITH LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
2. THE LANDSCAPE ARCHITECT OR HIS REPRESENTATIVE RESERVES THE RIGHT TO REFUSE ANY PLANT MATERIALS HE DEEMS UNACCEPTABLE. SEE SPECIFICATIONS.
3. THE CONTRACTOR SHALL SUPPLY AND INSTALL ALL PLANT MATERIAL AS SPECIFIED ON THE PLANTING PLANS. HOWEVER, SHOULD THE PLANT MATERIAL BE TEMPORARILY UNAVAILABLE, THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT AND INSTALL 3 GALLON NURSERY BUCKETS WITH IRRIGATION AT EACH PLANT LOCATION. AS THE PLANT MATERIAL BECOMES AVAILABLE, THE 3 GALLON BUCKETS SHALL BE REMOVED AND PLANT MATERIAL INSTALLED.
4. ANY AND ALL SUBSTITUTIONS TO BE APPROVED BY THE LANDSCAPE ARCHITECT.
5. LOCATE PLANTS AWAY FROM SPRINKLER HEADS, LIGHT FIXTURES AND OTHER OBSTRUCTIONS.
6. FINAL LOCATION OF ALL PLANT MATERIAL SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER'S AUTHORIZED REPRESENTATIVE.
7. PLANTING AND IRRIGATION DESIGN MAY BE MODIFIED TO ADAPT TO WALK CONFIGURATIONS THAT DIFFER FROM THESE PLANS, OR BECAUSE OF GRADE LIMITATIONS ON SITE.
8. WATER TEST ALL TREE PLANTING HOLES PRIOR TO PLANTING. IF TREE HOLE DOES NOT DRAIN, DO NOT PLANT.
9. REFER TO THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS NOT SHOWN ON DRAWINGS.
10. TREES SHALL BE PLANTED A MINIMUM OF 10'-0" FROM STREET LIGHTS/SEEPAGE BEDS/IDAHO POWER APPURTENANCES/ FIRE HYDRANTS, 6'-0" FROM EDGE OF UNDERGROUND PIPELINES AND A MINIMUM OF 4'-0" FROM WALKS, CURBS AND WALLS. SHRUBS SHALL BE PLANTED A MINIMUM OF 2'-0" FROM CURB AND WALKS.
11. ALL SPECIMEN TREES, SHRUBS AND GROUNDCOVER SHALL BE FIELD LOCATED BY LANDSCAPE ARCHITECT OR OWNER'S AUTHORIZED REPRESENTATIVE.
12. THE CONTRACTOR SHALL INSTALL "SHAWTOWN ROOT BARRIER PANELS" (OR APPROVED EQUAL) AT ALL TREES WITHIN 7'-0" FEET OF HARDSCAPE ELEMENTS INCLUDING (BUT NOT LIMITED TO) SIDEWALKS, ASPHALT, CONCRETE SLABS / FOOTINGS AND STRUCTURES. CONTRACTOR SHALL SUBMIT SPECIFICATION SHEETS OF PROPOSED ROOT BARRIER PANELS TO THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION, IF APPLICABLE.
13. ON-SITE AND OFF-SITE TOPSOIL SHALL CONFORM TO CONTENT REQUIREMENTS AS SPECIFIED IN PART 2 OF THE PLANTING SPECIFICATIONS. AGRONOMY TEST SUBMITTALS ARE REQUIRED FOR ALL MATERIAL USED FOR TOPSOIL AND BACKFILL. SUBMIT REPORT TO LANDSCAPE ARCHITECT FOR REVIEW.
14. ALL PLANT MATERIAL SHALL BE IN COMPLIANCE WITH THE AMERICAN STANDARDS FOR NURSERY STOCK, LATEST EDITION.
15. THE CONTRACTOR SHALL PROVIDE MAINTENANCE FOR ALL PLANT MATERIAL FROM THE TIME OF INSTALLATION THROUGH SUBSTANTIAL COMPLETION AND 90 DAY MAINTENANCE AFTER SUBSTANTIAL COMPLETION PRIOR TO TURNOVER TO HOME OWNER'S ASSOCIATION (HOA).
16. PLANT MATERIAL MARKED 'SALVAGE' SHALL BE SELECTED FROM ON-SITE SALVAGE INVENTORY. ALL MATERIAL SELECTIONS SHALL BE APPROVED BY LANDSCAPE ARCHITECT AND/OR OWNER'S AUTHORIZED REPRESENTATIVE.
17. ALL PLANTER BEDS SHALL BE TREATED WITH PRE-EMERGENT AS PER MANUFACTURER'S INSTRUCTIONS. RE-APPLY AS NECESSARY TO ELIMINATE INVASIVE WEEDS. REMOVE ALL DEAD DEBRIS.
18. ALL TREE STAKING SHALL CONFORM TO THE PLANTING DETAILS OR AS NOTED IN THE SPECIFICATIONS. THE LANDSCAPE ARCHITECT OR OWNER'S AUTHORIZED REPRESENTATIVE SHALL REVIEW TYPICAL TREE STAKING PRIOR TO FINAL ACCEPTANCE.

GRADING GENERAL NOTES:

1. CONTRACTOR SHALL GRADE TO MAINTAIN POSITIVE DRAINAGE AWAY FROM ALL STRUCTURES. REVIEW ENGINEERS PLAN FOR DRAINAGE.
2. FINISH GRADING SHALL BE BY THE DIRECTION OF THE LANDSCAPE ARCHITECT.
3. LANDSCAPE ARCHITECT SHALL APPROVE GRADING PRIOR TO PLANTING.
4. GRADING FOR THIS PROJECT INCLUDES THE FOLLOWING:
   A) FINE GRADING OF EXISTING ROUGH GRADES IS REQUIRED TO PROVIDE SMOOTH, EVEN GRADE TRANSITION IN LANDSCAPE AREA.
   B) IMPORTING AND PLACING "OFF-SITE 3/8" MINUS TOPSOIL" IN THE FOLLOWING AREAS:
      i) TURF, AND ANNUAL AREAS (6" DEPTH).
      ii) PLANT BACKFILL (CAN BE SCREENED ON-SITE SOIL).
5. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ANY CALICHE ENCOUNTERED ON SITE AT NO ADDITIONAL COST TO THE OWNER. THE OWNER AND CONTRACTOR SHALL COORDINATE A SUITABLE LOCATION ON SITE TO DISPOSE OF THE CALICHE MATERIAL. SHOULD A SUITABLE LOCATION ON SITE NOT EXIST, THE OWNER SHALL BE RESPONSIBLE FOR ALL FEES ASSOCIATED WITH REMOVAL AND DISPOSAL OF THE CALICHE.
6. FINISH GRADE OF ALL PLANTING AREAS IS TO BE 1.5" BELOW ADJACENT PAVING UNLESS NOTED OTHERWISE.
7. REFERENCE CIVIL ENGINEERING DRAWINGS FOR GRADING AND DRAINAGE FLOWS. THE CONTRACTOR SHALL BE RESPONSIBLE THAT THESE ARE PROVIDED FOR AND NOT IMPAIRED WITH OBSTRUCTIONS.
8. THE CONTRACTOR IS RESPONSIBLE FOR GRADING ALL AREAS AT THE DIRECTION OF THE LANDSCAPE ARCHITECT TO CREATE A NATURALLY UNDULATING GROUND PLANE.

HARDSCAPE GENERAL NOTES:

1. FOOTINGS, WALLS AND FENCES SHALL BE PLACED OUTSIDE OF THE PUBLIC RIGHT-OF-WAY.
2. REFER TO CIVIL PLANS PREPARED BY MASON STANFIELD AND JUB ENGINEERS, INC. FOR ALL INFORMATION REGARDING HORIZONTAL AND VERTICAL CONTROLS.
3. ALL DETAILS SHALL BE REVIEWED BY A STRUCTURAL ENGINEER AND MODIFIED (IF NECESSARY) PRIOR TO CONSTRUCTION.
4. ALL DIMENSIONS SHOWN ON THIS PLAN ARE BASED ON THE CIVIL PLAN SUBMITTED BY CIVIL ENGINEER. SHOULD DISCREPANCIES OCCUR, FIELD REVISIONS SHALL BE REQUIRED.
5. THE CONTRACTOR SHALL HAVE SIDEWALK SURVEYED AND STAKED FOR REVIEW BY THE LANDSCAPE ARCHITECT , OR OWNER'S REPRESENTATIVE, PRIOR TO INSTALLATION.
6. IN ADDITION TO SUBMITTING MATERIAL SAMPLES OF ALL SITE RELATED MATERIALS, THE CONTRACTOR SHALL PREPARE A 4'X4' SAMPLE PANEL FOR EACH TYPE OF CONSTRUCTION, I.E., A) CONCRETE PAVERS, B) EXPOSED AGGREGATE PAVING, C) INTEGRAL COLORED CONCRETE, ETC., FOR APPROVAL BY THE LANDSCAPE ARCHITECT AND OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO FINAL CONSTRUCTION.
7. UNLESS NOTED OTHERWISE ON CONSTRUCTION DOCUMENTS OR NOTED IN DETAILS, SIDEWALKS SHALL BE 5'-0" WIDE (VARIES), 4" THICK, 3,000 PSI CONCRETE ON COMPACTED BASE WITH CONSTRUCTION JOINTS AT 5'-0" (VARIES) ON CENTER AND EXPANSION JOINTS AT 20'-0" (VARIES) ON CENTER. SIDEWALKS SHALL HAVE A MEDIUM BROOM, NON-SKID FINISH WITH 1/2" RADIUS TOOLED EDGES.
8. RADIUS AT SIDEWALK INTERSECTIONS SHALL BE 5'-0" (TYPICAL), UNLESS NOTED OTHERWISE.
9. THE CONTRACTOR SHALL LAYOUT AND VERIFY ALL HARDSCAPE ELEMENTS PRIOR TO CONSTRUCTION FOR REVIEW BY THE LANDSCAPE ARCHITECT OR OWNER'S AUTHORIZED REPRESENTATIVE. SHOULD DISCREPANCIES EXIST, CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OR OWNER'S AUTHORIZED REPRESENTATIVE BEFORE PROCEEDING FURTHER.

GENERAL NOTES:

1. THESE CONSTRUCTION DOCUMENTS, INCLUDING ALL PLANS, NOTES, DETAILS AND SPECIFICATIONS ARE INTENDED TO FACILITATE THE INSTALLATION CONTRACTOR BY PROVIDING GENERAL GUIDELINES FOR DESIGN INTENT. IT IS THE GOAL OF THE DOCUMENTS THAT THE WORK IS TO BE COMPLETED WITHOUT CHANGE ORDERS. ALL QUANTITIES SHOWN IN THE DOCUMENTS ARE ESTIMATES ONLY AND ARE NOT GUARANTEED; THE CONTRACTOR SHALL SUPPLY ALL MATERIALS, LABOR AND EQUIPMENT IN ORDER TO FULFILL THE INTENT OF THE DESIGN DRAWINGS.
2. INTERPRETATION OF THE PLANS AND SPECIFICATIONS SHALL BE MADE BY THE "AUTHOR" OR "ARCHITECT/ENGINEER-OF-RECORD" OF THE RESPECTIVE DOCUMENT AND SHALL BE CONSIDERED FINAL. ANY POSSIBLE AMBIGUITY SHALL BE SUBMITTED IN WRITING BY THE CONTRACTOR PRIOR TO SUBMITTING FORMAL BIDS. ALL CLARIFICATIONS SHALL BE PREPARED IN WRITING BY THE "ARCHITECT/ENGINEER-OF-RECORD" PRIOR TO BIDDING. THE CONTRACTOR SHALL ACCEPT THE INTERPRETATION OF THE "ARCHITECT/ENGINEER-OF-RECORD" AS THE CORRECT AND FINAL INTERPRETATION.
3. ANY INCIDENTAL INSTALLATION PROCEDURE, MATERIAL OR EQUIPMENT, NOT MENTIONED IN THESE CONSTRUCTION DOCUMENTS, THE SPECIFICATIONS NOR SHOWN ON THE PLANS, WHICH MAY BE NECESSARY FOR COMPLETION AND SATISFACTORY OPERATION OF THE DESIGN SYSTEM SHALL BE FURNISHED AND INSTALLED (AS BASED ON INDUSTRY STANDARDS) AS THOUGH SHOWN OR PROVIDED FOR.
4. EXISTING CONDITIONS AND BASE INFORMATION ARE BASED ON PLANS PREPARED BY: MASON STANFIELD AND JUB ENGINEERS, INC. THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE LOCATIONS OF EXISTING AND FUTURE UNDERGROUND SERVICES AND IMPROVEMENTS WHICH MAY CONFLICT WITH THE WORK TO BE DONE. NOTIFY THE OWNER'S AUTHORIZED REPRESENTATIVE IMMEDIATELY SHOULD A CONFLICT ARISE.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL NECESSARY PERMITS AND SHALL NOTIFY ALL UTILITY COMPANIES WITH UTILITIES ON SITE PRIOR TO THE CONSTRUCTION OF THE PROJECT.
6. FOR UNDERGROUND UTILITY COORDINATION AND 48 HOURS PRIOR TO START OF CONSTRUCTION (DEPENDING ON AREA OR JURISDICTION), THE CONTRACTOR SHALL CONTACT:
   A) UTILITY DIG LINE SERVICE OF IDAHO 1-800-342-1585
   B) UNDERGROUND SERVICES ALERT (USA) 1-800-227-2600
   C) OVERHEAD UTILITIES
7. THESE NOTES ARE TO BE USED FOR GENERAL REFERENCE IN CONJUNCTION WITH AND AS A SUPPLEMENT TO THE WRITTEN SPECIFICATIONS, APPROVED ADDENDUMS, AND THE CHANGE ORDERS AS ASSOCIATED WITH THESE CONSTRUCTION DOCUMENTS.
8. SHOULD THE CONTRACTOR HAVE ANY QUJESTIONS REGARDING THESE CONSTRUCTION DOCUMENTS OR SHOULD THERE BE ANY DISCREPANCIES, HE SHALL CONTACT THE LANDSCAPE ARCHITECT FOR CLARIFICATION BEFORE PROCEEDING FURTHER.
9. ALL WORK SHALL CONFORM TO THE CONTRACT DOCUMENTS AND PER GOVERNING CODES AND/OR ORDINANCES.
10. THE CONTRACTOR SHALL PROVIDE BARRICADES AND TRAFFIC CONTROL ALONG PUBLIC STREETS, IF REQUIRED, DURING INSTALLATION.
11. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REPORT TO THE LANDSCAPE ARCHITECT AND/OR THE OWNER'S AUTHORIZED REPRESENTATIVE ANY DISCREPANCIES BETWEEN THE CONSTRUCTION DOCUMENTS AND FIELD CONDITIONS PRIOR TO THE START OF WORK.
12. BEFORE WORK BEGINS ON THE PROJECT, THE CONTRACTOR SHALL REVIEW THE PROJECT WITH THE LANDSCAPE ARCHITECT AND/OR THE OWNER'S AUTHORIZED REPRESENTATIVE.
13. THE LANDSCAPE ARCHITECT AND/OR THE OWNER'S AUTHORIZED REPRESENTATIVE SHALL APPROVE ANY OR ALL CHANGES PRIOR TO THE START OF WORK.
14. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING AND COORDINATING EXISTING SITE CONDITIONS.
15. THE CONTRACTOR SHALL ADHERE TO ALL APPLICABLE LOCAL, STATE, AND/OR FEDERAL LAWS AND/OR REGULATIONS PERTAINING TO THE PROJECT.
16. THE CONTRACTOR SHALL PROPERLY COORDINATE HIS WORK WITH OTHER CONTRACTOR'S WORK PRIOR TO INSTALLATION.
17. THE CONTRACTOR SHALL TAKE PRECAUTIONARY MEASURES TO PROTECT EXISTING IMPROVEMENTS AND THE PUBLIC FROM DAMAGE THROUGHOUT CONSTRUCTION.
18. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY DAMAGES IMPOSED, UNINTENTIONALLY OR ACCIDENTALLY TO EXISTING UTILITIES, STRUCTURES, WALLS, OR OTHER AMENITIES, DUE TO THE ACTION OF THE CONTRACTOR, CONTRACTOR'S EMPLOYEES AND/OR THE CONTRACTOR'S SUBCONTRACTORS. DAMAGE OCCURRED DURING THE CONTRACTOR'S OPERATION SHALL BE REPAIRED, AT THE EXPENSE OF THE CONTRACTOR, TO THE SATISFACTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE.
19. MATCH GRADES, LAYOUT AND ELEVATIONS OF ADJOINING LANDSCAPE WORK. NOTIFY THE LANDSCAPE ARCHITECT OF CONFLICTS BEFORE PROCEEDING WITH CONSTRUCTION.

MATERIAL SCHEDULE:

	DESCRIPTION	SUPPLIER	MODEL / SIZE	COLOR/FINISH	COMMENTS
	CONCRETE SIDEWALK				**PER JUB ENGINEERING PLANS**
		CONTRACTOR		UNCOLORED, MEDIUM BROOM FINISH	
	LIMIT OF TURF				
	-CUT EDGE	CONTRACTOR			
	PLANTING AREA				
	-MULCH	CONTRACTOR	MULCH	PREMIUM BLEND	
	TURF AREA				
	-SOD	CONTRACTOR	FESCUE SOD		

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7144 e stetson drive, suite 205
scottsdale, arizona 85251
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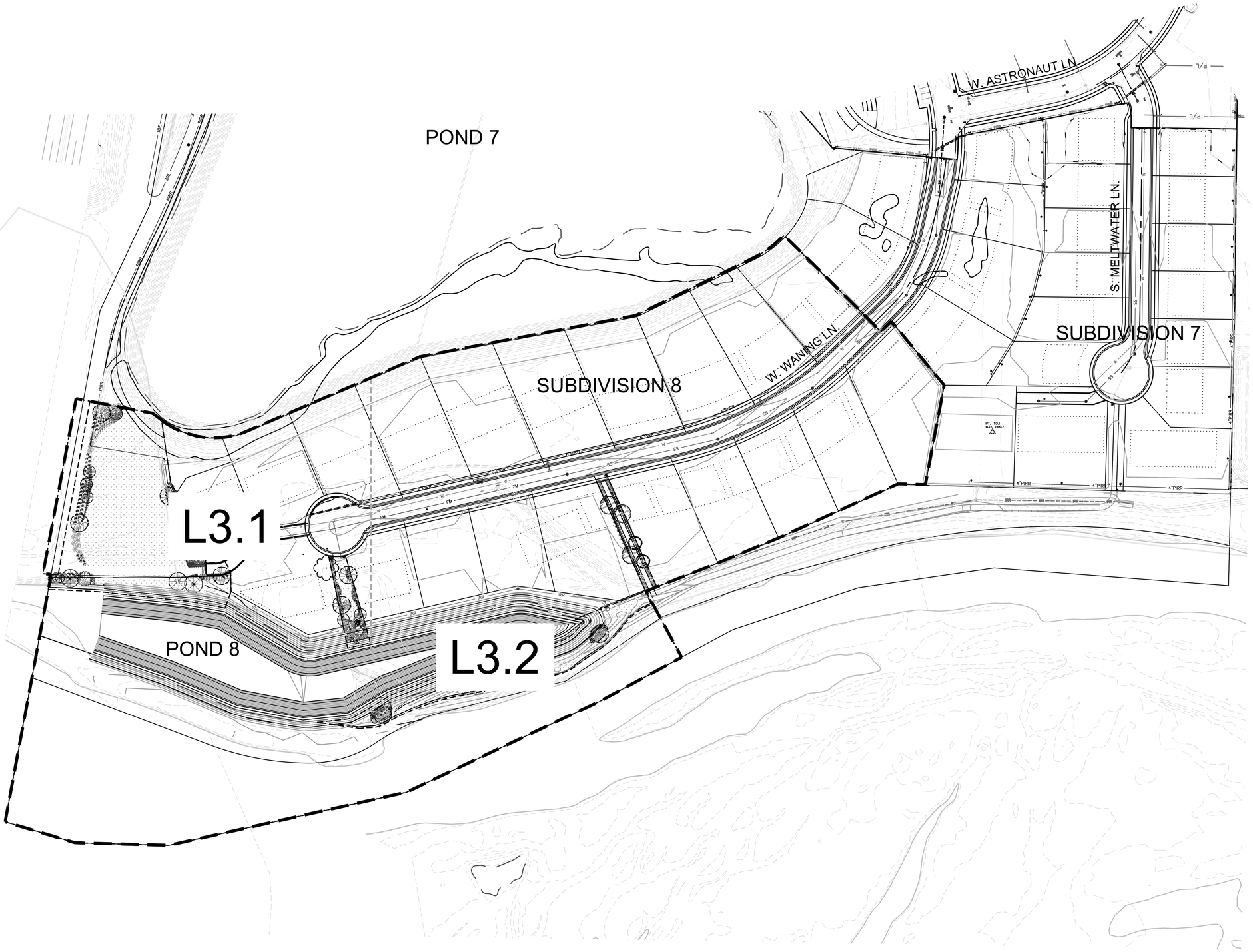
STATE OF IDAHO
RUSSELL GREEY
LA - 16653
LICENSED LANDSCAPE ARCHITECT
Expires09/31/23

RIVERSTONE SUBDIVISION
SUBDIVISION 8
Landscape Construction Documents
STAR, IDAHO

revisions:

project #: MTC069
scale: NTS
issued for: REVIEW
drawn by: TEAM
date: 05-02-2023
drawing: General Notes

sheet #
L0.1
2 of 7



LANDSCAPE SHEET LAYOUT

0' 80' 160' 240'

Scale: 1" = 80'-0"

PLANT MATERIALS PALETTE

Sym.	Plant Name	Size	Qty.	Remarks
Class I Trees				
	Cercis canadensis Eastern Redbud	2" B&B	2	Multi
	Pyrus calleryana 'Chanticleer' Chanticleer Pear	2" B&B	6	Standard
Class II Trees				
	Acer plantanoides 'Crimson King' Crimson King Maple	2" B&B	7	Standard
	Acer truncatum x plantanoides 'Keithform' Norwegian Sunset Maple	2" Cal.	7	Standard
	Betula nigra 'Heritage' Heritage Birch	2" Cal.	3	Standard
Conifer Trees				
	Pinus flexilis 'Vanderwolfs' Vanderwolfs Pine	6' - 8' HT. B&B	5	
	Pinus sylvestris Scotch Pine	6' - 8' HT. B&B	1	
Shrubs				
	Berberis thunbergii 'Gentry' Royal Burgundy Barberry	5 gal.	10	
	Buddleja davidii 'Black Knight' Black Knight Butterfly Bush	3 Gal.	56	
	Buddleja x flutterby 'Miss Ruby' Miss Ruby Butterfly Bush	3 Gal.	55	
	Caryopteris × clandonensis 'Dark Knight' Dark Knight Bluebeard	3 gal.	13	
	Euonymus kiautschovicus 'Manhattan' Manhattan Euonymus	3 Gal.	15	
	Euonymus japonicus 'Silver King' Silver King Euonymus	3 Gal.	32	
	Juniperus x pfitzeriana 'Mint Julep' Mint Julep Juniper	3 gal	23	
	Juniperus scopulorum 'Skyrocket' Skyrocket Juniper	3 gal.	9	
	Photinia x fraseri Photinia Frazeri	3 Gal.	27	
	Physocarpus lentifolius Summer Wine Ninebark	3 gal.	37	
	Potentilla fruticosa 'Goldfinger' Goldfinger Potentilla	3 gal.	86	
	Prunus x cistena Cistena Plum	3 gal.	15	
	Prunus laurocerasus 'Schipkaensis' Cherry Laurel	5 gal.	8	
	Ribes aureum Golden Currant	3 gal.	24	
	Rosa 'Nearly Wild' Nearly Wild Rose	5 gal.	43	
	Rosa x 'Noare' Flower Carpet TM Red Rose	3 Gal.	96	
	Spiraea x bumalda 'Goldflame' Gold Flame Spirea	3 gal.	27	
Grasses				
	Calamagrostis acutiflora 'Karl Forester' Karl Forester Feather Reed grass	5 gal.	24	
	Calamagrostis x acutiflora 'Overdam' 'Overdam' Feather Reed Grass	5 gal.	18	
	Miscanthus sinensis 'Gracillimus' Maiden Grass	3 gal.	38	

INERTS

Sym.	Description
	BARK MULCH, PREMIUM BLEND

MASS PLANTING

Sym.	Description
	SODDED FESCUE

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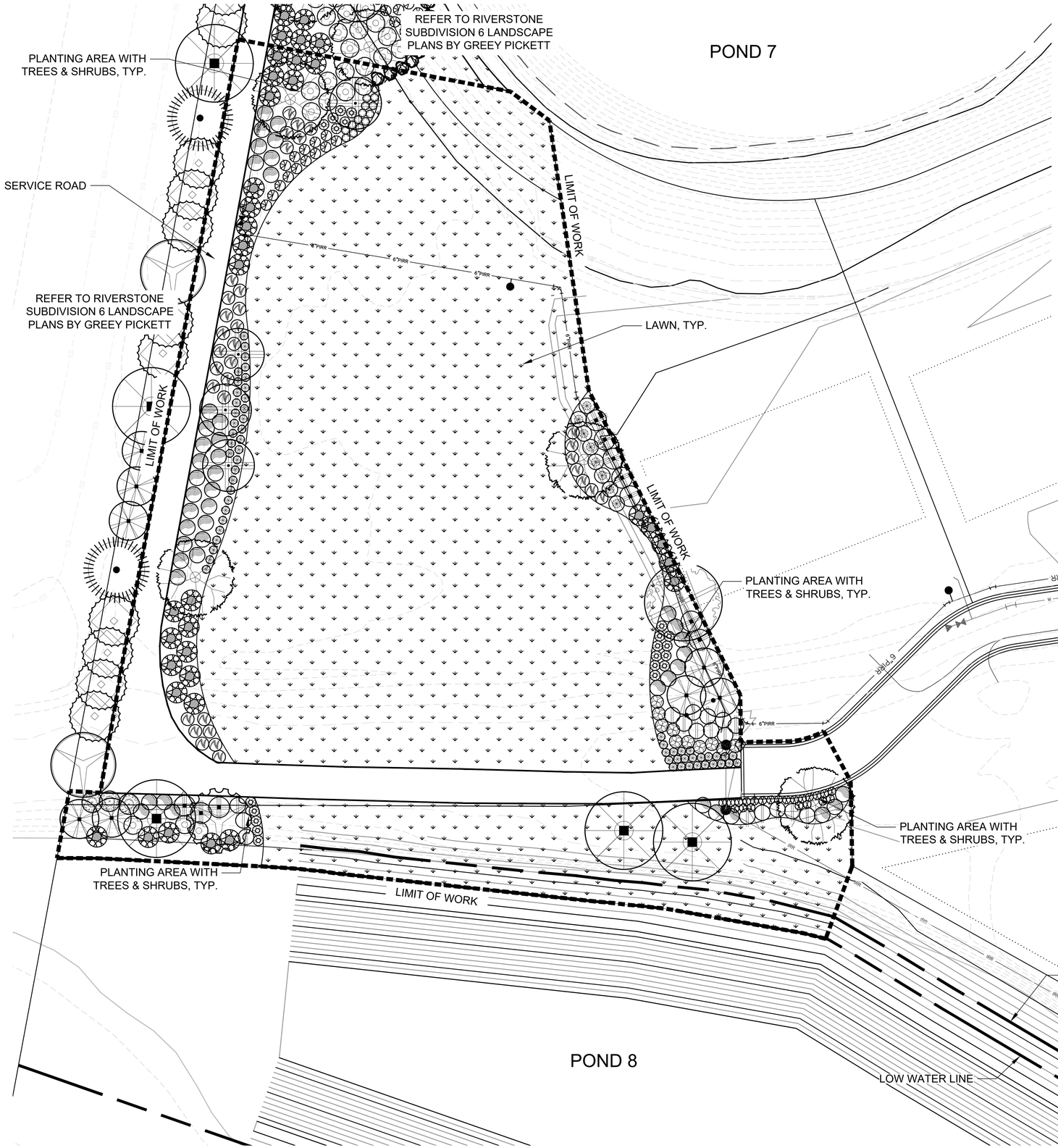
L3.0
3 of 7



PLANTING PLAN - L3.1

0' 20' 40' 60'
Scale: 1" = 20'-0"

PLANT MATERIALS PALETTE

Sym.	Plant Name	Size	Qty.	Remarks
Class I Trees				
	Cercis canadensis Eastern Redbud	2" B&B	2	Multi
	Pyrus calleryana 'Chanticleer' Chanticleer Pear	2" B&B	6	Standard
Class II Trees				
	Acer plantanoides 'Crimson King' Crimson King Maple	2" B&B	7	Standard
	Acer truncatum x plantanoides 'Keithform' Norwegian Sunset Maple	2" Cal.	7	Standard
	Betula nigra 'Heritage' Heritage Birch	2" Cal.	3	Standard
Conifer Trees				
	Pinus flexilis 'Vanderwolfs' Vanderwolfs Pine	6' - 8' HT. B&B	5	
	Pinus sylvestris Scotch Pine	6' - 8' HT. B&B	1	

Sym.			
Shrubs			
	Berberis thunbergii 'Gentry' Royal Burgundy Barberry	5 gal.	10
	Buddleja davidii 'Black Knight' Black Knight Butterfly Bush	3 Gal.	56
	Buddleja x flutterby 'Miss Ruby' Miss Ruby Butterfly Bush	3 Gal.	55
	Caryopteris × clandonensis 'Dark Knight' Dark Knight Bluebeard	3 gal.	13
	Euonymus kiautschovicus 'Manhattan' Manhattan Euonymus	3 Gal.	15
	Euonymus japonicus 'Silver King' Silver King Euonymus	3 Gal.	32
	Juniperus x pfitzeriana 'Mint Julep' Mint Julep Juniper	3 gal	23
	Juniperus scopulorum 'Skyrocket' Skyrocket Juniper	3 gal.	9
	Photinia x fraseri Photinia Frazeri	3 Gal.	27
	Physocarpus lentifolius Summer Wine Ninebark	3 gal.	37
	Potentilla fruticosa 'Goldfinger' Goldfinger Potentilla	3 gal.	86
	Prunus x cistena Cistena Plum	3 gal.	15
	Prunus laurocerasus 'Schipkaensis' Cherry Laurel	5 gal.	8
	Ribes aureum Golden Currant	3 gal.	24
	Rosa 'Nearly Wild' Nearly Wild Rose	5 gal.	43
	Rosa x 'Noare' Flower Carpet TM Red Rose	3 Gal.	96
	Spiraea x bumalda 'Goldflame' Gold Flame Spirea	3 gal.	27
Grasses			
	Calamagrostis acutiflora 'Karl Forester' Karl Forester Feather Reed grass	5 gal.	24
	Calamagrostis x acutiflora 'Overdam' 'Overdam' Feather Reed Grass	5 gal.	18
	Miscanthus sinensis 'Gracillimus' Maiden Grass	3 gal.	38

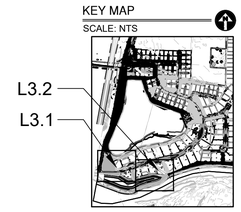
INERTS

Sym.	Description
	BARK MULCH, PREMIUM BLEND

MASS PLANTING

Sym.	Description
	SODDED FESCUE

KEY MAP
SCALE: NTS



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STATE OF IDAHO
SCOTT GREEY
LA - 16653
Expires 06/30/23
LICENSED LANDSCAPE ARCHITECT

RIVERSTONE SUBDIVISION
SUBDIVISION 8
Landscape Construction Documents
STAR, IDAHO

revisions:

project #: MTC069
scale: As Shown
issued for: REVIEW
drawn by: TEAM
date: 05-02-2023
drawing: Planting Plan

sheet #
L3.1
4 of 7

PLANT MATERIALS PALETTE

Sym.	Plant Name	Size	Qty.	Remarks
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	Acer truncatum x plantanoides 'Keithform' Norwegian Sunset Maple	2" Cal.	7	Standard
	Betula nigra 'Heritage' Heritage Birch	2" Cal.	3	Standard
Conifer Trees				
	Pinus flexilis 'Vanderwolfs' Vanderwolfs Pine	6' - 8' HT. B&B	5	
	Pinus sylvestris Scotch Pine	6' - 8' HT. B&B	1	
Shrubs				
	Berberis thunbergii 'Gentry' Royal Burgundy Barberry	5 gal.	10	
	Buddleja davidii 'Black Knight' Black Knight Butterfly Bush	3 Gal.	56	
	Buddleja x flutterby 'Miss Ruby' Miss Ruby Butterfly Bush	3 Gal.	55	
	Caryopteris × clandonensis 'Dark Knight' Dark Knight Bluebeard	3 gal.	13	
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	Potentilla fruticosa 'Goldfinger' Goldfinger Potentilla	3 gal.	86	
	Prunus x cistena Cistena Plum	3 gal.	15	
	Prunus laurocerasus 'Schipkaensis' Cherry Laurel	5 gal.	8	
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	Miscanthus sinensis 'Gracillimus' Maiden Grass	3 gal.	38	

INERTS

Sym.	Description
	BARK MULCH, PREMIUM BLEND

MASS PLANTING

Sym.	Description
	SODDED FESCUE

MATCHLINE SEE SHEET L3.1

W. WANING LANE

6"PIRR

W

FM

IRR

PLANTING AREA WITH TREES & SHRUBS, TYP.

SIDEWALK, SEE CIVIL PLANS TYP.

LIMIT OF WORK

LIMIT OF WORK

REFER TO RIVERSTONE SUBDIVISION 7 LANDSCAPE PLANS BY GREEY PICKETT

HIGH WATER LINE

LOW WATER LINE

SHRUB BED WITH ROCKERY WALL

SHRUB BED WITH ROCKERY WALL

POND 8

LIMIT OF WORK

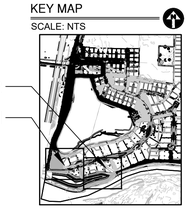
SHRUB BED WITH ROCKERY WALL

PLANTING PLAN - L3.2

0' 20' 40' 60'

Scale: 1" = 20'-0"

KEY MAP
SCALE: NTS



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STATE OF IDAHO
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LA - 16653
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revisions:

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date: 05-02-2023
drawing: Planting Plan

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L3.2
5 of 7

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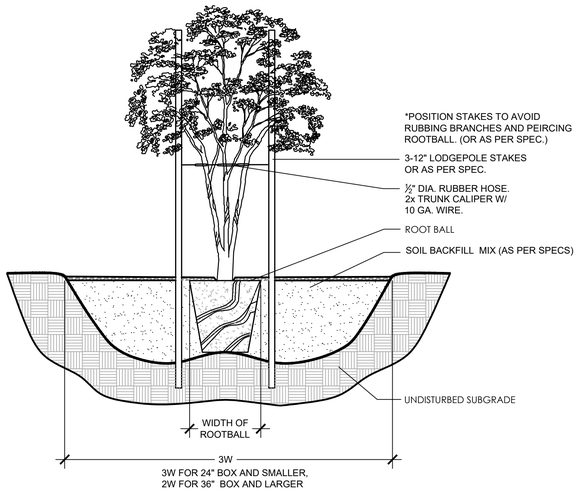
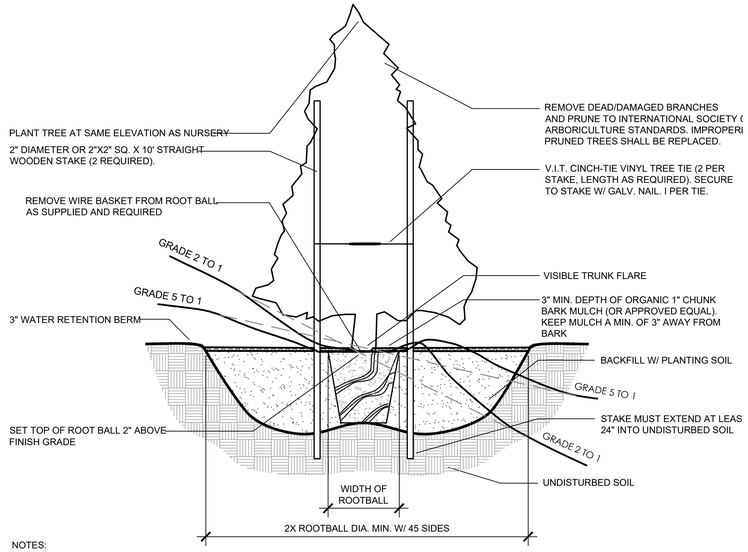


1.3 Tree Staking Detail

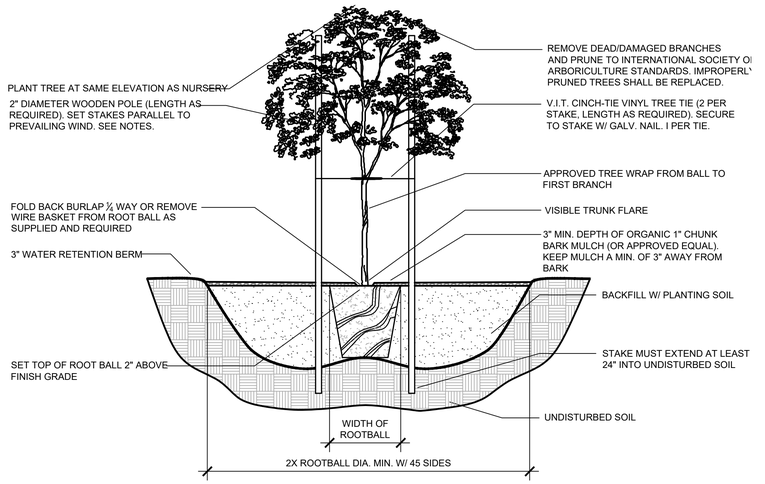
Scale: N.T.S.



NOTES:
1. THE CONTRACTOR IS RESPONSIBLE TO INSURE THAT ALL TREES ARE PLANTED STRAIGHT AND THAT THEY REMAIN STRAIGHT FOR THE TERM OF THE WAR
2. WRAP RUBBER CINCH-TIE (OR APPROVED EQUAL) AROUND THE TREE TRUNKS AND STAKES USING EITHER THE STANDARD OR THE FIGURE EIGHT METHOD SECURE THE TIES TO THE STAKES WITH GALVANIZED NAILS TO PREVENT MOVEMENT.
3. WATER IN BACKFILL BELOW THE ROOT BALL PRIOR TO SETTING TREE (TO INSURE NO SETTLING WILL OCCUR).
4. DEEP SOAK TREE TWICE WITHIN THE FIRST 48 HOURS.

1.2 Evergreen Tree Planting Detail

Scale: N.T.S.



NOTES:
1. THE CONTRACTOR IS RESPONSIBLE TO INSURE THAT ALL TREES ARE PLANTED STRAIGHT AND THAT THEY REMAIN STRAIGHT FOR THE TERM OF THE WARRANTY
2. WRAP RUBBER CINCH-TIE (OR APPROVED EQUAL) AROUND THE TREE TRUNKS AND STAKES USING EITHER THE STANDARD OR THE FIGURE EIGHT METHOD. SECURE THE TIES TO THE STAKES WITH GALVANIZED NAILS TO PREVENT MOVEMENT.
3. WATER IN BACKFILL BELOW THE ROOT BALL PRIOR TO SETTING TREE (TO INSURE NO SETTLING WILL OCCUR).
4. DEEP SOAK TREE TWICE WITHIN THE FIRST 48 HOURS.

1.1 Deciduous Tree Planting Detail

Scale: N.T.S.

STAKING PROCEDURE:
1. INSTALL LODGEPOLES
2. ATTACH RUBBER HOSES TO ALL TRUNKS
3. SECURE INTERIOR 10 GA.WIRE TO RUBBER HOSES
4. SECURE 12 GA. (COATED)HOSES TO LODGEPOLE WIRE FROM RUBBER

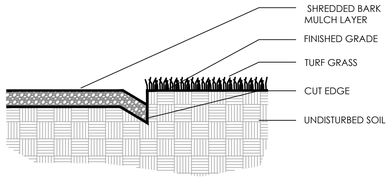
LODGEPOLE SIZING CHART

15 GAL TO 24" BOX MATERIAL	2- 2" X 10'-0" LODGEPOLE STAKES
36" BOX AND 48" BOX	3- 3" X 12'-0" LODGEPOLE STAKES

*NOTE: STAKES MAY BE TRIMMED AS NECESSARY

1.7 Tree Staking Diagram

Scale: NTS



ALL PLANTING BEDS ADJACENT TO LAWN AREAS SHALL HAVE A SHOVEL EDGE TO PROVIDE A DISTINCT SEPARATION BETWEEN LANDSCAPE TYPES.

1.6 Cut Edge Detail

Scale: N.T.S.

NOTE:
SEE SPECIFICATIONS FOR TOPDRESSING APPLICATION.

1.5 Shrub Planting Detail

Scale: N.T.S.

1.4 Tree Guying Detail

Scale: N.T.S.

1.8 Plant Spacing Detail

Scale: N.T.S.

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drawing: Planting/Site Details

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6 of 7

SECTION - 02900 LANDSCAPE

PART 1 - GENERAL

1.01 WORK INCLUDED

*Landscape finish grading.

* Soil preparation

*Tree supports

*Planting

*Watering

*Maintenance

Definitions:
Owner's representative - an authorized agent determined by owner to act on their behalf, in some cases the Landscape Architect may be the owner representative as outlined in these specs.
Plants - all shrubs other than trees and turf.
Plant Material - all trees, shrubs, ground cover, grasses, and other plants.

1.02 RELATED WORK

Contractor : Minimum 5 years experience in supply and installation of landscape materials. A Foreman with a minimum of 5 years experience in related work shall be on site at all times.

1.03 SOURCE QUALITY CONTROL

Provide certificates of inspection for all materials as required by law or regulation.

Package standard materials with manufacturers certified analysis. Provide analysis by recognized laboratory made in accordance with methods established by the Association of Official Chemists for all other material.

Provide trees and shrubs grown in a recognized nursery in accordance with good horticultural practice. Provide healthy, undamaged, vigorous stock grown under climatic conditions similar to conditions at project site and free of disease, insects, eggs, larvae and defects such as sun-scald, knots, injuries, abrasions or disfigurements. Provide trees and shrubs of the sizes indicated. Trees and shrubs of sizes larger than those indicated may be used provided roots, root ball, staking and planting pits are increased proportionately.

1.04 REFERENCE STANDARDS

ANSI 60.1 - American Standards for Nursery Stock.

1.05 SAMPLES

Submit the following material samples to Owner's Representative a minimum of 48 hours prior to start of work.

a. Topsoil for backfill mix (trees and shrubs).
b. Wood Shavings/Mulch.
c. Tree supports.
d. Reserved
e. Boulders.

The Owner's Representative reserves the right to take and analyze samples of materials for conformity to Specification at any time. Furnish samples upon request by Owner's Representative. Rejected materials shall be immediately removed from the site and replaced at the contractors additional expense.

Submit samples of decomposed granite for approval of graduation and color. Sample shall be representative of variations within size and color to be provided.

1.06 PRODUCT DATA

Submit to Owner's Representative a minimum of 48 hours prior to start of work manufacturers comprehensive product description, including specifications and installation instructions.

1.07 CERTIFICATES AND TEST REPORTS

Provide and pay for all materials testing. Testing agency shall be acceptable to the Landscape Architect. Submit to Owner's Representative a minimum of 48 hours prior to start of work 2 copies of certificates of inspection as required by governmental authorities, and manufacturers' vendors certified analysis for soil amendments, fertilizer materials, and chemicals. Submit other data substantiation that materials comply with specified requirements.
Certificates are required to determine the quality and quantity of all specified soil amendments.

Materials certification to be submitted include, but are not limited to: Topsoil source and nutrient analysis, mulch, fertilizers/soil amendments/chemicals. Test representative material samples proposed for use. Provide the following data:

a. Topsoil and planting backfill.
b. Soil PH.
c. Particle size, percentage soil texture.
d. Percentage organic material.
e. Percolation rate.
f. Nutrient level analysis.
g. All macro, secondary and micro nutrient salinity.
h. ESP.
i. Free lime.

Recommendations on type and quantity of amendments required to bring levels into acceptable ranges as detailed in Part 2 - Products of Materials of these specifications.

Separate recommendations to be submitted for each crop. Crop to be identified as:
a. Irrigated trees and shrubs.
b. Turf.

1.08 MAINTENANCE DATA

Submit to Owner's Representative 2 copies of typewritten instructions, prior to expiration of the initial maintenance period, recommending procedures to be followed by the Owner for the maintenance of landscape work for one full year.

1.09 PRODUCT DELIVERY, STORAGE AND HANDLING

Deliver packaged material in containers showing weight, analysis and identification of manufacturer. Protect materials from deterioration at all times.

Provide protective covers to plant life and trees during delivery. Do not prune trees prior to delivery. Do not bend-tie trees or shrubs in such a manner as to cause damage or destroy shape. Deliver materials after preparation for planting have been completed. Plant immediately. If planting is delayed for more than 6 hours after delivery, set plant material in shade, protect from weather and mechanical damage and keep roots moist.

Do not remove container grown stock including ground cover, from containers until planting time.

1.10 SITE CONDITIONS

Determine location of underground utilities. Execute work as required to prevent damage.

Maintain grade stakes set by others until directed otherwise.

Protect all existing plant life not scheduled for removal. If any plant material that is to remain is damaged, the Contractor, at his expense, will pay for a replacement plant of the same size and species (to be approved by Owner's Representative).

Protect existing utilities, paving and other facilities from damage during landscaping operation.

Coordinate with other contractors.

1.11 WARRANTY

Submit warranty to Owner's Representative. All plant material shall conform to the American Nurseryman Standards for type and size shown. Plants will be rejected if not in a sound and healthy condition.

Trees:
Warrant that trees will be alive and in good health for a period of 1 year after acceptance except for defects resulting from neglect by Owner, abuse or damage by others.

Owner must follow Contractors maintenance schedule and provide current maintenance log to Owner's Representative.

Remove and replace dead, unhealthy or girdled trees, that lose original form and size during warranty period with material equal to that specified. Replace any material which does not meet requirements within fifteen days of notification. All replacement trees shall be subject to an additional one year maintenance period.

Shrubs and Other Plantings:
Guarantee all other planting will be alive and in satisfactory condition for a period of 1 year from date of acceptance or will be replaced at no additional cost to the Owner. All plant material shall be maintained in a healthy, sturdy condition during the warranty period by the Contractor.

All replacement plants, including shrubs, groundcovers, grasses, vines and perennials shall be subject to an additional 1 year maintenance period.

PART 2 - PRODUCTS AND MATERIALS

2.01 FILL MATERIALS

Provide dry, loose material for fill, backfill, planting backfill and topsoil for planter beds. Frozen or muddy soils are not acceptable. Salts not to exceed 1500 ppm, and material shall be free of debris, noxious weeds, ingredients or objects detrimental to healthy plant growth. Topsoil: Screened, fertile, friable, from well drained arable land, free of nut grass, refuse, roots, heavy clay, noxious weeds or any material toxic to plant growth; contents as follows:

a. Silt: 20-45 %
b. Clay: 15-20 %
c. Sand: 30-60 %
d. Organic Material (natural or otherwise): 2 % minimum
e. pH: 7.0-8.3
f. Soluble salts: 1,500 ppm.
g. Nutrients: enough to bring levels up to acceptable plant growth.

Percolation rate shall be between 3 to 4 inches per hour.
Existing top soil may be used provided it meets these requirements.

2.02 COMMERCIAL GRADE FERTILIZERS

Agri-Sul, Dispersul - use only for sulfur
Agriculture grade gypsum

2.03 SOIL AMENDMENTS

Wood shavings: nitrogen stabilized fir or pine shavings containing 0.75% total nitrogen and 0.1 to 0.15% total iron, and under 60 ppm total manganese; composted, leached and aged for a minimum of 10 to 12 months; ph factor, 4.0 to 4.5. No soil amendments are required for salvaged plant material unless otherwise specified.

2.04 TREE SUPPORTS

Tree Stakes: 2" diameter or 2"x2" square x 10' straight wooden stake (2 required) for 15 gallon or larger tree. No tree stakes area required for salvaged plant material.

Tree Ties: Provide a minimum of two per tree: V.I.T. Cinch- tie vinyl tree tie (2 per stake, length as required). Secure to stake with galvanized nail. 1 per tree.

Anchors (Deadmen): 2 inch x 4 inch x 3 feet long; construction grade redwood.

Signals (Flags): For guy wires, 1/2 inch diameter, white or orange plastic tubing 5 feet long over each guy used.

2.05 HERBICIDES

Pre-emergent and contact Herbicides:

Fertilize all trees and shrubs with 'Agriform" planting tablets, 21 gram or approved equal. Quantity per manufacturer's recommendation.

2.06 PLANTING MATERIAL

Plant Material: Healthy, shapely and well rooted. Roots shall show no evidence of having been restricted or deformed at any time. All plants shall be representative of their normal species and variety. They shall have normally developed branch systems. Plants shall be free from disfiguring knots, sun scald injuries and abrasions of bark. Plants not meeting these requirements shall be considered defective and shall be replaced immediately. All plants shall be true to name and shall be tagged, one of each variety. All plant material shall be grown in nurseries inspected by the State Department of Agriculture unless otherwise approved by the Owner's Representative.

Provide "Specimen" plants with a special height, shape or character. Tag at the source of supply prior to notifying Landscape Architect for inspection. The Landscape Architect shall inspect selections at source of supply for suitability and adaptability to selected location. When specimen plants cannot be purchased locally, provide sufficient photographs of proposed material for approval.

Plants may be inspected and approved at place of growth for compliance with specification requirements for quality, size, and variety. Such approval shall not impair the right of inspection and rejection upon delivery at the site or during the progress of the work.

2.07 TURF SOD

As noted on plans.

2.08 MULCH

All planting beds and tree wells in lawn areas (wells to be 3' in diameter) shall be covered with a minimum of 3" of small (1") bark chips. Submit sample for approval.

2.09 SEED MIXTURE

All lawn areas shall be seeded with 100% Turf Type Tall Fescue. Immediately after placement of sod, water to saturate sod and top 4" of topsoil, install and seed rate per manufacturer's recommendations.

2.10 TREE ROOT BARRIER

Tree root barriers shall be placed adjacent to all trees located in the landscape planter strip and planter islands per The City of Eagle and ACHD standard details. Install per City of Eagle standard detail and manufacturer's recommendations.

PART 3 - EXECUTION

3.01 GENERAL

Install in accordance with the methods, techniques and specifications of each representative manufacturer. If a conflict occurs between manufacturers and these specifications, consult with Owner's Representative for a decision.

Do not begin planting until the irrigation system is completely installed, is adjusted for full coverage and is completely operational.

3.02 BACKFILL, IMPORTED FILL OR ARTIFICIAL SOIL AND GRAVEL

Inspect the integrity of all damp-proofing and water-proofing membranes which occur over, on or against any construction to be fully or partially concealed by earthwork prior to the placement of any imported soil, backfill, gravel fill or sub-base.

Planting back fill for trees and planting beds shall be 5 parts topsoil and 1 part Nu-Earth compost with straw. Stake all trees per details.

Correct defects prior to proceeding with the work.

3.03 TOPSOIL

All seeded lawn areas shall have 6" of topsoil and all planting beds shall have 12" of topsoil. Topsoil shall be a loose, sandy loam, clean and free of toxic materials, noxious weeds, wee seeds, rocks, grass, or other foreign material larger than 1" in any dimension, a pH from 5.5 to 7.0. Topsoil from site shall be used if meeting these standards. Place ⅔ Nu-Earth compost over all landscaped areas and rotatill into top 4". Spread, compact, and fine grade topsoil to a smooth and uniform grade, 1" below surface of walks and curbs in areas to be sodded and 3" in planting bed areas.

Import additional topsoil only as required to bring planting areas up to finish grade. Spread and cultivate soil so that no settling takes place at any time.

3.04 LANDSCAPE FINE GRADING

Allow for the addition of soil amendments, conditioners and any specified top dressing when determining and executing finish grade.

Set finish grade 1-1/2 inches below adjacent paving, curb and headers for shrubs and ground cover beds and areas or as required for installation of mulch or turf sod.

At all planting areas, make entire area smooth and even to finish grade. Cultivate all areas so that there are no bumps or hollows, and the area drains as indicated. Grade and maintain all flow lines, designated or not, to allow free flow of surface water. Cultivate entire area to a depth of 6 inches minimum and remove all rock in excess of 1-1/2 inches diameter, all building rubble, building construction material, waste and any other material that will impair satisfactory growth.

3.05 MULCH

3.06 HERBICIDE APPLICATION

Apply pre-emergent herbicides in accordance with manufacturer's instructions.

Apply contact herbicides in accordance with manufacturer's recommendations. Prior to application, moisten areas for fourteen days to encourage weed germination and growth. Apply before weeds attain a height of 6 inches. Remove taller weeds manually.

Areas to be landscaped shall be maintained in a weed-free condition at all times during construction and maintenance period.

Do not apply pre-emergent herbicides at locations of revegetation seeding. The contractor shall manually remove invasive weeds within these areas.

3.07 TREE SUPPORT

Staked Trees: Stake trees as shown on the drawings within 48-hours of planting.

Tree supports shall be installed to prevent lodging, yet allow for trunk movement. Hoses that encircle trunks shall be large enough to allow for normal growth of the trunk during the first year without girdling.

3.08 TREES, SHRUBS, AND VINES

Layout locations with stakes or gypsum. Coordinate with Owner's Representative to assure appropriate location, prior to installation.

Test drainage of plant beds and pits by filling with water. Notify Owner's Representative of areas where water is retained more than 24 hours.

Where rock, underground construction or other detrimental conditions are encountered at plant pits, Owner's Representative may select alternate location.

Do not expose roots to air except during transplanting. Set up of plants at same level when planted as in the container. Cut plant containers on 2 sides without injuring root ball and carefully remove plant. Do not cut container with spade. Damaged plants will be rejected.

Dig pits with perpendicular sides to a minimum of 2 to 3 times the width (see details) of the root ball for containerized trees and shrubs. Dig pits only as deep as the root ball to prevent settling of the tree or shrub.

Place rootball of vines as close to structure or support system as possible. If rootball can't be placed closer than 12" notify Owner's Representative of situation for inspection and remedy.

Tie vines to trellis supports if applicable with green plant tape and remove any staking supplied with plant material.

Planting Mixture: One part wood shavings Two parts excavated soil amended to meet standards in Part 2.

Mix thoroughly outside the hole before start of backfilling.

3.09 BACKFILLING

Backfill plant pits and form shallow basin around the plant to hold enough water to saturate the root ball and backfill (only form basins if specified on detail). Water plants immediately after planting and allow backfill to settle in plant pit. Do not raise basin rim above surrounding grade.

Puddle planting mixture when pit is 2/3 full of plant mix. Continue back filling to within 1 inch of surrounding grade.

Finish grade to 2 inches below headers or concrete work.

Planting back fill for trees and planting beds shall be 5 parts topsoil and 1 part Nu-Earth compost with straw.

Treat all planting areas with a pre-emergent.

3.10 GROUND COVER

At time of transplanting, soil in flats shall be sufficient so as not to fall apart when lifting plants. Plant each plant with its proportionate amount of the flat soil in a manner that will ensure a minimum disturbance to the root structure.

Plant flat material sufficiently deep to cover all roots. Firmly tamp the earth around each plant to force out large air pockets.

3.11 TURF SOD

Soil Preparation: Provide soil with an organic matter content of 25-percent to 30-percent. Cultivate entire area to a depth of 6" minimum and remove all rock in excess of 1 1/2", all building rubble, building construction material waste and any other material that will impair satisfactory growth. This top 6" must meet the topsoil requirements noted in Section 2.01.

Soil Amendments: Prior to rototilling, apply gypsum at a rate of 100 lbs per 1,000 sf, phosphate at a rate of 2 lbs per 1,000 sf, , and soil sulfur at 5 lbs per 1,000 sf. Rototill into soil.

Install sod along the straightest edge of turf area. Stagger joints in a brick-like pattern. Avoid gaps and overlapping. Place sod diagonally across, to avoid sliding. Water sod at least every 30 min. during installation. Finish by watering lightly and roll in two directions w/sod roller.

3.12 WATERING

Water all plants immediately after planting with hose in planting hole until the roots are completely saturated from the bottom of the hole to the top of the ground to avoid drying out until the entire planted area is thoroughly watered and the soil soaked to the full depth of each plant hole. Water stream shall not cause damage to planting hole or plant. Keep exposed roots wet by means of moist sawdust, peat moss or burlap at all times during planting operation. Repeat watering as often as necessary to keep the ground moist but not soaked, well below the root system of the plants.

3.13 CLEAN UP

Keep all areas clean and orderly during and after execution of work. Burning of trash is not permitted.

3.14 ADJUSTMENT

Prune each tree and shrub to preserve the natural character of the plant per American Standards for Nursery stock, as published by the American Association of Nurserymen. Prune only as directed by Owner's Representative and Landscape Architect to remove deadwood, suckers, or broken or badly bruised branches. Replace all plants damaged by excessive pruning, planting operations or construction damage.

3.15 MAINTENANCE PERIOD

When the Owner's Representative and Landscape Architect determine the work to be substantially complete in accordance with the Conditions of the Contract, Contractor will be advised, in writing, that the maintenance period is to begin.

Landscape contractor shall be responsible for maintenance of landscaped areas for a period of 90 days. Maintenance includes watering, trimming, weeding and cultivating of beds.

Landscape contractor, in order to protect his guarantee, shall give typewritten to Owner, a complete maintenance instruction booklet on the care and feeding of the landscape.

Contractor shall request, in writing, a Final Inspection with Landscape Architect at the completion of the maintenance period. If the Owner's Representative determines the work is satisfactory, the maintenance period will end on the date of the Final Inspection. If the maintenance is unsatisfactory, the maintenance period will be extended, at the Contractors expense, until such time as all corrections are made and the work is inspected and approved by the Owner's Representative and Landscape Architect. Retention will not be released until Final Inspection is made and approval issued by the Owner's Representative.

3.16 FIELD QUALITY CONTROL

Notify Owner's Representative of the requirement for inspection at least 48 hours in advance. Inspections are required, but not limited to, the following:

- Inspection and acceptance of plant material prior to shipping.
- At completion of rough grade and boulder placement
- At completion of landscape finish grading and soil preparation, prior to planting.
- At installation of irrigation system, prior to backfilling trenches and planting.
- During installation of specimen trees, or other specimen plant material.
- After staking locations for plant holes, but prior to planting; for approval.
- During the planting process.
- During the placement and aiming of all light fixtures.
- At Substantial Completion of the Work.
- During warranty period to observe maintenance procedures.
- At final Completion of the Work.

SECTION - 02930 SEEDING

PART 4 - APPLICATION

4.01 MATERIALS

Materials shall reflect evidence of proper storage and handling. Any material with indications of improper storage or handling (water, heat, chemical damage and the like), will be removed from the site and replaced by the contractor. All material shall be fresh and delivered in unopened containers. Seed shall be of the latest seasons crop and conform to state and federal seed laws.

2.02 ACCESSORY MATERIALS

Fertilizer: Uniform in composition, granular, free flowing and suitable for application with approved equipment - guaranteed analysis, 16-20-0, ammonium phosphate, or equal at a rate of 300 lbs per acre.

70% Virgin Wood Cellulose Fiber, 30% Max. recycled cellulose fiber:

Specially prepared wood cellulose fiber processed to contain no growth or germination inhibiting factors - maximum moisture content, air dry weight, 12% plus or minus 3% at the time of manufacture; pH range, 4.5 to 6.5.

Ash content 0.8% - 0.3% max.

Charcoal: Gro-Safe agricultural grade powered activated charcoal at a rate of 100 lbs. per acre.

Tackifier: Organic psillium muciloid hydrophilic water soluble dry. Derived from Plantago ovata/insularis powder at 70% min. purity, containing no agents toxic to seed germination. Addition of fertilizer to the slurry mix shall not change the properties of the tackifier. When applied, tackifier shall form a transparent crust permeable by water and air.

Water: Free of substances harmful to seedling growth - water source to be approved by Owner's Representative prior to use.

PART 5 - EXECUTION

5.01 PREPARATION

Limit preparation to areas that will be immediately seeded. Do not disturb natural areas or newly planted trees or shrubs in seed areas. Where equipment can operate, loosen topsoil to a depth of 4 inches by ripping using scarifier teeth. Rip along the contour to prevent runoff and erosion. Use hand tools where equipment can not operate. Remove and dispose of all stones 4" or greater, sticks, roots, rubbish or other deleterious material. Repair erosion damage, grade and slope as directed prior to seeding.

Spread 300 lbs./acre fertilizer as specified.

Rough harrow to break up any large dirt clods.

Fine harrow to create suitable seed bed.

5.02 APPLICATION

Apply seed immediately upon completion of tillage operation.

Seeding work should commence as soon as possible after site has been prepared. It is desirable to seed into a loose, friable surface which has not been allowed to crust or erode. Any undesirable weak growth or competing vegetation should be removed prior to seeding operations.

Hydroseed all material evenly in one (1) application of a uniform slurry of water, hydrofiber (mulch), seed, tackifier, fertilizer, soil conditioner, and other specified materials. Material shall be sprayed on all designated areas with overlapping on the crests of tops of berms and cuts.

Seed indicated areas within contract limits and areas adjoining contract limits disturbed due to the seeding preparation process.

Use a hydroseeder with a gear type pump with continuous paddle agitation during application. Do not put seed into water until just before the start of seeding.

Apply seed, mulch, fertilizer and tackifier in a one step process:
Slurry mix of water, seed, 300 lbs./acre of fertilizer, 80 lbs./acre tackifier for slopes less than 3:1, 100 lbs./acre for slopes greater than 3:1 and 2000 lbs./acre of wood fiber for slopes greater than 3:1, 1800 lbs./acre for slopes less than 3:1.

5.03 ESTABLISHMENT

Provide protective devices as required to protect seeded areas from traffic for 30 days.

Repair and reseed areas damaged by erosion or poor germination.

5.04 INSPECTION

Seeding operations and areas are subject to inspection at any time during installation for compliance with specified materials and installation requirements. Any method of installation or use of materials not in conformance with the Contract Documents will be reinstalled, repaired or removed, as directed by the Owner's Representative, at no additional cost to the Owner.

Formal inspections will be conducted by the Owner's Representative at the following work intervals:

Soil scarification upon completion.
Seed containers at time of delivery.
At time of seed and slurry mixing.
During application of seed.
During application of mulch.
Weekly for seed and weed germination.
Final inspection and approval - at the end of landscape establishment.

5.05 ACCEPTANCE

Upon notice of completion of the work from the landscape contractor, at the end of the Landscape Establishment period, the Owner's Representative will make an inspection. If all work provided for in the Contract Documents is found to be complete and the planted seeds yield a minimum stand as determined by the Owner's Representative based upon the specified germination rates and species used, and the seeded areas are free of weeds, disease and insects, this inspection will constitute the Final Inspection. The Owner's Representative will notify the Contractor in writing of this Acceptance.

If the inspection reveals any unsatisfactory work, the Contractor will reseed as necessary until the work is accepted by the Owner's Representative.

GREEY | PICKETT
landscape architecture | community design
7144 e stetson drive, suite 205
scottsdale, arizona 85251
480.609.0009p 480.609.0068f

STATE OF IDAHO
SCOTT GREEY
LICENSED LANDSCAPE ARCHITECT
LA - 16653
Expires 06/31/23

RIVERSTONE SUBDIVISION 8
Landscape Construction Documents
STAR, IDAHO

revisions:

project #: MTC069
scale: N.A.
issued for: REVIEW
drawn by: TEAM
date: 05-02-2023
drawing: Planting Specifications

sheet #
L8.1
7 of 7

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Your Economic Opportunity

IDAHO TRANSPORTATION DEPARTMENT
P.O. Box 8028 • Boise, ID 83707-2028
(208) 334-8300 • itd.idaho.gov

June 21, 2021

Mark Tate
M3 Companies
1087 W. River Street, Suite 310
Boise, ID 83702
MTate@m3companiesllc.com
Phone: 208.939.6263

VIA EMAIL

RE: Moon Valley Townhomes – ITD Development Condition Memo

Dear Mr. Tate,

The Idaho Transportation Department (ITD) appreciated the opportunity to review the Moon Valley Townhomes Traffic Impact Study (TIS) located on the southeast corner of SH-16 and SH-44. We have completed our review and although we do not have any technical questions, we do have concerns for the development's added trips to the intersections of SH-44 / Short Road and SH-44 / Palmer Lane.

ITD has entered into an agreement with the city of Star to collect a proportionate share contribution from each new development for impacts to the State highway system. As two agencies we are working together to accelerate highway construction within Star's area of impact to accommodate new development growth. ITD values your contribution to the transportation system so we can help keep goods, services and the public moving at an efficient pace.

Per the TIS, an eastbound right turn lane is warranted at the intersection of SH-44 / Short Rd. Since the improvement is at a public road intersection, ITD has estimated the cost of the improvement and calculated your development's proportionate share based off site traffic volumes versus total right turn lane traffic volumes at 2023 buildout.

ITD programmed the SH-44 / Palmer Lane signalization project for 2027 construction with the understanding that the department would request proportionate share contributions from new nearby developments to help accelerate the project. ITD calculated your development's proportionate share based off Palmer Lane site trips versus total 2045 Palmer Lane site trips.

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IDAHO TRANSPORTATION DEPARTMENT
P.O. Box 8028 • Boise, ID 83707-2028
(208) 334-8300 • itd.idaho.gov

ITD determined Moon Valley Townhomes proportionate share contribution as the following. Details of the proportionate share calculation are included in the attached *ITD Staff Technical Report*.

Intersection	Proportionate Share Contribution
SH-44 / Short Road	$52,039
SH-44 / Palmer Lane	$14,350
SH-16 / SH-44	N/A
TOTAL	**$66,389**
Approximate per household unit	***$426***

Maintaining safety and mobility for Idaho's motorists is of utmost importance to ITD. We appreciate your improvements to livability in Star, ID as we want all residents to travel safely and efficiently around the Treasure Valley. If you have any questions please contact me by email at jayme.coonce@itd.idaho.gov or 208-334-8302.

Sincerely,

Jayme Coonce, P.E.
ITD – District 3
Engineer Manager

Cc:
Shawn Nickel – City of Star
Paige Bankhead – ACHD
John Ringert – Kittelson & Associates

1445 N. Orchard St.
Boise ID 83706 • (208) 373-0550

Brad Little, Governor
Jess Byrne, Director

October 26, 2023

Shawn L. Nickel
Planning Director and Zoning Administrator
Star City Hall
P.O. Box 130
Star, Idaho 83669
snickel@staridaho.org

Subject: Moon Valley Subdivision Final Plat PH8

Dear Mr. Nickel:

Thank you for the opportunity to respond to your request for comment. While DEQ does not review projects on a project-specific basis, we attempt to provide the best review of the information provided. DEQ encourages agencies to review and utilize the Idaho Environmental Guide to assist in addressing project-specific conditions that may apply. This guide can be found at: *https://www.deq.idaho.gov/public-information/assistance-and-resources/outreach-and-education/.*

The following information does not cover every aspect of this project; however, we have the following general comments to use as appropriate:

1. **AIR QUALITY**
   - Please review IDAPA 58.01.01 for all rules on Air Quality, especially those regarding fugitive dust (58.01.01.651), trade waste burning (58.01.01.600-617), and odor control plans (58.01.01.776).

     For questions, contact David Luft, Air Quality Manager, at (208) 373-0550.

   - IDAPA 58.01.01.201 requires an owner or operator of a facility to obtain an air quality permit to construct prior to the commencement of construction or modification of any facility that will be a source of air pollution in quantities above established levels. DEQ asks that cities and counties require a proposed facility to contact DEQ for an applicability determination on their proposal to ensure they remain in compliance with the rules.

     For questions, contact the DEQ Air Quality Permitting Hotline at 1-877-573-7648.

2. **WASTEWATER AND RECYCLED WATER**
   - DEQ recommends verifying that there is adequate sewer to serve this project prior to approval. Please contact the sewer provider for a capacity statement, declining balance report, and willingness to serve this project.

- IDAPA 58.01.16 and IDAPA 58.01.17 are the sections of Idaho rules regarding wastew and recycled water. Please review these rules to determine whether this or future projects will require DEQ approval. IDAPA 58.01.03 is the section of Idaho rules regarding subsurface disposal of wastewater. Please review this rule to determine whether this or future projects will require permitting by the district health department.

- All projects for construction or modification of wastewater systems require preconstruction approval. Recycled water projects and subsurface disposal projects require separate permits as well.

- DEQ recommends that projects be served by existing approved wastewater collection systems or a centralized community wastewater system whenever possible. Please contact DEQ to discuss potential for development of a community treatment system along with best management practices for communities to protect ground water.

- DEQ recommends that cities and counties develop and use a comprehensive land use management plan, which includes the impacts of present and future wastewater management in this area. Please schedule a meeting with DEQ for further discussion and recommendations for plan development and implementation.

  For questions, contact Valerie Greear, Water Quality Engineering Manager at (208) 373-0550.

3. DRINKING WATER

- DEQ recommends verifying that there is adequate water to serve this project prior to approval. Please contact the water provider for a capacity statement, declining balance report, and willingness to serve this project.

- IDAPA 58.01.08 is the section of Idaho rules regarding public drinking water systems. Please review these rules to determine whether this or future projects will require DEQ approval.

- All projects for construction or modification of public drinking water systems require preconstruction approval.

- DEQ recommends verifying if the current and/or proposed drinking water system is a regulated public drinking water system (refer to the DEQ website at: https://www.deq.idaho.gov/water-quality/drinking-water/. For non-regulated systems, DEQ recommends annual testing for total coliform bacteria, nitrate, and nitrite.

- If any private wells will be included in this project, we recommend that they be tested for total coliform bacteria, nitrate, and nitrite prior to use and retested annually thereafter.

- DEQ recommends using an existing drinking water system whenever possible or construction of a new community drinking water system. Please contact DEQ to discuss this project and to explore options to both best serve the future residents of this development and provide for protection of ground water resources.

- DEQ recommends cities and counties develop and use a comprehensive land use management plan which addresses the present and future needs of this area for adequate, safe, and sustainable drinking water. Please schedule a meeting with DEQ for further discussion and recommendations for plan development and implementation.

  For questions, contact Valerie Greear, Water Quality Engineering Manager at (208) 373-0550.

4. SURFACE WATER

- Please contact DEQ to determine whether this project will require an Idaho Pollutant Discharge Elimination System (IPDES) Permit. A Construction General Permit from DEQ may be required if this project will disturb one or more acres of land, or will disturb less than one acre of land but are part of a common plan of development or sale that will ultimately disturb one or more acres of land.

- For questions, contact James Craft, IPDES Compliance Supervisor, at (208) 373-0144.

- If this project is near a source of surface water, DEQ requests that projects incorporate construction best management practices (BMPs) to assist in the protection of Idaho's water resources. Additionally, please contact DEQ to identify BMP alternatives and to determine whether this project is in an area with Total Maximum Daily Load stormwater permit conditions.

- The Idaho Stream Channel Protection Act requires a permit for most stream channel alterations. Please contact the Idaho Department of Water Resources (IDWR), Western Regional Office, at 2735 Airport Way, Boise, or call (208) 334-2190 for more information. Information is also available on the IDWR website at: https://idwr.idaho.gov/streams/stream-channel-alteration-permits.html

- The Federal Clean Water Act requires a permit for filling or dredging in waters of the United States. Please contact the US Army Corps of Engineers, Boise Field Office, at 10095 Emerald Street, Boise, or call 208-345-2155 for more information regarding permits.

  For questions, contact Lance Holloway, Surface Water Manager, at (208) 373-0550.

5. SOLID WASTE, HAZARDOUS WASTE AND GROUND WATER CONTAMINATION

- **Solid Waste.** No trash or other solid waste shall be buried, burned, or otherwise disposed of at the project site. These disposal methods are regulated by various state regulations including Idaho's Solid Waste Management Regulations and Standards (IDAPA 58.01.06), Rules and Regulations for Hazardous Waste (IDAPA 58.01.05), and Rules and Regulations for the Prevention of Air Pollution (IDAPA 58.01.01). Inert and other approved materials are also defined in the Solid Waste Management Regulations and Standards

- **Hazardous Waste.** The types and number of requirements that must be complied with under the federal Resource Conservations and Recovery Act (RCRA) and the Idaho Rules and Standards for Hazardous Waste (IDAPA 58.01.05) are based on the quantity and type of waste generated. Every business in Idaho is required to track the volume of waste generated, determine whether each type of waste is hazardous, and ensure that all wastes are properly disposed of according to federal, state, and local requirements.

- **Water Quality Standards.** Site activities must comply with the Idaho Water Quality Standards (IDAPA 58.01.02) regarding hazardous and deleterious-materials storage, disposal, or accumulation adjacent to or in the immediate vicinity of state waters (IDAPA 58.01.02.800); and the cleanup and reporting of oil-filled electrical equipment (IDAPA 58.01.02.849); hazardous materials (IDAPA 58.01.02.850); and used-oil and petroleum releases (IDAPA 58.01.02.851 and 852). Petroleum releases must be reported to DEQ in accordance with IDAPA 58.01.02.851.01 and 04. Hazardous material releases to state waters, or to land such that there is likelihood that it will enter state waters, must be reported to DEQ in accordance with IDAPA 58.01.02.850.
- **Ground Water Contamination.** DEQ requests that this project comply with Idaho's Ground Water Quality Rules (IDAPA 58.01.11), which states that "No person shall cause or allow the release, spilling, leaking, emission, discharge, escape, leaching, or disposal of a contaminant into the environment in a manner that causes a ground water quality standard to be exceeded, injures a beneficial use of ground water, or is not in accordance with a permit, consent order or applicable best management practice, best available method or best practical method."

  For questions, contact Rebecca Blankenau, Waste & Remediation Manager, at (208) 373-0550.

6. ADDITIONAL NOTES

- If an underground storage tank (UST) or an aboveground storage tank (AST) is identified at the site, the site should be evaluated to determine whether the UST is regulated by DEQ. EPA regulates ASTs. UST and AST sites should be assessed to determine whether there is potential soil and ground water contamination. Please call DEQ at (208) 373-0550, or visit the DEQ website https://www.deq.idaho.gov/waste-management-and-remediation/storage-tanks/leaking-underground-storage-tanks-in-idaho/ for assistance.
- If applicable to this project, DEQ recommends that BMPs be implemented for any of the following conditions: wash water from cleaning vehicles, fertilizers and pesticides, animal facilities, composted waste, and ponds. Please contact DEQ for more information on any of these conditions.

We look forward to working with you in a proactive manner to address potential environmental impacts that may be within our regulatory authority. If you have any questions, please contact me, or any of our technical staff at (208) 373-0550.

Sincerely,

Aaron Scheff
Regional Administrator

c:
2021AEK

FINDINGS OF FACT AND CONCLUSIONS OF LAW
FALCON STORAGE
FILE NO. CU-23-01

The above-entitled Conditional Use Permit land use application came before the Star City Council for their action on November 21, 2023, at which time public testimony was taken and the public hearing was closed. The Star City Council, having requested and taken oral and written testimony, and having duly considered the matter, does hereby make the following Findings of Fact and Conclusions of Law.

Procedural History:

A. *Project Summary:*

The Applicant is seeking approval of a Conditional Use Permit for a commercial storage facility to include 139 storage condominium units and 15, for sale commercial flex space units of approximately 2,500 square feet each. The property is located at 8323 W. Moon Valley Road in Star, Idaho and consists of 11 acres. The subject property is generally located on the south side of W. Moon Valley Road at the southeast corner of Moon Valley Road and S. Herons Flight Lane and adjacent to Hwy 16. Ada County Parcel No's. S0416110105, S0416121100 & S0416110400.

B. *Application Submittal:*

A neighborhood meeting was held on February 2, 2023, in compliance with the application submittal requirement of the Star Unified Development Code (Section 8-1 A-6 C). The Land Use application was deemed complete on March 9, 2023.

C. *Notice of Public Hearing:*

Notice of Public Hearing on the application for the City of Star Council was published in accordance with the requirements of Title 67, Chapter 65, Idaho Code and the Star Unified Development Code on September 27, 2023. Notice of this public hearing was mailed to property owners within three-hundred feet (300') of the subject property in accordance with the requirements of Title 67, Chapter 65, Idaho Code and Star Unified Development Code on November 2, 2023. Notice was sent to agencies having jurisdiction in the City of Star on March 9, 2023. The property was posted in accordance with the Star Unified Development Code on November 10, 2023.

D. *History of Previous Actions:*

October 12, 2023 Council denied applications for Preliminary Plat (PP-21-12), Private Road (PR-21-11) and Development Agreement Modification (DA-21-13) for 156

residential townhouse lots, 1 common lot on 12.06 acres with a density of 12.94 dwelling units per acre.

E. *Comprehensive Plan Land Use Map and Zoning Map Designations:*

	Zoning Designation	Comp Plan Designation	Land Use
Existing	Mixed Use (MU)	Mixed Use (MU)	Bare Ground
Proposed	Mixed Use (MU-DA)	Mixed Use (MU)	Storage Condos
North of site	County Rural Transitional (RUT)	Estate Urban Residential	Single Family Residential
South of site	County Rural Transitional (RUT)/Mixed Use (MU)	Mixed Use (MU)	Single Family Residential/Bare Ground
East of site	County Rural Transitional (RUT)	Neighborhood Residential	Bare Ground/Agricultural Use
West of site	Residential (R-3PUD-DA)/County Rural Transitional (RUT)	Estate Urban Residential	Rosti Farms Subdivision/Single Family Residential/Agricultural

F. *Development Features*:

CONDITIONAL USE PERMIT:

The applicant is requesting approval of a Conditional Use Permit for an approximately 183,916 square feet self-storage facility. The proposed development would consist of 4 buildings that will contain individually owned units (condominiums) and will be used for the storage of recreational vehicles and personal items. The main buildings range in size from 800 square feet to 1,500 square feet. The applicant states there will be 139 individual units within the facility. The site will be improved with paved driving aisles, perimeter landscaping and a security gate. Main access will currently be taken from S. Heron's Flight Lane/Moon Valley Road. The site will have a 1,336 square foot clubhouse and office space with adjoining parking spaces. Two of the buildings will have restroom facilities on the west end of the building for use by all the owners/guests.

The proposed development will also consist of 2 buildings that will contain 15 individually owned business condominiums. These for sale units will each consist of 2,500 square feet of commercial flex space with room for a potential office with a service garage door and open parking. These buildings will be part of a separate ownership association, which will collect dues to maintain and operate the open space, buildings, and parking area.

For the individual units in this development to be sold, a condominium subdivision plat will need to be submitted and approved by the Administrator. The applicant shall comply with the standards set forth in Section 8-6A-6-F of the UDC.

The Unified Development Code Section 8-4B-2 states that all drive aisles adjacent to a building shall be a minimum of 25'0" or as required by the fire code, unless the building is 30 feet in height or greater, at which point the drive aisle shall be 26'0" or as otherwise approved by the Fire District. The Applicant has not provided measurements on all the drive aisles, the ones with measurements show 24'0", which does not satisfy code. **The Applicant will need to update the site plan with drive aisles that meet the code on width. The widths will also need to be properly labeled on all drive aisles, showing adherence to the code.**

Section 8-4B-2 also states that parking stalls shall be 9' wide and 20' deep. The materials submitted with the application do not show the dimensions of any parking stalls. This will need to be added to the updated site plan, along with drive aisle measurements. The Applicant also needs to clearly mark an ADA parking spot for the clubhouse.

The Star Transportation and Pathways Committee has provided comment on the application and recommends that the sidewalk on the west side of the development be changed to a 10-foot-wide sidewalk to comply with the City's pathway system connecting Hwy 44 and the Boise River. Staff supports this recommendation.

The Applicant has not indicated on the site plan the fencing proposed for the property. Per Section 8-5-30-F, *no structure, facility, drive lane, parking area, nor loading area, shall be located adjacent to a residential district without a sound attenuation wall or other sound buffering measures.* Staff recommends that solid fencing be required along the entire southern and eastern boundary of the development. The Applicant shall provide staff with revised site plan for review and approval prior to issuance of a building permit. The Applicant has not indicated the hours of operation for the storage facility. Per Section 8-5-30-E, *If abutting a residential district, the facility hours of public operation shall be limited to seven o'clock (7:00) A.M. to ten o'clock (10:00) P.M.* Council shall consider operation hours for this facility based on the adjacent land uses. Considering the submitted layout of the site with the back of the storage buildings adjacent to the residential subdivision to the south, together with proposed landscaping and required fencing, Staff believes that noise from the storage facility will not have a negative impact on the surrounding land uses.

The Applicant has indicated in the letter of intent that the facility shall include an RV dump station. The Applicant shall be required to provide an approval letter from Star Sewer and Water District to allow the dump station. Otherwise, it shall not be allowed as part of this approved facility.

The applicant has provided exterior elevations and color renderings of the storage condominiums but not the commercial flex space. The Applicant states that the materials used in construction will be hardy siding, stucco panels along with metal and wood accents. The buildings will be a mix of grey, brown and white. These materials and colors are aligned with the architectural guidelines. The buildings will need approval from the design review committee as part of the Certificate of Zoning Compliance process.

The applicant has requested a waiver of the 20' street side setback for a portion of the storage units on the west boundary of the property. This waiver is needed to accommodate Fire District requirements and to allow the Applicant to provide the 10' sidewalk.

As required by the Unified Development Code, Chapter 8, Section 8-8C-2-M (2) Street Trees; A minimum of one street tree shall be planted for every thirty-five (35) linear feet of street frontage. The applicant shall use "Treasure Valley Tree Selection Guide", as adopted by the Unified Development Code. The submitted landscape plan appears to meet these requirements.

H. *On-Site Features:*

- Areas of Critical Environmental Concern – No known areas.
- Evidence of Erosion – No known areas.
- Fish Habitat – No known areas.
- Mature Trees – None.
- Riparian Vegetation – None.
- Steep Slopes – None.
- Stream/Creek – Along the north of the property.
- Unique Animal Life – No unique animal life has been identified.
- Unique Plant Life – No unique plant life has been identified.
- Unstable Soils – No known issues.
- Wildlife Habitat – No wildlife habitat has been developed or will be destroyed.
- Historical Assets – No historical assets have been observed.

I. *Agencies Responding:*

The following agencies responded, and correspondence was attached to the staff report.

Star Fire District	Pending
ACHD	March 27, 2023/September 20, 2023
ITD	February 23, 2023
Drainage Dist. #2	March 10, 2023
Pathway Committee	November 6, 2023

J. Staff received the following letters & emails for the development:

October 11, 2023 Letter from Jerry Kiser, Atty, on behalf of Lloyd and Paul Akins
October 4, 2023 Email from George Jacques

K. *Comprehensive Plan and Unified Development Code Provisions:*

Comprehensive Plan:

8.2.3 Land Use Map Designations:

Mixed Use District

Generally suitable for a mixture of uses which may, at the sole discretion of the Council, include office, commercial, light industrial, and/or residential depending upon the specific area designated as Mixed Use. See Mixed Use Implementation Policies for specific criteria. Development within this land use designation is to proceed through the PUD and/or development agreement process. Identifying areas for mixed-use development has two objectives. The first objective is to give the city a better tool to manage the type of developments through the planned unit development and/or the Development Agreement process. The second objective is that this land use designation will allow the development community to be more innovative in design and placement of structures. Development design guidelines should also be established to guide development within mixed-use areas. Rezoning within this land use designation is to be strictly monitored by the city to assure that the Mixed-Use areas are not being used simply to justify high density residential use.

8.3 Goal:

Encourage the development of a diverse community that provides a mix of land uses, housing types, and a variety of employment options, social and recreational opportunities, and where possible, an assortment of amenities within walking distance of residential development.

8.4 Objectives:

- Implement the Land Use Map and associated policies as the official guide for development.
- Manage urban sprawl in order to minimize costs of urban services and to protect rural areas.
- Encourage land uses that are in harmony with existing resources, scenic areas, natural wildlife areas, and surrounding land uses.

8.5.7 Policies Related Mostly to the Mixed-Use Planning Areas:

A. Council, at their sole discretion, shall determine what mix of uses are appropriate for any Mixed-Use area considering existing property owners rights. B. Development within the Mixed-Use Designation is to proceed through the CUP, PUD, and/or Development Agreement process, and a concept plan must be included with any such proposed use. C. In general, Mixed-Use areas along state highways should be predominantly commercial with a very minor component of residential unless the residential is placed on upper floors as part of a mixed-use building. D. Mixed use areas along state and U.S. Highways where direct access to the state highway is prohibited, like along State Highway 16 between State Highway 44 and US Highway 20/26, should be predominately residential with a minor component of neighborhood commercial, or light industrial if sufficient roadway access, by means of backage or other roads, to the State Highway is provided. E. Mixed use areas located between commercial and residential land use designations are to provide a compatible transition between the higher intensity use of commercial and the lower intensity use of Estate and Neighborhood Residential. Uses for these Mixed-Use areas could include multi-family housing and or office related uses if determined by the Council through the public hearing process, to be appropriate.

8.5.9 Additional Land Use Component Policies:

- Encourage flexibility in site design and innovative land uses.
- Encourage landscaping to enhance the appearance of subdivisions, structures, and parking areas.
- Require more open space and trees in subdivisions.
- Work with Ada County Highway District (ACHD), Canyon Highway District #4 (CHD4), and Idaho Department of Transportation (ITD) for better coordination of roadway and access needs.
- Support well-planned, pedestrian-friendly developments.
- Dark sky provision should be adopted within the code to assure down style lighting in all developments and Star should consider joining the International Dark Sky Association.
- The City should utilize the 2018 Treasure Valley Tree Selection Guide when requiring trees within developments.

Unified Development Code:

8-3A-1: ZONING DISTRICTS AND PURPOSE ESTABLISHED:

The following zoning districts are hereby established for the interpretation of this title, the zoning districts have been formulated to realize the general purposes as set forth in this title. In

addition, the specific purpose of each zoning district shall be as follows:

MU MIXED USE DISTRICT: To provide for a mixture of uses which may, at the sole discretion of the Council, include office, commercial, and/or residential depending upon the specific comprehensive plan area designated as Mixed Use. Development within this zone is to proceed through the PUD process unless a development agreement has already been executed for the particular property. Identifying areas for mixed-use development has two objectives. The first objective is to give the city a better tool to manage the type of developments through the planned unit development and/or the Development Agreement process. The second objective is that this zone may allow the development community to be more innovative in design and placement of structures subject to Council review and approval. Rezoning within this land use designation is to be strictly monitored by the city to assure that the Mixed-Use areas are not being used simply to justify high density residential use. Residential uses may be part of an overall mixed-use development that includes a non-residential component and may not exceed 30% of the overall size of the development.

DA DEVELOPMENT AGREEMENT: This designation, following any zoning designation noted on the official zoning map of the city (i.e., C-2-DA), indicates that the zoning was approved by the city with a development agreement, with specific conditions of zoning.

8-3A-3: USES WITHIN ZONING DISTRICTS

The following table lists principal permitted (P), accessory uses (A), conditional (C), or prohibited (N) uses.

ZONING DISTRICT USES	MU
Flex Space	C
Storage facility, outdoor (Commercial) 1	C
Storage facility, self-service (Commercial) 1	C

Notes:

1. Indicates uses that are subject to specific use standards in accord with chapter 5 of this title.

8-3A-4: ZONING DISTRICT DIMENSIONAL STANDARDS:

Zoning District	Maximum Height Note Conditions	Minimum Yard Setbacks Note Conditions			
		Front (1)	Rear	Interior Side	Street Side

MU	35'	For MU and CBD - Unless otherwise approved by the Council as a part of a PUD or development agreement, all residential buildings shall follow the residential setbacks shown in this table based upon the project density and all other buildings shall follow setbacks for the C-2 zone (3).

Notes:

1. Front yard setback shall be measured from the face of the garage to the face of the sidewalk, allowing for 20' of parking on the driveway without overhang onto the sidewalk.
2. Zero-Lot-Line and reduced front and rear setback waivers may be requested through the Development Agreement process. All other side yard setback requests for detached structures shall not be granted waivers, unless as part of a Planned Unit Development.
3. All setbacks in the CBD, C-1. C-2, LO, IL, PS, RC and M-U zone shall maintain a minimum 15' when adjacent to a residential use or zone.
4. As approved by the Fire District.

8-1B-4: CONDITIONAL USES:

A. Purpose: The purpose of this section is to establish procedures that allow for a particular use on a particular property subject to specific terms and conditions of approval.

B. Applicability: The provisions of this section apply to all uses identified as conditional use in chapter 3, "District Regulations", of this title, and as otherwise required by specific development standards in chapter 5, "Specific Use Standards", of this title.

C. Process:

1. The applicant shall complete a preapplication conference with the administrator prior to submittal of an application for a conditional use.

2. An application and appropriate application fees, in accord with article A, "General Provisions", of this chapter, shall be submitted to the administrator on forms provided by the planning department.

3. The administrator may require additional information concerning the social, economic, fiscal or environmental effects of the proposed conditional use, prior to the scheduling of a public hearing.

D. Standards: In approving any conditional use, the city council may prescribe appropriate conditions, bonds and safeguards in conformity with this title that:

1. Minimize adverse impact of the use on other property.

2. Control the sequence and timing of the use.

3. Control the duration of the use.

4. Assure that the use and the property in which the use is located is maintained properly.

5. Designate the exact location and nature of the use and the property development.

6. Require the provision for on site or off-site public facilities or services.

7. Require more restrictive standards than those generally required in this title.

8. Require mitigation of adverse impacts of the proposed development upon service delivery by any political subdivision, including school districts, that provides services within the city.

8-1B-4E. FINDINGS: The council shall base its determination on the conditional use permit request upon the following:

1. That the site is large enough to accommodate the proposed use and meet all the dimensional and development regulations in the district in which the use is located.

2. That the proposed use will be harmonious with the Star comprehensive plan and in accord with the requirements of this title.

3. That the design, construction, operation and maintenance will be compatible with other uses in the general neighborhood and with the existing or intended character of the general vicinity and that such use will not adversely change the essential character of the same area.

4. That the proposed use, if it complies with all conditions of the approval imposed, will not adversely affect other property in the vicinity.

5. That the proposed use will be served adequately by essential public facilities and services such as highways, streets, schools, parks, police and fire protection, drainage structures, refuse disposal, water, and sewer.

6. That the proposed use will not create excessive additional costs for public facilities and services and will not be detrimental to the economic welfare of the community.

7. That the proposed use will not involve activities or processes, materials, equipment and conditions of operation that will be detrimental to any persons, property or the general welfare by reason of excessive production of traffic, noise, smoke, fumes, glare or odors.

8. That the proposed use will not result in the destruction, loss or damage of a natural, scenic or historic feature considered to be of major importance.

8-5-30: STORAGE FACILITY, SELF-SERVICE:

A. Storage units and/or storage areas shall not be used as dwellings or as a commercial or industrial place of business. The manufacture or sale of any item by a tenant from or at a self-service storage facility is specifically prohibited.

B. On site auctions of unclaimed items by the storage facility owners shall be allowed.

C. The distance between structures shall be a minimum of twenty-five feet (25').

D. The storage facility shall be completely fenced, walled, or enclosed. Where abutting a residential district or public road, chain-link shall not be allowed as fencing material.

E. E. If abutting a residential district, the facility hours of public operation shall be limited to seven o'clock (7:00) A.M. to ten o'clock (10:00) P.M.

F. No structure, facility, drive lane, parking area, nor loading area, shall be located adjacent to a residential district without a sound attenuation wall or other sound buffering measures.

G. If the applicant provides a sound attenuation wall, landscaping buffers may be reduced to ten feet (10').

H. The facility shall have at least one additional point of access, for emergency purposes, as determined by the Star Fire District.

I. All outdoor storage of material shall be maintained in an orderly manner so as not to create a public nuisance. Materials shall not be stored within the required yards. Stored items shall not block sidewalks or parking areas and may not impede vehicular or pedestrian traffic.

J. The site shall not be used as vehicle wrecking or junk yard as herein defined.

K. For any use requiring the storage of fuel or hazardous material, the use shall be located a minimum of one thousand feet (1,000') from a hospital or school.

L. The use shall comply with the flood hazard overlay district as set forth in this title.

8-6A-6: SHORT PLAT PROCESS:

A. Applicability: A subdivision application for a short plat may be processed provided that it meets all of the following conditions:

1. The property is an original lot in a recorded subdivision;
2. The property is not the result of a previous short plat of a lot and/or the property is not the result of an approved parcel division by Ada or Canyon County Development Services;
3. The proposed subdivision does not exceed a total of two (2) lots on a previously platted property or parcel of land;
4. No new public street dedication, or new proposed private street, excluding widening of an existing street, is involved;
5. There are no impacts on the health, safety or general welfare of the city, and the subdivision is in the best interest of the city.

B. Preapplication Conference: The applicant shall complete a preapplication conference with the administrator prior to submittal of an application for a combined preliminary and final plat. The purpose of this meeting is to discuss early and informally the purpose and effect of this title and the criteria and standards contained herein.

C. Application Requirements: Applications and fees, in accord with subsection 8-6A-3C, 8-6A-3D and 8-6A-4 of this article shall be submitted.

D. Final Approval Notice: Upon determination by the administrator that the short plat is in conformance with this article, a final approval letter shall be issued.

E. Time Limit and Completion of Tasks: Upon tentative approval of the application by the administrator, subject to any applicable conditions of approval and the regulations of this title, the applicant or owner shall have one year to complete the following tasks:

a. Cause the property to be surveyed and a record of survey recorded;

b. Execute and record the necessary deeds to accomplish the property boundary adjustments as approved;

c. Obtain new tax parcel numbers and street addresses from the county assessor; and

d. Provide copies of the recorded record of survey, recorded deeds, and the new tax parcel numbers to the administrator.

F. A condominium plat application for any number of lots for property in any district shall be processed as a short plat where all buildings are constructed or have received

building permits for construction. A condominium plat amendment for interior alterations or modifications shall be exempt from further review.

8-1B-4E CONDITIONAL USE FINDINGS:

1. That the site is large enough to accommodate the proposed use and meet all the dimensional and development regulations in the district in which the use is located.

   The Council finds nothing in the record indicating that the site of the proposed use would not be large enough to accommodate the proposed use or meet all of the dimensional and development regulations in the district in which the use would be located.

2. That the proposed use will be harmonious with the Star comprehensive plan and in accord with the requirements of this title.

   The Council finds that the proposed use request is harmonious with the Star Comprehensive Plan and is in accord with the requirements of this Title. The proposed development meets the intent or purpose.

3. That the design, construction, operation and maintenance will be compatible with other uses in the general neighborhood and with the existing or intended character of the general vicinity and that such use will not adversely change the essential character of the same area.

   The Council finds that operation of the proposed use would be compatible with the other uses in the general area.

4. That the proposed use, if it complies with all conditions of the approval imposed, will not adversely affect other property in the vicinity.

   The Council finds that the proposed use, with imposed conditions of approval, would not adversely affect other property in the vicinity.

5. That the proposed use will be served adequately by essential public facilities and services such as highways, streets, schools, parks, police and fire protection, drainage structures, refuse disposal, water, and sewer.

   The Council finds that the proposed use can be adequately served by essential public facilities and services.

6. That the proposed use will not create excessive additional costs for public facilities and services and will not be detrimental to the economic welfare of the community.

   The Council finds that the proposed use would not create excessive additional costs for public facilities and would not be detrimental to the economic welfare of the community. The City has not received notice from any agency having jurisdiction stating that this application will create excessive additional costs for the public facilities and services as the development will pay for all changes in services.

7. That the proposed use will not involve activities or processes, materials, equipment and conditions of operation that will be detrimental to any persons, property or the general

welfare by reason of excessive production of traffic, noise, smoke, fumes, glare or odors.

The Council finds that the proposed use would involve activities that would not be detrimental to any person, property or the general welfare by reason of excessive production of traffic, noise, smoke, fumes, glare or odors.

8. That the proposed use will not result in the destruction, loss or damage of a natural, scenic or historic feature considered to be of major importance.

The Council finds that the proposed use would not result in the destruction, loss or damage of natural, scenic or historic feature of major importance since none are apparent on this site.

Public Hearing of the Council:

a. A public hearing on the application was heard by the City Council on May 2, 2023, at which time testimony was heard and the public hearing was closed, and the Council made their decision at that time.

b. Oral testimony regarding the application was presented to the City Council by:

- Shawn L Nickel, City Planning Director gave Staff Presentation
- Chris Todd
- Shane Jamenez
- Star Police Officer Johnathon Steele

c. Written testimony in favor of or opposing the application was presented to the City Council at the hearing by:

None

Deliberations and Conclusions of Law:

The Council reviewed the particular facts and circumstances of this proposed conditional use permit application in accordance with the City of Star Title 8 (Unified Development Code), deliberated on the matter, resulting in review of the record, including the staff report, and discussions on the proposed land use. Review and discussion included hours of operation, site plan/layout, access and circulation, noise and landscape/fencing buffering. The Council added conditions of approval and included Staff recommended conditions of approval to address these concerns. Council concluded that the Applicant's request, as conditioned, meets the requirements for conditional use. Council hereby incorporates the staff report dated November 21, 2023 into the official decision as part of these Findings of Fact, Conclusions of Law.

Statement of Compliance:

Council finds the Applicant has met all requirements of the Unified Development Code and the intent and purpose of the Comprehensive Plan and Map requirements.

Council added the following conditions of approval and requested waivers to the application approval:

- **Masonry or other appropriate sound dampening fencing/wall shall be installed along the entire southern and eastern boundary of the property.**
- **A ten foot (10') sidewalk shall be installed along the western boundary of the property to provide for continuation of the City greenbelt/pathway.**
- **24-hour operation for the storage facility is conditionally approved with a revocation clause that hours will be limited to 7am to 10pm should violations occur as a result of signed complaints through the Police Department. The complaint shall be reviewed by Council for determination of revocation with prior notice provided to the affected parties of the hearing.**
- **Council approves a waiver of the street side yard setback on the western boundary to 10' to provide for widening of the sidewalk and to accommodate fire district internal drive aisle widths.**
- **The applicant shall add additional landscaping along the western boundary of the development to include additional trees at a ratio of 3 per 30'. This shall be reviewed at Design Review.**

Additional Conditions of Approval:

1. The approved Conditional Use shall comply with all statutory requirements of applicable agencies and districts having jurisdiction in the City of Star.
2. Streetlights/Parking Lot lights shall comply with the Star City Code. Design shall follow Code with requirements for light trespass and "Dark Skies" lighting. **Applicant/Owner shall work with staff and submit a streetlight design that meets city standards prior to Building Permit being issued.**
3. **A Certificate of Zoning Compliance will be required prior to the start of construction. The applicant shall address building finishes, fencing type and landscape buffering at that time.**
4. **A revised site plan, showing the correct parking dimensions shall be submitted to and approved by City Staff, prior to issuing the building permit**. **The Applicant also needs to clearly mark an ADA parking spot for the clubhouse.**
5. **The Applicant shall provide an updated landscape plan showing the additional trees and landscaping materials on the western boundary, along with fencing specifics to Staff for approval prior to issuing a building permit**.
6. The property with the approved application shall be satisfactorily weed abated, preventing a public nuisance, per Star City Code.
7. Pressurized irrigation systems shall comply with the Irrigation District(s) and the City of Star Codes. Plans for pressurized irrigation systems shall be submitted to, and approved by the City of Star Engineer, prior to installation.

8. A form signed by the Star Sewer & Water District shall be submitted to the City prior to issuance of building permit stating that all conditions of the District have been met, including annexation into the District.
9. The applicant shall provide a sign, to be located at all construction entrances, indicating the rules for all contractors that will be working on the property starting at grading and running through occupancy that addresses items including but not limited to dust, music, dogs, starting/stopping hours for contractors (7a.m. start time). **Sign shall be approved by the City prior to the start of any construction.**
10. The applicant shall obtain all the proper building permits from the City Building Department prior to occupancy of the unit.
11. The Conditional Use Permit may be revoked or modified by the City Council for any violation of any Condition of Approval.
12. The applicant shall obtain a sign permit prior to any signage being placed on the site or building.
13. The applicant shall meet all requirements of the Star Fire Protection District.

Council Decision:

The Council voted 3-0 (Salmonsen absent) to approve the Conditional Use for Falcon Storage on November 21, 2023.

Dated this 5th day of December 2023.

Star, Idaho

By: _____
Trevor A. Chadwick, Mayor

ATTEST:

_____
Jacob M. Qualls, City Clerk

LEGAL NOTICE
PUBLIC HEARING

Notice is hereby given that the Star City Council will hold a Public Hearing on **December 5th, 2023,** at the Star City Hall, 10769 W. State Street, Star, Idaho at 7:00 pm, or as soon thereafter as the matter may be heard.

Application: Milled Olive-Conditional Use Permit
Files # CU-23-06

Representative: Jessica Heggie-Studio H Architects, 306 NE 2nd Street, Meridian, Id 83642

Owner: The Milled Olive

Action: The Applicant is requesting approval for a Conditional Use Permit for a mixed-commercial use to include a retail-store, wine & beer lounge, retail storage area, outdoor concessions, and event space. The property is located at 1133 S. Main Street in Star, Ada County, Idaho, and consists of 2.0 acres in a central business district (CBD) zoning designation.

Property Location: The subject property is generally located at the northeast corner of S. Star Road and S. Main Street. Ada County Parcel No. R1842701420.

Information/Comments: A complete copy of the applications are available at City Hall for public review. The City invites all interested parties to attend the meeting and provide public testimony. Written comments will be accepted by the City up to 2 days prior to the date of the public hearing.

Services for persons with disabilities may be made available if notice is received in advance of the meeting by calling Star City Hall at (208) 286-7247.

Shawn L. Nickel
Planning Director and Zoning Administrator
snickel@staridaho.org

CITY OF STAR

LAND USE STAFF REPORT

TO: Mayor & Council

FROM: City of Star Planning Department
MEETING DATE: **December 5, 2023 – PUBLIC HEARING**
FILE(S) #: CU-23-06 – Conditional Use Permit Milled Olive

OWNER/APPLICANT/REPRESENTATIVE

Applicant/Owner

Milled Olive Oil & Vinegar Co Inc.
12247 W. Pavo Street
Star, Idaho

Representative:

Jessica Heggie
Studio H. Architects
306 NE 2nd Street
Meridian, Idaho 83642

REQUEST

Request: The Applicant is requesting approval of a Conditional Use Permit for a mixed-commercial use to include a retail store, wine & beer lounge, retail storage area, outdoor concessions and an event space. The property is located at 1133 S. Main Street in Star, Ada County, Idaho, and consists of 2.0 acres in a central business district (CBD) zoning designation.

PROPERTY INFORMATION

Property Location: The subject property is generally located at the northeast corner of S. Star Road and S. Main Street. Ada County Parcel No. R1842701420.

Existing Site Characteristics: The property is currently vacant bare ground.

Irrigation/Drainage District(s): - Pioneer Ditch Company LTD
P.O. Box 70
Star, Idaho 83669

Flood Zone: A portion of this property is located in a Special Flood Hazard Area.
FEMA FIRM panel: 16001C0140J
FIRM effective date: 6/19/2020
Flood Zone: AE, X
Base Flood Elevation: 2468.9

Special On-Site Features:

- ✪ Areas of Critical Environmental Concern – No known areas.
- ✪ Evidence of Erosion – No known areas.
- ✪ Fish Habitat – No known areas.
- ✪ Mature Trees – Yes. Mature Trees
- ✪ Riparian Vegetation – None.
- ✪ Steep Slopes – None.
- ✪ Stream/Creek – None.
- ✪ Unique Animal Life – No unique animal life has been identified.
- ✪ Unique Plant Life – No unique plant life has been identified.
- ✪ Unstable Soils – No known issues.
- ✪ Wildlife Habitat – No wildlife habitat has been developed or will be destroyed.
- ✪ Historical Assets – No historical assets have been observed.

APPLICATION REQUIREMENTS

Pre-Application Meeting Held	August 3, 2023
Neighborhood Meeting Held	September 14, 2023
Application Submitted & Fees Paid	October 18, 2023
Application Accepted	October 20, 2023
Residents within 300' Notified	November 20, 2023
Agencies Notified	October 24, 2023
Legal Notice Published	November 19, 2023
Property Posted	, 2023

HISTORY

November 17, 2020	Council approved an application for Rezone and Development Agreement (RZ-20-10/DA-20-21) for the property to be rezoned Central Business District (CBD).

SURROUNDING ZONING/COMPREHENSIVE PLAN MAP/LAND USE DESIGNATIONS

	Zoning Designation	Comp Plan Designation	Land Use
Existing	Central Business District (CBD)	Central Business District	Vacant – Pasture
Proposed	Central Business District (CBD)	Central Business District	Commercial, Retail
North of site	Residential (R-1)	Central Business District	Single Family Residential
South of site	Rural Transitional (RT)	Central Business District	Vacant
East of site	Rural Transitional (RT)	Central Business District	Single Family Residential
West of site	Rural Urban Transition (RUT)	Central Business District	Single Family Residential/Agricultural

ZONING ORDINANCE STANDARDS / COMPREHENSIVE PLAN

UNIFIED DEVELOPMENT CODE:

8-3A-1: ZONING DISTRICTS AND PURPOSE ESTABLISHED:

The following zoning districts are hereby established for the interpretation of this title, the zoning districts have been formulated to realize the general purposes as set forth in this title. In addition, the specific purpose of each zoning district shall be as follows:

(CBD) CENTRAL BUSINESS DISTRICT: To provide for commercial, retail, civic, office, and entertainment uses. High density housing is encouraged on the upper floors of mixed-use buildings and may also be allowed at the fringes of the land use designation shown on the comprehensive plan. Live/work designed development is also encouraged in this district. Developments in this district are to place an emphasis on pedestrian and bicycle access and compatibility. Special emphasis shall be placed on development in the central downtown area to encourage and create a vibrant, walkable downtown community that incorporates the Boise River as an active amenity.

8-3A-3: USES WITHIN ZONING DISTRICTS

The following table lists principal permitted (P), accessory uses (A), conditional (C), or prohibited (N) uses.

ZONING DISTRICT USES	CBD
Events Center, public or private (indoor/outdoor)	C
Retail store/retail services	P

8-3A-4: ZONING DISTRICT DIMENSIONAL STANDARDS:

Zoning District	Maximum Height Note Conditions	Minimum Yard Setbacks Note Conditions			
		Front (1)	Rear	Interior Side	Street Side
CBD	35'	0'	0'	0' [4]	0'
C-2	35'	20'	5'	0' [4]	20'
MU	35'	For MU and **CBD** - Unless otherwise approved by the Council as a part of a PUD or development agreement, all residential buildings shall follow the residential setbacks shown in this table based upon the project density and all other buildings shall follow setbacks for the C-2 zone (3).			

Notes:

2. Zero-Lot-Line and reduced front and rear setback waivers may be requested through the Development Agreement process. All other side yard setback requests for detached structures shall not be granted waivers, unless as part of a Planned Unit Development.
3. All setbacks in the CBD, C-1. C-2, LO, IL, PS, RC and M-U zone shall maintain a minimum 15' when adjacent to a residential use or zone.
4. As approved by the Fire District.

8-1B-4: CONDITIONAL USES:

A. Purpose: The purpose of this section is to establish procedures that allow for a particular use on a particular property subject to specific terms and conditions of approval.

B. Applicability: The provisions of this section apply to all uses identified as conditional use in chapter 3, "District Regulations", of this title, and as otherwise required by specific development standards in chapter 5, "Specific Use Standards", of this title.

C. Process:

1. The applicant shall complete a preapplication conference with the administrator prior to submittal of an application for a conditional use.

2. An application and appropriate application fees, in accord with article A, "General Provisions", of this chapter, shall be submitted to the administrator on forms provided by the planning department.

3. The administrator may require additional information concerning the social, economic, fiscal or environmental effects of the proposed conditional use, prior to the scheduling of a public hearing.

D. Standards: In approving any conditional use, the city council may prescribe appropriate conditions, bonds and safeguards in conformity with this title that:

1. Minimize adverse impact of the use on other property.

2. Control the sequence and timing of the use.

3. Control the duration of the use.

4. Assure that the use and the property in which the use is located is maintained properly.

5. Designate the exact location and nature of the use and the property development.

6. Require the provision for on site or off-site public facilities or services.

7. Require more restrictive standards than those generally required in this title.

8. Require mitigation of adverse impacts of the proposed development upon service delivery by any political subdivision, including school districts, that provides services within the city.

8-1B-4E. FINDINGS: The council shall base its determination on the conditional use permit request upon the following:

1. That the site is large enough to accommodate the proposed use and meet all the dimensional and development regulations in the district in which the use is located.

2. That the proposed use will be harmonious with the Star comprehensive plan and in accord with the requirements of this title.

3. That the design, construction, operation and maintenance will be compatible with other uses in the general neighborhood and with the existing or intended character of the general vicinity and that such use will not adversely change the essential character of the same area.

4. That the proposed use, if it complies with all conditions of the approval imposed, will not adversely affect other property in the vicinity.

5. That the proposed use will be served adequately by essential public facilities and services such as highways, streets, schools, parks, police and fire protection, drainage structures, refuse disposal, water, and sewer.

6. That the proposed use will not create excessive additional costs for public facilities and services and will not be detrimental to the economic welfare of the community.

7. That the proposed use will not involve activities or processes, materials, equipment and conditions of operation that will be detrimental to any persons, property or the general welfare by reason of excessive production of traffic, noise, smoke, fumes, glare or odors.

8. That the proposed use will not result in the destruction, loss or damage of a natural, scenic or historic feature considered to be of major importance.

COMPREHENSIVE PLAN:

8.2.3 Land Use Map Designations:

Central Business District

The Central Business District is planned to be a vibrant downtown center for the community. Uses encouraged are commercial, retail, civic, private offices, and entertainment. High density housing is encouraged on the upper floors of mixed-use buildings and at the fringes of the land use designation. Developments in this district are to place an emphasis on pedestrian and bicycle access and compatibility.

8.3 Goal:

Encourage the development of a diverse community that provides a mix of land uses, housing types, and a variety of employment options, social and recreational opportunities, and where possible, an assortment of amenities within walking distance of residential development.

8.4 Objectives:

- Implement the Land Use Map and associated policies as the official guide for development.
- Work to create a vibrant Central Business District.
- Manage urban sprawl in order to minimize costs of urban services and to protect rural areas.
- Encourage land uses that are in harmony with existing resources, scenic areas, natural wildlife areas, and surrounding land uses.
- Encourage commercial development that is consistent with a family friendly feel, not overburdening the community with big box and franchise uses and discourage the development of strip commercial areas.

8.5.5 Policies Related Mostly to the Central Business District Planning Areas:

A. The CBD zoning district should allow for a mix of commercial, office, institutional, and civic type uses with specific provisions for residential use in appropriate locations with compatible densities.
B. High density residential is suitable within the CBD in mixed use buildings with commercial or office type uses on the first floor and high density residential on upper floors.
C. Main Street, generally south of Tempe Lane extended, consists of several lots which are about one acre in size created by "Dixon Subdivision" almost a century ago. Many of the existing home sites on these lots are rural in nature, including farm animals. As redevelopment of this area occurs, a transition consisting of a compatible mix of lower intensity commercial and office type uses mixed with residential should be encouraged. This Main Street area needs to be studied to provide for special care guiding future development understanding that the rights consisting of the existing rural use of residential lots are not to be infringed. Furthermore, Main Street is to be studied for the provision of traffic calming measures and to provide for a connection for horseback riders to access an equestrian trail which should be planned along the Boise River.
D. The city should develop a street improvement plan for the CBD identifying drainage and street improvements with a functional grid system and use public private partnerships to assure the system is built and that "ad hoc" development of parcels within the CBD do not block good planning.
E. The city should develop a downtown grid system, in part, planning for the easterly extension of Tempe Lane and easterly extension of West First Street to help provide better downtown access and parking facilities.
F. The east west public road from the Heron River Development, south of the LDS Church on Main Street, should be extended to Star Road.

G. Implement, review, and update the 2011 Star Downtown Revitalization Plan for development strategies within the plan intended to stimulate development within the CBD.
H. As recommended in the 2011 Star Downtown Revitalization Plan, the city should create an Urban Renewal District to stimulate development within the CBD.
I. The city should encourage assemblage of the smaller properties where appropriate.
J. The "floodway" lands abutting the CBD land use designation, all as shown in the Comprehensive Plan Land Use Map, should continue to be developed as park space supporting activities integral to the economic and "Live, Work, Play" ambiance planned for the CBD.
K. Main city service facilities should be located in the CBD and should all be south of State Highway 44 clustered into a "City Services Campus". That includes the City Hall, Library, Post Office, Emergency Services, Department of Motor Vehicles, and other related facilities.
L. Big Box commercial, generally a single-story single use building over 50,000 square feet, should not be permitted within the CBD and any single-story single use building which is large in scale, such as approaching the 50,000 square foot size, should be located to front on Highway 44 or Star Road.

8.5.9 Additional Land Use Component Policies:

- Encourage flexibility in site design and innovative land uses.
- Encourage landscaping to enhance the appearance of subdivisions, structures, and parking areas.
- Work with Ada County Highway District (ACHD), Canyon Highway District #4 (CHD4), and Idaho Department of Transportation (ITD) for better coordination of roadway and access needs.
- Support well-planned, pedestrian-friendly developments.
- Dark sky provision should be adopted within the code to assure down style lighting in all developments and Star should consider joining the International Dark Sky Association.
- The City should utilize the 2018 Treasure Valley Tree Selection Guide when requiring trees within developments.

PROJECT OVERVIEW

CONDITIONAL USE PERMIT:

The Applicant is requesting approval of a Conditional Use Permit for a mixed-commercial use to include a retail store, wine & beer lounge, retail storage area, outdoor concessions and an event space. The property contains approximately 2-acres. The proposed main structure that includes the retail sales, beer and wine lounge, warehouse and 2nd Floor event/meeting room is approximately 17,141 total square feet in size. The proposed accessory storage building is 1,450 square feet in size, and the proposed concessions building is 367 square feet in size. The proposed food truck and farmers market booth area, located in the southeast corner of project, will include temporary spaces for food trucks and retail booths to be used throughout the year and during community events.

The site will be improved with paved driving aisles and parking spaces, perimeter landscaping and fencing. Main site access will be on S. Main Street.

The Unified Development Code Section 8-4B-2 states that all drive aisles adjacent to a building shall be a minimum of 25'0" or as required by the fire code, unless the building is 30 feet in height or greater, at which point the drive aisle shall be 26'0" or as otherwise approved by the Fire District. **It appears that all proposed drive aisles will be able to meet the 25' and 26' widths throughout the project, as required.**

Section 8-4B-2 also states that parking stalls shall be 9' wide and 20' deep. The materials submitted with the application indicate compliance with the parking standards. The applicant is providing 2 ADA parking spaces in front of the main building. The site plan indicates a total of 51 on-site parking spaces, with an additional 17 on-street parking spaces along S. Main Street. ACHD will need to approve the allowance for parking in the public right of way. The parking calculations provided by the applicant appear to meet the required parking requirements within the CBD zone. The addition of approved on-street parking of 17 additional spaces will benefit the uses proposed.

The Applicant is proposing fencing along all boundaries of the property, including open, metal fencing along the Star Road and S. Main Street frontages, with a security gate along the entrance drive. A 6' solid wood and metal fence is proposed adjacent to the existing residential uses to the north and east of the proposed development.

The Applicant has not indicated the hours of operation for the project. Council may want to consider hours of operation for the food trucks and farmers market uses of the project.

The applicant has provided exterior elevations and color renderings of all of the structures within the development. The buildings appear to meet the intent of the architectural overlay, however, the site plan and elevations will need additional approval from the design review committee as part of the Certificate of Zoning Compliance process.

The applicant has requested a 10' northern building setback for the main building and 5' northern and southern setback for the storage building located in the northeast corner of the property. In addition, the concessions building has indicated a 5' northern setback. Council should consider future CBD uses adjacent to this property. Staff believes the proposed setbacks are appropriate for the future build-out of the Central Business District.

Cross access to adjacent properties is critical for maintaining circulation between commercial uses, especially along Star Road, where access points are intended to be eliminated and combined where necessary as properties redevelop. Staff supports a requirement for a cross access easement to the north of the property in the event that the northern property were to redevelop. The easement would be located where the applicant is showing 3 parking spaces in the northeast corner of the project. Until a need for access is warranted, the applicant shall maintain the 3 parking spaces as shown.

The applicant has not indicated a location for restroom facilities near the concession building and food truck and farmers market area of the development. Facilities located in the main building may provide this service when open, however, bathroom facilities should be discussed by Council and the applicant.

A landscaping plan has been submitted with the application. Staff would like to see an additional landscaping buffer on the northern boundary of the development adjacent to the proposed parking lot and main building.

AGENCY RESPONSES

Star Fire District	Pending
ACHD	Pending
ITD	October 25, 2023

PUBLIC RESPONSES

None

STAFF ANALYSIS & RECOMMENDATIONS

Based upon the information provided to staff in the applications and agency comments received to date, staff finds that the proposed conditional use permit meets the requirements, standards and intent for development as they relate to the Unified Development Code and Comprehensive Plan.

The Council should consider the entire record and testimony presented at their scheduled public hearing prior to rendering its decision on the matter. Should the Council vote to approve the applications, either as presented or with added or revised conditions of approval, Council shall direct staff to draft findings of fact and conclusions of law for the Council to consider at a future date.

Items for Council Review and Discussion:

- **Building Setbacks along northern property lines**
- **Cross Access Easement**
- **Fencing**
- **Food Trucks and Farmers Market Use**
- **Restroom Facilities near Food Trucks and Farmers Market Area**
- **Additional landscaping along northern boundary**
- **Hours of Operation**

FINDINGS

The Council may **approve**, **conditionally approve**, **deny** or **table** this request. In order to approve these applications, the Unified Development Code requires that Council must find the following:

Findings for Conditional Use Permits (UDC §8-6B-6):

1. That the site is large enough to accommodate the proposed use and meet all the dimensional and development regulations in the district in which the use is located.

   The Council must find that the site of the proposed use would be large enough to accommodate the proposed use or meet all of the dimensional and development regulations in the district in which the use would be located.

2. That the proposed use will be harmonious with the Star comprehensive plan and in accord with the requirements of this title.

   The Council must find that the proposed use request is harmonious with the Star

Comprehensive Plan and is in accord with the requirements of this Title. The proposed development should meet the intent or purpose of the Central Business District.

3. That the design, construction, operation and maintenance will be compatible with other uses in the general neighborhood and with the existing or intended character of the general vicinity and that such use will not adversely change the essential character of the same area.

   The Council must find that the operation of the proposed use would be compatible with the other uses in the general area.

4. That the proposed use, if it complies with all conditions of the approval imposed, will not adversely affect other property in the vicinity.

   The Council must find that the proposed use, with imposed conditions of approval, would not adversely affect other property in the vicinity.

5. That the proposed use will be served adequately by essential public facilities and services such as highways, streets, schools, parks, police and fire protection, drainage structures, refuse disposal, water, and sewer.

   The Council must find that the proposed use be adequately served by essential public facilities and services.

6. That the proposed use will not create excessive additional costs for public facilities and services and will not be detrimental to the economic welfare of the community.

   The Council must find that the proposed use would not create excessive additional costs for public facilities and would not be detrimental to the economic welfare of the community.

7. That the proposed use will not involve activities or processes, materials, equipment and conditions of operation that will be detrimental to any persons, property or the general welfare by reason of excessive production of traffic, noise, smoke, fumes, glare or odors.

   The Council must find that the proposed use would involve activities that would not be detrimental to any person, property or the general welfare by reason of excessive production of traffic, noise, smoke, fumes, glare or odors.

8. That the proposed use will not result in the destruction, loss or damage of a natural, scenic or historic feature considered to be of major importance.

   The Council must find that the proposed use would not result in the destruction, loss or damage of natural, scenic or historic feature of major importance since none are apparent on this site.

CONDITIONS OF APPROVAL

1. The approved Conditional Use shall comply with all statutory requirements of applicable agencies and districts having jurisdiction in the City of Star.
2. Streetlights/Parking Lot lights shall comply with the Star City Code. Design shall follow Code with requirements for light trespass and "Dark Skies" lighting. **Applicant/Owner shall work with staff and submit a site and streetlight design at Zoning Certificate that meets city standards.**
3. **A detailed fencing plan with specific building materials shall be submitted at Zoning Certificate for approval by Design Review Committee.**
4. **The Applicant shall provide an updated site plan that has the dimensions of all drive aisles and parking spots clearly marked and meeting code. Drive aisles shall be a minimum of 25' & 26' feet wide and parking spots shall be 9 feet wide and 20 feet deep. A note shall be placed on the site plan showing the cross access easement location in the northeast corner and onto the adjacent northern property.**
5. **The Applicant shall provide a revised landscape plan for review and approval showing a landscape buffer along the northern boundary of the development. This shall be submitted with the Zoning Certificate application.**
6. **Hours of Operation for the food truck and farmers market area shall be determined by Council.**
7. **All food trucks shall obtain a vendors license from the City prior to operation.**
8. **A cross access easement shall be provided to the City for future access to the north.**
9. Pressurized irrigation systems shall comply with the Irrigation District(s) and the City of Star Codes. Plans for pressurized irrigation systems shall be submitted to, and approved by the City of Star Engineer, prior to installation.
10. A form signed by the Star Sewer & Water District shall be submitted to the City prior to issuance of building permit stating that all conditions of the District have been met, including annexation into the District.
11. The applicant shall provide a sign, to be located at all construction entrances, indicating the rules for all contractors that will be working on the property starting at grading and running through occupancy that addresses items including but not limited to dust, music, dogs, starting/stopping hours for contractors (7a.m. start time). **Sign shall be approved by the City prior to start of any construction.**
12. The applicant shall obtain all the proper building permits from the City Building Department prior to occupancy or the unit.
13. The Conditional Use Permit may be revoked or modified by the City Council for any violation of any Condition of Approval.
14. The applicant shall obtain a separate sign permit prior to any signage being placed on the site or building.
15. A Certificate of Zoning Compliance will be required prior to the start of construction.
16. Any additional Condition of Approval as required by Staff and City Council.

17. Any Conditions of Approval as required by Star Fire Protection District.

COUNCIL DECISION

The Star City Council _____ File Number CUP-23-06, for Milled Olive on _____ _____, 2023.

DAN AND ANGIE MCGETRICK

THE MILLED OLIVE

09/18/2023

VICINITY MAP

by: Studio H Architects

Studio H Architects, PLLC.
306 NE 2nd St.
Meridian, ID 83642

208-283-4593 | jessica@studioharchitects.com

Project Narrative
October 6, 2023

PROJECT:
The Milled Olive
1133 S. Main Street
Star, ID 83669

We are proposing a new commercial development on 2 acres on the northeast corner of S Star Road and S Main Street. The new development consists of 51 parking spaces serving 3 separate buildings, outdoor patio area to serve a beer & wine lounge, outdoor food truck/farmers market area with seating near the River side of the site, trash enclosure, water feature, and landscaping throughout.

The main building will comprise of a wine & beer lounge, Milled Olive retail store, and retail storage area on the main floor, and an event space on the second floor. The second floor event space will be utilized at a minimal capacity during retail hours and mostly in use while the retail space is closed.

Additional buildings on the site include a storage building for site and maintenance items and a concessions stand for the River recreational users. Please do not hesitate to reach out for additional information or clarifications for the new development.

Thank you,

Jessica Heggie, NCARB

Principal Architect, Studio H Architects

jessica@studioharchitects.com

208-283-4593

City of Star
Star, Idaho 83669
P: 208-286-7247

CONDITIONAL USE PERMIT APPLICATION

***All applicable information must be filled out to be processed.*

FILE NO.: _____
Date Application Received: _____ Fee Paid: _____
Processed by: City: _____

Applicant Information:

PRIMARY CONTACT IS: Applicant ___ Owner ___ Representative ✓

Applicant Name: The Milled Olive
Applicant Address: 9776 W. State St, Star, ID Zip: 83669
Phone: 208.250.9030 Email: shop@themilledolive.com

Owner Name: Milled Olive DII a Vinegar Co., Inc.
Owner Address: 12247 W. Pavo St. Star, ID Zip: 83669
Phone: 208.250.9030 Email: shop@themilledolive.com

Representative (e.g., architect, engineer, developer):
Contact: Jessica Heggie Firm Name: Studio H Architects
Address: 206 NE 2nd St, Meridian, ID Zip: 83642
Phone: 208.283.4593 Email: jessica@studioharchitects.com

Property Information:

Site Address: 11333 S. Main St, Star, ID 83669 Parcel Number: R1842701420
Requested Condition(s) for Conditional Use: Event Space

	Zoning Designation	Comp Plan Designation
Existing	CBD-DA	CENTRAL BUS. DISTRICT
Proposed	CBD-DA	CENTRAL BUS. DISTRICT
North of site	R-1	CENTRAL BUS. DISTRICT
South of site	RT	PARKS + OPEN SPACE
East of site	RT	CENTRAL BUS. DISTRICT
West of site	RUT	CENTRAL BUS. DISTRICT.

Site Data:

Total Acreage of Site: 2.00
Proposed Percentage of Site Devoted to Bldg Coverage: 15.8%
Proposed Percentage of Site Devoted to Landscaping:
Number of Parking spaces: Proposed 51 Required 50
Requested Front Setback: Ø Requested Rear Setback:
Requested Side Setback: Ø Requested Side Setback: Ø
Requested Side Setback: Ø
Existing Site Characteristics: Vacant land

Number and Uses of Proposed Buildings: (3) Retail, Concessions, Storage
Location of Buildings: West PL. along Star Rd. AT ENTRY, AND BACK CORNER.
Gross Floor Area of Proposed Buildings: 18,750
Describe Proposed On and Off-Site Traffic Circulation: Singe ingress/egress off Main Street to private 24'-26' wide access road with fire apparatus turn around at back of parking area.
Proposed Signs – number, type, location: (2) Monument, (4) BUILDING
(include draft drawing) Monument - Watertower look, Building - See elevations
Public Services (state what services are available and what agency is providing the service):
Potable Water - City of Star
Irrigation Water - City of Star
Sanitary Sewer - City of Star
Schools - West Ada School District
Fire Protection - Star Fire
Roads - Ada County Highway District.

Flood Zone Data (This Info Must Be Filled Out Completely Prior to Acceptance):

Subdivision/Project Name: The Milled Olive Phase: N/A
Special Flood Hazard Area: total acreage 2 number of homes/structures 3

a. A note must be provided on the site plan documenting the current flood zone in which the property or properties are located. The boundary line must be drawn on the plan in situations where two or more flood zones intersect over the property or properties being surveyed.

b. FEMA FIRM panel(s): #160xxxxxxC, 160xxxxxxE, etc.: 16001C0140J
FIRM effective date(s): mm/dd/year 06/19/2020
Flood Zone(s): Zone X, Zone A, Zone AE, Zone AH, etc.: AE, X
Base Flood Elevation(s): AE____.0 ft., etc.: 2468.9

c. Flood Zones are subject to change by FEMA and all land within a floodplain is regulated by Chapter 10 of the Star City Code.

Application Requirements:

(Applications are required to contain one copy of the following unless otherwise noted.)

Applicant (√)	Description	Staff (√)
✓	Pre-application meeting with Planning Department required prior to neighborhood meeting.	
✓	Copy of neighborhood meeting notice sent to property owners within 300 feet and meeting sign-in sheet. **(Please contact the City for addresses & labels)** (Applicants are required to hold a neighborhood meeting to provide an opportunity for public review of the proposed project prior to the submittal of an application.)	
✓	Completed and signed Conditional Use Application	
✓	Fee: Please contact the City for current fee. Fees may be paid in person with check or electronically with credit card. Please call City for electronic payment. Additional service fee will apply to all electronic payments.	
✓	Narrative fully describing the existing use, and the proposed project. (must be signed by applicant)	
✓	Legal description of the property (word.doc and electronic version with engineer's seal):	
✓	Copy of recorded warranty deed.	
NA	If the signature on this application is not the owner of the property, an **original** notarized statement (affidavit of legal interest) from the owner stating the applicant is authorized to submit this application.	
✓	One (1) copy of names and addresses printed on address labels, of property owners within three hundred feet (300') of the external boundaries of the property being considered as shown on record in the County Assessor's office. Please contact the City to request addresses and labels.	
	List of names(s) and address(es) of all canal or irrigation ditches within or contiguous to the proposed development.	
✓	Vicinity map showing the location of the subject property	
✓	One (1) full-size copy and One (1) 11"x 17" reduction of the Site Plan	
✓	One (1) full-size copy and One (1) 11"x 17" reduction of the landscape plan (if applicable)	
	Building elevations showing construction materials	
	Two (2) copies electronic versions of submitted application including signed application, narrative, legal description, warranty deed, vicinity map, site plan, landscape plan, building elevations, shall be submitted in original pdf format (no scans) on a thumb drive only (no discs) with the files named with project name and plan type. We encourage you to also submit at least one (1) color version for presentation purposes.	
	Signed Certification of Posting with pictures. (see attached posting requirements and certification form) – To be completed by application after acceptance of application. Staff will notify applicant of hearing and posting date.	

Site Plan (If applicable):

	The following items must be included on the site plan:	
✓	• Date, scale, north arrow, and project name	
✓	• Names, addresses, and phone number of owner(s), applicant, and engineer, surveyor or planner who prepared the site plan	
✓	• Existing boundaries, property lines, and dimensions of the lot	
✓	• Relationship to adjacent properties, streets, and private lanes	
✓	• Easements and right-of-way lines on or adjacent to the lot	
✓	• Existing and proposed zoning of the lot, and the zoning and land use of all adjacent properties	
✓	• Building locations(s) (including dimensions to property lines)	
✓	• Parking and loading areas (dimensioned)	
✓	• Traffic access drives and traffic circulation (dimensioned)	

✓	• Open/common spaces	
✓	• Refuse and service areas	
✓	• Utilities plan, including the following: Sewer, water, irrigation, and storm drainage (existing & proposed)	
✓	• All on-site lighting proposed – Must Meet City "Dark Sky" Ordinances	

Landscape Plan (If applicable):

	The following items must be included on the landscape plan:	
✓	• Date, scale, north arrow, and project name	
✓	• Names, addresses, and phone numbers of the developer and the person and/or firm preparing the plan	
✓	• Existing natural features such as canals, creeks, drains, ponds, wetlands, floodplains, high groundwater areas, and rock outcroppings	
✓	• Location, size, and species of all existing trees on site with trunks 4 inches or greater in diameter, measured 6 inches above the ground. Indicate whether the tree will be retained or removed.	
✓	• Existing buildings, structures, planting areas, light poles, power poles, walls, fences, berms, parking and loading areas, vehicular drives, trash areas, sidewalks, pathways, storm water detention areas, signs, street furniture, and other man-made elements	
✓	• Existing and proposed contours for all areas steeper than 20% slope. Berms shall be shown with one-foot contours	
✓	• Sight Triangles as defined in 8-4 A-7 of this Ordinance	
✓	• Location and labels for all proposed plants, including trees, shrubs, and groundcovers (trees must not be planted in City water or sewer easements). Scale shown for plant materials shall reflect approximate mature size	
✓	• Proposed screening structures	
✓	• Design drawings(s) of all fencing proposed	
✓	• Calculations of project components to demonstrate compliance with requirements of this ordinance, including: ➢ Number of street trees and lineal feet of street frontage ➢ Width of street buffers (exclusive of right-of-way) ➢ Width of parking lot perimeter landscape strip ➢ Buffer width between different land uses ➢ Number of parking stalls and percent of parking area with internal landscaping ➢ Total number of trees and tree species mix ➢ Mitigation for removal of existing trees, including number of caliper inches being removed	

SIGNS (If applicable):

All signs will require separate submittal of a sign application.

FEE REQUIREMENT:

*** I have read and understand the above requirements. I further understand fees will be collected at the time of filing an application.* ***I understand that there may be other fees associated with this application incurred by the City in obtaining reviews or referrals by architect, engineering, or other professionals necessary to enable the City to expedite this application. I understand that I, as the applicant, am responsible for all payments to the City of Star.***

9/14/23

Studio H
ARCHITECTS

306 NE 2nd Street
Meridian, ID 83642
208-283-4593
www.studioharchitects.com

STAMP:

CONSULTANT:

REVISIONS

No.	Description	Date

2 MAIN + STAR

3 FRONT ENTRY

CUP SUBMITTAL PACKAGE

10.06.2023

OWNER
DAN AND ANGIE MCGETRICK

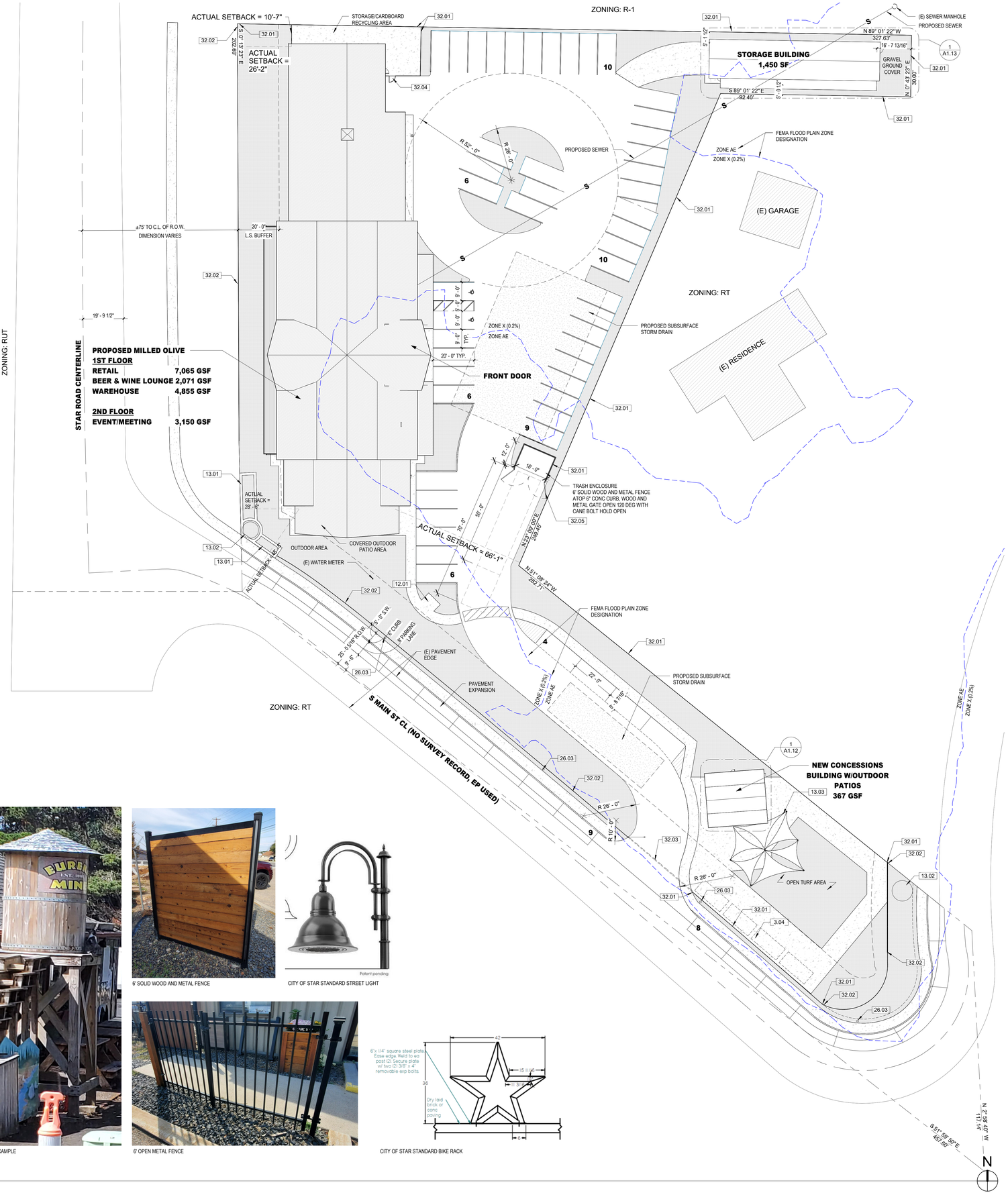
PROJECT
THE MILLED OLIVE

PROJECT ADDRESS
1133 S MAIN ST
STAR, ID 83669

SHEET NAME
COVER SHEET AND GENERAL INFORMATION

PROJECT NUMBER	23-050
SHEET ISSUE DATE	10/06/23
SUBMITTAL	CUP SUBMITTAL

SHEET
A0.00



MONUMENT SIGN EXAMPLE

6' SOLID WOOD AND METAL FENCE

CITY OF STAR STANDARD STREET LIGHT

6' OPEN METAL FENCE

CITY OF STAR STANDARD BIKE RACK

1 SITE PLAN
1" = 20'-0"

ZONING INFORMATION

SITE: 2.00 ACRES
PARCEL #: R1842701420
ZONING: CBD-DA

MAX. HEIGHT: 35'-0"
SETBACKS: 0' ON ALL SIDES

PARKING: 9'x20' STALLS, 26' DRIVE AISLE AT BLDG, 24' ELSEWHERE.
- RETAIL 1:250 GSF
- WINE TASTING 1:150 GSF
- EVENT CENTER (PER CUP)
- CONCESSIONS 1:150 GSF
- BICYCLE 1:25 SPACES
- *PARKING IN CBD MAY BE REDUCED BY COUNCIL, IN ADDITION ON-STREET PARKING MAY BE COUNTED

PROPOSED USES:
RETAIL STORE
WINE/BEER TASTING
STORAGE
CONCESSIONS STAND
EVENT SPACE (ACCESSORY USE)

PARKING CALCULATIONS

RETAIL/OFFICE 1:250 GSF
7,056 / 250 = 28.3 SPACES REQ'D
WINE/BEER TASTING 1:150 GSF
2,071 / 150 = 13.8 SPACES REQ'D
STORAGE
4,855 / 1000 = 4.9 SPACES REQ'D
CONCESSIONS 1:150 GSF
367 / 150 = 2.4 SPACES REQ'D
EVENT SPACE (PER CUP)
*SPACE TO BE USED DURING RETAIL OFF HOURS
BICYCLE 1:25 SPACES
50 TOTAL SPACES REQ'D =
2 BICYCLE SPACES

51 ON-SITE VEHICULAR SPACES PROVIDED
17 OFF-SITE VEHICULAR SPACES PROVIDED

SHEET NOTES - SITE PLAN

1. SLOPE AWAY FROM DWELLING MIN. 5% FOR 10'-0" AND 2% THEREAFTER.
2. CONTRACTOR TO VERIFY ALL SETBACKS AND EASEMENTS.

SHEET KEYNOTE LEGEND

NO.	KEYNOTE / REFERENCE NOTE
3.04	FOOD TRUCK AND FARMERS MARKET BOOTH AREA
12.01	CITY OF STAR STANDARD BIKE RACK
13.01	STONE PILLAR WATER FEATURE
13.02	WATERTOWER MONUMENT SIGN
13.03	SHADE SAILS
26.03	CITY OF STAR STANDARD STREET LIGHTS
32.01	6'H SOLID WOOD AND METAL FENCE
32.02	6'H OPEN METAL FENCE
32.03	METAL AND WOOD AUTOMATIC ROLLING VEHICULAR GATE WITH MILLED OLIVE LOGO; GATE TO BE CLOSED DURING OFF HOURS
32.04	METAL AND WOOD LOCKING SWING GATE
32.05	METAL AND WOOD SWING GATE TO OPEN 120 DEG WITH CANE BOLT HOLD OPEN

Studio H ARCHITECTS
306 NE 2nd Street
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STAMP:

CONSULTANT:

REVISIONS

No.	Description	Date

OWNER
DAN AND ANGIE MCGETRICK

PROJECT
THE MILLED OLIVE

PROJECT ADDRESS
1133 S MAIN ST
STAR, ID 83669

SHEET NAME
SITE PLAN

PROJECT NUMBER	23-050
SHEET ISSUE DATE	10/06/23
SUBMITTAL	CUP SUBMITTAL

SHEET
A1.00

EXTERIOR MATERIALS

S-4 COMMON BRICK SIDING
ELDORADO TUNDRABRICK CHALK DUST

S-1 FIBER CEMENT BOARD PANELS
NICHIHA ROUGHSAWN ESPRESSO

S-5 VERTICAL WOOD SIDING
RUSTIC BARN WOOD

P-1 TRIM PAINT
SHERWIN WILLIAMS SW 9175 DEEP
FOREST BROWN

P-2 SIDING PAINT
SHERWIN WILLIAMS SW 6182
ETHEREAL WHITE

P-3 SIDING AND BARN DOOR PAINT
SHERWIN WILLIAMS SW 6335
FIRED BRICK

MATERIAL SCHEDULE

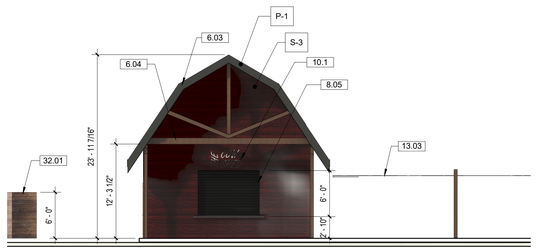
MARK	DESCRIPTION	MANUFACTURER	COLOR	COMMENTS
P-1	PAINT	SHERWIN WILLAMS	SW 9175 DEEP FOREST BROWN	
P-2	PAINT	SHERWIN WILLAMS	SW 6182 ETHEREAL WHITE	
R-1	30 YEAR ASPHALT SHINGLES	TBD	BLACK	
S-1	FIBER CEMENT BOARD PANELS	NICHIHA OR EQUAL	ROUGHSAWN ESPRESSO	
S-2	BOARD AND BATTEN FIBER CEMENT PANELS	JAMES HARDIE OR EQUAL	FACTORY PRIMED FINISH	PAINT P-2
S-3	BOARD AND BATTEN FIBER CEMENT PANELS	JAMES HARDIE OR EQUAL	FACTORY PRIMED FINISH	PAINT P-3
S-4	COMMON BRICK SIDING	EL DORADO OR EQUAL	TUNDRABRICK CHALK DUST	
S-5	VERTICAL WOOD SIDING	TBD	RUSTIC BARN WOOD	PROVIDE SAMPLE FOR APPROVAL

KITCHEN EQUIPMENT SCHEDULE

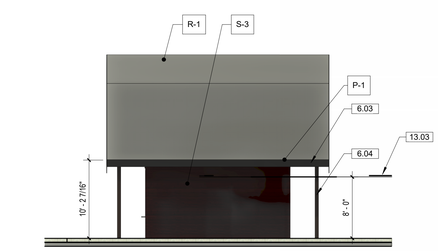
Room: Number	Room: Name	MARK	QTY.	DESCRIPTION	MANUFACTURER	MODEL	COMMENTS
300	CONCESSIONS	K-3	1	MICROWAVE	PANASONIC	NE-1054F	
		K-13	1	SINGLE RACK DISHWASHER	CMA DISHMACHINES	AH	
300	CONCESSIONS	K-15	1	FRYER	COOK RITE	ATSF-50	
300	CONCESSIONS	K-15	1	HANDWASH SINK	MIX RITE	MRS-HS-14(W)	
300	CONCESSIONS	K-19	1	THERMOSTATIC GRIDDLE	COOK RITE	ATTG-36	
300	CONCESSIONS	K-20	1	SHELVING, EPOXY COATED, FLOOR	REGENCY	36x24x74	GREEN EPOXY, 5 SHELF
300	CONCESSIONS	K-20	1	SHELVING, EPOXY COATED, FLOOR	REGENCY	36x24x74	GREEN EPOXY, 5 SHELF
300	CONCESSIONS	K-20	1	SHELVING, EPOXY COATED, FLOOR	REGENCY	36x24x74	GREEN EPOXY, 5 SHELF
300	CONCESSIONS	K-26	1	1 COMPARTMENT SINK	ADVANCE TABCO	FC-1-1824-24R	
300	CONCESSIONS	K-27	1	REFRIGERATOR, REACH IN	Beverage-Air	R18HC	
300	CONCESSIONS	K-28	1	REFRIGERATOR, GLASS FRONT REACH IN	Beverage-Air	R18HC	
300	CONCESSIONS	K-29	1	COMBI OVEN	Vulcan	ABC7G-NATP	
300	CONCESSIONS	K-30	1	Ice Cream Storage Cabinet	Master-Bilt	DC-4D	
300	CONCESSIONS	K-31	1	WORK TABLE	MIX RITE	SSTW-3030	
300	CONCESSIONS	K-32	1	3 COMPARTMENT CORNER SINK	REGENCY	600S32323XC	

SHEET KEYNOTE LEGEND

NO.	KEYNOTE / REFERENCE NOTE
6.03	1x WOOD TRIM PAINTED P-1
6.04	DECORATIVE WOOD TRUSS AND POSTS
8.05	ROLLING COUNTER DOOR
10.1	WALL MOUNTED SIGNAGE UNDER SEPARATE PERMIT
13.03	SHADE SAILS
32.01	6'H SOLID WOOD AND METAL FENCE



5 CONCESSIONS - W ELEV.
1/8" = 1'-0"



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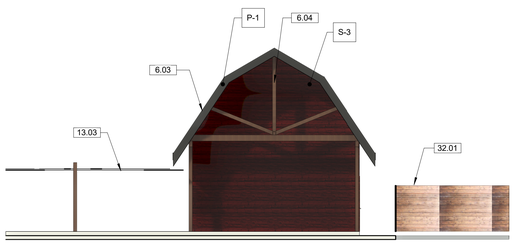
1/8" = 1'-0"



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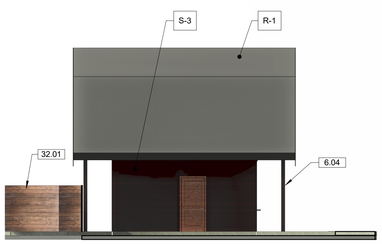
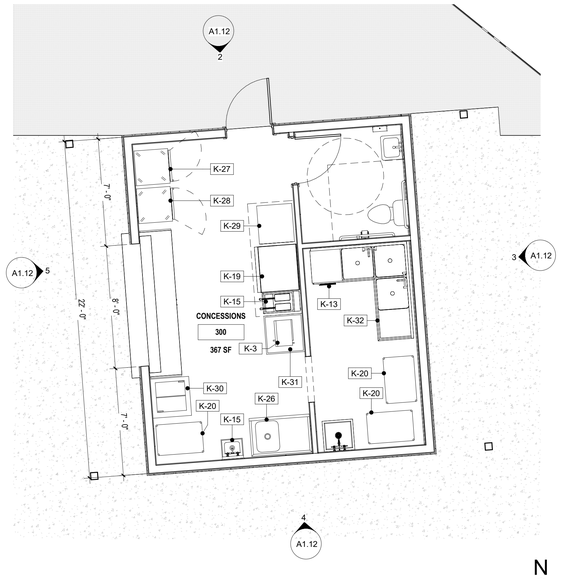
1/8" = 1'-0"



2 CONCESSIONS - N ELEV.
1/8" = 1'-0"



1 CONCESSIONS BLDG. FLOORPLAN
1/4" = 1'-0"

N

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Meridian, ID 83642
208-283-4593
www.studioharchitects.com

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CONSULTANT:

REVISIONS

No.	Description	Date

OWNER
DAN AND ANGIE MCGETRICK

PROJECT
THE MILLED OLIVE

PROJECT ADDRESS
1133 S MAIN ST
STAR, ID 83669

SHEET NAME
CONCESSIONS BUILDING PLANS

PROJECT NUMBER	23-050
SHEET ISSUE DATE	10/06/23
SUBMITTAL	CUP SUBMITTAL

SHEET
A1.12

EXTERIOR MATERIALS

S-4 COMMON BRICK SIDING
ELDORADO TUNDRABRICK CHALK DUST

S-1 FIBER CEMENT BOARD PANELS
NICHIHA ROUGHSAWN ESPRESSO

S-5 VERTICAL WOOD SIDING
RUSTIC BARN WOOD

P-1 TRIM PAINT
SHERWIN WILLIAMS SW 9175 DEEP
FOREST BROWN

P-2 SIDING PAINT
SHERWIN WILLIAMS SW 6182
ETHEREAL WHITE

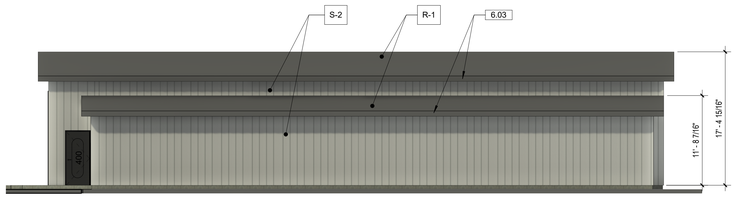
P-3 SIDING AND BARN DOOR PAINT
SHERWIN WILLIAMS SW 6335
FIRED BRICK

MATERIAL SCHEDULE

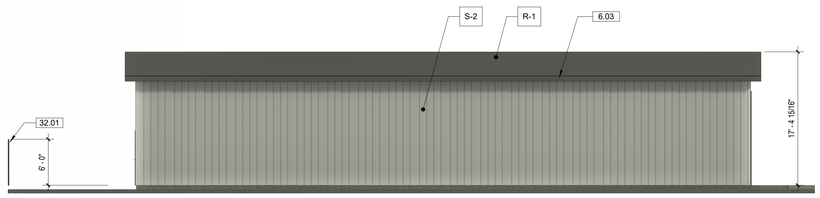
MARK	DESCRIPTION	MANUFACTURER	COLOR	COMMENTS
P-1	PAINT	SHERWIN WILLAMS	SW 9175 DEEP FOREST BROWN	
P-2	PAINT	SHERWIN WILLAMS	SW 6182 ETHEREAL WHITE	
R-1	30 YEAR ASPHALT SHINGLES	TBD	BLACK	
S-1	FIBER CEMENT BOARD PANELS	NICHIHA OR EQUAL	ROUGHSAWN ESPRESSO	
S-2	BOARD AND BATTEN FIBER CEMENT PANELS	JAMES HARDIE OR EQUAL	FACTORY PRIMED FINISH	PAINT P-2
S-3	BOARD AND BATTEN FIBER CEMENT PANELS	JAMES HARDIE OR EQUAL	FACTORY PRIMED FINISH	PAINT P-3
S-4	COMMON BRICK SIDING	EL DORADO OR EQUAL	TUNDRABRICK CHALK DUST	
S-5	VERTICAL WOOD SIDING	TBD	RUSTIC BARN WOOD	PROVIDE SAMPLE FOR APPROVAL

SHEET KEYNOTE LEGEND

NO.	KEYNOTE / REFERENCE NOTE
6.03	1x WOOD TRIM PAINTED P-1
8.04	OVERHEAD GARAGE DOOR WITH FULL VISION SECTION
32.01	6'H SOLID WOOD AND METAL FENCE



6 STOR. BLDG. - S ELEV.
1/8" = 1'-0"



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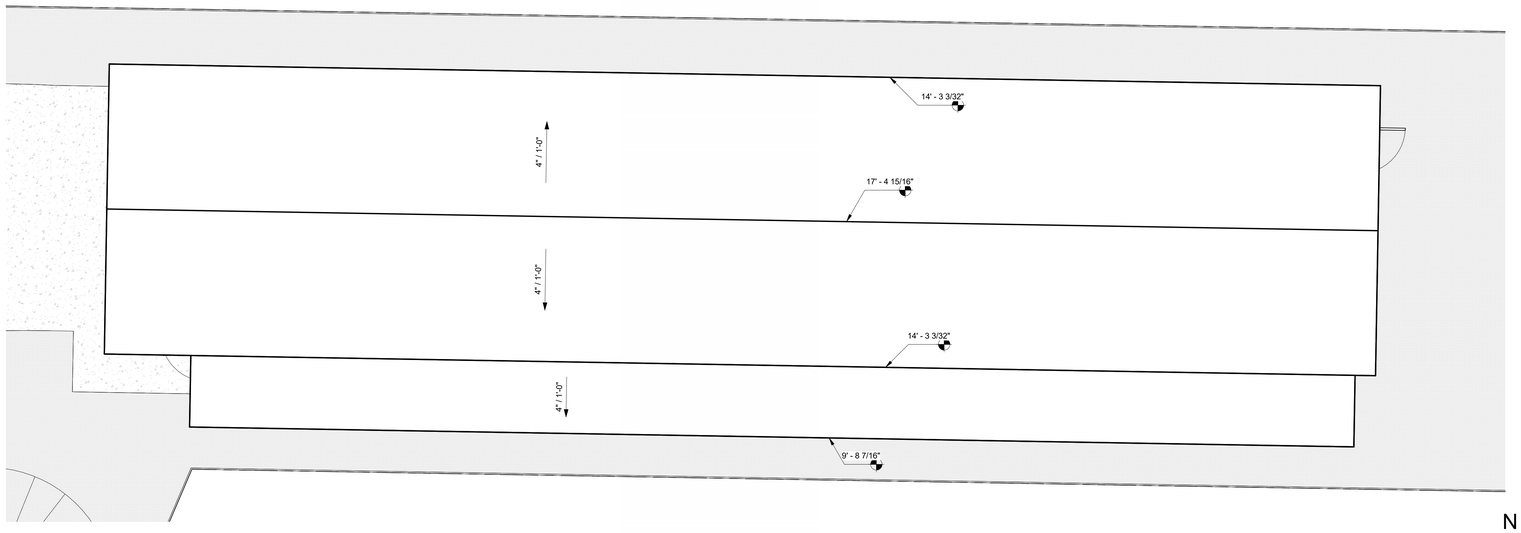
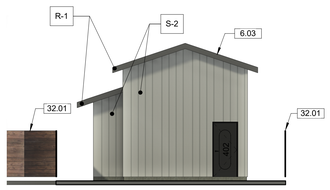
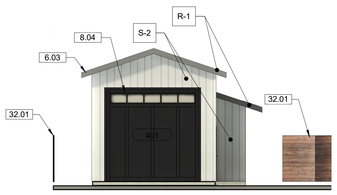
1/8" = 1'-0"



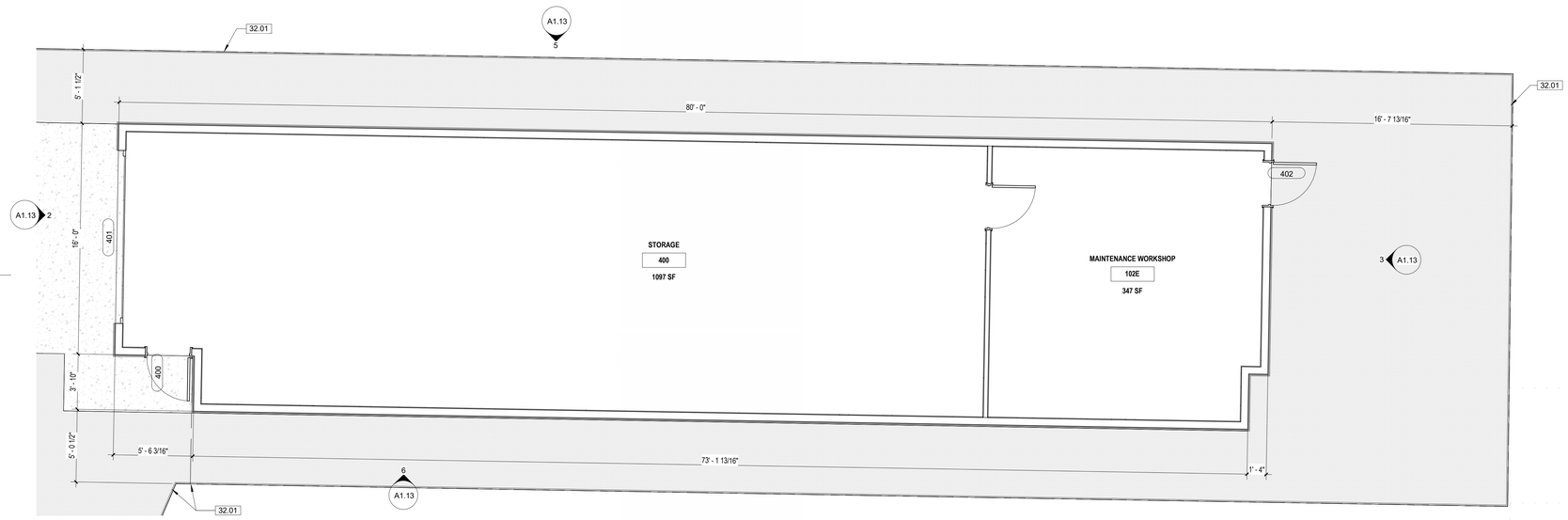
4 STOR BLDG ROOF PLAN
1/4" = 1'-0"



3 STOR. BLDG. - E ELEV.
1/8" = 1'-0"



2 STOR. BLDG. - W ELEV.
1/8" = 1'-0"



1 STORAGE BLDG. FLOORPLAN
1/4" = 1'-0"

N

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CONSULTANT:

REVISIONS

No.	Description	Date

OWNER
DAN AND ANGIE MCGETRICK

PROJECT
THE MILLED OLIVE

PROJECT ADDRESS
1133 S MAIN ST
STAR, ID 83669

SHEET NAME
STORAGE BUILDING PLANS

PROJECT NUMBER	23-050
SHEET ISSUE DATE	10/06/23
SUBMITTAL	CUP SUBMITTAL

SHEET
A1.13

EXTERIOR MATERIALS

S-4 COMMON BRICK SIDING
ELDORADO TUNDRABRICK CHALK DUST

S-1 FIBER CEMENT BOARD PANELS
NICHIHA ROUGHSAWN ESPRESSO

S-5 VERTICAL WOOD SIDING
RUSTIC BARN WOOD

P-1 TRIM PAINT
SHERWIN WILLIAMS SW 9175 DEEP FOREST BROWN

P-2 SIDING PAINT
SHERWIN WILLIAMS SW 6182 ETHEREAL WHITE

P-3 SIDING AND BARN DOOR PAINT
SHERWIN WILLIAMS SW 6335 FIRED BRICK

MATERIAL SCHEDULE

MARK	DESCRIPTION	MANUFACTURER	COLOR	COMMENTS
P-1	PAINT	SHERWIN WILLAMS	SW 9175 DEEP FOREST BROWN	
P-2	PAINT	SHERWIN WILLAMS	SW 6182 ETHEREAL WHITE	
R-1	30 YEAR ASPHALT SHINGLES	TBD	BLACK	
S-1	FIBER CEMENT BOARD PANELS	NICHIHA OR EQUAL	ROUGHSAWN ESPRESSO	
S-2	BOARD AND BATTEN FIBER CEMENT PANELS	JAMES HARDIE OR EQUAL	FACTORY PRIMED FINISH	PAINT P-2
S-3	BOARD AND BATTEN FIBER CEMENT PANELS	JAMES HARDIE OR EQUAL	FACTORY PRIMED FINISH	PAINT P-3
S-4	COMMON BRICK SIDING	EL DORADO OR EQUAL	TUNDRABRICK CHALK DUST	
S-5	VERTICAL WOOD SIDING	TBD	RUSTIC BARN WOOD	PROVIDE SAMPLE FOR APPROVAL

SHEET KEYNOTE LEGEND

NO.	KEYNOTE / REFERENCE NOTE
3.05	PRECAST CONCRETE BOLLARDS
5.01	EXTERIOR BALCONY WITH METAL RAILINGS
6.01	EXTERIOR FIXED WOOD SHUTTERS TO MATCH S-5 WITH METAL BANDS PAINTED P-1
6.02	EXTERIOR FIXED BARN DOORS PAINTED P-3
6.03	1x WOOD TRIM PAINTED P-1
6.04	DECORATIVE WOOD TRUSS AND POSTS
8.04	OVERHEAD GARAGE DOOR WITH FULL VISION SECTION
8.06	GLASS ROLLING COUNTER DOOR
10.1	WALL MOUNTED SIGNAGE UNDER SEPARATE PERMIT
13.01	STONE PILLAR WATER FEATURE
13.02	WATERTOWER MONUMENT SIGN
32.01	6'H SOLID WOOD AND METAL FENCE
32.02	6'H OPEN METAL FENCE

4 MAIN ELEV B
1/8" = 1'-0"

3 S ELEV B
1/8" = 1'-0"

2 N ELEV B
1/8" = 1'-0"

1 STAR RD ELEV B
1/8" = 1'-0"

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OWNER
DAN AND ANGIE MCGETRICK

PROJECT
THE MILLED OLIVE

PROJECT ADDRESS
1133 S MAIN ST
STAR, ID 83669

SHEET NAME
EXTERIOR ELEVATIONS

PROJECT NUMBER	23-050
SHEET ISSUE DATE	10/06/23
SUBMITTAL	CUP SUBMITTAL

SHEET
A2.01

LANDSCAPE REQUIREMENTS:

CODE REQUIREMENTS PER CITY CODE

STREET BUFFER:
*1 TREE PER #LF, # SHRUBS PER #LF

STREET NAME	LENGTH (LF)	TREES/SHRUBS REQUIRED	TREES/SHRUBS PROVIDED
STAR RD	195	6	6
S MAIN ST	458	13	13

PERIMETER BUFFER:
*1 TREE PER #LF, # SHRUBS PER #LF

BUFFER LOCATION/LENGHT	ADJACENCY	TREES/SHRUBS REQUIRED	TREES/SHRUBS PROVIDED
BUFFER A	RESIDENTIAL	##	##

PARKING LOT:
*1 TREE PER PARKING ISLAND/TERMINAL PLANTER

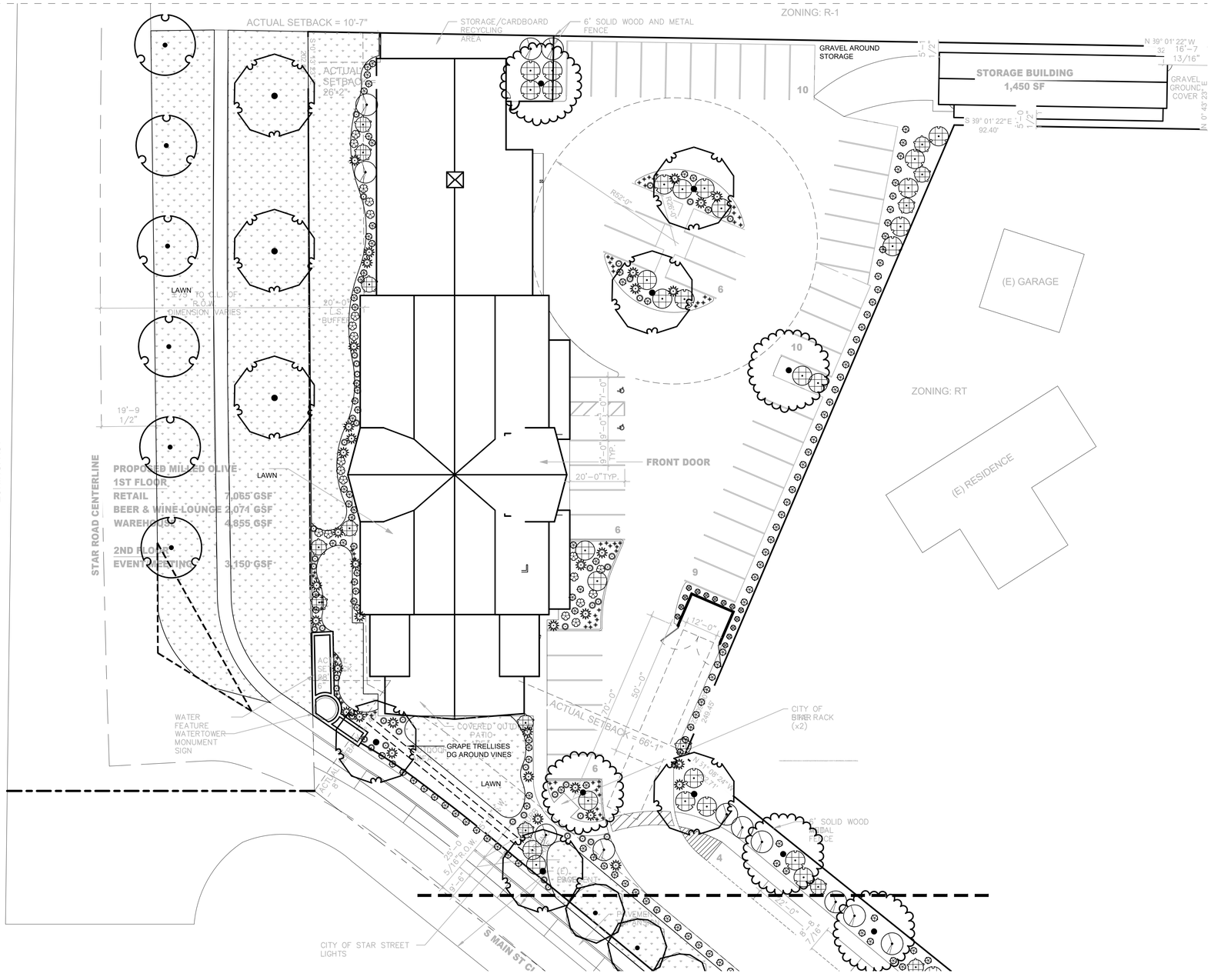
PLANTERS	TREES REQUIRED	TREES PROVIDED
#	#	#

MINIMUM PLANT SIZES:

PLANT TYPE:	MINIMUM SIZE
*EVERGREEN TREES:	6'-0" HT. MIN.
*ORNAMENTAL TREES:	2" CALIPER MIN.
*SHADE TREES:	2" CALIPER MIN.
*WOODY SHRUBS:	2 GAL. MIN.

PLANT SCHEDULE

TREES	BOTANICAL / COMMON NAME	CONT	CAL	QTY	REMARKS
	Acer platanoides `Parkway` / Norway Maple	B&B	3"	9	25`H x 25`W, CLASS II
	Betula nigra `BNMTF` TM / Dura Heat River Birch	B&B	2"	10	35`H x 30`W, CLASS II
	Gleditsia triacanthos inermis `Shademaster` TM / Shademaster Locust	B&B	2"	5	35`H x 35`W, CLASS II
	Tilia cordata `Greenspire` / Greenspire Littleleaf Linden	B & B	2"	6	35`H x 25`W, Class II
SHRUBS	BOTANICAL / COMMON NAME	CONT	FIELD2	QTY	REMARKS
	Calamagrostis x acutiflora `Karl Foerster` / Feather Reed Grass	2 gal		189	30"H x 3`W
	Caryopteris x clandonensis `Worcester Gold` / Worchester Gold Bluebeard	2 gal		26	4`H x 5`W
	Helictotrichon sempervirens `Blue Oats` / Blue Oat Grass	2 gal		60	30"H x 30"W
	Juniperus horizontalis `Blue Rug` / Blue Rug Juniper	2 gal		17	8" h & 8` w
	Juniperus scopulorum `Skyrocket` / Skyrocket Juniper	2 gal		14	15` h & 3` w
	Nassella tenuissima `Pony Tails` / Mexican Feathergrass	1 gal		65	24"h x 18"w
	Physocarpus opulifolius `Monlo` TM / Diabolo Purple Ninebark	2 gal		17	6`H x 10`W
	Rhus aromatica `Gro-Low` / Gro-Low Fragrant Sumac	2 gal		20	2.5`H x 6`W+
	Rhus typhina 'Lacinata' / Cutleaf Staghorn Sumac	2 gal		22	6-12' h & 6-10' w
	Yucca filamentosa `Color Guard` / Adam`s Needle	2 gal		42	3`h x 4`w



NORTH
0 20 40 60 feet
SCALE: 1" = 20'

STACK ROCK GROUP
LANDSCAPE ARCHITECTURE & MASTER PLANNING

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404 S 8th St. #300A1
Boise, ID 83702
StackRockGroup.com

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OFFICE: (208) 345.0500 EMAIL:
WILL@STACKROCKGROUP.COM
www.STACKROCKGROUP.COM

Seals

PRELIMINARY

STATE OF IDAHO · WILLET C. HOWARD · LA-167.33 · 10.05.23 · LICENSED LANDSCAPE ARCHITECT

NOT FOR CONSTRUCTION

THE MILLED OLIVE

1133 S MAIN, STAR, ID

REVISIONS

MRK	DATE	Description
1	**	**

JOB NO:	23-2767
DATE:	09.18.2023
DRAWN BY:	JB
CHECKED BY:	JB

DRAWING TITLE

LANDSCAPE PLAN - AREA 1

SHEET NUMBER

L100

LANDSCAPE REQUIREMENTS:

CODE REQUIREMENTS PER CITY CODE

STREET BUFFER:
*1 TREE PER #LF, # SHRUBS PER #LF

STREET NAME	LENGTH (LF)	TREES/SHRUBS REQUIRED	TREES/SHRUBS PROVIDED
STAR RD	195	6	6
S MAIN ST	458	13	13

PERIMETER BUFFER:
*1 TREE PER #LF, # SHRUBS PER #LF

BUFFER LOCATION/LENGHT	ADJACENCY	TREES/SHRUBS REQUIRED	TREES/SHRUBS PROVIDED
BUFFER A	RESIDENTIAL	##	##

PARKING LOT:
*1 TREE PER PARKING ISLAND/TERMINAL PLANTER

PLANTERS	TREES REQUIRED	TREES PROVIDED
#	#	#

MINIMUM PLANT SIZES:

PLANT TYPE:	MINIMUM SIZE
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PLANT SCHEDULE

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SHRUBS	BOTANICAL / COMMON NAME	CONT	FIELD2	QTY	REMARKS
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	Caryopteris x clandonensis `Worcester Gold` / Worchester Gold Bluebeard	2 gal		26	4'H x 5'W
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	Juniperus horizontalis `Blue Rug` / Blue Rug Juniper	2 gal		17	8" h & 8` w
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	Nassella tenuissima `Pony Tails` / Mexican Feathergrass	1 gal		65	24"h x 18"w
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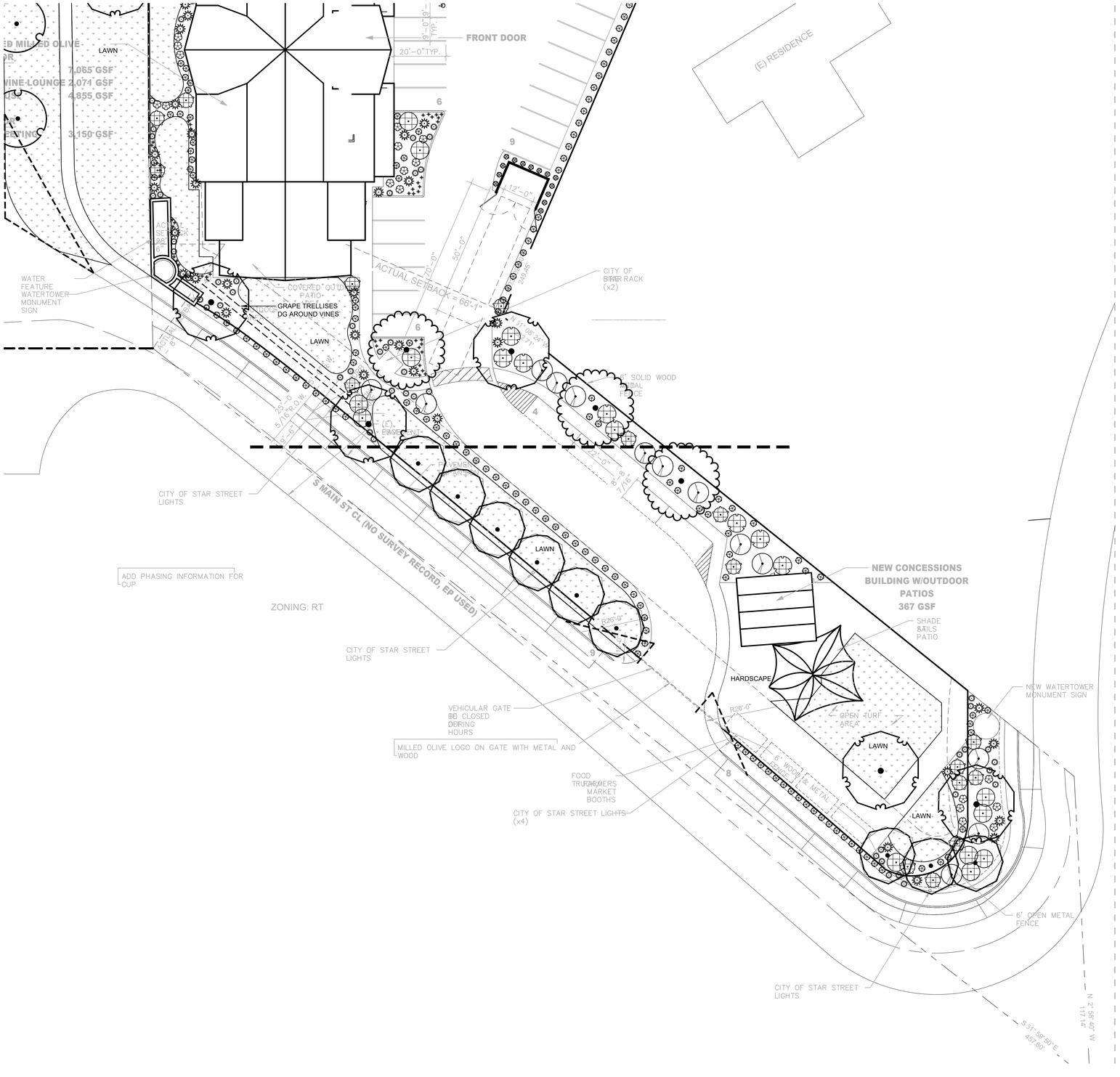
	Rhus aromatica `Gro-Low` / Gro-Low Fragrant Sumac	2 gal		20	2.5'H x 6`W+
	Rhus typhina 'Lacinata' / Cutleaf Staghorn Sumac	2 gal		22	6-12' h & 6-10' w
	Yucca filamentosa `Color Guard` / Adam`s Needle	2 gal		42	3`h x 4`w



NORTH
0 20 40 60 feet
SCALE: 1" = 20'

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Seals

PRELIMINARY

STATE OF IDAHO · WILLET C. HOWARD · LA-167.33 · 10.05.23 · LICENSED LANDSCAPE ARCHITECT

NOT FOR CONSTRUCTION

THE MILLED OLIVE
1133 S MAIN, STAR, ID

REVISIONS

MRK	DATE	Description
1	**	**

JOB NO:	23-2767
DATE:	09.18.2023
DRAWN BY:	JB
CHECKED BY:	JB

DRAWING TITLE

LANDSCAPE PLAN - AREA 2

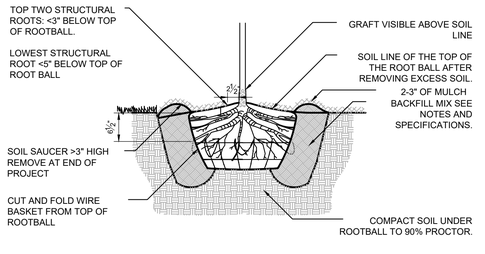
SHEET NUMBER

L101

LANDSCAPE NOTES:

1. REGULATIONS & STANDARDS
   - 1.1. All contractor work shall be conducted in accordance with ISPWC (Idaho Standard Public Works Construction), 2020 (or most recent published); and City of STAR, ID codes, standards and state and local regulations.
2. EXISTING CONDITIONS
   - 2.1. All utilities shall be located prior to construction and protected. Any damage to structures, utilities or concrete will be replaced at contractor's expense.
   - 2.2. The site has many existing improvements such as underground utilities, curb and gutter, light poles and sidewalks.
   - 2.3. See Engineer's plans for information about existing features.
     - 2.3.1. Refer to civil plans for all existing and/or proposed drainage pipes & locations, utilities. Protect all drainage at all times, protect all utilities at all times.
3. GRADING & SITE PREPARATION
   - 3.1. Prepare finish grades for planting by grubbing and removing weeds. If necessary apply Round-Up (or equivalent herbicide), using a certified applicator. Remove rocks and other materials over 2".
   - 3.2. All gravel overprep to be removed and disposed of off site.
   - 3.3. Finish grade to be smooth transition to allow for entire site to be a natural flowing space.
   - 3.4. Fine grade lawn areas to elevations set by Engineer's plans with positive drainage away from structures.
   - 3.5. Refer to Engineer's plans for grading information & for all drainage pipes and locations. Protect and retain drainage at all times.
   - 3.6. No pooling or standing water will be accepted per industry standards.
4. SOILS
   - 4.1. Lawn areas shall receive 12" min depth of screened topsoil.
   - 4.2. All planter beds shall receive 18" min depth of screened topsoil.
   - 4.3. Reuse of existing topsoil that has been stockpiled on site is permitted if:
     - 4.3.1. Topsoil is tested and analyzed to ensure a proper growing medium. Provide additional amendments as determined by soil tests.
     - 4.3.2. Topsoil is to be loose, friable sandy loam that is clean and free of toxic materials, noxious weeds, weed seeds, rocks, grass or other foreign materials.
     - 4.3.3. Topsoil shall have a ph of 6.5 to 8.0.
     - 4.3.4. If on site topsoil does not meet these minimum standards contractor is responsible for providing approved imported topsoil or improving onsite topsoil per the approval of the project manager.
   - 4.4. If imported topsoil is used it must be from a local source and be screened free of any debris or foreign matter. Topsoil must not contain rocks, sticks, lumps, or toxic matter and has a pH of 6.5-8.0.
   - 4.5. Smooth, compact, and fine grade topsoil in lawn areas to smooth and uniform grade .5" below adjacent surfaces.
   - 4.6. Amend all new plantings with 2 parts topsoil, 1 part compost.
5. LAWN AREAS
   - 5.1. Sodded lawn to be tall turf-type fescue, or approved other.
   - 5.2. Sodded lawn to be regionally/locally harvested, lay sod within 24 hours of harvesting.
   - 5.3. Lay sod to form a solid mass with offset, tightly fitted joints on even grades.
   - 5.4. Any existing lawn that is damaged shall be replaced with sodded lawn of the same type of existing lawn.
   - 5.5. All lawn areas adjacent to planter beds, gravel areas, or aggregate pathways shall have 4" black steel edging installed per manufacturer recommendations. Other applications to be approved by owner and landscape architect.
   - 5.6. Lawn adjacent to buildings, structures shall be a minimum of 18" away from foundations. Lawn adjacent to fences or other screening elements shall be a minimum of 9" away.
     - 5.6.1. Install ¾" chips or other approved gravel mulch type in mow strip at a depth of 3" over commercial grade weed barrier fabric installed per manufacturer recommendations.
   - 5.7. Provide tree rings with a minimum 3' diameter around all trees located in lawn, mulch type & installation/application to match all other planter beds.
6. PLANTER BED MULCH
   - 6.1. All planter beds to receive 3" depth of black & tan mini rock mulch or approved equal, submit for approval prior to placement. Install over commercial grade weed barrier fabric per manufacturer recommendations.
7. PLANTS
   - 7.1. All plant material shall be installed per industry standards.
   - 7.2. All plant material shall meet or exceed the minimum federal standards as regulated by ANSI z60.1, American Standard for Nursery Stock. Plants not meeting these standards for quality, or plants determined to be unhealthy by Owner's representative, will be rejected.
   - 7.3. All Ball and Burlap trees to be installed per Balled and Burlapped planting detail. All shrubs to be installed per detail.
   - 7.4. Trees and shrubs over 30" shall not be planted within clear vision triangles.
   - 7.5. Fertilize all trees and shrubs with 'Agriform' planting tablets or approved equal. Apply per manufacturers recommendations.
8. IRRIGATION
   - 8.1. Irrigation system shall be built to the following specifications:
   - 8.2. Adhere to city codes when connecting to city water.
   - 8.3. All irrigation material to be new with manufacturers' warranty fully intact.
   - 8.4. Install outdoor rated controller in specified location on plan, in a lock box with 2 keys. Coordinate with project manager and general contractor on exact location.
     - 8.4.1. Controller to have On/Off rain switch or rain shut off device that does not alter program.
   - 8.5. All remote control valves (including master control valve) to have flow control device.
   - 8.6. Irrigation system piping to be minimum class 200 PVC or approved equal, sleeves to be double the size of pipes located within, all wires to be contained in separate sleeves 1-1/2" dia min.
   - 8.7. All pipe above 3" caliper to be gasketed, with approved joint restraints at all 45, TEE, ELL, 22, 11.
   - 8.8. Use common trenching where possible..
   - 8.9. All PVC located under hardscapes to be schedule 40 PVC with same req's as above.
   - 8.10. All wires to be Paige wire 7350 or 7351 direct bury wire at a minimum of 12" below finished grade.
   - 8.11. Connect mainline to point of connection in approximate location shown on plan.
   - 8.12. Contractor is responsible complying with all codes and paying all permits necessary.
   - 8.13. Sprinkler heads shall have matched precipitation within each control circuit. Velocities shall not exceed 5 feet per second.
   - 8.14. All drip irrigation to be buried 2" below finished grade.
   - 8.15. Water schedule to be provided at a min of 80% evapotranspiration as determined by the local ET.
   - 8.16. Install all irrigation per irrigation drawings. utilize material specified or approved equal.
   - 8.17. Contractor shall confirm the static water pressure at least five days before construction begins and to contact the landscape architect in writing if the pressure is below 80 psi.
   - 8.18. If any discrepancies are found, then local codes shall prevail.
9. CONTRACTOR RESPONSIBILITIES
   - 9.1. Estimated quantities are shown for general reference only. Contractor shall be responsible for all quantity estimates.
   - 9.2. All plant material and workmanship shall be guaranteed for a period of one year beginning at the date of Acceptance by Owner. Replace all dead or unhealthy plant material immediately with same type and size at no cost to Owner.
   - 9.3. Landscape contractor to turn in as built drawings at the end of project. Substantial completion will not be granted until 2 copies @ 1"=20' scale are turned in and approved by owner's representative.
10. In the event of a discrepancy, notify the Landscape Architect immediately.

NOTES:
1. DO NOT DAMAGE OR CUT LEADER
2. DO NOT DISTURB ROOT OR DAMAGE ROOT BALL WHEN INSTALLING TREE OR TREE STAKES.
3. TREE STAKING SHALL BE AT THE DISCRETION OF CONTRACTOR. HOWEVER ANY TREES DISTURBED FROM PLUMB DURING THE PLANT WARRANTEE PERIOD WILL BE REPAIRED OR REPLACED AT CONTRACTOR'S EXPENSE.
4. WATER PLANTS THOROUGHLY IMMEDIATELY AFTER INSTILLATION.
5. REMOVE ALL BURLAP, TWINE, ROPE, OR MATERIAL FROM THE TOP ⅓ OF THE ROOTBALL.
6. 5' DIAMETER PLANTER BED/MULCH RING AROUND THE TRUNK OF THE TREE. 3" OF MULCH MIN. DO NOT PLACE MULCH WITHIN 2" OF TRUNK OF TREE.

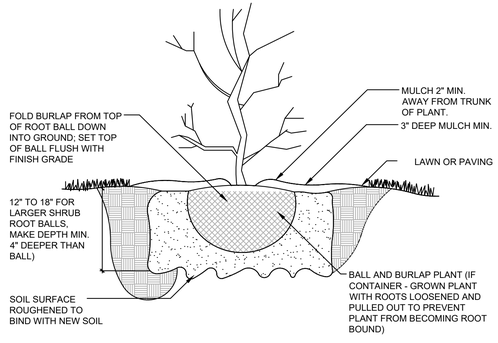


1 BALL & BURLAP TREE PLANTING

3/4" = 1'-0" 3293-01

NOTE:
REMOVE ALL TAGS, TWINE OR OTHER NON BIODEGRADABLE MATERIALS ATTACHED TO PLANT OR ROOT MASS.

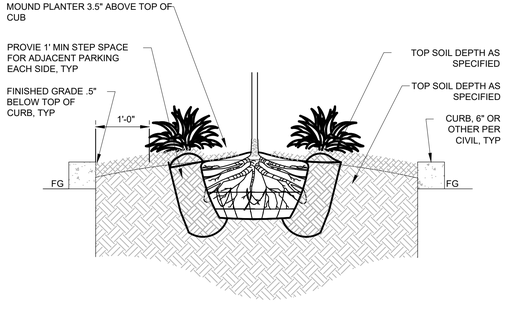
BACKFILL SHALL BE 100% TOPSOIL. WATER SETTLE ALL PLANTINGS TO ENSURE PLANT ROOTBALL MAINTAINS ¾" HEIGHT ABOVE EXISTING SOILS WHEN COMPLETE.



2 SHRUB PLANTING

1" = 1'-0" 329333-03

NOTE:
*CURB & ADJACENT PAVEMENT PER CIVIL OR HARDSCAPE PLANS
*TREE & SHRUB TO BE INSTALLED PER RESPECTIVE DETAILS
*PLANTS & MULCH PER PLAN



3 PLANTER ISLAND DETAIL

3/4" = 1'-0" P-CO-01

STACK ROCK GROUP
LANDSCAPE ARCHITECTURE & MASTER PLANNING

(208) 345-0500
404 S 8th St. #300A1
Boise, ID 83702
StackRockGroup.com

WILLET C HOWARD, PLA
OFFICE: (208) 345.0500 EMAIL:
WILL@STACKROCKGROUP.COM
www.STACKROCKGROUP.COM

Seals

PRELIMINARY

NOT FOR CONSTRUCTION

THE MILLED OLIVE
1133 S MAIN, STAR, ID

REVISIONS

MRK	DATE	Description
1	**	**

JOB NO:	23-2767
DATE:	09.18.2023
DRAWN BY:	JB
CHECKED BY:	JB

DRAWING TITLE

NOTES & DETAILS

SHEET NUMBER

L150

STACK ROCK GROUP - CITY REVIEW SET

Shawn Nickel

From: Saran Becker <Saran.Becker@itd.idaho.gov>
Sent: Wednesday, October 25, 2023 10:02 AM
To: Shawn Nickel
Cc: Barbara Norgrove
Subject: Re: FW: Agency Transmittal - The Milled Olive Mixed Commercial CUP

Good morning Shawn.

ITD does not object to the proposed application as presented at this time.

Thank you,

Saran J Becker
District 3 - Development Services Coordinator

8150 W Chinden Blvd, Garden City, ID 83714
Phone: (208) 334-8377
Email: saran.becker@itd.idaho.gov

Your Safety • Your Mobility
Your Economic Opportunity

MIDDLETON RURAL FIRE DISTRICT

STAR FIRE PROTECTION DISTRICT

DATE: November 30, 2023

TO: City of Star – Planning and Zoning

FROM: Victor Islas, Deputy Chief

SUBJECT: Fire District Review

PROJECT NAME: Milled Olive Conditional Use Permit
Files: CU-23-06

Fire District Summary Report:

1. **Overview** This development can be serviced by the Star Fire Protection District. This development shall comply with the 2018 International Fire Code (IFC) and any codes set forth by the City of Star, Idaho.

2. **Fire Response Time:** This development will be served by the Star Fire Protection District Station 51, located at 11665 W. State St., Star, Idaho 83669. Station 51 is 1.0 miles with a travel time of 3 minutes under ideal driving conditions.

3. **Side Setback:** Side Setback as per Star City Code.

4. **Accessibility:** Roadway Access, Traffic, Radio Coverage
    a. Access roads shall be provided and maintained following Appendix D and Section 503 of the IFC. Access shall include adequate roadway widths, signage, turnarounds, and turning radius for fire apparatus.
    b. Access road design shall be designed and constructed to allow for evacuation simultaneously with emergency response operations.
    c. All access roads in this development shall remain clear and unobstructed during construction of the development. Additional parking restrictions may be required as to always maintain access for emergency vehicles. Hydrants shall always remain unobstructed per city code.
    d. An unobstructed vertical clearance of no less than 13 feet 6 inches shall be always maintained.
    e. Areial Fire Apparatus Access Road per Appendix D Section D105, where the vertical distance between the grade plane and the highest roof surface exceeds 30 ft.

5. **Water Supply:** Water supply requirements will be followed as described in Appendix B of the 2018 International Fire Code unless agreed upon by the Fire District.
    a. Fire Flow: Fire Flow will be calculated during building review.
    b. Water Supply: Final Approval of the fire hydrant locations shall be by the Star Fire Protection District or their designee in accordance with International Fire Code Section (IFC) 508.5.4.
    c. Water Supply: A hydrant must be located within 100 ft from the FDC.

6. **Inspections:**
    a. Final inspection by the Fire District of the above listed including hydrant flow must be completed before building permits are issued.

7. **Additional Comments:**
    a. Additional review will be conducted during the building permit phase of this project. At that time the project will comply with current Fire Code and Codes set forth by the City of Star.
    b. It shall be the responsibly of the applicant to submit appropriate applications and supporting documents to the Fire District for review.

Project/File: **The Milled Olive / STAR23-0007 / CU-23-06**
This is a conditional use permit application for a commercial development which includes a beer & wine lounge and outdoor food truck/farmers market area on 2-acres.

Lead Agency: City of Star

Site address: 1133 S Main Street

Staff Approval: December 5, 2023

Applicant: The Milled Olive, via email
9776 W State Street
Star, ID 83669

Representative: Jessica Heggie, via email
Studio H Architects
306 NE 2nd Street
Meridian, ID 83642

Staff Contact: KaraLeigh Troyer
Phone: 387-6391
E-mail: ktroyer@achdidaho.org

Vicinity Map

A. Findings of Fact

1. **Description of Application:** The applicant is requesting approval of a conditional use permit application for the development of a beer & wine lounge and outdoor food truck/farmers market on 2-acres. The applicant's proposal meets the City of Star's Future Land Use Map which designates the area as a Central Business District.

2. **Description of Adjacent Surrounding Area:**

Direction	Land Use	Zoning
North	Residential	R-1
South	Very Low Density	RT
East	Very Low Density	RT
West	Rural-Urban Transition	RUT (Ada County)

3. **Site History:** ACHD previously reviewed this site as STAR20-0009 in November 2020 as a rezone only with site specific conditions to be set with future development.

4. **Transit:** Transit services are not available to serve this site.

5. **Pathway Crossings:** United States Access Board R304.5.1.2 Shared Use Paths. In shared use paths, the width of curb ramps runs and blended transitions shall be equal to the width of the shared use path.

   AASHTO's Guidelines for the Development of Bicycle Facilities 5.3.5 Other Intersection Treatments: The opening of a shared use path at the roadway should be at least the same width

as the shared use path itself. If a curb ramp is provided, the ramp should be the full width of the path, not including any flared sides if utilized. . . . Detectable warnings should be placed across the full width of the ramp.

FHWA's "Designing Sidewalks and Trails for Access" (1999) reflected common ADA-related concepts: Chapter 6, Page 16-6: The width of the ramp should be at least as wide as the average width of the trail to improve safety for users who will be traveling at various speeds. In addition, the overall width of the trail should be increased, so the curb ramp can be slightly offset to the side. The increased width reduces conflict at the intersection by providing more space for users at the bottom of the ramp.

6. **New Center Lane Miles:** The proposed development includes 0 centerline miles of new public road.

7. **Impact Fees:** There will be an impact fee that is assessed and due prior to issuance of any building permits. The assessed impact fee will be based on the impact fee ordinance that is in effect at that time. The impact fee assessment will not be released until the civil plans are approved by ACHD.

8. **Capital Improvements Plan (CIP)/ Integrated Five Year Work Plan (IFYWP):**
   - Star Road is scheduled in the IFYWP to be widened to 5-lanes from Chinden Boulevard to State Street with a design, right-of-way, and construction year date yet to be determined.
   - The intersection of Star Road and Main Street is scheduled in the IFYWP for a community improvement project with the construction of a pedestrian crossing with a design year of 2023, a right-of-way year of 2024-2025, and a construction year of 2026.
   - Star Road is scheduled in the IFYWP to receive enhanced pedestrian facilities on the west side of the roadway and a pedestrian bridge over the Lawrence Kennedy Canal (Bridge #1007) with a design year of 2023, a right-of-way year of 2024-2025, and a construction year of 2026.

9. **Roadways to Bikeways Master Plan:** ACHD's Roadways to Bikeways Master Plan (BMP) was adopted by the ACHD Commission in May of 2009 and was update in 2018. The plan seeks to implement the Planned Bicycle Network to support bicycling as a viable transportation option for Ada County residents with a wide range of ages and abilities, maintain bicycle routes in a state of good repair in order to ensure they are consistently available for use, promote awareness of existing bicycle routes and features and support encouragement programs and to facilitate coordination and cooperation among local jurisdictions in implementing the Roadways to Bikeways Plan recommendations.

   The BMP identifies Star Road as an existing Level 3 and future Level 1 facility and Main Street as an existing Level 1 facility.

B. Traffic Findings for Consideration

1. **Trip Generation:** This development is estimated to generate 98 vehicle trips per hour in the PM peak hour, based on the Institute of Transportation Engineers Trip Generation Manual, 11th edition.

2. **Condition of Area Roadways**
   Traffic Count is based on Vehicles per hour (VPH)

Roadway	Frontage	Functional Classification	PM Peak Hour Traffic Count	PM Peak Hour Level of Service
Star Road	279-feet	Arterial	483	Better than "E"
Main Street	458-feet	Local	N/A	N/A

* Acceptable level of service for a two-lane minor arterial is “E” (575 VPH).
** ACHD does not set level of service thresholds for local roadways.

3. Average Daily Traffic Count (VDT)
Average daily traffic counts are based on ACHD’s most current traffic counts.

- The average daily traffic count for Star Road south of SH-44 was 12,022 on October 26, 2022.
- There are no existing average daily traffic counts for Main Street.

C. Findings for Consideration

1. Star Road

a. Existing Conditions: Star Road is improved with 2-travel lanes and no curb, gutter or sidewalk abutting the site. There is 133-149 feet of right-of-way for Star Road (75-77 feet from centerline).

b. Policy:
Arterial Roadway Policy: District Policy 7205.2.1 states that the developer is responsible for improving all street frontages adjacent to the site regardless of whether or not access is taken to all of the adjacent streets.

Master Street Map and Typology Policy: District Policy 7205.5 states that the design of improvements for arterials shall be in accordance with District standards, including the Master Street Map and Livable Streets Design Guide. The developer or engineer should contact the District before starting any design.

Street Section and Right-of-Way Width Policy: District Policies 7205.2.1 & 7205.5.2 state that the standard 5-lane street section shall be 72-feet (back-of-curb to back-of-curb) within 96-feet of right-of-way. This width typically accommodates two travel lanes in each direction, a continuous center left-turn lane, and bike lanes on a minor arterial and a safety shoulder on a principal arterial.

Right-of-Way Dedication: District Policy 7205.2 states that The District will provide compensation for additional right-of-way dedicated beyond the existing right-of-way along arterials listed as impact fee eligible in the adopted Capital Improvements Plan using available impact fee revenue in the Impact Fee Service Area.

No compensation will be provided for right-of-way on an arterial that is not listed as impact fee eligible in the Capital Improvements Plan.

The District may acquire additional right-of-way beyond the site-related needs to preserve a corridor for future capacity improvements, as provided in Section 7300.

Sidewalk Policy: District Policy 7205.5.7 requires a concrete sidewalk at least 5-feet wide to be constructed on both sides of all arterial streets. A parkway strip at least 6-feet wide between the back-of-curb and street edge of the sidewalk is required to provide increased safety and protection of pedestrians. Consult the District’s planter width policy if trees are to be placed within the parkway strip. Sidewalks constructed next to the back-of-curb shall be a minimum of 7-feet wide.

Detached sidewalks are encouraged and should be parallel to the adjacent roadway. Meandering sidewalks are discouraged.

A permanent right-of-way easement shall be provided if public sidewalks are placed outside of the dedicated right-of-way. The easement shall encompass the entire area between the right-of-way line and 2-feet behind the back edge of the sidewalk. Sidewalks shall either be located wholly within the public right-of-way or wholly within an easement.

Frontage Improvements Policy: District Policy 7205.2.1 states that the developer shall widen the pavement to a minimum of 17-feet from centerline plus a 3-foot wide gravel shoulder adjacent to the entire site. Curb, gutter and additional pavement widening may be required (See Section 7205.5.5).

ACHD Master Street Map: ACHD Policy Section 3111.1 requires the Master Street Map (MSM) guide the right-of-way acquisition, arterial street requirements, and specific roadway features required through development. This segment of Star Road is designated in the MSM as a Residential Arterial with 5-lanes and on-street bike lanes, a 72-foot street section within 100-feet of right-of-way.

c. Applicant Proposal: The applicant is proposing to construct 5-foot wide detached concrete sidewalk 41-feet from centerline abutting the site on Star Road.

d. Staff Comments/Recommendations: The applicant's proposal to construct 5-foot wide detached concrete sidewalk meets District policy and should be approved, as proposed. The applicant should be required to place the sidewalk in the ultimate location for detached sidewalk 43-feet from centerline.

The applicant should be required to widen the pavement to total 17-feet from centerline with a 3-foot wide gravel shoulder abutting the site on Star Road.

For detached sidewalk, the applicant should be required to provide a permanent right-of-way easement from the right-of-way line to 2-feet behind back of sidewalk.

2. Main Street

a. Existing Conditions: Main Street is improved with 2-travel lanes and no curb, gutter or sidewalk abutting the site. There is 44-50 feet of prescriptive right-of-way for Main Street (21-24 feet from centerline).

b. Policy:

Commercial Roadway Policy: District Policy 7208.2.1 states that the developer is responsible for improving all commercial street frontages adjacent to the site regardless of whether or not access is taken to all of the adjacent streets.

Street Section and Right-of-Way Policy: District Policy 7208.5 states that right-of-way widths for new commercial streets shall typically be 50 and 70-feet wide and that the standard street section will vary depending on the need for a center turn lane, bike lanes, volumes, percentage of truck traffic, and/or on-street parking.

- A 36-foot street section (back-of-curb to back-of-curb) will typically accommodate two travel lanes and on-street parking.
- A 40-foot street section (back-of-curb to back-of-curb) will typically accommodate two travel lanes and a center turn lane.
- A 46-foot street section (back-of-curb to back-of-curb) will typically accommodate two travel lanes and a center turn lane and bike lanes.

Sidewalk Policy: District Policy 7208.5.6 requires a concrete sidewalks at least 5-feet wide to be constructed on both sides of all commercial streets. If a separated sidewalk is proposed, a parkway strip at least 6-feet wide between the back-of-curb and street edge of the sidewalk is required to provide increased safety and protection of pedestrians. Consult the District's planter width policy if trees are to be placed within the parkway strip.

A permanent right-of-way easement shall be provided if public sidewalks are placed outside of the dedicated right-of-way. The easement shall encompass the entire area between the right-

of-way line and 2-feet behind the back edge of the sidewalk. Sidewalks shall either be located wholly within the public right-of-way or wholly within an easement.

c. Applicant's Proposal: The applicant is proposing to construct curb, gutter, and 5-foot wide attached concrete sidewalk abutting the site on Main Street.

d. Staff Comments/Recommendations: The applicant's proposal to construct curb, gutter, and 5-foot wide attached concrete sidewalk abutting the site on Main Street meets District policy and should be approved, as proposed. The applicant should be required to construct Main Street as ½ of a 36-foot local commercial street section.

The applicant should dedicate right-of-way to extend from the site's south property line north to 2-feet behind the back edge of sidewalk on Main Street abutting the site.

This site plan shows striping parking stalls on Main Street abutting the site. While on-street parking is allowed on a 36-foot wide street section, on-street parking cannot be striped, dedicated for use only the applicant, or counted toward City of Star parking requirements. ACHD can remove on-street parking at any time as conditions warrant.

3. Driveways

3.1 Main Street

a. Existing Conditions: There is an existing 12-foot wide unimproved gated driveway from the site onto Main Street located 110-feet east of Star Road (measured centerline to centerline).

b. Policy:

Driveway Location Policy: District policy 7207.4.1 requires driveways near intersections to be located a minimum of 75-feet (measured centerline-to-centerline) from the nearest local street intersection, and 150-feet from the nearest collector or arterial street intersection.

Successive Driveways: District Policy 7207.4.1 states that successive driveways away from an intersection shall have no minimum spacing requirements for access points along a local street, but the District does encourage shared access points where appropriate.

Driveway Width Policy: District policy 7207.4.3 states that where vertical curbs are required, residential driveways shall be restricted to a maximum width of 20-feet and may be constructed as curb-cut type driveways.

Driveway Paving Policy: Graveled driveways abutting public streets create maintenance problems due to gravel being tracked onto the roadway. In accordance with District policy, 7207.4.3, the applicant should be required to pave the driveway its full width and at least 30-feet into the site beyond the edge of pavement of the roadway.

c. Applicant's Proposal: The applicant is proposing to construct a 32-foot wide curb-return type driveway from the site onto Main Street located 352-feet from Star Road (measured centerline to centerline).

d. Staff Comments/Recommendations: The applicant's proposal to construct a curb-return type driveway located 352-feet from Star Road meets District policy and should be approved, as proposed.

4. Tree Planters

Tree Planter Policy: Tree Planter Policy: The District's Tree Planter Policy prohibits all trees in planters less than 8-feet in width without the installation of root barriers. Class II trees may be allowed in planters with a minimum width of 8-feet, and Class I and Class III trees may be allowed in planters with a minimum width of 10-feet.

5. Landscaping

Landscaping Policy: A license agreement is required for all landscaping proposed within ACHD right-of-way or easement areas. Trees shall be located no closer than 10-feet from all public storm drain facilities. Landscaping should be designed to eliminate site obstructions in the vision triangle at intersections. District Policy 5104.3.1 requires a 40-foot vision triangle and a 3-foot height restriction on all landscaping located at an uncontrolled intersection and a 50-foot offset from stop signs. Landscape plans are required with the submittal of civil plans and must meet all District requirements prior to signature of the final plat and/or approval of the civil plans.

6. Other Access

Star Road is classified as a minor arterial roadway. Other than the access specifically approved with this application, direct lot access is prohibited to this roadway.

D. Special Recommendation to the City of Star

The Milled Olive project includes a bar/food truck/retail center and is located southwest of a City of Star park and riverwalk access and will likely be a pedestrian attractor given the proposed uses mix of uses and proximity to the park. The Milled Olive project will be constructing a sidewalk on the north side of Main Street. However, there will be a sidewalk gap between the Milled Olive and existing pedestrian improvements (sidewalk and bike lanes) located adjacent to the park site. To provide safe pedestrian access in the area ACHD recommends that the City of Star look for ways to provide additional pedestrian facilities to fill in the sidewalk gap between the proposed Milled Olive and the existing park site.

E. Site Specific Conditions of Approval

1. Construct 5-foot wide detached concrete sidewalk located a minimum of 43-feet from centerline on Star Road abutting the site.

2. Widen the pavement to total 17-feet from centerline abutting the site on Star Road.

3. If the detached sidewalk is located outside of the dedicated right-of-way provide a permanent right-of-way easement from the right-of-way line to 2-feet behind back of sidewalk on Star Road.

4. Construct Main Street as ½ of a 36-foot local commercial street section with curb, gutter, and 5-foot wide attached concrete sidewalk abutting the site on Main Street.

5. Striped and dedicated on-street parking on Main Street is not approved.

6. Dedicate right-of-way on Main Street to extend from the sites south property line north to 2-feet behind the back edge of sidewalk on Main Street abutting the site.

7. Construct a 30-foot wide curb-return type driveway from the site onto Main Street located 352-feet from Star Road.

8. Other than the access specifically approved with this application, direct lot access is prohibited to Star Road.

9. Submit civil plans to ACHD Development Services for review and approval. The impact fee assessment will not be released until the civil plans are approved by ACHD.

10. Payment of impact fees is due prior to issuance of a building permit.

11. Comply with all Standard Conditions of Approval.

F. Standard Conditions of Approval

1. All proposed irrigation facilities shall be located outside of the ACHD right-of-way (including all easements). Any existing irrigation facilities shall be relocated outside of the ACHD right-of-way (including all easements).

2. Private Utilities including sewer or water systems are prohibited from being located within the ACHD right-of-way.

3. In accordance with District policy, 7203.3, the applicant may be required to update any existing non-compliant pedestrian improvements abutting the site to meet current Americans with Disabilities Act (ADA) requirements. The applicant's engineer should provide documentation of ADA compliance to District Development Review staff for review.

4. Replace any existing damaged curb, gutter and sidewalk and any that may be damaged during the construction of the proposed development. Contact Construction Services at 387-6280 (with file number) for details.

5. A license agreement and compliance with the District's Tree Planter policy is required for all landscaping proposed within ACHD right-of-way or easement areas.

6. All utility relocation costs associated with improving street frontages abutting the site shall be borne by the developer.

7. It is the responsibility of the applicant to verify all existing utilities within the right-of-way. The applicant at no cost to ACHD shall repair existing utilities damaged by the applicant. The applicant shall be required to call DIGLINE (1-811-342-1585) at least two full business days prior to breaking ground within ACHD right-of-way. The applicant shall contact ACHD Traffic Operations 387-6190 in the event any ACHD conduits (spare or filled) are compromised during any phase of construction.

8. Utility street cuts in pavement less than five years old are not allowed unless approved in writing by the District. Contact the District's Utility Coordinator at 387-6258 (with file numbers) for details.

9. All design and construction shall be in accordance with the ACHD Policy Manual, ISPWC Standards and approved supplements, Construction Services procedures and all applicable ACHD Standards unless specifically waived herein. An engineer registered in the State of Idaho shall prepare and certify all improvement plans.

10. Construction, use and property development shall be in conformance with all applicable requirements of ACHD prior to District approval for occupancy.

11. No change in the terms and conditions of this approval shall be valid unless they are in writing and signed by the applicant or the applicant's authorized representative and an authorized representative of ACHD. The burden shall be upon the applicant to obtain written confirmation of any change from ACHD.

12. If the site plan or use should change in the future, ACHD Planning Review will review the site plan and may require additional improvements to the transportation system at that time. Any change in the planned use of the property which is the subject of this application, shall require the applicant to comply with ACHD Policy and Standard Conditions of Approval in place at that time unless a waiver/variance of the requirements or other legal relief is granted by the ACHD Commission.

G. Conclusions of Law

1. The proposed site plan is approved, if all of the Site Specific and Standard Conditions of Approval are satisfied.

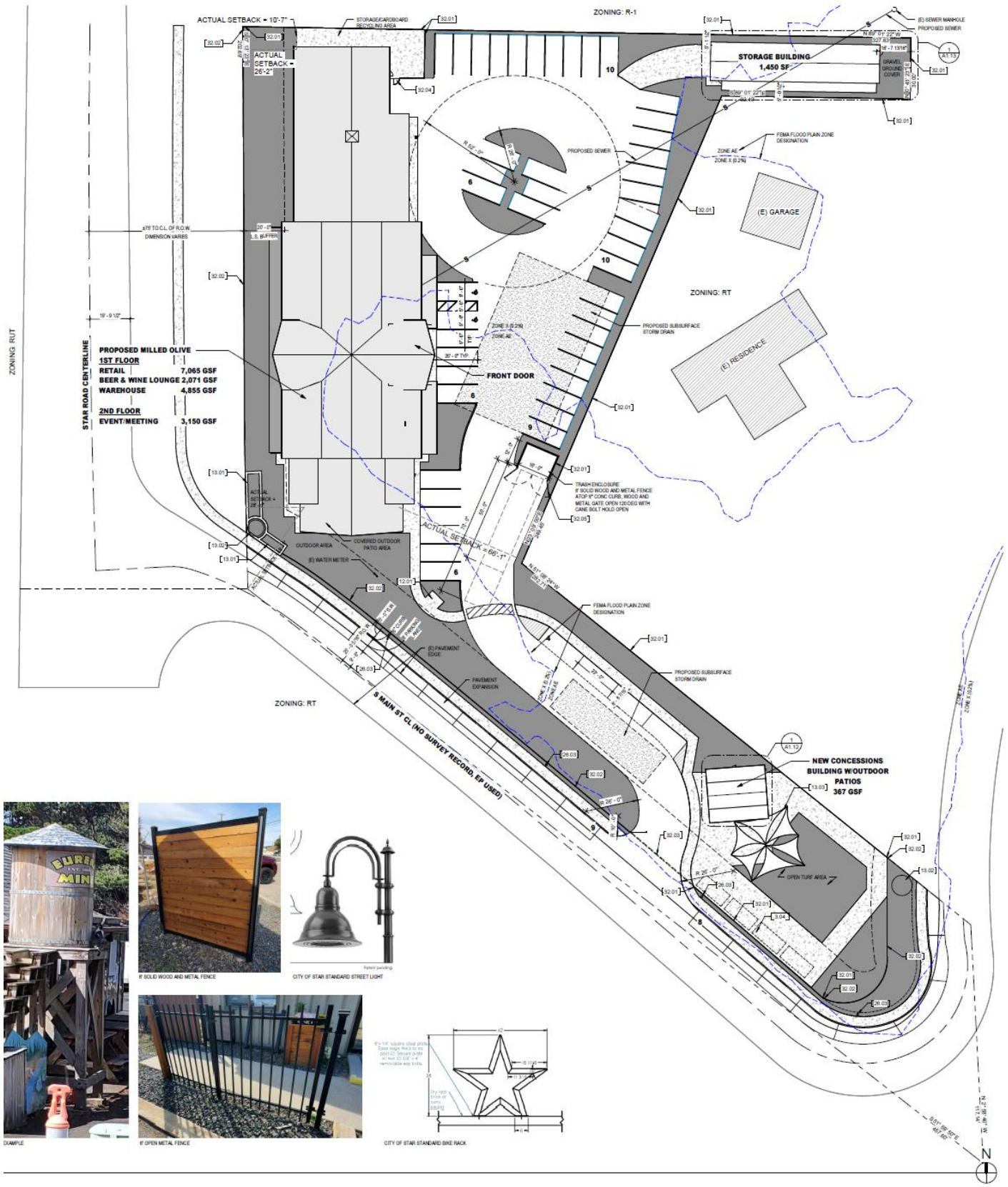
2. ACHD requirements are intended to assure that the proposed use/development will not place an undue burden on the existing vehicular transportation system within the vicinity impacted by the proposed development.

H. Attachments

1. Vicinity Map
2. Site Plan
3. Utility Coordinating Council
4. Development Process Checklist
5. Appeal Guidelines

VICINITY MAP

SITE PLAN



EXAMPLE

6' SOLID WOOD AND METAL FENCE

CITY OF STAR STANDARD STREET LIGHT

6' OPEN METAL FENCE

CITY OF STAR STANDARD BIKE RACK

Ada County Utility Coordinating Council

Developer/Local Improvement District
Right of Way Improvements Guideline Request

Purpose: To develop the necessary avenue for proper notification to utilities of local highway and road improvements, to help the utilities in budgeting and to clarify the already existing process.

1) **Notification:** Within five (5) working days upon notification of required right of way improvements by Highway entities, developers shall provide written notification to the affected utility owners and the Ada County Utility Coordinating Council (UCC). Notification shall include but not be limited to, project limits, scope of roadway improvements/project, anticipated construction dates, and any portions critical to the right of way improvements and coordination of utilities.

2) **Plan Review:** The developer shall provide the highway entities and all utility owners with preliminary project plans and schedule a plan review conference. Depending on the scale of utility improvements, a plan review conference may not be necessary, as determined by the utility owners. Conference notification shall also be sent to the UCC. During the review meeting the developer shall notify utilities of the status of right of way/easement acquisition necessary for their project. At the plan review conference each company shall have the right to appeal, adjust and/or negotiate with the developer on its own behalf. Each utility shall provide the developer with a letter of review indicating the costs and time required for relocation of its facilities. Said letter of review is to be provided within thirty calendar days after the date of the plan review conference.

3) **Revisions:** The developer is responsible to provide utilities with any revisions to preliminary plans. Utilities may request an updated plan review meeting if revisions are made in the preliminary plans which affect the utility relocation requirements. Utilities shall have thirty days after receiving the revisions to review and comment thereon.

4) **Final Notification:** The developer will provide highway entities, utility owners and the UCC with final notification of its intent to proceed with right of way improvements and include the anticipated date work will commence. This notification shall indicate that the work to be performed shall be pursuant to final approved plans by the highway entity. The developer shall schedule a preconstruction meeting prior to right of way improvements. Utility relocation activity shall be completed within the times established during the preconstruction meeting, unless otherwise agreed upon.

Notification to the Ada County UCC can be sent to: 50 S. Cole Rd. Boise 83707, or Visit iducc.com for e-mail notification information.

Development Process Checklist

Items Completed to Date:

☒Submit a development application to a City or to Ada County

☒The City or the County will transmit the development application to ACHD

☒The ACHD **Planning Review Section** will receive the development application to review

☒The **Planning Review Section** will do one of the following:

☐Send a **"No Review"** letter to the applicant stating that there are no site specific conditions of approval at this time.

☒Write a **Staff Level** report analyzing the impacts of the development on the transportation system and evaluating the proposal for its conformance to District Policy.

☒Write a **Commission Level** report analyzing the impacts of the development on the transportation system and evaluating the proposal for its conformance to District Policy.

Items to be completed by Applicant:

☐For **ALL** development applications, including those receiving a **"No Review"** letter:

- The applicant should submit one set of engineered plans directly to ACHD for review by the **Development Review Section** for plan review and assessment of impact fees. (Note: if there are no site improvements required by ACHD, then architectural plans may be submitted for purposes of impact fee assessment.)
- The applicant is required to get a permit from Construction Services (ACHD) for ANY work in the right-of-way, including, but not limited to, driveway approaches, street improvements and utility cuts.

☐Pay Impact Fees prior to issuance of building permit. Impact fees cannot be paid prior to plan review approval.

DID YOU REMEMBER:
Construction (Non-Subdivisions)
☐ **Driveway or Property Approach(s)**

- Submit a "Driveway Approach Request" form to ACHD Construction (for approval by Development Services & Traffic Services). There is a one week turnaround for this approval.

☐ **Working in the ACHD Right-of-Way**

- Four business days prior to starting work have a bonded contractor submit a "Temporary Highway Use Permit Application" to ACHD Construction – Permits along with:
  a) Traffic Control Plan
  b) An Erosion & Sediment Control Narrative & Plat, done by a Certified Plan Designer, if trench is >50' or you are placing >600 sf of concrete or asphalt.

Construction (Subdivisions)
☐ **Sediment & Erosion Submittal**

- At least one week prior to setting up a Pre-Construction Meeting an Erosion & Sediment Control Narrative & Plan, done by a Certified Plan Designer, must be turned into ACHD Construction to be reviewed and approved by the ACHD Stormwater Section.

☐ **Idaho Power Company**

- Vic Steelman at Idaho Power must have his IPCO approved set of subdivision utility plans prior to Pre-Con being scheduled.

☐ **Final Approval from Development Services is required** prior to scheduling a Pre-Con.

Request for Appeal of Staff Decision

1. **Appeal of Staff Decision:** The Commission shall hear and decide appeals by an applicant of the final decision made by the Development Services Manager when it is alleged that the Development Services Manager did not properly apply this section 7101.6, did not consider all of the relevant facts presented, made an error of fact or law, abused discretion or acted arbitrarily and capriciously in the interpretation or enforcement of the ACHD Policy Manual.

    a. Filing Fee: The Commission may, from time to time, set reasonable fees to be charged the applicant for the processing of appeals, to cover administrative costs.

    b. Initiation: An appeal is initiated by the filing of a written notice of appeal with the Secretary and Clerk of the District, which must be filed within ten (10) working days from the date of the decision that is the subject of the appeal. The notice of appeal shall refer to the decision being appealed, identify the appellant by name, address and telephone number and state the grounds for the appeal. The grounds shall include a written summary of the provisions of the policy relevant to the appeal and/or the facts and law relied upon and shall include a written argument in support of the appeal. The Commission shall not consider a notice of appeal that does not comply with the provisions of this subsection.

    c. Time to Reply: The Development Services Manager shall have ten (10) working days from the date of the filing of the notice of appeal to reply to the notice of the appeal, and may during such time meet with the appellant to discuss the matter, and may also consider and/or modify the decision that is being appealed. A copy of the reply and any modifications to the decision being appealed will be provided to the appellant prior to the Commission hearing on the appeal.

    d. Notice of Hearing: Unless otherwise agreed to by the appellant, the hearing of the appeal will be noticed and scheduled on the Commission agenda at a regular meeting to be held within thirty (30) days following the delivery to the appellant of the Development Services Manager's reply to the notice of appeal. A copy of the decision being appealed, the notice of appeal and the reply shall be delivered to the Commission at least one (1) week prior to the hearing.

    e. Action by Commission: Following the hearing, the Commission shall either affirm or reverse, in whole or part, or otherwise modify, amend or supplement the decision being appealed, as such action is adequately supported by the law and evidence presented at the hearing.

LEGAL NOTICE
PUBLIC HEARING

Notice is hereby given that the Star City Council will hold a Public Hearing on **November 21, 2023** at the Star City Hall, 10769 W. State Street, Star, Idaho at 7:00 pm, or as soon thereafter as the matter may be heard.

Application: Talega Village Subdivision
Files #'s AZ-22-11 Annexation/Zoning
RZ-22-03 Rezone
CU-22-05 Conditional Use
DA-22-12 Development Agreement
PP-22-15 Preliminary Plat
PR-22-08 Private Road

Representative: Chad Garner, Focus Engineering & Surveying

Owner: Derk Pardoe, 3454 Stone Mountain Ln. Sandy, Utah 84092

Action: The Applicant is requesting approval of an Annexation and Zoning (Residential R-10-DA), a Rezone (from R-1 & C-2 to Residential R-10-DA) a Development Agreement, a Conditional Use Permit for a proposed multifamily residential use (340 units), a Preliminary Plat for proposed residential and commercial uses consisting of 162 buildable lots (1 commercial lot, 1 multi-family lot, 65 single-family residential lots, 95 townhome lots and multiple common lots), and private streets. A residential density of 10 du/acres is proposed. The property is located at 58 N. Truman Place and 8370 W. Shultz Court in Star, Idaho.

Property Location: The subject property is generally located on the northeast corner of State Highway 16 and State Highway 44. Ada County Parcels: R3720002880, R3720003030, R3720002500, R3720002480, R3720001505, R3720002412, & S0409417201

Information/Comments: A complete copy of the applications are available at City Hall for public review. The City invites all interested parties to attend the meeting and provide public testimony. Written comments will be accepted by the City up to 2 days prior to the date of the public hearing.

Services for persons with disabilities may be made available if notice is received in advance of the meeting by calling Star City Hall at (208) 286-7247.

Shawn L. Nickel
Planning Director and Zoning Administrator
snickel@staridaho.org

CITY OF STAR

LAND USE STAFF MEMO

TO: Mayor & Council

FROM: City of Star Planning & Zoning Department

MEETING DATE: **December 5, 2023 – PUBLIC HEARING (tabled from 11-21-23)**

FILE(S) #: AZ-22-11 - Annexation and Zoning
RZ-23-03 – Rezone
DA-22-12 – Development Agreement
PP-22-17 – Preliminary Plat for Talega Village Subdivision
CUP-22-05 – Talega Village Multi-Family

OWNER/APPLICANT/REPRESENTATIVE

Representative:
Chad Garner
Focus Engineering & Surveying
6949 S. High Tech Dr., Ste. 200
Midvale, UT 84047

Owner/Applicant:
Derk Pardoe
3454 Stone Mountain Lane
Sandy, UT 84092

REQUEST

Request: The Applicant is requesting approval of an Annexation and Zoning (Residential R-10-DA), a Rezone (from R-1 & C-2 to Residential R-10-DA), a Development Agreement, a Preliminary Plat for proposed residential and commercial uses consisting of 162 buildable lots (1 commercial lot, 1 multi-family lot, 65 single-family residential lots, 95 townhome lots and multiple common lots), and a Conditional Use Permit for a proposed multifamily residential use (340 units), A residential density of 10 du/acre is proposed. The property is located at 58 N. Truman Place and 8370 W. Shults Court in Star, Idaho. The entire property consists of 74.61 acres.

PROPERTY INFORMATION

Property Location: The subject property is generally located on the northeast corner of State Highway 16 and State Highway 44. Ada County Parcels: R3720002880,

R3720003030, R3720002500, R3720002480, R3720001505, R3720002412, & S0409417201.

Existing Site Characteristics: The property currently is vacant.

Irrigation/Drainage District(s): Middleton Irrigation Association
Middleton Mill Ditch Company
P.O. Box 848
Middleton, ID 83644

Pioneer Ditch Company
P.O. Box 70
Star, Idaho 86369

Flood Zone: This property is not currently located in a Special Flood Hazard Area.

Special On-Site Features:

- ✪ Areas of Critical Environmental Concern – No known areas.
- ✪ Evidence of Erosion – No evidence.
- ✪ Fish Habitat – No.
- ✪ Floodplain – No.
- ✪ Mature Trees – Several existing mature trees.
- ✪ Riparian Vegetation – None.
- ✪ Steep Slopes – None.
- ✪ Stream/Creek – Yes, Drainage District No. 2 main drain in the northern portion of property.
- ✪ Unique Animal Life – No unique animal life has been identified.
- ✪ Unique Plant Life – No unique plant life has been identified.
- ✪ Unstable Soils – No known issues.
- ✪ Historical Assets – No historical assets have been observed.
- ✪ Wildlife Habitat – No known sensitive wildlife habitat observed.

APPLICATION REQUIREMENTS

Pre-Application Meeting Held	December 1, 2021
Neighborhood Meeting Held	March 15, 2022
Application Submitted & Fees Paid	November 21, 2022
Application Accepted	October 10, 2023
Residents within 300' Notified	November 2, 2023
Agencies Notified	August 15, 2023
Legal Notice Published	November 7, 2023

Property Posted November 21, 2023

HISTORY

On March 6, 2018, the Council voted 4 to 0 to approve CPA-18-01 Comprehensive Plan Map Amendment to Commercial; AZ-18-01, Annexation and Zoning to Commercial (C2) for the Eagle Crossroads, LLC. Application.

On December 8, 2021, Council approved the 2020 Comprehensive Plan Map Amendment, recognizing this property with single-family, townhomes, multi-family and commercial.

SURROUNDING ZONING/COMPREHENSIVE PLAN MAP/LAND USE DESIGNATIONS

	Zoning Designation	Comp Plan Designation	Land Use
Existing	Commercial (C-2) Residential (R-1) Rural Urban Transition (RUT)	Commercial/High Density Residential/Compact Residential/Neighborhood Residential	Vacant
Proposed	Commercial (C-2-DA) Residential (R-10-DA)	Commercial/High Density Residential/Compact Residential/Neighborhood Residential	Commercial/Multi-Family Residential/Single-Family Residential
North of site	Residential (R-6-DA) City of Eagle	City of Eagle Comprehensive Plan	Approved 400 residential lot Cascade Springs Subdivision
South of site	Commercial (C-1) Residential (R-1) Rural Urban Transition (RUT)	Commercial	Hwy 44 Single Family Residential Vacant Agricultural
East of site	Residential (R-13/R-5) Commercial (C-2) Mixed Use (MU)	Commercial/High Density Residential/ Neighborhood Residential/Eagle's Jurisdiction	Multi-Family Residential (Amazon Falls) Vacant (Junction Crossing)/Agricultural
West of site	Rural Urban Transition (RUT) Mixed Use (MU) Light Industrial (LI) Greyloch	Mixed Use Light Industrial	Hwy 16 Vacant Greyloch Cabinets

ZONING ORDINANCE STANDARDS / COMPREHENSIVE PLAN

UNIFIED DEVELOPMENT CODE:

8-1B-1: ANNEXATION AND ZONING; REZONE:

B. Standards:

1. The subject property shall meet the minimum dimensional standards of the proper district.

2. The city may require a development agreement in conjunction with the annexation and zoning, or rezone, pursuant to Idaho Code section 67-6511A, which may include a concept plan. In addition to other processes permitted by city and state code, exceptions or waivers of standards, other than use, may be permitted through execution of a development agreement. A development agreement and concept plan shall be required for any rezone to a mixed-use zone, high density zone or land which includes steep slope (land over 25%) or floodway.

3. The termination of a development agreement shall result in the reversal of the official zoning map amendment approval and applicable development approval for any undeveloped portion of property subject to the development agreement. The undeveloped property subject to the development agreement shall be rezoned to the district classification as designated by the development agreement. When no designation is provided, the property shall revert to its original zoning or, if the original designation no longer exists, to the closest current equivalent zoning as determined by the current Comprehensive Plan Land Use Map designation.

4. An amendment or termination of a previously recorded development agreement shall be recorded in the office of the county recorder by the clerk.

5. An approved development agreement must be executed within ninety (90) days of the meeting at which the development agreement is approved by the city council. A one-time administrative extension of maximum thirty (30) days may be granted by the zoning administrator. Additional extensions may be approved by majority vote of the city council. Failure to execute the development agreement within the required timeframe will result in the denial of all related applications.

C. Required Findings: The council shall review the application at the public hearing. In order to grant an annexation and zoning or rezone, the council shall make the following findings:

1. The map amendment complies with the applicable provisions of the comprehensive plan;

2. The map amendment complies with the regulations outlined for the proposed district;

3. The map amendment shall not be materially detrimental to the public health, safety, and

welfare; and

4. The map amendment shall not result in an adverse impact upon the delivery of services by any political subdivision providing public services within the city.

5. The annexation (as applicable) is in the best interest of city.

8-1B-4: CONDITIONAL USES:

A. Purpose: The purpose of this section is to establish procedures that allow for a particular use on a specific property subject to specific terms and conditions of approval.
B. Applicability: The provisions of this section apply to all uses identified as conditional use within this title. In addition to other processes permitted by city and state code, exceptions or waivers of standards, other than use, may be permitted through issuance of a conditional use permit, development agreement or PUD.
C. Process:
1. The applicant shall complete a pre-application conference with the administrator prior to submittal of an application for a conditional use.
2. A neighborhood meeting shall be held by the applicant pursuant to Section 8-1A-6C of this title.
3. An application and appropriate application fees shall be submitted to the City on forms provided by the city.
4. Prior to issuing the conditional use permit, the administrator may require additional information, including studies, concerning the social, economic, fiscal or environmental effects of the proposed conditional use. Traffic studies may be required by the transportation authority prior to acceptance of an application.
D. Standards: In approving any conditional use, the city council may prescribe appropriate conditions, bonds and safeguards in conformity with this title that:
1. Minimize adverse impact of the use on other property.
2. Control the sequence and timing of the use.
3. Control the duration of the use.
4. Assure that the use and the property in which the use is located is maintained properly.
5. Designate the location and nature of the use and the property development.
6. Require the provision for on site or off-site public facilities or services.
7. Require more restrictive standards than those generally required in this title.
8. Require mitigation of adverse impacts of the proposed development upon service delivery by any political subdivision, including school districts, that provides services within the city.
E. Findings: The council shall base its determination on the conditional use permit request upon the following:
1. That the site is large enough to accommodate the proposed use and meet all the dimensional and development regulations in the district in which the use is located.
2. That the proposed use shall meet the intent of the Star comprehensive plan and be in compliance with the requirements of this title.

3. That the design, construction, operation and maintenance will be compatible with other uses in the general neighborhood and with the existing or intended character of the general vicinity.
4. That the proposed use, if it complies with all conditions of the approval imposed, will not adversely affect other property in the vicinity.
5. That the proposed use will be served adequately by essential public facilities and services such as highways, streets, schools, parks, police and fire protection, drainage structures, refuse disposal, water, and sewer.
6. That the proposed use will not create excessive additional costs for public facilities and services and will not be detrimental to the economic welfare of the community.
7. That the proposed use will not involve activities or processes, materials, equipment and conditions of operation that will be detrimental to any persons, property or the general welfare by reason of excessive production of traffic, noise, smoke, fumes, glare or odors.
8. That the proposed use will not result in the destruction, loss or damage of a natural, scenic or historic feature considered to be of major importance as determined by the City.
F. Time Limitations and Extensions:
1. A conditional use permit, upon council approval, shall be valid for a maximum period of twenty-four (24) months unless otherwise approved by the City Council. During this time, the applicant shall commence the use as permitted in accord with the conditions of approval, satisfy the requirements set forth in the conditions of approval, and acquire building permits and commence construction of permanent footings or structures on or in the ground. Once all requirements are satisfied, permits are acquired and the use is commenced, the conditional use permit will become permanent unless otherwise revoked by the city council.
2. A conditional use permit that also requires plating: The final plat must be recorded within this twenty-four (24) month period.
a. For projects with multiple phases, the twenty-four (24) month deadline shall apply to the first phase. In the event that the development is made in successive contiguous segments or multiple phases, such phases shall be constructed within successive intervals of one year from the original date of approval. If the successive phases are not submitted within the one-year interval, the conditional use approval of the future phases shall be null and void.
3. Time Extension. Upon written request and filed by the applicant prior to the termination of the period in accord with this subsection F, the administrator may authorize a single, administrative time extension to commence the use not to exceed one (1), twelve (12) month period. The administrator may require the conditional use comply with the current provisions of this chapter. Additional requests must be approved by the council.
a. Council approval of requests for time extension for an approved conditional use shall be determined by the city council at a public hearing and will not be granted if any of the following conditions exist:
(1) Significant amendments to the comprehensive plan or this unified development code have been adopted that change the basis under which the conditional use permit was granted.
(2) Significant changes in land use have occurred in the area that will impact or be impacted by the project.
(3) Hazardous conditions have developed or have been discovered that will impact the project.
4. Community facilities and/or services are no longer adequate to serve the project.

a. The city council may place additional requirements, modify the previous approval or deny the request for time extension.
b. No more than one-time extension may be granted to a single conditional use.
G. Transfers and Modifications:
1. Conditional use permits are an entitlement to the specific property on which the approval was granted and upon property sale the entitlement transfers to the new owner(s) without further application or approval, provided, however, the new owner(s) shall be bound by the same conditions of approval as the original permit holder(s). This is for a specific use and may not be used for other applications.
2. A conditional use permit is not transferable from one property to another.
3. All requested modifications to an approved conditional use shall be considered by the city council at a public hearing. The city council may modify the conditions, limitations and/or scope of the permit.
H. Revocation:
1. A conditional use permit may be revoked or modified by the city council, upon notice and public hearing, for breach or violation of any condition of approval or limitation of the permit.
2. If the city council decides to revoke a conditional use permit, either on its own action or upon complaint to the city council, the administrator shall notify the permit holder of its intention to revoke the conditional use permit and provide the permit holder with the opportunity to contest the revocation.
3. Fifteen (15) days' prior notice of the hearing shall be given to the permit holder and all property owners of record (to be obtained from the County Assessor's office) within the radius required in subsection 8-1A-4B of this article.
4. The council shall make findings of fact and conclusions of law supporting its decision to revoke the conditional use permit. If the council decides not to revoke the conditional use permit, no findings of fact and conclusions of law shall be made.
5. An affected person may appeal the decision of the city council under the administrative procedure act of the state of Idaho, Idaho Code title 67, chapter 52.

8-3A-1: ZONING DISTRICTS AND PURPOSE ESTABLISHED:

The following zoning districts are hereby established for the interpretation of this title, the zoning districts have been formulated to realize the general purposes as set forth in this title. In addition, the specific purpose of each zoning district shall be as follows:

RESIDENTIAL DISTRICT: To provide regulations and districts for various residential neighborhoods. Gross density in a Residential (R) district shall be determined according to the numeral following the R. The numeral designates the maximum number of dwelling units per acre. In zoning designations of R-1, R-2, R-3, R-4 and R-5, housing shall be single family detached unless approved with a PUD or development agreement. Connection to municipal water and sewer facilities are required for all subdivision and lot split applications submitted after the effective date hereof in all districts exceeding one dwelling unit per acre. Wells and septic systems may be permitted for larger lots in this land use designation that are not adjacent

to municipal services, as determined by the Sewer District, and if approved by the applicable Health Department. Private streets may be approved in this district for access to newly subdivided or split property. This district does allow for some non-residential uses as specified in 8-3A-3.

(C-2) GENERAL BUSINESS DISTRICT: To provide for the establishment of areas for commercial uses allowed in other commercial zones and commercial uses which are more intensive than those permitted in other commercial zones, and typically located adjacent to arterial roadways and not immediately adjacent to residential, including the establishment of areas for travel related services such as hotels, motels, service stations, drive-in restaurants, offices, limited warehousing, commercial services and retail sales.

DA DEVELOPMENT AGREEMENT: This designation, following any zoning designation noted on the official zoning map of the city (i.e., C-2-DA), indicates that the zoning was approved by the city with a development agreement, with specific conditions of zoning.

8-3A-3: USES WITHIN ZONING DISTRICTS

The following table lists principal permitted (P), accessory uses (A), conditional (C), or prohibited (N) uses.

ZONING DISTRICT USES	R	C-2
Dwelling		
Multi-family 1	C	N
Single-family attached	P	N
Single-family detached	P	N

Notes:

1. **Indicates uses that are subject to specific use standards in accord with chapter 5 of this title.**

8-3A-4: ZONING DISTRICT DIMENSIONAL STANDARDS:

Zoning District	Maximum Height Note Conditions	Minimum Yard Setbacks Note Conditions			
		Front (1)	Rear	Interior Side	Street Side

R-6 to R-11 attached housing	35'	15' to living area 20' to garage 10' if alley load	15' 4' if alley load	7.5' (2)	20'
C-2	35'	20'	5'	0(4)	20'

Notes:
1. Front yard setback shall be measured from the face of the garage to the face of the sidewalk, allowing for 20' of parking on the driveway without overhang onto the sidewalk.
2. Zero-Lot-Line and reduced front and rear setback waivers may be requested through the Development Agreement process. All other side yard setback requests for detached structures shall not be granted waivers, unless as part of a Planned Unit Development.
3. All setbacks in the CBD, C-1. C-2, LO, IL, PS, RC and M-U zone shall maintain a minimum 15' when adjacent to a residential use or zone.
4. As approved by the Fire District.

8-3B-3: ADDITIONAL RESIDENTIAL DISTRICT STANDARDS

A. Comply with Section 8-3A-1: ZONING DISTRICTS AND PURPOSE ESTABLISHED.
B. When development is planned with lots that directly abut existing lots within a Rural Residential area, or "Special Transition Overlay Area" as shown on the Comprehensive Plan Land Use map, an appropriate transition shall be provided for the two abutting residential lot types. A transition shall take into consideration site constraints that may exist and may include clustering of the urban lots in order to provide an open space area avoiding urban lots directly abutting rural residential lots, or may include the provision of a buffer strip avoiding urban lots directly abutting rural residential lots, or may include setbacks within the urban lots similar to the rural residential lots directly abutting, or may include the provision of one half to one acre size lots directly abutting the rural residential lots.
C. Urban style development, as guided by provisions within the compressive plan and this Title, is required to limit urban sprawl, however, densities of no more than 1 to 2 dwelling units per acre are to be designed within the floodplain, ridgeline developable areas and hillside developable areas (both as defined within the comprehensive plan).
D. Housing developments with densities of R-11 and higher shall be designed to limit height, increase setbacks and/or provide additional landscaping along the perimeter of the development, if determined by the council, where abutting areas are planned for lower densities.
E. Rezoning to R-11 and higher shall not be allowed unless adequate ingress/egress to major transportation corridors is assured.

F. All new residential, accessory uses or additions/remodels within the residential zones shall pave all unpaved driveways to the home.

G. Spite strips, common lots, unreasonable development phasing, or other means of any type purposely or unintentional that may result in the blocking of services or development, including but not limited to sewer, water, streets, or utilities are prohibited in any zoning district within the City of Star.

H. In any development that requires a traffic signal as part of the approval process, the developer shall be responsible for providing an Emergency Opticom System to the intersection.

8-3C-1: ADDITIONAL COMMERCIAL DISTRICT STANDARDS:

ALL COMMERCIAL DISTRICTS:

A. Comply with Section 8-3A-1: ZONING DISTRICTS AND PURPOSE ESTABLISHED.

B. New commercial developments shall incorporate site and architectural design recommendations from the Architectural Overlay Design Guidelines for the Central Business District and Riverfront Center.

C. Site Improvements: 1) Prior to any ground disturbance for any commercial, industrial or other non-residential buildings, a Commercial Site Improvements application shall be submitted to the City for approval by the City Engineer. This shall include any new site development initiated prior to a City Building permit.

2) In any development that requires a traffic signal as part of the approval process, the applicant shall be responsible for providing an Emergency Opticom System to the intersection.

3) One (1) full-size copy of the construction drawings, drawn in accordance with the requirements hereinafter stated. The construction Drawings shall be submitted on good quality paper, be professionally drafted, shall have the dimensions of not less than twenty-four inches by thirty-six inches (24" x 36"), and shall be drawn to a scale of not less than one inch to one hundred feet (1"=100') and contain a drafting date and north arrow.

a. Application shall include compliance with Section 8-4A-8 and 8-4A-11 of this ordinance.

b. Construction drawings shall include both above ground and below ground improvements, including the proposed building envelope of proposed improvements. Said improvements must include proposed finished grades of all impervious surfaces, and shall be in conformance with all Federal, State, and local regulations.

c. Electronic file of all application materials in original .pdf format shall be submitted with the application on a thumb drive.

8-3G-1: ARCHITECTURAL OVERLAY DISTRICT:

A. An Architectural Overlay District boundary is all of the existing CBD north of the Boise River, and approximately 750' on either side of SH-44 from city limit to city limit, including future annexations. This shall also include all other non-residential zoned uses and properties throughout the City. Single-family dwellings that are part of an approved PUD or Conditional Use Permit shall comply with this section.

B. Architectural Overlay District includes the entirety of the South of the River Area Plan.

C. The "STAR DESIGN GUIDELINES, CENTRAL BUSINESS DISTRICT AND RIVERFRONT CENTER" (the Guidelines), is adopted through this ordinance. It may be amended from time to time by a Resolution of the Star City Council and shall be used within the Architectural Overlay District.

D. If the Architectural Overlay District Guidelines conflict with other parts of the City of Star code, the Architectural Overlay District Guidelines shall be used.

8-4B-3: REQUIRED NUMBER OF OFF-STREET PARKING SPACES:

A. Required parking spaces for other permitted or conditional uses not listed herein or uses that are listed but may be different from normal operation, shall be determined by the administrator and/or Council. Among the factors for determining the number of spaces to be required for a use not listed herein, the administrator may compare the proposed use with a use which has similar traffic generating characteristics as outlined in the most recent version of the institute of transportation engineers trip generation manual.

B. Minimum Number of Off-Street Parking Spaces: The minimum number of required off street vehicle parking spaces for residential uses shall be:

Type Of Use	**Off-Street Parking Spaces Required**
RESIDENTIAL	
Apartments or multi-family dwellings	For each unit with 2 or more bedrooms - 2 including 1 covered; for each 1 bedroom or studio unit - 1.5 including 1 covered. Guest parking shall be provided at a ratio of .25 spaces per unit.

COMMON OPEN SPACE AND SITE AMENITY REQUIREMENTS

8-4E-1: APPLICABILITY:

The standards for common open space and site amenities shall apply to all residential developments with a density exceeding one dwelling unit per acre.

8-4E-2: STANDARDS:

A. Open Space and Site Amenity Requirement (see also Chapter 8 "Architectural Review"):
1. The total land area of all common open space shall equal or exceed fifteen percent (15%) of the total gross acreage of land area of the development. A minimum of 10% of the total gross acreage of the development shall be for useable area open space. Open space shall be

designated as a total of 15% minimum for residential developments in all zones with densities of R-2 or greater.
2. Each development is required to have at least one site amenity.
3. One additional site amenity shall be required for each additional twenty (20) acres of development area, plus one additional amenity per 75 residential units.
4. Developments with a density of less than 1 dwelling unit per acre may request a waiver of open space and amenities to the Council. Developments with a density of less than 2 dwelling units per acre may request a 50% reduction in total required open space and amenities to the Council.
5. For multi-family developments, see Section 8-5-20 for additional standards.
B. Qualified Usable Area Open Space: The following qualifies to meet the useable area open space requirements:
1. Any open space that is active or passive in its intended use, and accessible or visible by all residents of the development, including, but not limited to:
a. Open grassy area of at least fifty feet by one hundred feet (50' x 100') in area;
b. Qualified natural areas, as determined by the Administrator;
c. Ponds or water features where active fishing, paddle boarding or other activities are provided (50% qualifies towards total required usable area open space, must be accessible by all residents to qualify.) ponds must be aerated;
d. A plaza.
e. Common lots that include a pathway providing local or regional connectivity that is a minimum of 20’ in width.
f. Irrigation easements/ditches when a pathway is included (to be measured from the center of the ditch to the property line of the common lot).
2. Additions to a public park or other public open space area.
3. The buffer area along collector and arterial streets may be included in required overall common open space for residential subdivisions.
4. Parkways along local residential streets with detached sidewalks that meet all the following standards may count toward the common open space requirement:
a. The parkway is a minimum of eight feet (8') in width from street curb to edge of sidewalk and includes street trees as specified otherwise herein.
b. Except for alley accessed dwelling units, the area for curb cuts to each residential lot or common driveway shall be excluded from the open space calculation. For purposes of this calculation, the curb cut area shall be a minimum area of twenty-six feet (26') by the width of the parkway.
c. Stormwater detention facilities do not qualify to meet the common area open space requirements, unless all of the following is met:
1. Must be at least fifty feet by one hundred feet (50' x 100') in area;
2. Specifically designed as a dual use facility, as determined by the administrator, to include minimal slopes, grass throughout, and guarantee of water percolation within 24 hours of storm event.
3. Is located in a development that has a second usable open space area that contains a qualified site amenity as herein defined.

5. Visual natural space, including open ditches, wetlands, slopes or other areas that may not be readily accessible to residents, and is provided with open style fencing, may qualify for up to 20% of the required open space total, as determined by the Administrator.
C. Qualified Site Amenities: Qualified site amenities shall include, but not be limited to, the following:
1. Clubhouse;
2. Fitness facilities, indoors or outdoors;
3. Public art;
4. Picnic area; or
5. Recreation amenities:
a. Swimming pool with an enlarged deck and changing and restroom facility (pools shall count towards 3 required site amenities).
b. Children's play structures.
c. Sports courts.
d. Additional open space in excess of 10% qualified usable space.
e. RV parking for the use of the residents within the development.
f. School and/or Fire station sites if accepted by the district.
g. Pedestrian or bicycle circulation system amenities meeting the following requirements:
(1) The system is not required for sidewalks adjacent to public right of way;
(2) The system connects to existing or planned pedestrian or bicycle routes outside the development; and
(3) The system is designed and constructed in accord with standards set forth by the city of Star;
D. Location: The common open space and site amenities shall be located on a common lot or an area with a common maintenance agreement.
E. Maintenance:
1. All common open space and site amenities shall be owned by and be the responsibility of an owners' association for the purpose of maintaining the common area and improvements thereon.

8-5-21: MULTI-FAMILY DWELLING/DEVELOPMENT:

Multi-family developments with multiple properties shall be considered as one property for the purpose of implementing the standards set forth in this section.

A. Storage of Recreational Vehicles: No recreational vehicles, snowmobiles, boats or other personal recreation vehicles shall be stored on the site unless provided for in a separate, designated and screened area, and approved as part of the development.

B. Developments with Twenty Units Or More: Developments with twenty (20) units or more shall provide the following:

1. A property management office.

2. A maintenance storage area.

3. A map of the development at an entrance or convenient location for those entering the development.

C. Open Space Requirement (see also Chapter 8 "Architectural Review").

1. The total land area of all common open space shall equal or exceed fifteen percent (15%) of the gross land area of the development. Ten percent (10%) of that area shall be usable open space.

2. Private Open Space: In addition to the common open space and site amenity requirements of this title, a minimum of eighty (80) square feet of additional, private, usable open space shall be provided for each residential unit not planned as single-family detached. This requirement can be satisfied through porches, patios, decks, and enclosed yards. Landscaping, entryway and other accessways do not count toward this requirement.

D. Amenities

1. The number of amenities shall depend on the size of multi-family development as follows:

a. A multi-family development with less than twenty (20) units, two (2) amenities shall be provided from two (2) separate amenity categories.

b. A multi-family development between twenty (20) and seventy-five (75) units, three (3) amenities shall be provided, with one from each amenity category.

c. A multi-family development with seventy-five (75) units or more, four (4) amenities shall be provided, with at least one from each amenity category.

d. A multi-family development with more than one hundred (100) units, the Council shall require additional amenities commensurate to the size of the proposed development.

e. All multi-family developments greater than 75 units shall be required to provide a swimming pool with a changing and restroom facilities, and an enlarged deck. The minimum pool size shall be equal to the following:

(1) Developments between 75 and 149 units = 1,600 square feet

(2) Developments between 150 and 299 units = 2,400 square feet

(3) Developments over 300 units = minimum of 3,600 square feet

E. Any required traffic impact study shall be submitted and accepted by the appropriate transportation authority prior to submittal of an application. A hearing date before the Council shall not be scheduled until the traffic impact study has been approved and the transportation authority has issued a Staff report on the development application.

2. Amenity Categories. The council may consider other amenities in addition to those listed below.

a. Clubhouse.

b. Fitness facilities -Indoor/Outdoor.

c. Enclosed bike storage.

d. Public art.

e. Covered bus stops as approved by the School District or Regional Transportation Authority.

f. Ponds or water features.

g. Plaza.

h. Recreation areas.

i. Pool.

j. Walking trails and/or bike paths.

k. Children's play structures.

l. Sports courts.

m. Natural Areas (as approved by Council).

n. RV parking for the use of the residents within the development.

o. Additional open space in excess of 5% usable space.

p. School and/or Fire station sites if accepted by the district.

q. Pedestrian or bicycle circulation system amenities meeting the following requirements:

(1) The system is not required for sidewalks adjacent to public right of way;

(2) The system connects to existing or planned pedestrian or bicycle routes outside the development; and

(3) The system is designed and constructed in accord with standards set forth by the city of Star

E. Maintenance and Ownership Responsibilities: All multi-family developments shall record legally binding documents that state the maintenance and ownership responsibilities for the management of the development, including, but not limited to, structures, parking, common areas, and other development features.

F. Architectural standards in Chapter 8 shall be applied to all multi-family developments.

G. Signs:

(1) Addressing Signage. The following shall apply to all multi-family developments:

A. Approval from Fire District and Addressing Authority.

B. The sign(s) shall be front or back lit from dusk to dawn.

C. Sign materials shall be of wood, plastic or metal.

D. Minimum size of the plan view diagram portion of the sign shall be 3'x3' or presented at a larger size to be easily readable and visible from the distance of the intended viewer.

E. Text on the map shall be of a contrasting color to the background of the sign.

F. Maps can be produced as a digital print on a variety of substrates such as vinyl, paper, or a laminated graphic. The method of production needs to be compatible with the environmental conditions as well as with the structure that the map is to be integrated with.

G. Isometric or Three-Dimensional Signs are allowed if approved by the addressing agent.

H. Orientation: Vehicle oriented maps should always be positioned in the direction that a vehicle is facing.

I. The sign(s) shall be inspected annually by the owner/property manager for damage, visibility and legibility and appearance issues.

J. Nearby vegetation should be kept back from the sign(s) and low plantings used as to not block the sign when fully grown.

FIGURE 8-5-20(a)
ADDRESSING SIGN STYLE

COMPREHENSIVE PLAN:

8.2.3 Land Use Map Designations:

NEIGHBORHOOD RESIDENTIAL - Suitable primarily for single family residential use. Densities in the majority of this land use area are to range from 3.01 units per acre to 5 dwelling units per acre. Densities not exceeding 1 to 2 units per acre are to be encouraged in areas of the floodplain, ridgeline developable areas, hillside developable areas, and where new residential lots are proposed immediately adjacent to existing residential lots of one acre and larger where those existing larger lots are not likely to be subdivided in the future.

COMPACT RESIDENTIAL - Suitable primarily for residential use allowing a mix of housing types such as single family, two family, and multi-family. Densities range from 5.01 units per acre to 10 units per acre.

HIGH DENSITY RESIDENTIAL - Suitable primarily for multi-family. This use should generally be located in close proximity to commercial centers and primary transportation corridors. The use is also suitable within the Central Business District in mixed-use buildings with commercial or office uses on the first floor and high density residential on upper floors. Densities range from 10.01 units per acre and up. Density may be limited to ensure compatibility and transition between uses adjacent to the site. Design specifications may include increased setbacks for multi-story buildings, landscape buffers, and transitional densities. Rezoning to this designation should not be allowed unless adequate ingress/egress to major transportation corridors are assured.

COMMERCIAL - Suitable primarily for the development of a wide range of commercial activities including offices, retail, and service establishments. Rezoning to this designation should not be allowed unless adequate ingress/egress to major transportation corridors are assured. Light industrial uses may be considered at the discretion of the City Council without amending this plan.

8.3 Goal:

> Encourage the development of a diverse community that provides a mix of land uses, housing types, and a variety of employment options, social and recreational opportunities, and where possible, an assortment of amenities within walking distance of residential development.

8.4 Objectives:

- Implement the Land Use Map and associated policies as the official guide for development.
- Manage urban sprawl in order to minimize costs of urban services and to protect rural areas.
- Encourage land uses that are in harmony with existing resources, scenic areas, natural wildlife areas, and surrounding land uses.

- Encourage commercial development that is consistent with a family friendly feel, not overburdening the community with big box and franchise uses and discourage the development of strip commercial areas.

8.5.6 Policies Related Mostly to the Commercial Planning Areas:

- Assist in the provision of coordinated, efficient, and cost-effective public facilities and utility services, carefully managing both residential and non-residential development and design, and proactively reinforcing downtown Star's role as the urban core while protecting existing property rights. B. Encourage commercial facilities to locate on transportation corridors. C. Locate neighborhood services within walking distance to residential development. D. Discourage the development of strip commercial areas. E. Maintain and develop convenient access and opportunities for shopping and employment activities. F. Commercial areas of five acres or less should be encouraged in residential land use designations with appropriate zoning to allow for commercial services for residential neighborhoods and to limit trip lengths. Such commercial areas should be submitted for approvals with a Conditional Use Permit or Development Agreement to assure that conditions are placed on the use to provide for compatibility with existing or planned residential uses. These areas should be oriented with the front on a collector or arterial street.8.5.9 Additional Land Use Component Policies:
- Encourage flexibility in site design and innovative land uses.
- Work with Ada County Highway District (ACHD), Canyon Highway District #4 (CHD4), and Idaho Department of Transportation (ITD) for better coordination of roadway and access needs.
- Support well-planned, pedestrian-friendly developments.
- Dark sky provision should be adopted within the code to assure down style lighting in all developments and Star should consider joining the International Dark Sky Association.

8.5.8 Policies Related Mostly to Open Space and Special Areas:

A. Projects that hold a residential designation, where the developers would like to provide or dedicate amenities similar to those allowed in the Public Use/Parks/Open Space designation, may transfer unused density from these areas to other areas within the development, as may be approved by the City Council through the Planned Unit Development or Development Agreement processes.
B. Where possible, open space should be located to be contiguous to public lands and existing open space areas.
C. Open space should be designed to capitalize on and expand the open space areas around natural features and environmentally sensitive areas. Priorities for preservation include: The most sensitive resources – floodways and floodplains (including riparian and wetland areas), slopes in

excess of 25%, locally significant features, and scenic viewpoints. Fragmentation of open space areas should be minimized so that resource areas are able to be managed and viewed as an integrated network.
D. Open space areas along the Boise River should be designed to function as part of a larger regional open space network.
E. Require the conservation and preservation of open spaces and public access to the Boise River and BLM lands and interconnected pathways, open to the public, through new developments.
F. The city should work with property owners adjacent to the Boise River to maintain and enhance the river corridor as an amenity for residents and visitors and to obtain public pathway easements and to have pathways constructed. Uses which complement this public access include trails and interpretive signage.
G. Common areas in subdivisions should be centrally located for the residents use and should include micro-path connections where feasible.
H. Discourage development within the floodplain, excluding within the Riverfront Center area, in which development could mitigate floodplain areas and provide for civic space within the floodway and adjacent areas.
I. Floodway areas are to remain "open space" because of the nature of the floodway which can pose significant hazards during a flood event. Within the Riverfront Center, this floodway area should be developed as civic gathering area, open and park space, with the design allowing for floodwaters to inundate the area without contributing to hazard risk.
J. Floodway areas are excluded from being used for calculating residential and development densities.
K. Any portion of the floodway developed as a substantially improved wildlife habitat and/or wetlands area that is open to and usable by the public for open space, such as pathways, ball fields, parks, or similar amenities, as may be credited toward the minimum open space required for a development, if approved by the City Council.
L. Encourage land uses that are in harmony with existing resources, scenic areas, natural wildlife areas, and surrounding land uses.
M. Areas over 25% slope are to be "no development" areas except for city approved trails and except where isolated areas of steep slope are located on property where site grading can easily modify the steep slope area for buildable area. In those cases where grading can be accomplished to modify the isolated steep slope areas the surrounding land use designation will apply within the area designated "steep slope."
N. Clustering of housing is to be encouraged where needed to preserve hillsides, natural features, and to avoid mass grading of land in areas determined to be preserved.

8.5.9 Additional Land Use Component Policies:

- Encourage flexibility in site design and innovative land uses.
- Work with Ada County Highway District (ACHD), Canyon Highway District #4 (CHD4), and Idaho Department of Transportation (ITD) for better coordination of roadway and access needs.

- Support well-planned, pedestrian-friendly developments.
- Dark sky provision should be adopted within the code to assure down style lighting in all developments and Star should consider joining the International Dark Sky Association.

18.4 Implementation Policies:

F. Development Agreements allow the city to enter into a contract with a developer upon rezoning. The Development Agreement may provide the city and the developer with certain assurances regarding the proposed development upon rezoning.

PROJECT OVERVIEW

ANNEXATION & ZONING:

The annexation, zoning, and rezone request from County Rural Urban Transition (RUT) and Residential (R-1) and General Business District (C-2) to Residential (R-10-DA) on the applicant's property will allow for the development and subdivision of the subject property into a residential subdivision with accompanying commercial uses that will be consistent with the recently adopted Comprehensive Plan. The property consists of a total of 74.61 acres, including 55.68 acres for residential use and 18.93 acres for commercial use. The total proposed residential units is 500, with an overall gross residential density of 8.98 dwelling units per acre, which excludes the 18.93 acres that is currently designated for commercial in the calculations. A further density breakdown shows:

- Approximately 2.17 dwelling units per acre for the single family residential dwellings - The current Comprehensive Plan Land Use Map designates this portion of the property as Neighborhood Residential, with an allowed density of 3-5 dwelling units per acre;
- Approximately 9.25 dwelling units per acre for the townhomes – The current Comprehensive Plan Land Use Map designates the portion of the property as Compact Residential, with an allowed density of 5-10 dwelling units per acre;
- Approximately 22 dwelling units per acre for the multi-family dwellings - The current Comprehensive Plan Land Use Map designates this portion of the property as High Density Residential, with an allowed density of 10 plus dwelling units per acre.

The requested land uses of residential and commercial within the annexation and zoning and rezone applications meet the intent of the zoning designations intended in the Comprehensive Plan.

PRELIMINARY PLAT:

The proposed Preliminary Plat contains 161 residential lots, 1 commercial lot and 19 common area lots for a total of 181 total lots. The Preliminary Plat contains 65 single family residential lots with an average lot size of 8,400 square feet, 95 townhome lots with and 340 apartment units. The 65 single family residential lots range in size from 6,623 square feet to 15,690 square feet with the average buildable lot area of approximately 8,400 square feet. The 95 townhome lots range in size from 4,851 square feet to 9,016 square feet with the average lot size of 6,974 square feet. The 340 apartments are located on 1 parcel.

The Preliminary Plat has been submitted with information that does not meet UDC and the Ada County Surveyor requirements for plats. Specifically, platted lots require lot and block numbers, and common lots should be numbered within the individual blocks and not as parcels (A-Q). A revised Preliminary Plat shall be submitted prior to final plat application that clearly shows compliance with all Ada County platting procedures.

All streets are proposed to be public within the single family and townhome residential portion of the development, with private driveways proposed within the multi-family residential section. Residential roads are proposed as follows: The road section for the Hamin collector road and one internal roadway between the single family and the multi-family proposes a 60-foot wide right of way, with a roadway measurement of 36 feet from back of curb to back of curb, and a 5-foot-wide detached sidewalk with an 8-foot-wide park strip. **The UDC requires sidewalks along collectors to be a minimum of 7 feet. The sidewalks along both sides of Hamlin Avenue shall be revised to include a 7 foot width**. The remaining roadway sections in the residential development include a 50-foot-wide right of way with 36 feet from back of curb to back of curb and a 5-foot-wide detached sidewalk with an 8-foot-wide park strip.

The project has 55.68 acres of residential housing area. Section 8-4E-2 of the Unified Development Code states *"The total land area of all common open space shall equal or exceed fifteen percent (15%) of the total gross acreage of land area of the development. A Minimum of 10% of the total gross acreage of the development shall be for useable area open space. Open space shall be designated as a total of 15% minimum for residential developments in all zones with densities of R-2 or greater."* As the submitted site plan does not appear to have the correct calculations for open space, Staff has done its own calculation, and the residential area appears to exceed the required amount of open space. With 55.68 acres of total residential area, the development should have a total of 8.35 acres of total open space (15%) and 5.57 acres of usable open space (10%). Staff calculations of the submitted plans are as follows:

- **Total provided Open Space* = 20.67 acres (37%). This breaks down as follows for the 3 individual residential sections of the development:**
    - **Single-Family = 8.54 acres (32.5%)**
    - **Townhomes = 9.09 acres (77.6%)**
    - **Multi-Family = 3.04 acres (17.2%)**

- **Total provided Usable Open Space* =**
  - **Single Family = 5.98 acres (22.7%)**
  - **Townhomes = 2.13 acres (18.2%)**
  - **Multi-Family = 2.52 acres (14.3%)**

***All provided calculations have been determined by Staff as best as possible, as correctly detailed breakdowns of the open spaces has not been provided. Staff will require accurate calculations of total open space and usable open space from the applicant prior to final approval. This should include separated actual acreages of the 3 different residential types so Staff can properly review the calculations.**

It is also unclear from the information submitted as to what type of common lots "Parcels G & H" are. If they are to be landscaped usable open space lots, they should be accessible to the residential portion of the development. They appear to be too large for the Hwy 16 required buffer. Staff recommends a pathway connection between Lots 3022 & 3023 to access the area.

Section 8-4E-2 also states *"Each development is required to have a least one site amenity. One additional site amenity shall be required for each additional twenty (20) acres of development area, plus one additional amenity per 75 residential units."* The Applicant is proposing 500 residential units on 55.68 acres, which requires a minimum of nine (9) amenities. The Applicant is proposing a tot lot, dog park, clubhouse, pool, 3 large open areas, a picnic shelter, walking paths and a bench as amenities. These meet the required number and kind of amenities as outline in the Unified Development Code. **The pool shall be required to be a minimum of 3,600 square feet in size. It is assumed and also recommended that all amenities and open spaces shall be utilized by the residents of all 500 residential units.**

Section 8-8C-2 paragraph J states "Any road designated as a principal arterial on the applicable highway district function class map: A minimum of forty feet (40') wide buffer area (not including right of way) shall be provided with the following plants per one hundred (100) linear feet of right of way: four (4) shade trees, three (3) evergreen trees, two (2) flowering/ornamental trees, and twelve (12) shrubs. Each required shade tree may be substituted with two (2) flowering/ornamental trees, provided that not more than fifty percent (50%) of the shade trees are substituted. A minimum seven foot (7') high buffer consisting of a berm, wall, fence, or combination thereof shall be provided within the buffer area. The maximum slope for any berm shall be three feet (3') horizontal distance to one foot (1') vertical distance. Unsightly fencing shall not be permitted." The Applicant has provided the correct buffer along Hwy 16 and the proposed landscape appears to satisfy the code requirements.

The development is currently provided with ingress/egress to the south from Highway 44 (State Street) via Hamlin Avenue. This is currently a right in/right out only and is subject to further access modification once the Hwy 16/44 interchange is constructed. There is a secondary access proposed via Amazon Drive, a public road through the Amazon Falls development off Short

Road. This connection is not yet built and will need to cross the drainage ditch to connect to Hamlin Avenue. **The council should consider the limited access and may want to condition this connection to be completed prior to any construction activities when making a decision on the application.** The Applicant will need to receive approval from both transportation agencies (ITD and ACHD) and possibly the proper irrigation district and adhere to their requirements for access and improvements.

The applicant has provided a conceptual phasing plan showing 4 phases for the development. Phase 1 appears to be the apartments (17.67 acres), Phase 2 the townhomes (11.7 acres), Phase 3 the single family residential (26.3 acres) and Phase 4 the commercial portion (18.93 acres) of the development. **The council should consider this phasing plan and the timing of the commercial development when making a decision on the application.**

ADDITIONAL DEVELOPMENT FEATURES:

- Sidewalks

  Sidewalks are proposed at five-foot (5') widths and will be detached throughout the subdivision. **The Hamlin Avenue sidewalks shall be 7 feet minimum.** The Applicant is proposing 8-foot landscape strips throughout, satisfying the Unified Development Code.

- Streetlights

  A streetlight location plan and design sample has been submitted by the applicant. Streetlights shall reflect the "Dark Sky" criteria with all lighting. The same streetlight design shall continue throughout the entire development. The proposed streetlight locations and proposed fixtures satisfy code and the City's requirements for a common style of streetlight. **Although the streetlight plan and design meet City Code, upon installation and inspection, shielding of lights may be required to prevent light trespass as necessary.**

- Subdivision and Street Names

  The Applicant has provided approval from Ada County for the subdivision name with the application packet. **No street name approval was included in the application materials, this will be required before signing the final plat.**

- Landscaping

  As required by the Unified Development Code, Chapter 8, Section 8-8C-2-M (2) Street Trees; A minimum of one street tree shall be planted for every thirty-five (35) linear feet of street frontage. For open areas, one shade tree shall be planted for every four thousand (4,000) square feet. The applicant shall use "Treasure Valley Tree Selection Guide", as adopted by the Unified Development Code. The proposed landscape plan appears to meet these requirements for street trees. **In instances**

where street trees will be planted by the builder, certificate of occupancy may be held up if trees are not planted in accordance with this code.

Applicant should be prepared to address Staff's question on the landscaping and usability of "Parcels G & H".

- Mail Cluster

  The Applicant has provided an approval letter from the Eagle Postmaster of a location for the mail clusters, however the map showing the approved location was not included in the application materials. **Staff will require this map prior to signing the final plat. Per Section 8-4A-20, all mailboxes and clusters shall be covered with an architecturally designed cover, to be approved by the Administrator prior to final plat signature. All covers shall be provided with lighting and shall be stained/painted and kept in good condition at all times. The administrator may issue a letter of violation to the HOA when any mailbox cluster or cover falls into disrepair. Maintenance shall be included in the CC&R's.**

- Block Length

  Part of Hamlin Avenue is already constructed, as the northern section is extended, Staff suggests the Applicant work with the Highway District and Fire District with regards to traffic calming techniques. Staff is supportive of the waiver to the block lengths in this development as only 1 appears to exceed the 750' limit.

- Setbacks

  The applicant is not requesting any setback waivers and will adhere to the setbacks outlined in this report and as follows:
  - Single-Family Detached = 15'/20' Front; 7.5' Side Yard; 15' Rear; 20' Street Side
  - Townhomes = 0' Front; Zero-Lot Lines for Interior Sides; 5' Rear; 5' Exterior Side
  - Multi-Family = N/A

- Common Driveways

  The preliminary plat is currently showing two common driveways in the townhome section (lots 2030 & 2031). Section 8-6B-2D of the Unified Development Code states *"Common driveways shall serve a maximum of two (2) dwelling units and shall approved by the Fire District."* **Staff recommends that the two lots be eliminated from the plat, as the Fire District has been denying all common and shared driveways due to emergency access and turn-around issues.**

- **Old Grange Hall Property:**

  The old grange hall property located currently at 8377 W Shultz Court is surrounded by this project. As Hwy 16 is improved, it will be necessary to provide access to this out-parcel internally within the Talega Village development. A cul-

de-sac turn-around is designed north of the parcel. The right of way should be extended to provide legal access to this parcel.

CONDITIONAL USE PERMIT:**

The applicant is requesting approval of a Conditional Use Permit for 340 apartment units in approximately 22 buildings. The applicant has not indicated if the apartment units will be one or two bedroom units. For a two-bedroom unit, parking requirements are calculated at 2 spaces for each unit with 1 space being covered and .25 spaces per unit for guest parking. The Applicant is proposing approximately 500 parking spaces, based on what Staff can estimate. **This number is short approximately 265 parking spaces.** Section 8-4B-2 of the Unified Development Code requires parking stalls to be a minimum of nine feet (9') wide and twenty feet (20') deep. **Parking stall measurements are not clearly marked on the submitted plan. Prior to final approval, the Applicant shall provide to Staff a site plan that clearly meets all the requirements of the Unified Development Code.**

Section 8-4B-3H of the Unified Development Code states that one bicycle parking space shall be provided for every twenty-five (25) vehicle parking spaces. Based on the required number of parking spaces, **the Applicant will be required to provide 30 bicycle spaces, this is not clearly denoted on the submitted plan.**

The Applicant has provided elevations for the proposed apartments, which appear to be three (3) stories tall. Section 8-4B-2 of the UDC requires "*all drive aisles adjacent to a building shall be a minimum of 25'0" or as required by the fire code, unless the building is 30 feet in height or greater, at which point the drive aisle shall be 26'0" or as otherwise approved by the Fire District."* **The drive aisles are not clearly marked on the submitted site plan or preliminary plat. The Applicant will be required to submit a site plan that clearly shows all drive aisle measurements, meeting code as required.**

The Applicant is not asking for an exception of the height requirement, therefore buildings will be limited to thirty-five feet (35') in height, unless otherwise approved by Council.

All signage, including building and directionals require separate permit and approval from Staff prior to installation.

The applicant has submitted very brief color renderings of the proposed building, which will still need to go through design review (Certificate of Zoning Compliance) for approval prior to building permits being issued.

It is unclear from the site plan if the following requirements of Section 8-5-21 of the UDC has been included as part of the multi-family development. This includes:

- **Any storage for recreational vehicles**

- **Location of the management office**
- **Location of maintenance storage area**
- **Location of the map of the development, including vehicle orientation map**
- **Maintenance and ownership responsibilities documents**
- **Architectural standards and materials**
- **Bicycle parking**

****The site plan submitted for review for the multi-family residential provides very minimal information necessary for Staff to properly review the layout. Staff recommends that, if Council approves the land use, that the applicant be required to submit a detailed site plan with information as required in Section 8-5-21 of the UDC, and that the site plan be brought before the Council and/or Design Review Committee for review and final approval. Because of the appearance of needed extra parking, the 500 unit count proposed may not be achievable.**

DEVELOPMENT AGREEMENT:

Through the Development Agreement process, the applicant is proposing to work with the City to provide further insurance that the development will be built as presented and/or modified by the Council through the review process. Items that should be considered by the applicant and Council include the following:

- **ITD Proportionate Share Fees at $1,000.00 per residential unit**
- **Density**
- **Fire Sprinklers Requirements**
- **Parking Requirements**
- **Commercial Acreage/Use**
- **Traffic**
- **Potential phasing limitations on the project**
- **Access to the old Grange Hall property**
- **Guest parking for townhomes**
- **Hamlin Avenue 7' sidewalks**
- **Usability of "Parcels G & H" as related to landscaping**
- **Open space usage for entire development**
- **Access to Amazon Falls Drive prior to construction**
- **Elimination of common drive lots**

AGENCY RESPONSES

ITD	March 21, 2023/October 25, 2023
ACHD	September 26, 2023
Ada County Dev. Services	February 27, 2023

COMPASS	March 13, 2023
West Ada School District	March 29, 2023
Central District Health	March 3, 2023
Star Fire Department	Pending

PUBLIC RESPONSES

No public comments have been received.

STAFF ANALYSIS & RECOMMENDATIONS

Based upon the information provided to Staff in the applications and agency comments received to date, Staff finds that the proposed request for annexation and zoning, rezone, and preliminary plat, as conditioned, meets the requirements, standards and intent for development as they relate to the Unified Development Code and Comprehensive Plan. **Regarding the conditional use permit for the multi-family residential, Staff would need additional information to make a clear recommendation on all aspects of the CUP application. Staff would recommend that the Council consider approval of the land use for multi-family residential with a maximum allowed density to be confirmed once the revised site plan is fully reviewed to determine if additional parking is required and density need to be reduced.**

Traffic Concerns:

Staff is concerned with the amount of traffic that will be generated by the uses in this development upon full build-out in relationship with the current access to the site. Currently, Hamlin Avenue is the only access to the site. With the additional connection to Amazon Falls Drive to the east and access to Hwy 44 via Short Road, there will still be considerable traffic from this development, in addition to the currently approved residential and commercial developments north, east and west of Short Road. And if Hamlin Avenue is further restricted by ITD once the interchange is constructed, the strain on Short Road will be extreme. Staff has been informed by representatives of the two developments to the north and northeast of Talega Village (Cascade Springs and Fountain Park Subdivisions) that connection from Hamlin Road north towards Floating Feather Road and east towards Palmer Lane, are anticipated to be a minimum of 5-years out, based on current phasing of those projects and with the current market. The Palmer Lane signal light will also be necessary to handle all of the current and future traffic from the currently approved developments in Star and Eagle in this immediate area. Council may want to consider additional phasing and/or unit limitation conditions on this development until the proposed improvement to the traffic system are completed prior to final build-out of this development. While ACHD and ITD have provided initial review comments for this development, Staff has had discussions with both ITD and the Fire

District regarding concerns on access and traffic. These two agencies will be providing additional comment prior to the public hearing.

The Council should consider the entire record and testimony presented at their scheduled public hearing prior to rendering its decision on the matter. Should the Council vote to approve the applications, either as presented or with added or revised conditions of approval, Council shall direct Staff to draft findings of fact and conclusions of law for the Council to consider at a future date.

FINDINGS

The Council may **approve**, **conditionally approve**, **deny** or **table** this request. In order to approve these applications, the Unified Development Code requires that Council must find the following:

ANNEXATION/REZONE FINDINGS:

1. The map amendment complies with the applicable provisions of the Comprehensive Plan.

   The purpose of the Star Comprehensive Plan is to promote the health, safety, and general welfare of the people of the City of Star and its Impact Area. Some of the prime objectives of the Comprehensive Plan include:

   - ✓ *Protection of property rights.*
   - ✓ *Adequate public facilities and services are provided to the people at reasonable cost.*
   - ✓ *Ensure the local economy is protected.*
   - ✓ *Encourage urban and urban-type development and overcrowding of land.*
   - ✓ *Ensure development is commensurate with the physical characteristics of the land.*

   The goal of the Comprehensive Plan for Land Use is to encourage the development of a diverse community that provides a mixture of land uses, housing types, and a variety of employment options, social and recreational opportunities, and where possible provides an assortment of amenities within walking distance of a residential development. The Council must find compliance with the Comprehensive Plan.

2. The map amendment complies with the regulations outlined for the proposed district, specifically, the purposes statement.

   The Council must find that the proposal complies with the proposed district and purpose statement. The purpose of the residential districts is to provide regulations and districts for various residential neighborhoods with gross densities in compliance with the intent of the Comprehensive Plan designation. Housing shall be single family detached unless approved with a PUD or development agreement. Connection to municipal water and sewer facilities are required for all subdivision and lot split applications in all districts exceeding one dwelling unit per acre. Private streets may be approved in this district for

access to newly subdivided or split property.

3. The map amendment shall not be materially detrimental to the public health, safety, and welfare; and

   The Council must find that there is no indication from the material submitted by any political agency stating that this annexation and zoning of this property will be materially detrimental to the public health, safety or welfare.

4. The map amendment shall not result in an adverse impact upon the delivery of services by any political subdivision providing public services within the city including, but not limited to, school districts.

   The Council must find that it has not been presented with any information from agencies having jurisdiction that public services will be adversely impacted other than traffic, which will continue to be impacted as the City grows.

5. The annexation is in the best interest of the city.

   The Council must find that this annexation is reasonably necessary for the orderly development of the City.

PRELIMINARY PLAT FINDINGS:

1. The plat is in compliance with the Comprehensive Plan.

   The City must find that this Plat follows designations, spirit and intent of the Comprehensive Plan regarding residential development and meets several of the objectives of the Comprehensive Plan such as:

   1. Designing development projects that minimize impacts on existing adjacent properties, and
   2. Managing urban sprawl to protect outlying rural areas.

2. Public Services are available or can be made available and are adequate to accommodate the proposed development.

   The City must find that Agencies having jurisdiction on this parcel were notified of this action, and that it has not received notice that public services are not available or cannot be made available for this development.

3. There is public financial capability of supporting services for the proposed development;

   The City must find that they have not been notified of any deficiencies in public financial capabilities to support this development.

4. The development will not be detrimental to the public health, safety or general welfare;

   The City must find that it has not been presented with any facts stating this Preliminary Plat will be materially detrimental to the public health, safety and welfare. Residential uses are a permitted use.

5. The development preserves significant natural, scenic or historic features;
The City must find that there are no known natural, scenic, or historic features that have been identified within this Preliminary Plat.

Upon granting approval or denial of the application, the Council shall specify:

1. The Ordinance and standards used in evaluating the application;
2. The reasons for recommending approval or denial; and
3. The actions, if any, that the applicant could take to obtain approval.

Upon granting approval or denial of the application, the Council shall specify:

1. The Ordinance and standards used in evaluating the application;
2. The reasons for recommending approval or denial; and
3. The actions, if any, that the applicant could take to obtain approval.

CONDITIONAL USE PERMIT FINDINGS:

1. That the site is large enough to accommodate the proposed use and meet all the dimensional and development regulations in the district in which the use is located.
The Council must find that the site of the proposed use would be large enough to accommodate the proposed use or meet all of the dimensional and development regulations in the district in which the use would be located.

2. That the proposed use will be harmonious with the Star comprehensive plan and in accord with the requirements of this title.
The Council must find that the proposed use request is harmonious with the Star Comprehensive Plan and is in accord with the requirements of this Title. The proposed development should meet the intent or purpose of the Mixed-Use District.

3. That the design, construction, operation and maintenance will be compatible with other uses in the general neighborhood and with the existing or intended character of the general vicinity and that such use will not adversely change the essential character of the same area.
The Council must find that the operation of the proposed use would be compatible with the other uses in the general area.

4. That the proposed use, if it complies with all conditions of the approval imposed, will not adversely affect other property in the vicinity.
The Council must find that the proposed use, with imposed conditions of approval, would not adversely affect other property in the vicinity.

5. That the proposed use will be served adequately by essential public facilities and services such as highways, streets, schools, parks, police and fire protection, drainage structures, refuse

disposal, water, and sewer.

The Council must find that the proposed use be adequately served by essential public facilities and services.

6. That the proposed use will not create excessive additional costs for public facilities and services and will not be detrimental to the economic welfare of the community.

The Council must find that the proposed use would not create excessive additional costs for public facilities and would not be detrimental to the economic welfare of the community.

7. That the proposed use will not involve activities or processes, materials, equipment and conditions of operation that will be detrimental to any persons, property or the general welfare by reason of excessive production of traffic, noise, smoke, fumes, glare or odors.

The Council must find that the proposed use would involve activities that would not be detrimental to any person, property or the general welfare by reason of excessive production of traffic, noise, smoke, fumes, glare or odors.

8. That the proposed use will not result in the destruction, loss or damage of a natural, scenic or historic feature considered to be of major importance.

The Council must find that the proposed use would not result in the destruction, loss or damage of natural, scenic or historic feature of major importance since none are apparent on this site.

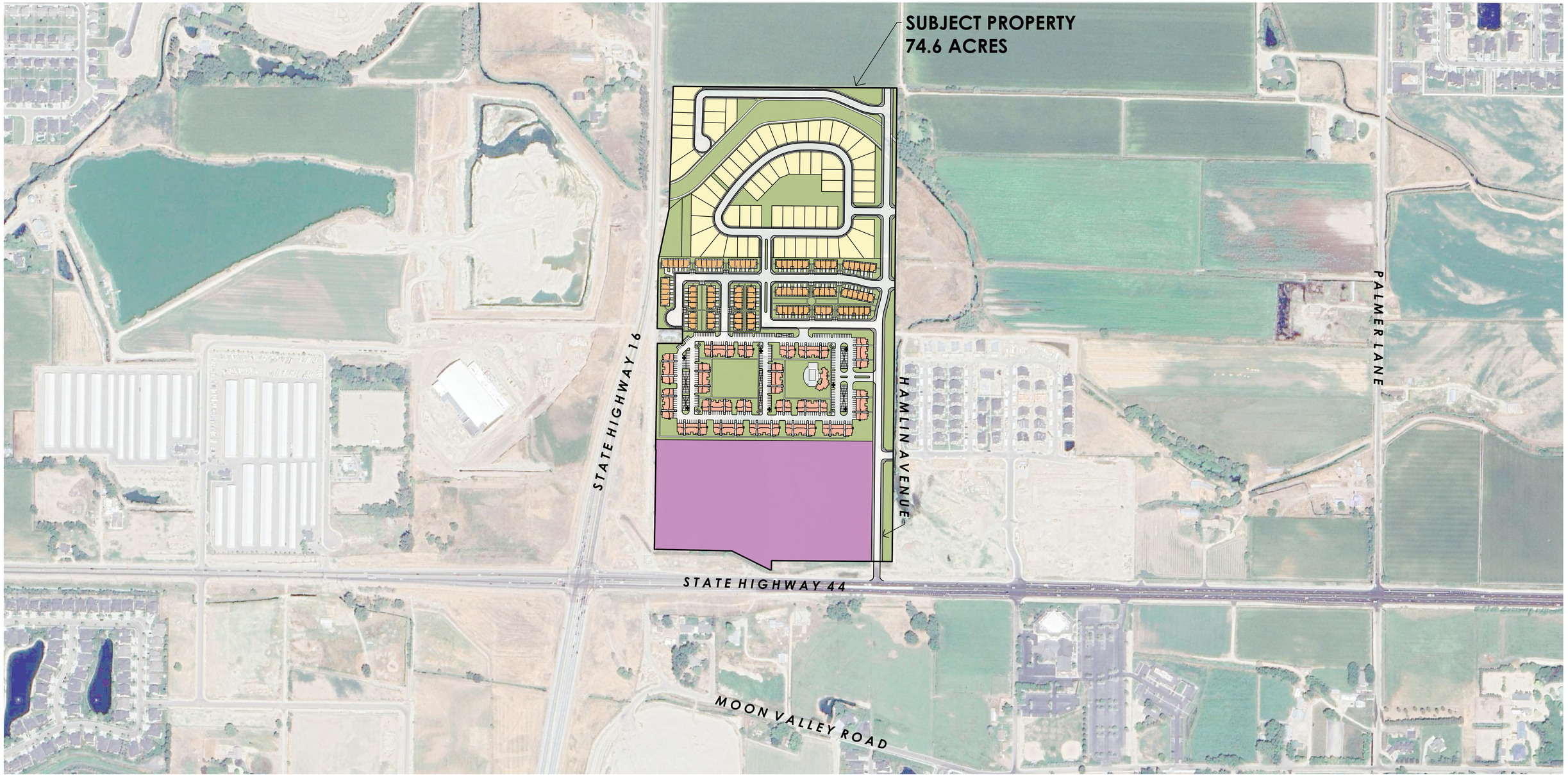
CONDITIONS OF APPROVAL

1. The approved Conditional Use shall comply with all statutory requirements of applicable agencies and districts having jurisdiction in the City of Star.
2. **The applicant shall enter into a Development Agreement with the City, agreeing to proportionate share assessment by ITD regarding impacts to the State Highway System. ITD has calculated the fees to be $1000.00 per residential unit for a total of $500,000 ($1000 x 500). These fees will be collected by the City of Star, by phase, prior to final plat signature. The development agreement shall be signed and recorded as part of the ordinance for annexation and zoning and shall contain the details of the fees to be collected**.
3. **A revised preliminary plat shall be submitted indicating the 7 feet sidewalk along both sides of Hamlin Avenue and showing the correct lot and block numbering as required by Ada Count and the City of Star. This shall be submitted prior to final plat approval.**
4. **Prior to issuance of a building permit, all Star Sewer and Water District requirements shall be met. A letter of approval from the District shall be submitted with the building permit.**
5. **Prior to issuance of any building permits for any use in this development, a final plat shall be recorded with Ada County.**

6. **The multi-family buildings will need to go through the design review process (Certificate of Zoning Compliance) and receive approval prior to issuing building permits.**
7. **The applicant may be responsible for additional mitigation measures regarding noise and lighting for existing, adjacent residential uses when it is determined by the City that unreasonable, negative impacts are a direct result of the business activity. This shall include, but not be limited to additional landscaping, fencing/walls, and light shields or relocation of light poles.**
8. **The Applicant shall revise the site plan for the apartments so show the correct number of parking spaces, proper size spaces, location and correct number of bicycle parking spots and clearly marked drive aisle dimensions. This site plan shall be required to be reviewed by Council and/or the Design Review Committee prior to final approval of the CUP.**
9. **The Applicant shall revise the site plan for the townhomes and remove the 2 lots with the common driveways. This updated site plan will be required prior to signing the mylar for the final plat.**
10. **The Applicant shall provide renderings of the cover for the mail clusters and receive Staff approval, prior to signing the final plat.**
11. **The Applicant shall provide documentation from Ada County that the proposed street names have been approved and they shall be accurately reflected on the final plat prior to signature.**
12. Pressurized irrigation systems shall comply with the Irrigation District(s) and the City of Star Codes. Plans for pressurized irrigation systems shall be submitted to, and approved by the City of Star Engineer, prior to installation.
13. A form signed by the Star Sewer & Water District shall be submitted to the City prior to issuance of building permit stating that all conditions of the district have been met, including annexation into the District.
14. The applicant shall provide a sign, to be located at all construction entrances, indicating the rules for all contractors that will be working on the property starting at grading and running through occupancy that addresses items including but not limited to dust, music, dogs, starting/stopping hours for contractors (7a.m. start time). **Sign shall be approved by the City prior to start of any construction.**
15. The applicant shall obtain all the proper building permits from the City Building Department prior to occupancy of the unit.
16. The Conditional Use Permit may be revoked or modified by the City Council for any violation of any Condition of Approval.
17. **The applicant shall obtain a sign permit prior to any signage being placed on the site or building.**
18. A Certificate of Zoning Compliance will be required prior to the start of construction.
19. Any additional Condition of Approval as required by Staff and City Council.
20. Any Conditions of Approval as required by Star Fire Protection District.

COUNCIL DECISION

The Star City Council _____ File Number AZ-22-11/RZ-23-03/DA-22-12/PP-22-17/CUP-22-05 for Talega Village Subdivision on _____ _____, 2023.



N

S

GRAPHIC SCALE

250 0 125 250 500 1,000

(IN FEET)
1 inch = 250ft.

TALEGA VILLAGE vicinity map

STAR CITY, ADA COUNTY, IDAHO
5/18/2023
21-0488

FOCUS ENGINEERING AND SURVEYING, LLC

Z:_2021\21-0488 Talegra Village\design 21-0488\dwg\concept\21-0488 Site Plan.dwg

ANNEXATION & ZONING – REZONE APPLICATION
NARRATIVE

May 19, 2023

The property located on the northeast corner of State Highway 16 and State Highway 44, referred to Talega Village, is being considered for development. The overall site consisting of 74.6 acres is under consideration for annexation into Star City and rezoning to the R-10 and C-2 zone. The R-10 zone would consist of 57.4 acres while the C-2 zone would consist of 17.2 acres. Within the proposed R-10 zone is a proposed multifamily residential development phase consisting of 19.4 acres and portions of seven parcels with three identified addresses (shown below).

IDENTIFIED ADDRESSES: **58 N Truman Pl.**
8245 W Shultz Ct.
8370 W Shultz Ct.

PARCEL NUMBERS:

R3720001507
R3720001509
R3720002500
R3720002480
A portion of R3720001505
A portion of R3720002412
A portion of S0409417201

The applicant is requesting annexation of the property into the City of Star and a rezone from RUT (Rural Urban Transition), R1 (Single Family Residential), and C-2 (General Commercial) to R-10 (Residential – 10 units/acre) and C-2 (General Commercial) with a development agreement and preliminary plat approval of approximately 17.2 acres of commercial & retail and 57.4 acres of residential consisting of approximately 65 single-family lots, 95 townhome units, and 340 apartment units with an overall density of 9.1 units per acre. The average lot size of the single family portion is approximately 8,400 square feet.

The purpose of this annexation and rezone application is to annex the property into the City of Star and rezone the property to allow for greater flexibility in the placement of commercial and residential. The intent is to incorporate a variety of housing types to appeal to a wide range of home buyers while still implementing commercial and single family residential uses as currently shown in the general plan.

City of Star
P.O. Box 130
Star, Idaho 83669
P: 208-286-7247 F: 208-286-7569

ANNEXATION & ZONING - REZONE APPLICATION

****All information must be filled out to be processed.*

FILE NO.: AZ-22-11
Date Application Received: 5/27/2023 Fee Paid: _____
Processed by: City: Barbara Norgrove

Applicant Information:

PRIMARY CONTACT IS: Derk Pardoe

Applicant Name: Derk Pardoe
Applicant Address: 3454 Stone Mountain Ln. Sandy, UT Zip: 84092
Phone: 801-808-2357 Email: derkpardoe@gmail.com

Owner Name: Derk Pardoe
Owner Address: 3454 Stone Mountain Ln. Sandy, UT Zip: 84092
Phone: 801-808-2357 Email: derkpardoe@gmail.com

Representative (e.g., architect, engineer, developer):
Contact: Chad Garner Firm Name: Focus Engineering & Surveying
Address: 6949 S High Tech Dr. Ste. 200 Zip: 84047
Phone: 801-352-0075 Email: cgarner@focus-es.com

Property Information:

Site Address: 58 N Truman Pl 8370 W Shultz Ct 8245 W Shultz Ct Parcel Number: (see below)
Total Acreage of Site: ±74.6 acres
Total Acreage of Site in Special Flood Hazard Area: N/A
Proposed Zoning Designation of Site: R-10 & C-2
Parcel Numbers: R3720002880, R3720003030, R3720001505, R3720001507, R3720001509, S0409417201, R3720002500, R3720002480, R3720002412

Zoning Designations:

	Zoning Designation	Comp Plan Designation	Land Use
Existing	C-2, R1, RUT	Commercial, High Density Residential, Compact Residential, Neighborhood Residential	Commercial, High Density Residential, Compact Residential, Neighborhood Residential
Proposed	C-2 & R-10	Commercial, Compact Residential	Commercial, Compact Residential
North of site	RUT	N/A	N/A
South of site	C-1, R1, RUT (Hwy 44)	Commercial	Commercial
East of site	MU, R-13, RUT	Commercial, High Density Residential, Neighborhood Residential	Commercial, High Density Residential, Neighborhood Residential
West of site	RUT (Hwy 16)	ITD 44/16 R.O.W.	ITD 44/16 R.O.W.

Special On-Site Features *(Yes or No – If yes explain)*:

Areas of Critical Environmental Concern - No
Evidence of Erosion - No
Fish Habitat - No
Floodplain - No
Mature Trees - No
Riparian Vegetation - No
Steep Slopes - No
Stream/Creek - Yes, runs east/west on north side of development
Unique Animal Life - No
Unique Plant Life - No
Unstable Soils - No
Wildlife Habitat - No
Historical Assets - No

Application Requirements:

(Applications are required to contain one copy of the following unless otherwise noted. ***When combining with other applications (Prelim Plat, CUP, etc.) please include one paper copy for all applications****)*

Applicant (√)	Description	Staff (√)
DP	Pre-application meeting with the Planning Department required prior to neighborhood meeting.	
DP	Copy of neighborhood meeting notice sent to property owners within 300 feet and meeting sign-in sheet. **(Please contact the City for addresses & labels)** (Applicants are required to hold a neighborhood meeting to provide an opportunity for public review of the proposed project prior to the submittal of an application.)	
DP	Completed and signed Annexation & Zoning/Rezone Application	
DP	Fee: (Include Development Agreement Fee). Please contact the City for current fee. Fees may be paid in person with check or electronically with credit card. Please call City for electronic payment. Additional service fee will apply to all electronic payments.	
	Narrative fully describing the proposed project (must be signed by applicant)	
DP	Legal description of the property to be annexed and/or rezoned: • Include a metes & bounds description to the section line/centerline of all adjacent roadways, stamped and signed by a registered professional land surveyor, with a calculated closure sheet. • Scaled exhibit map showing the boundaries of the legal description in compliance w/the requirements of the Idaho State Tax Commission Property Tax Administrative Rules IDAPA 35.01.03.225.01h. • If requesting more than one zoning designation, include a legal description for each zone along with an overall annexation/rezone boundary description. Also include the boundaries of each different zone on the map. • Submit word.doc and pdf version with engineer's seal.	
DP	Recorded warranty deed for the subject property	

DP	If the signature on this application is not the owner of the property, an **original** notarized statement (affidavit of legal interest) from the owner stating the applicant is authorized to submit this application.	
DP	One (1) 8½" X 11" copy and electronic copy in pdf. format of vicinity map showing the location of the subject property	
DP	One (1) full-size 24" X 36" copy and one (1) 11" X 17" copy of associated CUP/PUD Site Plan/Preliminary Plat. If this application is not accompanied by a plat or site plan, please submit conceptual development plan for the property.	
DP	Electronic copy in pdf. format of submitted plat, site or conceptual plan.	
DP	List of name(s) and address(es) of all canal or irrigation ditches within or contiguous to the proposed development.	
DP	One (1) copy of names and addresses printed on address labels, of property owners within three hundred feet (300') of the external boundaries of the property being considered as shown on record in the County Assessor's office. **Please contact the City to request addresses and labels.**	
DP	Two (2) copies of the Electronic versions of submitted application including neighborhood meeting information, signed application, narrative, legal description, warranty deed, vicinity map, preliminary plat/site plan, irrigation district information, shall be submitted in original pdf format (no scans for preliminary plat/site plans) on two (2) thumb drives only (no discs) with the files named with project name and plan type.	
DP	Signed Certification of Posting with pictures. (see attached posting requirements and certification form) – To be completed by application after acceptance of application. Staff will notify applicant of hearing and posting date.	
DP	*Applicant agrees to enter into a Development Agreement with this application. Applicant's Signature: Derk Pardoe	
DP	Property shall be annexed into Star Sewer and Water District prior to Final Plat approval, building permits. Please contact SSWD for details.	

FEE REQUIREMENT:

*** I have read and understand the above requirements. I further understand fees will be collected at the time of filing an application. I understand that there may be other fees associated with this application incurred by the City in obtaining reviews or referrals by architect, engineering, or other professionals necessary to enable the City to expedite this application. I understand that I, as the applicant, am responsible for all payments to the City of Star.*

Derk Pardoe
Applicant/Representative Signature

5/26/23
Date

City of Star
P.O. [illegible]
Star, Idaho [illegible]
P: 208-286-7247

CONDITIONAL USE PERMIT APPLICATION

****All applicable information must be filled out to be processed.*

FILE NO.: CU-22-05
Date Application Received: 5/27/2023 Fee Paid: _____
Processed by: City: Barbara Norgrove

Applicant Information:

PRIMARY CONTACT IS: Derk Pardoe

Applicant Name: Derk Pardoe
Applicant Address: 3454 Stone Mountain Ln. Sandy, UT Zip: 84092
Phone: 801-808-2357 Email: derkpardoe@gmail.com

Owner Name: Derk Pardoe
Owner Address: 3454 Stone Mountain Ln. Sandy, UT Zip: 84092
Phone: 801-808-2357 Email: derkpardoe@gmail.com

Representative (e.g., architect, engineer, developer):
Contact: Chad Garner Firm Name: Focus Engineering & Surveying
Address: 6949 S High Tech Dr. Ste. 200 Zip: 84047
Phone: 801-352-0075 Email: cgarner@focus-es.com

Property Information:

Site Address: 58 N Truman Pl 8370 W Shultz Ct. 8245 W Shultz Ct
Parcel Number: R3720001507, R3720001509, R3720002500, R3720002480 Part of R3720001505 Part of R3720002412 Part of S0409417201

Requested Condition(s) for Conditional Use: Requesting a conditional use for multifamily residential dwellings. The proposed boundaries of this multifamily development are currently zoned in Boise as C-2 and R1. We are currently filing for annexation into Star City and requesting a rezone of the entire property to the C-2 and R-10 zone. The multifamily residential dwellings would fall in the R-10 zone.

	Zoning Designation	Comp Plan Designation
Existing	C-2, R1, small portion of RUT	Commercial, High Density Residential, Compact Residential, Neighborhood Residential
Proposed	C-2 & R-10	Commercial & Compact Residential
North of site	RUT	N/A
South of site	C-1, R1, RUT (Hwy 44)	Commercial
East of site	MU, R-13, RUT	Commercial, High Density Residential, Neighborhood Residential
West of site	RUT (Hwy 16)	ITD 44/16 R.O.W.

Site Data:

Total Acreage of Site: ±19.4 acres for apartments; ±74.6 acres for entire development
Proposed Percentage of Site Devoted to Bldg Coverage: Approx. 23%
Proposed Percentage of Site Devoted to Landscaping: Approx. 35%
Number of Parking spaces: Proposed 701 stalls Required 686 stalls
Requested Front Setback: 10' Requested Rear Setback: 10'
Requested Side Setback: 0' Requested Side Setback: 0'
Requested Side Setback: 20' between buildings
Existing Site Characteristics: Existing homes, some abandoned buildings, partially improved portions of Hamlin Drive, Shultz St, and Shultz Cir, existing irrigation, storm drain, and overhead powerlines.
Number and Uses of Proposed Buildings: 19 residential multifamily building + 1 clubhouse building
Location of Buildings: Throughout property
Gross Floor Area of Proposed Buildings: Approx. 500,000 SQFT
Describe Proposed On and Off-Site Traffic Circulation: Property is near the intersection of Highways 16 and 44. Main access would be located off of Hamlin Ave, which is accessed from Highway 44. There would be circular traffic flow with internal roads/drive aisles located off of Shultz St and Hamlin Ave.
Proposed Signs – number, type, location: Entry monument signage at east entrance.
(include draft drawing) Secondary entry monument at north entrance.
Public Services (state what services are available and what agency is providing the service):

- Potable Water - Star Sewer and Water
- Irrigation Water - Middleton Mill Canal
- Sanitary Sewer - Star Sewer and Water
- Schools - Eagle Elementary, Star Middle School, Eagle High School
- Fire Protection - Middleton/Star Fire District
- Roads - Roads within property to be privately owned and maintained.

Flood Zone Data (This Info Must Be Filled Out Completely Prior to Acceptance):

Subdivision/Project Name: Talega Village Phase: 1
Special Flood Hazard Area: total acreage 0 number of homes/structures
0 Subject property does not have any special flood hazard areas.

a. A note must be provided on the site plan documenting the current flood zone in which the property or properties are located. The boundary line must be drawn on the plan in situations where two or more flood zones intersect over the property or properties being surveyed.

b. FEMA FIRM panel(s): #160xxxxxC, 160xxxxxE, etc.: 16001C0130J
FIRM effective date(s): mm/dd/year 06/19/2020
Flood Zone(s): Zone X, Zone A, Zone AE, Zone AH, etc.: Zone X
Base Flood Elevation(s): AE____.0 ft., etc.: N/A

c. Flood Zones are subject to change by FEMA and all land within a floodplain is regulated by Chapter 10 of the Star City Code.

Application Requirements:

(Applications are required to contain <u>one</u> copy of the following unless otherwise noted.)

Applicant (√)	Description	Staff (√)
	Pre-application meeting with Planning Department required prior to neighborhood meeting.	
	Copy of neighborhood meeting notice sent to property owners within 300 feet and meeting sign-in sheet. **(Please contact the City for addresses & labels)** (Applicants are required to hold a neighborhood meeting to provide an opportunity for public review of the proposed project prior to the submittal of an application.)	
	Completed and signed Conditional Use Application	
	Fee: Please contact the City for current fee. Fees may be paid in person with check or electronically with credit card. Please call City for electronic payment. Additional service fee will apply to all electronic payments.	
	Narrative fully describing the existing use, and the proposed project. (must be signed by applicant)	
	Legal description of the property (word.doc and electronic version with engineer's seal):	
	Copy of recorded warranty deed.	
	If the signature on this application is not the owner of the property, an **original** notarized statement (affidavit of legal interest) from the owner stating the applicant is authorized to submit this application.	
	One (1) copy of names and addresses printed on address labels, of property owners within three hundred feet (300') of the external boundaries of the property being considered as shown on record in the County Assessor's office. Please contact the City to request addresses and labels.	
	List of names(s) and address(es) of all canal or irrigation ditches within or contiguous to the proposed development.	
	Vicinity map showing the location of the subject property	
	One (1) full-size copy and One (1) 11"x 17" reduction of the Site Plan	
	One (1) full-size copy and One (1) 11"x 17" reduction of the landscape plan (if applicable)	
	Building elevations showing construction materials	
	Two (2) copies electronic versions of submitted application including signed application, narrative, legal description, warranty deed, vicinity map, site plan, landscape plan, building elevations, <u>shall be submitted in original pdf format (no scans) on a thumb drive only (no discs)</u> with the files named with project name and plan type. We encourage you to also submit at least one (1) color version for presentation purposes.	
	Signed Certification of Posting with pictures. (see attached posting requirements and certification form) – To be completed by application after acceptance of application. Staff will notify applicant of hearing and posting date.	

Site Plan (If applicable):

	The following items must be included on the site plan:	
	• Date, scale, north arrow, and project name	
	• Names, addresses, and phone number of owner(s), applicant, and engineer, surveyor or planner who prepared the site plan	
	• Existing boundaries, property lines, and dimensions of the lot	
	• Relationship to adjacent properties, streets, and private lanes	
	• Easements and right-of-way lines on or adjacent to the lot	
	• Existing and proposed zoning of the lot, and the zoning and land use of all adjacent properties	
	• Building locations(s) (including dimensions to property lines)	
	• Parking and loading areas (dimensioned)	
	• Traffic access drives and traffic circulation (dimensioned)	

	• Open/common spaces	
	• Refuse and service areas	
	• Utilities plan, including the following: Sewer, water, irrigation, and storm drainage (existing & proposed)	
	• All on-site lighting proposed – Must Meet City "Dark Sky" Ordinances	

Landscape Plan (If applicable):

	The following items must be included on the landscape plan:	
	• Date, scale, north arrow, and project name	
	• Names, addresses, and phone numbers of the developer and the person and/or firm preparing the plan	
	• Existing natural features such as canals, creeks, drains, ponds, wetlands, floodplains, high groundwater areas, and rock outcroppings	
	• Location, size, and species of all existing trees on site with trunks 4 inches or greater in diameter, measured 6 inches above the ground. Indicate whether the tree will be retained or removed.	
	• Existing buildings, structures, planting areas, light poles, power poles, walls, fences, berms, parking and loading areas, vehicular drives, trash areas, sidewalks, pathways, storm water detention areas, signs, street furniture, and other man-made elements	
	• Existing and proposed contours for all areas steeper than 20% slope. Berms shall be shown with one-foot contours	
	• Sight Triangles as defined in 8-4 A-7 of this Ordinance	
	• Location and labels for all proposed plants, including trees, shrubs, and groundcovers (trees must not be planted in City water or sewer easements). Scale shown for plant materials shall reflect approximate mature size	
	• Proposed screening structures	
	• Design drawings(s) of all fencing proposed	
	• Calculations of project components to demonstrate compliance with requirements of this ordinance, including: ➢ Number of street trees and lineal feet of street frontage ➢ Width of street buffers (exclusive of right-of-way) ➢ Width of parking lot perimeter landscape strip ➢ Buffer width between different land uses ➢ Number of parking stalls and percent of parking area with internal landscaping ➢ Total number of trees and tree species mix ➢ Mitigation for removal of existing trees, including number of caliper inches being removed	

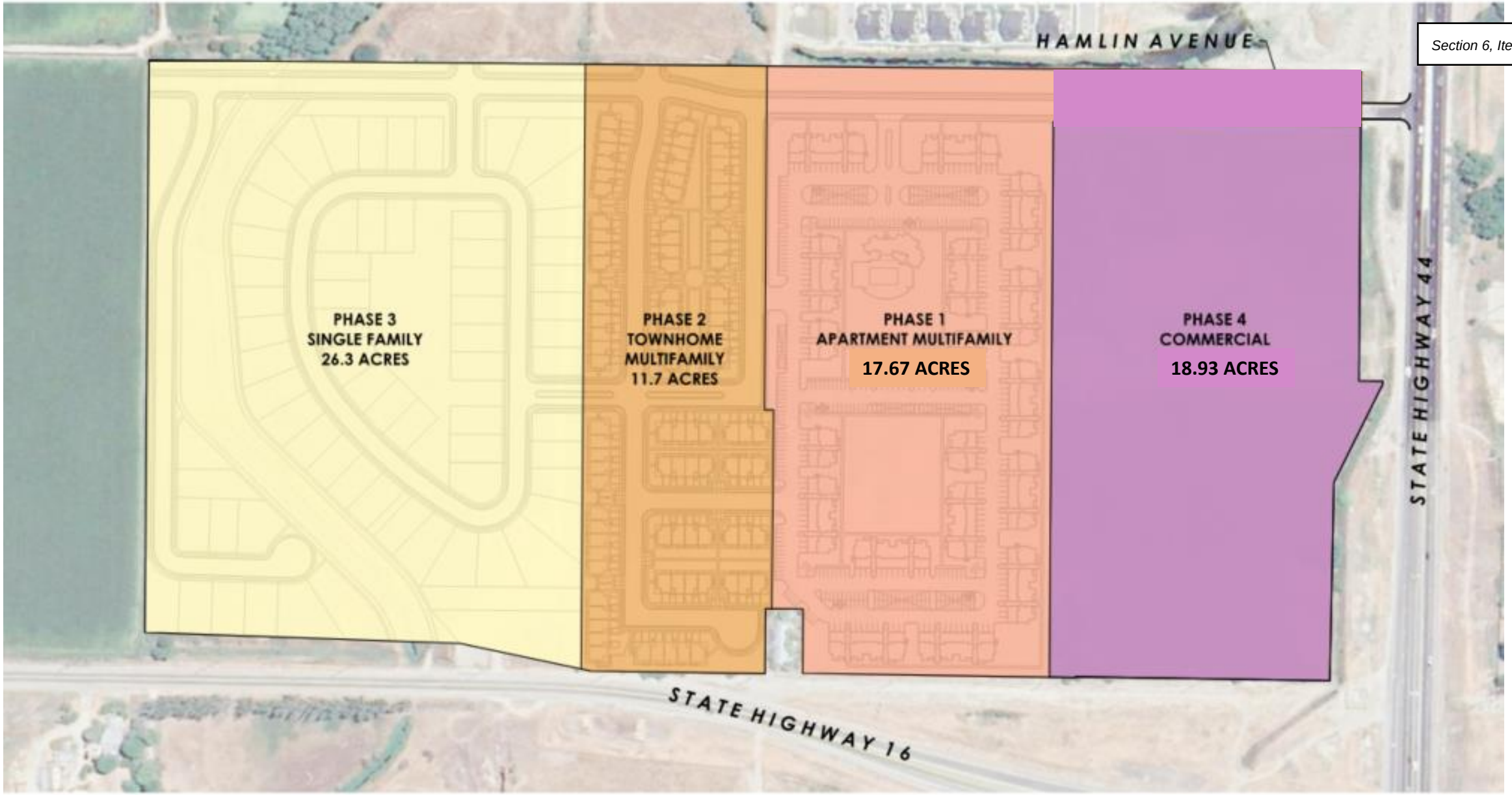
SIGNS (If applicable):

All signs will require separate submittal of a sign application.

FEE REQUIREMENT:

*** I have read and understand the above requirements. I further understand fees will be collected at the time of filing an application.* ***I understand that there may be other fees associated with this application incurred by the City in obtaining reviews or referrals by architect, engineering, or other professionals necessary to enable the City to expedite this application. I understand that I, as the applicant, am responsible for all payments to the City of Star.***

Derk Pardoe _____ 11/28/22 _____


HAMLIN AVENUE
PHASE 3
SINGLE FAMILY
26.3 ACRES
PHASE 2
TOWNHOME
MULTIFAMILY
11.7 ACRES
PHASE 1
APARTMENT MULTIFAMILY
17.67 ACRES
PHASE 4
COMMERCIAL
18.93 ACRES
STATE HIGHWAY 44
STATE HIGHWAY 16
GRAPHIC SCALE

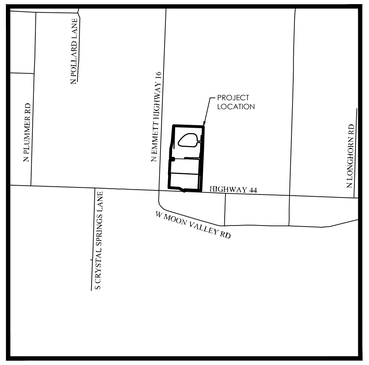
TALEGA VILLAGE

PREPARED FOR:

CIG ENTERPRISES

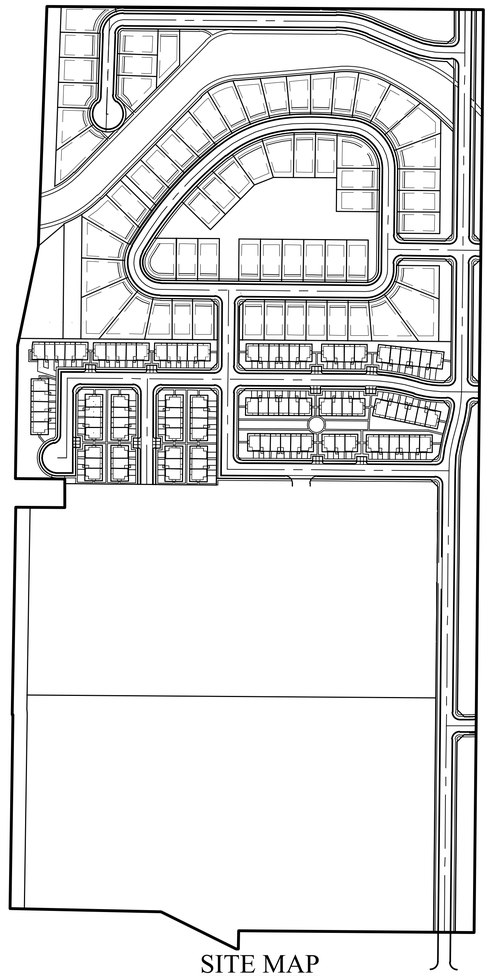
LOCATED IN:

STAR, IDAHO



VICINITY MAP

NTS



SITE MAP

Sheet List Table	
Sheet Number	Sheet Title
C1	COVER SHEET
C2.1	PRELIMINARY PLAT
C2.2	PRELIMINARY PLAT
C2.3	PRELIMINARY PLAT
C2.4	PRELIMINARY PLAT
C3	PRELIMINARY SITE PLAN
C4.1	GRADING & DRAINAGE PLAN
C4.2	GRADING & DRAINAGE PLAN
C4.3	GRADING & DRAINAGE PLAN
L1.0	OVERALL LANDSCAPE PLAN
L1.1	LANDSCAPE PLAN SINGLE FAMILY
L1.2	LANDSCAPE PLAN SINGLE FAMILY
L1.3	LANDSCAPE PLAN SINGLE FAMILY
L1.4	LANDSCAPE PLAN SINGLE FAMILY
L1.5	LANDSCAPE PLAN SINGLE FAMILY
L1.6	LANDSCAPE PLAN SINGLE FAMILY
L1.7	LANDSCAPE PLAN SINGLE FAMILY
L1.8	LANDSCAPE PLAN TOWNHOMES
L1.9	LANDSCAPE PLAN TOWNHOMES
L1.10	LANDSCAPE PLAN TOWNHOMES
L1.11	LANDSCAPE DETAILS

GENERAL NOTES

1. CONTRACTOR TO FIELD VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION, AND REPORT ANY DISCREPANCIES TO THE ENGINEER.

2. ANY AND ALL DISCREPANCIES IN THESE PLANS ARE TO BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO COMMENCEMENT OF CONSTRUCTION.

3. ALL CONSTRUCTION SHALL ADHERE TO CITY OF STAR AND ISPWC STANDARD PLANS AND SPECIFICATIONS.

4. ALL UTILITIES AND ROAD IMPROVEMENTS SHOWN ON THE PLANS HEREIN SHALL BE CONSTRUCTED USING REFERENCE TO SURVEY CONSTRUCTION STAKES PLACED UNDER THE SUPERVISION OF A PROFESSIONAL LICENSED SURVEYOR WITH A CURRENT LICENSE ISSUED BY THE STATE OF ICAHO. ANY IMPROVEMENTS INSTALLED BY ANY OTHER VERTICAL OR HORIZONTAL REFERENCE WILL NOT BE ACCEPTED OR CERTIFIED BY THE ENGINEER OF RECORD.

5. THIS DRAWING SET IS SCALED TO BE PRINTED ON A 24" X 36" SIZE OF PAPER (ARCH. D). IF PRINTED ON A SMALLER PAPER SIZE, THE DRAWING WILL NOT BE TO SCALE AND SHOULD NOT BE USED TO SCALE MEASUREMENTS FROM THE PAPER DRAWING. ALSO USE CAUTION, AS THERE MAY BE TEXT OR DETAIL THAT MAY BE OVERLOOKED DUE TO THE SMALL SIZE OF THE DRAWING.

NOTICE

BEFORE PROCEEDING WITH THIS WORK, THE CONTRACTOR SHALL CAREFULLY CHECK AND VERIFY ALL CONDITIONS, QUANTITIES, DIMENSIONS, AND GRADE ELEVATIONS, AND SHALL REPORT ALL DISCREPANCIES TO THE ENGINEER.

ENGINEER'S NOTES TO CONTRACTOR

1. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES, CONDUITS OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS, TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN ON THESE DRAWINGS. THE CONTRACTOR FURTHER ASSUMES ALL LIABILITY AND RESPONSIBILITY FOR THE UTILITY PIPES, CONDUITS OR STRUCTURES SHOWN OR NOT SHOWN ON THESE DRAWINGS. IF UTILITY LINES ARE ENCOUNTERED DURING CONSTRUCTION THAT ARE NOT IDENTIFIED BY THESE PLANS, CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY.

2. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE CITY, THE OWNER, AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.

3. UNAUTHORIZED CHANGES & USES: THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

4. ALL CONTOUR LINES SHOWN ON THE PLANS ARE AN INTERPRETATION BY CAD SOFTWARE OF FIELD SURVEY WORK PERFORMED BY A LICENSED SURVEYOR. DUE TO THE POTENTIAL DIFFERENCES IN INTERPRETATION OF CONTOURS BY VARIOUS TYPES OF GRADING SOFTWARE BY OTHER ENGINEERS OR CONTRACTORS, FOCUS DOES NOT GUARANTEE OR WARRANTY THE ACCURACY OF SUCH LINEWORK. FOR THIS REASON, FOCUS WILL NOT PROVIDE ANY GRADING CONTOURS IN CAD FOR ANY TYPE OF USE BY THE CONTRACTOR. SPOT ELEVATIONS AND PROFILE ELEVATIONS SHOWN IN THE DESIGN DRAWINGS GOVERN ALL DESIGN INFORMATION ILLUSTRATED ON THE APPROVED CONSTRUCTION SET. CONSTRUCTION EXPERTISE AND JUDGMENT BY THE CONTRACTOR IS ANTICIPATED BY THE ENGINEER TO COMPLETE BUILD-OUT OF THE INTENDED IMPROVEMENTS.

CONTACTS

ENGINEER & SURVEYOR
FOCUS ENGINEERING & SURVEYING, LLC
1001 N. ROSARIO STREET, SUITE 100
MERIDIAN, IDAHO 83642
(208) 974-0075
PROJECT MANAGER: DENNIS JORDAN
SURVEY MANAGER: TRENTON SMITH

OWNER/DEVELOPER
CIG ENTERPRISES
2255 E SUNNYSIDE AVE
SALT LAKE CITY, UTAH 84158
DERKPARDOE@GMAIL.COM
CONTACT: DERK PARDOE

N

S

Know what's below. Call 811 before you dig.

GRAPHIC SCALE

200 0 100 200 400 800

(IN FEET)
1 inch = 200 ft.

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focusutah.com

FOR REVIEW ONLY

TALEGA VILLAGE
STAR, IDAHO
COVER SHEET

REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
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COVER SHEET

Scale: 1"=200' | Drawn: DCJ
Date: 11/28/2023 | Job #: 21-0488
Sheet: C1

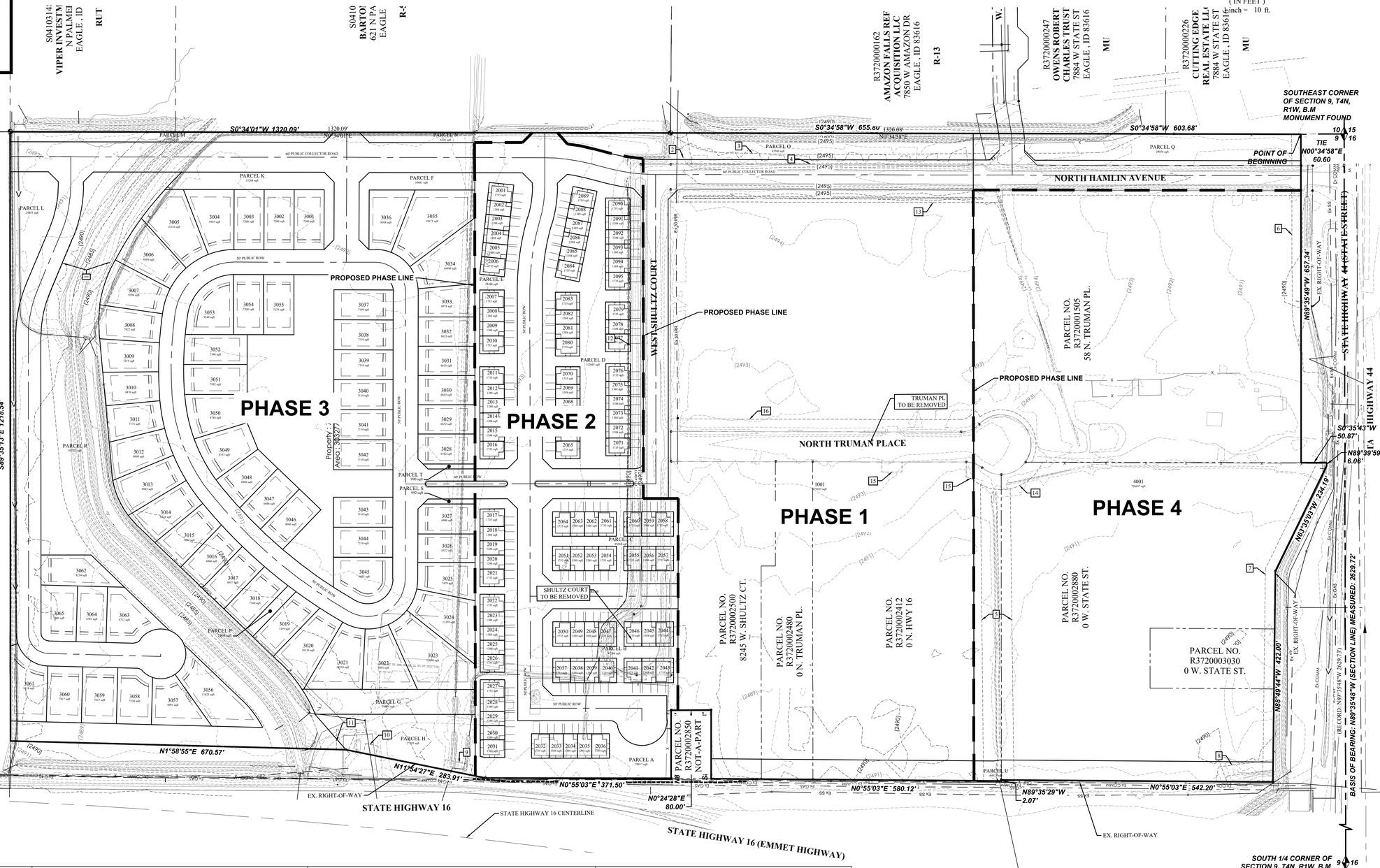
2021\21-0488 Talega Village\design\21-0488.dwg\sheets preliminary subdivision\21-0488 C1 Cover Sheet.dwg

PRELIMINARY PLAT

TALEGA VILLAGE

ADA COUNTY, IDAHO

LOCATE WITHIN THE SE 1/4 OF SECTION 9, TOWNSHIP 4 NORTH., RANGE 1 WEST.,
B.M. ADA COUNTY, IDAHO.



LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15 SD — 15" STORM DRAIN
- 8 SS — 8" SANITARY SEWER
- 8 W — 8" CULINARY WATER
- 8 SW — 8" SECONDARY WATER
- XXXX — CONTOUR MAJOR
- XXXX — CONTOUR MINOR
- Ex SD — EXIST. STORM DRAIN
- Ex SS — EXIST. SANITARY SEWER
- Ex W — EXIST. CULINARY WATER
- EXIST. FENCE
- (XXXX) — EXIST. CONTOUR MAJOR
- (XXXX) — EXIST. CONTOUR MINOR
- SIGN
- STREET LIGHT
- SD MH, INLET, AND COMBO
- SEWER MANHOLE
- CULINARY VALVE, TEE & BEND
- SECONDARY VALVE, TEE & BEND
- WATER BLOW-OFF
- FIRE HYDRANT
- STREET MONUMENT (TO BE SET)
- EXIST. STREET MONUMENT
- EXIST. SD INLET & MH
- EXIST. SEWER MH
- EXIST. VALVE, TEE, & BEND
- EXIST. FIRE HYDRANT
- o XXXX.XX — SPOT ELEVATION

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 10 ft.

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www.focusutah.com

FOR REVIEW ONLY

TALEGA VILLAGE
ADA COUNTY, IDAHO
LOCATE WITHIN THE SE 1/4 OF SECTION 9, T4N,
RANGE 1 WEST, B.M. ADA COUNTY, IDAHO.
PRELIMINARY PLAT

REVISION BLOCK

#	DATE	DESCRIPTION
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PRELIMINARY PLAT

Scale: 1"=100' | Drawn: MJT
Date: 5/25/2023 | Job #: 21-0488
Sheet: C2

ENGINEER
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PHONE: (208) 261-2226
EMAIL:JOHN@VALLEYLANDSURVEYING.COM

DEVELOPER
DERK PARDOE
3454 STONE MOUNTAIN LANE, SANDY, UT 84092.
EMAIL:DERKPARDOE@GMAIL.COM

OWNERS OF RECORD
CIG ENTERPRISES, LLC
2255 E SUNNYSIDE AVE.
SALT LAKE CITY, UTAH 84158.

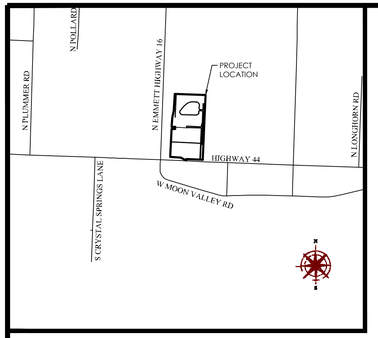
811 Know what's below. Call 811 before you dig.

PRELIMINARY PLAT

TALEGA VILLAGE

ADA COUNTY, IDAHO

LOCATE WITHIN THE SE 1/4 OF SECTION 9, TOWNSHIP 4 NORTH., RANGE 1 WEST.,
B.M. ADA COUNTY, IDAHO.



GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 10 ft.

LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15 SD — 15" STORM DRAIN
- 8 SS — 8" SANITARY SEWER
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- WATER BLOW-OFF
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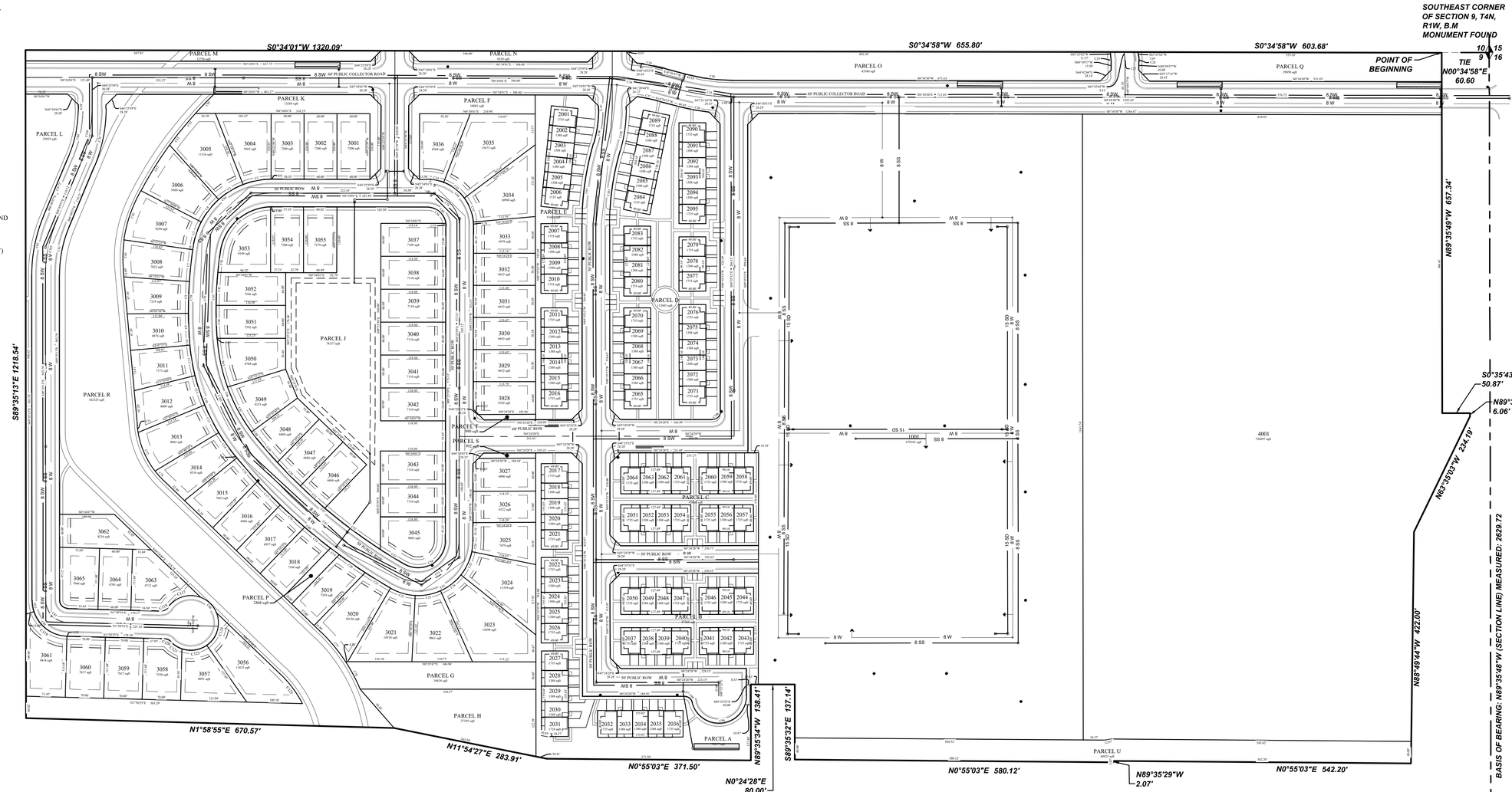
- EXIST. FIRE HYDRANT
- o XXXX.XX — SPOT ELEVATION



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FOR REVIEW ONLY

TALEGA VILLAGE
ADA COUNTY, IDAHO
LOCATE WITHIN THE SE 1/4 OF SECTION 9, TOWNSHIP 4 NORTH.,
RANGE 1 WEST., B.M. ADA COUNTY, IDAHO.
PRELIMINARY PLAT

REVISION BLOCK

#	DATE	DESCRIPTION
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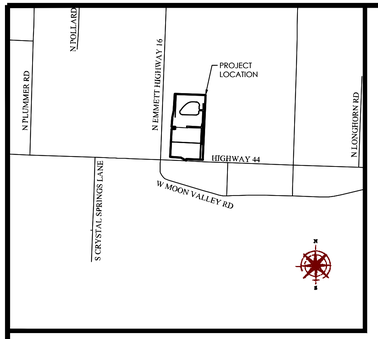
PRELIMINARY PLAT

Scale: 1"=100' | Drawn: MJT
Date: 5/25/2023 | Job #: 21-0488
Sheet: C2.1

Know what's below. Call 811 before you dig.



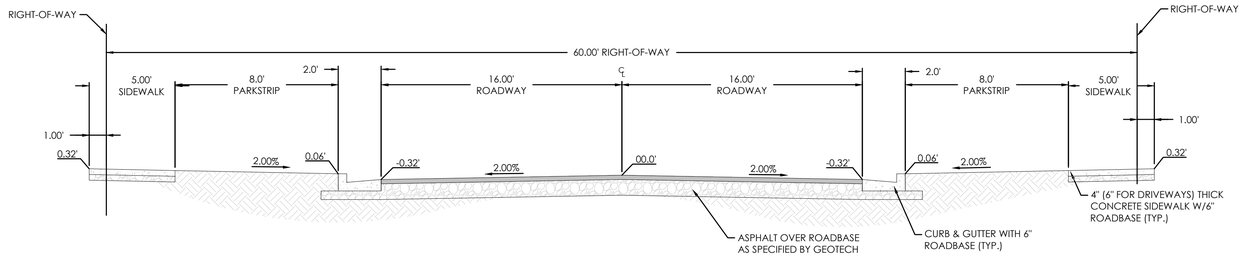
BOUNDARY LINE
SECTION LINE
EXIST. EASEMENT LINE
EXIST. PROPERTY LINE
EXIST. RIGHT-OF-WAY LINE
(XXXX) EXIST. CONTOUR MAJOR
(XXXX) EXIST. CONTOUR MINOR
EXIST. STORM DRAIN
EXIST. SANITARY SEWER
EXIST. CULINARY WATER
EXIST. SECONDARY WATER
EXIST. IRRIGATION
EXIST. NATURAL GAS
EXIST. COMMUNICATIONS
EXIST. OVERHEAD POWER
EXIST. UNDERGROUND POWER
EXIST. FENCE
EXIST. IRRIGATION DITCH FLOWLINE
EXIST. CONCRETE, CURB & GUTTER
EXIST. EDGE OF ASPHALT
PROPOSED CURB & GUTTER
SECTION MONUMENT (FOUND)
SECTION MONUMENT (NOT FOUND)
BOUNDARY MARKER
EXIST. SD INLET, MANHOLE & COMBO BOX
EXIST. SEWER MANHOLE
EXIST. WATER VALVE & WATER METER
EXIST. FIRE HYDRANT
EXIST. IRRIGATION BOX
EXIST. GAS VALVE & GAS METER
EXIST. STREET LIGHT
EXIST. POWER POLE
EXIST. ELECTRICAL BOX
EXIST. COMMUNICATIONS BOX

PRELIMINARY PLAT

TALEGA VILLAGE

ADA COUNTY, IDAHO

LOCATE WITHIN THE SE 1/4 OF SECTION 9, TOWNSHIP 4 NORTH., RANGE 1 WEST.,
B.M. ADA COUNTY, IDAHO.



60' RESIDENTIAL ROAD
N.T.S.

GENERAL NOTES:

1. ALL PUBLIC UTILITY EASEMENTS PLATTED HEREON ARE IN PERPETUITY FOR INSTALLATION, MAINTENANCE, REPAIR AND REPLACEMENT OF PUBLIC UTILITIES, SIDEWALKS AND APPURTENANT PARTS THEREOF AND THE RIGHT TO REASONABLE ACCESS TO GRANTOR'S PROPERTY FOR THE ABOVE DESCRIBED PURPOSES. THE EASEMENT SHALL RUN WITH THE REAL PROPERTY AND SHALL BE BINDING UPON THE GRANTOR AND THE GRANTOR'S SUCCESSORS, HEIRS, AND ASSIGNS.

2. ALL COMMON AREAS AND STREETS OR DRIVES TO SERVE AS PUBLIC UTILITY EASEMENTS.

3. ALL AREAS ARE COMMON AREAS AND FACILITIES EXCEPT AS OTHERWISE SPECIFICALLY DESIGNATED.

4. THE INSTALLATION OF IMPROVEMENTS SHALL CONFORM TO ALL CITY STANDARDS, RESOLUTIONS AND ORDINANCES.

5. BUILDING PERMITS WILL NOT BE ISSUED UNTIL ALL IMPROVEMENTS HAVE BEEN INSTALLED AND ACCEPTED BY THE CITY IN WRITING OR BONDED FOR.

6. THIS AREA IS SUBJECT TO THE NORMAL, EVERYDAY SOUNDS, ODORS, SIGHTS, EQUIPMENT, FACILITIES, AND ANY OTHER ASPECTS ASSOCIATED WITH AGRICULTURAL LIFESTYLES. FUTURE RESIDENTS SHOULD ALSO RECOGNIZE THE RISK INHERENT WITH LIVESTOCK.

7. SANITARY SEWER AND DOMESTIC WATER SERVICE TO BE PROVIDED BY STAR SEWER AND WATER DISTRICT.

8. SUBJECT PROPERTY DOES NOT FALL WITHIN FEMA FLOOD HAZARD ZONES A AND X. SEE FIRM PANEL

9. ALL LOTS ARE HEREBY DESIGNATED AS HAVING A PERMANENT EASEMENT FOR PUBLIC UTILITIES, IRRIGATION AND LOT DRAINAGE OVER THE TEN (10) FEET ADJACENT TO ANY PUBLIC STREET. THIS EASEMENT SHALL NOT PRECLUDE THE CONSTRUCTION OF HARD-SURFACED DRIVEWAYS AND WALKWAYS TO EACH LOT.

10. UNLESS OTHERWISE SHOWN AND DIMENSIONED, ALL LOT ARE HEREBY DESIGNATED AS HAVING A PERMANENT EASEMENT FOR PUBLIC UTILITIES, IRRIGATION AND LOT DRAINAGE OVER THE FIVE (5) FEET ADJACENT TO ANY INTERIOR SIDE LOT LINE, AND OVER THE TWELVE (12) FEET ADJACENT TO ANY REAR LOT LINE OR SUBDIVISION BOUNDARY.

11. THIS SUBDIVISION WILL BE SUBJECT TO THE TERMS OF A DEVELOPMENT AGREEMENT WITH THE CITY OF STAR.

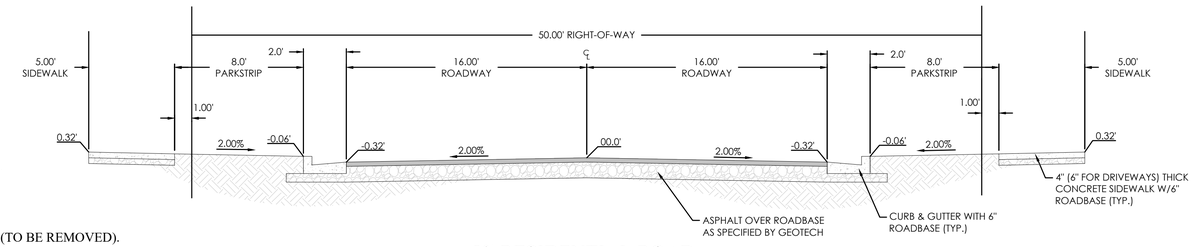
12. IRRIGATION WATER SHALL BE PROVIDED FROM THE GROUNDWATER RIGHTS WITH IDWR (63-2957) IN COMPLIANCE WITH IDAHO CODE 31-3805(B). LOTS WITHIN THE SUBDIVISION SHALL BE ENTITLED TO IRRIGATION WATER RIGHTS, AND THE INDIVIDUAL LOTS SHALL BE SUBJECT TO IRRIGATION WATER ASSESSMENTS.

13. BUILDING SETBACKS AND DIMENSIONAL STANDARDS IN THIS SUBDIVISION SHALL BE IN COMPLIANCE WITH THE APPLICABLE ZONING REGULATIONS OF THE CITY OF STAR OR AS APPROVED UNDER THE DEVELOPMENT AGREEMENT.

14. DIRECT LOT ACCESS TO STATE HIGHWAY 16 AND 44 IS PROHIBITED. (EXCEPT EMERGENCY VEHICLE ACCESS)

EASEMENTS NOTES:

1. DRY CREEK CANAL EASEMENT 25' FROM TOP OF BANK ON EACH SIDE.
2. ACCESS EASEMENT INST. NO. 2017-121572
3. DRY CREEK CANAL EASEMENT 25' FROM TOP OF BANK
4. ACHD SIDEWALK EASEMENT INST. NO. 2019-046199.
5. MIDDLETON MILL CANAL EASEMENT 25' FROM TOP OF BANK.
6. DRAINAGE DISTRICT 2 EASEMENT 25' FROM TOP OF BANK.
7. DRAINAGE DISTRICT 2 EASEMENT 25' FROM TOP OF BANK.
8. 20' TELECOMMUNICATIONS EASEMENT, INST. NO. 9001613 & 9129096.
9. ITD PERMANENT DRAINAGE AND IRRIGATION EASEMENT, INST NO. 111101448.
10. ITD PERMANENT DRAINAGE AND IRRIGATION EASEMENT, INST NO. 111101448.
11. TELECOMMUNICATIONS EASEMENT, INST. NO. 8961467.
12. ITD PERMANENT DRAINAGE AND IRRIGATION EASEMENT, INST NO. 111101448.
13. ITD PERMANENT DRAINAGE AND IRRIGATION EASEMENT, INST. NO 111092656.
14. ITD PERMANENT DRAINAGE AND IRRIGATION EASEMENT, INST NO. 112005782. (TO BE REMOVED).
15. ITD PERMANENT DRAINAGE AND IRRIGATION EASEMENT, INST NO. 112005783. (TO BE REMOVED).
16. ITD PERMANENT DRAINAGE AND IRRIGATION EASEMENT, INST NO. 111092656. (TO BE REMOVED).



50' RESIDENTIAL ROAD
N.T.S.

PRELIMINARY PLAT DEVELOPMENT DATA

TOTAL ACRES (ENTIRE DEVELOPMENT)	74.60 AC
SINGLE-FAMILY LOTS	(16.9%) 12.6 AC
TOWNHOME UNITS	(4.6%) 3.4 AC
PUBLIC RIGHT-OF-WAY	(14.9%) 11.1 AC
TOTAL OPEN SPACE	(63.7%) 47.5 AC
TOTAL USABLE OPEN SPACE	(58.6%) 43.7 AC
TOTAL LOTS	
SINGLE-FAMILY RESIDENTIAL	65
TOWNHOMES RESIDENTIAL	95
MULTI-FAMILY LOT	1
COMMON LOTS/PARCELS	5
COMMERCIAL LOT	1
OPEN SPACE	14
TOTAL LOTS	181
LOT AREA DATA	
SMALLEST LOT SIZE (SINGLE-FAMILY)	6,686 SQ. FT.
SMALLEST LOT SIZE (TOWNHOMES)	4,859 SQ. FT.
AVERAGE LOT SIZE (SINGLE FAMILY)	8,400 SQ. FT.
AVERAGE LOT SIZE (TOWNHOMES)	6,974 SQ. FT.
RESIDENTIAL DENSITY	
OVERALL DENSITY	2.39 DU/AC
RESIDENTIAL GROSS DENSITY	8.7 UNITS/AC
ZONING	
EXISTING:	RUT, R-1 & C-2
PROPOSED:	R-10 & C-2

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FOR REVIEW ONLY

TALEGA VILLAGE
ADA COUNTY, IDAHO
LOCATE WITHIN THE SE 1/4 OF SECTION 9, TOWNSHIP 4 NORTH.,
RANGE 1 WEST., B.M. ADA COUNTY, IDAHO.
PRELIMINARY PLAT

REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
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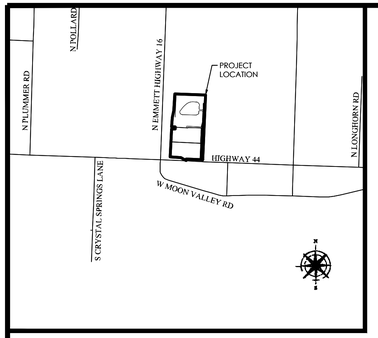
PRELIMINARY PLAT

Scale: N.T.S. | Drawn: MJT
Date: 5/25/2023 | Job #: 21-0488
Sheet: C2.2

J:\21\21-0488 talega Village\design 21-0488\dwg\sheet\ preliminary subdivision\21-0488 C2.2 Preliminary Plat.dwg



PRELIMINARY PLAT

TALEGA VILLAGE

ADA COUNTY, IDAHO

LOCATE WITHIN THE SE 1/4 OF SECTION 9, TOWNSHIP 4 NORTH., RANGE 1 WEST.,
B.M. ADA COUNTY, IDAHO.

Curve Table					
CURVE	RADIUS	DELTA	LENGTH	CHORD DIRECTION	CHORD LENGTH
C1	145.00	0°39'11"	1.65	S00°14'25"W	1.65
C2	145.00	20°36'39"	52.16	S10°23'30"E	51.88
C3	145.00	20°40'02"	52.30	S31°01'50"E	52.02
C4	145.00	20°40'02"	52.30	S51°41'52"E	52.02
C5	145.00	18°59'23"	48.06	S71°31'35"E	47.84
C6	775.00	0°21'18"	4.80	S81°11'56"E	4.80
C7	775.00	4°18'04"	58.18	S83°31'37"E	58.17
C8	775.00	4°18'04"	58.18	S87°49'42"E	58.17
C9	775.00	3°47'27"	51.27	N88°07'33"E	51.27
C10	375.00	1°01'17"	6.68	N85°43'11"E	6.68
C11	375.00	8°37'37"	56.46	N80°53'44"E	56.41
C12	375.00	8°37'37"	56.46	N72°16'07"E	56.41
C13	375.00	8°37'37"	56.46	N63°38'30"E	56.41
C14	375.00	7°58'43"	52.22	N55°20'20"E	52.18
C15	1025.00	0°14'49"	4.42	N51°13'35"E	4.42
C16	1025.00	3°11'33"	57.11	N49°30'24"E	57.10
C17	1025.00	3°21'22"	60.04	N46°13'56"E	60.03
C18	1025.00	3°22'00"	60.23	N39°30'55"E	60.22
C19	1025.00	1°07'36"	20.16	N37°16'07"E	20.16
C20	1025.00	3°13'45"	57.77	N35°05'26"E	57.76

Curve Table					
CURVE	RADIUS	DELTA	LENGTH	CHORD DIRECTION	CHORD LENGTH
C21	1025.00	3°00'30"	53.82	N31°58'19"E	53.81
C22	100.00	27°07'29"	47.34	N16°54'19"E	46.90
C23	100.00	27°07'29"	47.34	N10°13'11"W	46.90
C24	100.00	27°06'25"	47.31	N37°20'08"W	46.87
C25	100.00	27°06'25"	47.31	N64°26'33"W	46.87
C26	100.00	11°26'13"	19.96	S83°42'52"E	19.93
C27	100.00	4°35'01"	8.00	S87°42'32"W	8.00
C28	125.00	4°35'01"	10.00	N87°42'32"E	10.00
C29	75.00	4°35'01"	6.00	N87°42'32"E	6.00
C30	315.00	14°22'27"	79.03	S07°45'43"W	78.82
C31	85.00	5°08'21"	7.62	S87°59'51"W	7.62
C32	85.00	31°55'19"	47.36	S69°28'00"W	46.75
C33	85.00	31°55'19"	47.36	S37°32'41"W	46.75
C34	85.00	21°01'01"	31.18	S11°04'32"W	31.00
C35	345.00	14°22'27"	86.55	S07°45'43"W	86.33
C36	375.00	8°07'07"	53.14	S10°53'23"W	53.09
C37	325.00	6°26'38"	36.55	N11°43'38"E	36.53
C38	355.00	14°22'56"	89.11	N07°45'29"E	88.88
C39	385.00	7°40'56"	51.62	N11°06'29"E	51.58
C40	95.00	1°29'34"	2.47	N00°10'46"W	2.47

Curve Table					
CURVE	RADIUS	DELTA	LENGTH	CHORD DIRECTION	CHORD LENGTH
C41	95.00	80°05'45"	132.80	N40°58'25"W	122.25
C42	725.00	3°05'48"	39.18	N82°34'11"W	39.18
C43	725.00	4°44'58"	60.10	N86°29'33"W	60.08
C44	725.00	4°44'44"	60.05	S88°45'36"W	60.03
C45	725.00	0°09'25"	1.98	S86°18'32"W	1.98
C46	325.00	15°47'14"	89.55	S78°20'13"W	89.27
C47	325.00	16°26'44"	93.28	S62°13'14"W	92.96
C48	325.00	2°38'53"	15.02	S52°40'26"W	15.02
C49	975.00	3°24'03"	57.87	S49°38'57"W	57.86
C50	975.00	3°31'41"	60.04	S46°11'05"W	60.03
C51	975.00	3°31'41"	60.04	S42°39'24"W	60.03
C52	671.49	2°47'49"	32.78	N51°58'25"W	32.78
C52	975.00	7°25'28"	126.34	S37°10'49"W	126.26
C53	755.00	3°07'23"	41.15	N49°00'49"W	41.15
C53	975.00	3°00'01"	51.06	S31°58'04"W	51.05
C54	50.00	119°54'02"	104.63	S29°28'58"E	86.56
C55	35.00	8°12'48"	5.02	N86°27'37"E	5.01
C56	35.00	81°47'12"	49.96	N41°27'37"E	45.83
C57	671.49	8°26'20"	98.90	N57°35'30"W	98.81
C58	775.00	12°44'53"	172.44	N87°23'44"W	172.08

Curve Table					
CURVE	RADIUS	DELTA	LENGTH	CHORD DIRECTION	CHORD LENGTH
C59	375.00	34°52'51"	228.29	S68°47'24"W	224.78
C60	1025.00	20°52'55"	373.57	S40°54'31"W	371.51
C61	100.00	119°54'02"	209.27	S29°28'58"E	173.12
C62	254.66	21°26'03"	95.27	N70°17'55"W	94.71
C63	237.50	13°21'26"	55.37	N88°04'59"W	55.24
C64	85.00	90°00'00"	133.52	N45°34'01"E	120.21
C65	725.00	12°44'53"	161.31	N87°23'44"W	160.98
C66	325.00	34°52'51"	197.85	S68°47'24"W	194.81
C67	975.00	20°52'55"	355.35	S40°54'31"W	353.38
C68	35.00	90°00'00"	54.98	N45°34'01"E	49.50
C69	120.00	81°35'18"	170.88	N40°13'38"W	156.80
C70	750.00	12°44'53"	166.87	N87°23'44"W	166.53
C71	157.50	4°12'15"	11.56	S83°08'11"W	11.55
C72	157.50	28°09'13"	77.39	S66°57'27"W	76.61
C73	75.00	119°54'02"	156.95	S29°28'58"E	129.84
C74	60.00	90°00'00"	94.25	N45°34'01"E	84.85
C75	157.50	8°28'03"	23.28	S48°38'50"W	23.26
C76	1025.00	3°21'20"	60.03	N42°52'35"E	60.02
C77	312.50	12°50'39"	70.05	S50°50'07"W	69.91
C78	312.50	10°24'36"	56.78	S62°27'45"W	56.70

Curve Table					
CURVE	RADIUS	DELTA	LENGTH	CHORD DIRECTION	CHORD LENGTH
C79	275.00	22°36'21"	108.50	S78°07'48"E	107.80
C80	225.00	22°36'21"	88.77	S78°07'48"E	88.20
C81	225.00	22°45'36"	89.38	N78°12'25"W	88.79
C82	275.00	22°45'36"	109.24	N78°12'25"W	108.52
C83	65.00	18°11'43"	20.64	S81°18'55"W	20.56
C84	65.00	88°25'52"	100.32	S46°11'51"W	90.66
C85	40.00	88°25'52"	61.74	S46°11'51"W	55.79
C89	50.00	283°36'29"	247.49	N86°21'54"E	61.84
C91	15.00	57°25'16"	15.03	S26°43'43"E	14.41
C93	1000.00	20°52'55"	364.46	S40°54'31"W	362.45
C94	145.00	81°35'18"	206.48	N40°13'38"W	189.47
C95	755.00	3°41'01"	48.54	S45°36'43"E	48.53
C96	225.00	16°07'34"	63.33	S81°22'12"E	63.12
C97	525.00	16°17'08"	149.22	N81°26'58"W	148.72
C98	15.00	76°39'27"	20.07	N38°44'12"E	18.61
C99	50.00	166°39'27"	145.44	S06°15'48"E	99.32
C100	15.00	90°00'00"	23.56	S44°35'32"E	21.21
C101	475.00	16°17'08"	135.01	N81°26'58"W	134.56
C102	275.00	16°07'34"	77.40	S81°22'12"E	77.15
C103	350.00	34°52'51"	213.07	S68°47'24"W	209.80

Curve Table					
CURVE	RADIUS	DELTA	LENGTH	CHORD DIRECTION	CHORD LENGTH
C104	250.00	22°36'21"	98.64	S78°07'48"E	98.00
C105	250.00	22°45'36"	99.31	N78°12'25"W	98.66
C117	50.00	76°46'42"	67.00	S17°02'59"E	62.10
C118	15.00	57°25'16"	15.03	S26°43'43"E	14.41
C119	65.00	70°14'08"	79.68	N37°05'59"E	74.78
C120	15.00	46°11'13"	12.09	N25°04'32"E	11.77
C121	50.00	28°54'03"	25.22	N33°43'07"E	24.95
C123	50.00	54°08'09"	47.24	N07°48'00"W	45.50
C124	50.00	77°38'42"	67.76	N73°41'25"W	62.69
C125	206.00	18°45'05"	67.42	N53°47'20"E	67.12

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2255 E SUNNYSIDE AVE.
SALT LAKE CITY, UTAH 84158.

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TALEGA VILLAGE
ADA COUNTY, IDAHO
LOCATE WITHIN THE SE 1/4 OF SECTION 9, TOWNSHIP 4 NORTH.,
RANGE 1 WEST., B.M. ADA COUNTY, IDAHO.
PRELIMINARY PLAT

REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
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4	----	----
5	----	----
6	----	----

PRELIMINARY PLAT

Scale: N.T.S. Drawn: MJT
Date: 5/25/2023 Job #: 21-0488
Sheet: C2.3

Know what's below. Call 811 before you dig.

N

S

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100 ft.

LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15" SD — 15" STORM DRAIN
- 8 SS — 8" SANITARY SEWER
- 8 W — 8" CULINARY WATER
- 8 SW — 8" SECONDARY WATER
- XXXX — CONTOUR MAJOR
- XXXX — CONTOUR MINOR
- Ex SD — EXIST. STORM DRAIN
- Ex SS — EXIST. SANITARY SEWER
- Ex W — EXIST. CULINARY WATER
- X — X — EXIST. FENCE
- (XXXX) — EXIST. CONTOUR MAJOR
- (XXXX) — EXIST. CONTOUR MINOR
- SIGN
- STREET LIGHT
- SD MH, INLET, AND COMBO
- SEWER MANHOLE
- CULINARY VALVE, TEE & BEND
- SECONDARY VALVE, TEE & BEND
- WATER BLOW-OFF
- FIRE HYDRANT
- STREET MONUMENT (TO BE SET)
- EXIST. STREET MONUMENT
- EXIST. SD INLET & MH
- EXIST. SEWER MH
- EXIST. VALVE, TEE, & BEND
- EXIST. FIRE HYDRANT
- o XXXX.XX — SPOT ELEVATION

STREET LIGHT #101 W/ XPJ-1 MAST ARM & DSS20 HEAD OR EQUIVALENT

STREET LIGHT #102 W/ XPJ-1 MAST ARM & DSS20 HEAD OR EQUIVALENT

STREET LIGHT #103 W/ XPJ-1 MAST ARM & DSS20 HEAD OR EQUIVALENT

STREET LIGHT #104 W/ XPJ-1 MAST ARM & DSS20 HEAD OR EQUIVALENT

STREET LIGHT #105 W/ XPJ-1 MAST ARM & DSS20 HEAD OR EQUIVALENT

STREET LIGHT #106 W/ XPJ-1 MAST ARM & DSS20 HEAD OR EQUIVALENT

STREET LIGHT #107 W/ XPJ-1 MAST ARM & DSS20 HEAD OR EQUIVALENT

STREET LIGHT #108 W/ XPJ-1 MAST ARM & DSS20 HEAD OR EQUIVALENT

STREET LIGHT #109 W/ XPJ-1 MAST ARM & DSS20 HEAD OR EQUIVALENT

STREET LIGHT #110 W/ XPJ-1 MAST ARM & DSS20 HEAD OR EQUIVALENT

STREET LIGHT #111 W/ XPJ-1 MAST ARM & DSS20 HEAD OR EQUIVALENT

STREET LIGHT #112 W/ XPJ-1 MAST ARM & DSS20 HEAD OR EQUIVALENT

STREET LIGHT #113 W/ XPJ-1 MAST ARM & DSS20 HEAD OR EQUIVALENT

STREET LIGHT #114 W/ XPJ-1 MAST ARM & DSS20 HEAD OR EQUIVALENT

STREET LIGHT #115 W/ XPJ-1 MAST ARM & DSS20 HEAD OR EQUIVALENT

STREET LIGHT #116 W/ XPJ-1 MAST ARM & DSS20 HEAD OR EQUIVALENT

STREET LIGHT #117 W/ XPJ-1 MAST ARM & DSS20 HEAD OR EQUIVALENT

STREET LIGHT #118 W/ XPJ-1 MAST ARM & DSS20 HEAD OR EQUIVALENT

STREET LIGHT #119 W/ XPJ-1 MAST ARM & DSS20 HEAD OR EQUIVALENT

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STREET LIGHT #121 W/ XPJ-1 MAST ARM & DSS20 HEAD OR EQUIVALENT

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STREET LIGHT #123 W/ XPJ-1 MAST ARM & DSS20 HEAD OR EQUIVALENT

STREET LIGHT #124 W/ XPJ-1 MAST ARM & DSS20 HEAD OR EQUIVALENT

STREET LIGHT #125 W/ XPJ-1 MAST ARM & DSS20 HEAD OR EQUIVALENT

STREET LIGHT #126 W/ XPJ-1 MAST ARM & DSS20 HEAD OR EQUIVALENT

STREET LIGHT #127 W/ XPJ-1 MAST ARM & DSS20 HEAD OR EQUIVALENT

STREET LIGHT #128 W/ XPJ-1 MAST ARM & DSS20 HEAD OR EQUIVALENT

STREET LIGHT #129 W/ XPJ-1 MAST ARM & DSS20 HEAD OR EQUIVALENT

STREET LIGHT #130 W/ XPJ-1 MAST ARM & DSS20 HEAD OR EQUIVALENT

STREET LIGHT #131 W/ XPJ-1 MAST ARM & DSS20 HEAD OR EQUIVALENT

STREET LIGHT #132 W/ XPJ-1 MAST ARM & DSS20 HEAD OR EQUIVALENT

STREET LIGHT #133 W/ XPJ-1 MAST ARM & DSS20 HEAD OR EQUIVALENT

STREET LIGHT #134 W/ XPJ-1 MAST ARM & DSS20 HEAD OR EQUIVALENT

8" WATER (TYP)
8" SEWER (TYP)
8" PRESSURE IRRIGATION (TYP)

CLUSTER MAILBOX UNIT IN PARK STRIP BETWEEN SIGLE FAMILY AND TOWNHOMES

40' BUFFER SPACE (TYP.)

231.66 ft
236.36 ft
229.66 ft
208.10 ft
1,140.77 ft
91.00 ft

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TALEGA VILLAGE
STAR, IDAHO
PRELIMINARY SITE PLAN

REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
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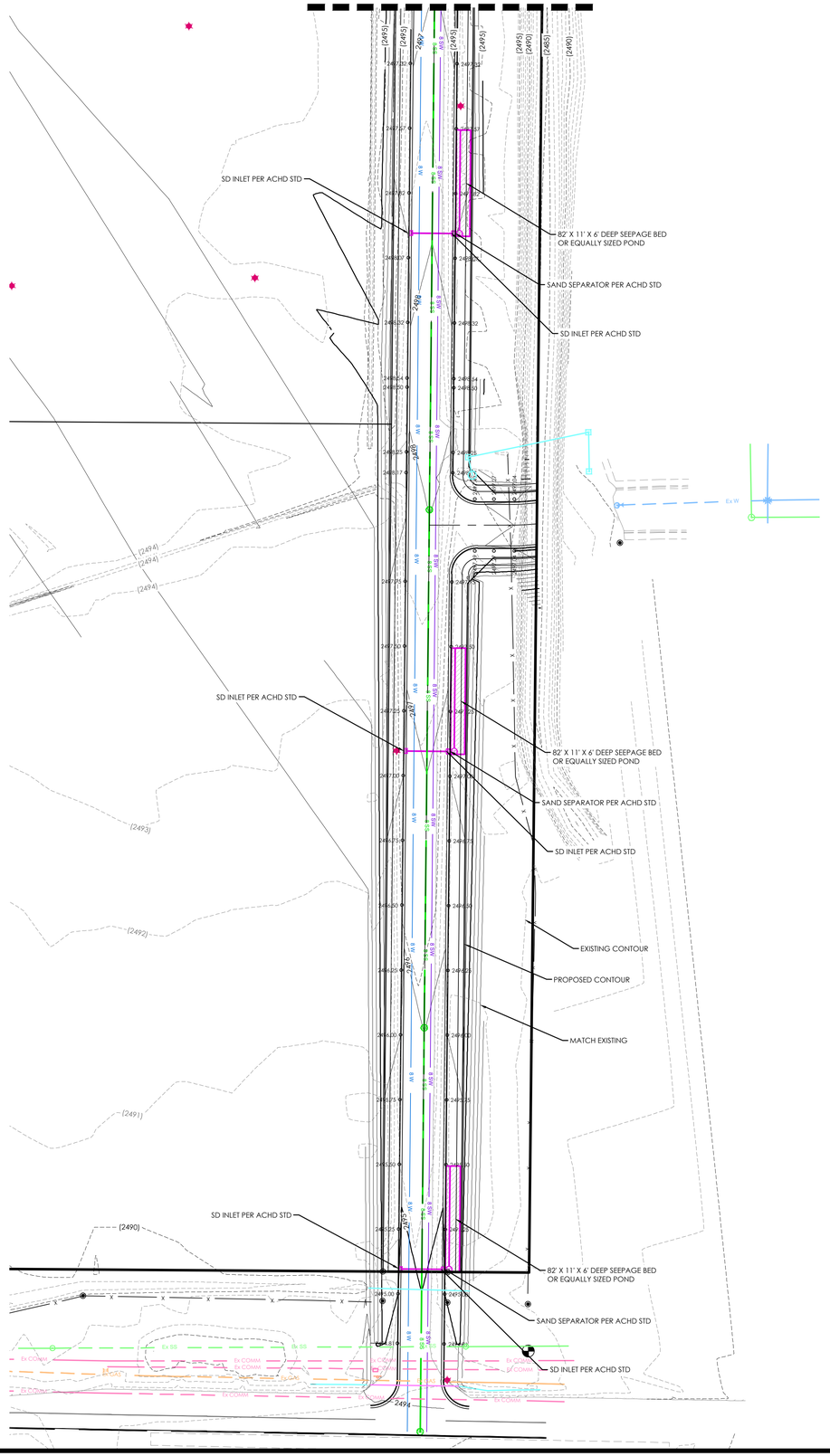
PRELIMINARY SITE PLAN

Scale: 1"=100' | Drawn: DCJ
Date: 11/28/2023 | Job #: 21-0488
Sheet: C3

Know what's below. Call 811 before you dig.

2021\21-0488 Talega Village\design 21-0488\dwg\sheets preliminary subdivision\21-0488 C3 Preliminary Site Plan.dwg

MATCH SHEET C4.2



LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15" STORM DRAIN
- 8" SANITARY SEWER
- 8" CULINARY WATER
- 8" SECONDARY WATER
- CONTOUR MAJOR
- CONTOUR MINOR
- EXIST. STORM DRAIN
- EXIST. SANITARY SEWER
- EXIST. CULINARY WATER
- EXIST. FENCE
- EXIST. CONTOUR MAJOR
- EXIST. CONTOUR MINOR
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- SECONDARY VALVE, TEE & BEND
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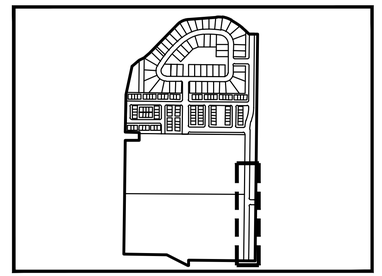
- FIRE HYDRANT
- STREET MONUMENT (TO BE SET)
- EXIST. STREET MONUMENT
- EXIST. SD INLET & MH
- EXIST. SEWER MH
- EXIST. VALVE, TEE, & BEND
- EXIST. FIRE HYDRANT
- o XXXX.XX — SPOT ELEVATION



KEY MAP
N.T.S

N

S

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

Know what's below. Call 811 before you dig.

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TALEGA VILLAGE
STAR, IDAHO
GRADING & DRAINAGE PLAN

REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
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GRADING & DRAINAGE PLAN

Scale:	1"=50'	Drawn:	DCJ
Date:	11/28/2023	Job #:	21-0488
Sheet:	C4.1		

P:\2021\21-0488 Talega Village\design 21-0488.dwg\sheets preliminary subdivision\21-0488 C4.1 Preliminary Grading and Drainage.dwg

MATCH SHEET C4.3

EXISTING CONTOUR
MATCH EXISTING
PROPOSED CONTOUR

SD INLET PER ACHD STD
SAND SEPARATOR PER ACHD STD
82' X 11' X 6' DEEP SEEPAGE BED OR EQUALLY SIZED POND

MATCH SHEET C4.1

LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15" STORM DRAIN
- 8" SANITARY SEWER
- 8" CULINARY WATER
- 8" SECONDARY WATER
- CONTOUR MAJOR
- CONTOUR MINOR
- EXIST. STORM DRAIN
- EXIST. SANITARY SEWER
- EXIST. CULINARY WATER
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- SPOT ELEVATION

N

S

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

KEY MAP
N.T.S

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GRADING & DRAINAGE PLAN

Scale:	1"=50'	Drawn:	DCJ
Date:	11/28/2023	Job #:	21-0488
Sheet:	C4.2		

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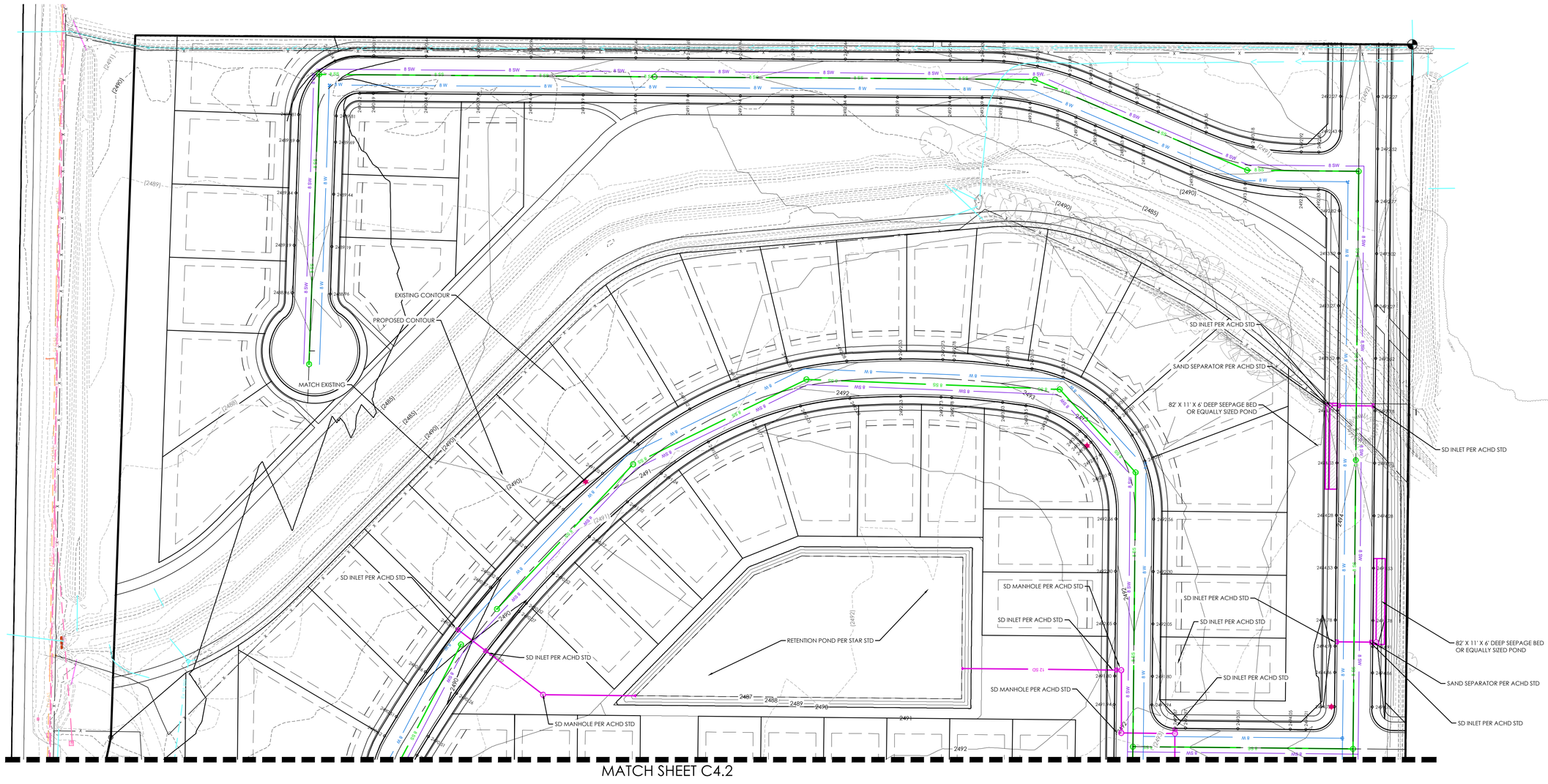

LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15 SD — 15" STORM DRAIN
- 8 SS — 8" SANITARY SEWER
- 8 W — 8" CULINARY WATER
- 8 SW — 8" SECONDARY WATER
- XXXX — CONTOUR MAJOR
- XXXX — CONTOUR MINOR
- Ex SD — EXIST. STORM DRAIN
- Ex SS — EXIST. SANITARY SEWER
- Ex W — EXIST. CULINARY WATER
- X — X — X — EXIST. FENCE
- (XXXX) — EXIST. CONTOUR MAJOR
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- o XXXX.XX — SPOT ELEVATION

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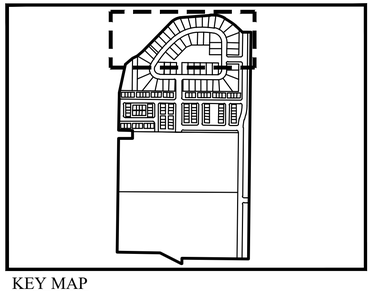
S

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.



KEY MAP
N.T.S

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GRADING & DRAINAGE PLAN

REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
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GRADING & DRAINAGE PLAN

Scale:	1"=50'	Drawn:	DCJ
Date:	11/28/2023	Job #:	21-0488
Sheet:	C4.3		

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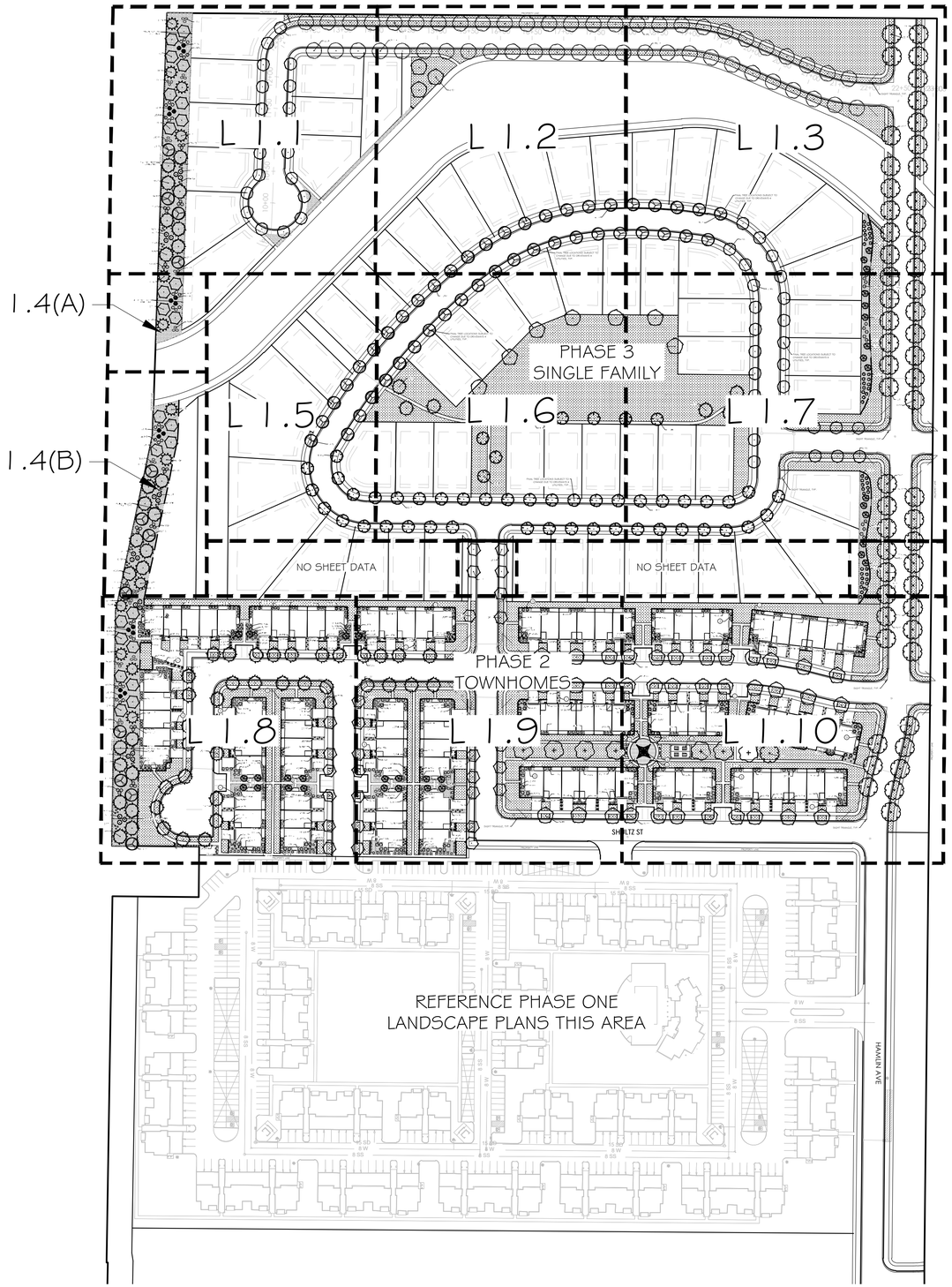

OVERALL PHASES 2-3 PLANT SCHEDULE

	CODE	BOTANICAL NAME	COMMON NAME	SIZE	QTY
TREES					
	AP	Acer platanoides	Norway Maple	2" Cal.	56
	AX	Acer x freemanii	Freeman Maple	2" Cal.	65
	SB	Amelanchier x grandiflora	Serviceberry	2" Cal.	45
	CC	Cercis canadensis	Eastern Redbud	2" Cal.	46
	CF	Cornus florida	Flowering Dogwood	2" Cal.	13
	GY	Ginkgo biloba 'JN9' TM	Sky Tower Ginkgo	2" Cal.	35
	JW	Juniperus scopulorum 'Wichita Blue'	Wichita Blue Juniper	6` Ht.	18
	MS	Malus x `Spring Snow`	Spring Snow Crabapple	2" Cal.	51
	PF	Pinus anstata 'Formal Form'	Formal Form Bristlecone Pine	6` Ht.	21
	PV	Prunus virginiana `Canada Red`	Canada Red Chokecherry	2" Cal.	57
	PJ	Pyrus calleryana 'Jaczam' TM	Jack Callery Pear	2" Cal.	59
	QR	Quercus robur	English Oak	2" Cal.	7
	UA	Ulmus x `Accolade`	Accolade Elm	2" Cal.	52
SHRUBS					
	AMG	Aronia melanocarpa `UCONNAMO12` TM	Ground Hug Black Chokeberry	2 gal.	76
	BTC	Berberis thunbergii `Concorde`	Concorde Japanese Barberry	5 gal.	34
	BG	Berberis thunbergii 'Goruzam' TM	Golden Ruby Japanese Barberry	5 gal.	85
	BDH	Buddleja davidii `Buzz Hot Raspberry`	Hot Raspberry Butterfly Bush	2 gal.	78
	BGM	Buxus x `Green Mountain`	Green Mountain Boxwood	5 gal.	22
	CAB	Cornus alba `Bailhalo` TM	Ivory Halo Dogwood	5 gal.	92
	CSK	Cornus sencea `Kelseyi`	Kelsey`s Dwarf Red Twig Dogwood	2 gal.	108
	EAC	Euonymus alatus 'Grove Compactus'	Grove Compact Burning Bush	5 gal.	54
	POL	Physocarpus opulifolius `Donna May` TM	Little Devil Ninebark	5 gal.	121
	PMM	Pinus mugo var. pumilio	Dwarf Mugo Pine	5 gal.	40
	PLC	Prunus laurocerasus `Chestnut Hill`	Chestnut Hill English Laurel	5 gal.	61
	SSS	Sorbaria sorbifolia `Sem`	Sem Ash Leaf Spirea	5 gal.	61
	SJD	Spiraea japonica `Double Play Doozie`	Doozie Spirea	2 gal.	33
	SBL	Syringa x `SMSJBP7` `Bloomerang`	Bloomerang Dark Purple Lilac	5 gal.	47
	VCS	Viburnum carlesii 'SMVCB' TM	Spice Baby Koreanspice Viburnum	5 gal.	105
ORNAMENTAL GRASSES					
	CAK	Calamagrostis x acutiflora `Karl Foerster`	Karl Foerster Feather Reed Grass	1 gal.	133
	HSS	Helictotrichon sempervirens `Sapphire`	Sapphire Blue Oat Grass	1 gal.	86
	MSG	Miscanthus sinensis `Gold Bar`	Gold Bar Eulalia Grass	1 gal.	72
	PAH	Pennisetum alopecuroides `Hameln`	Hameln Fountain Grass	1 gal.	72
PERENNIALS					
	HSO	Hemerocallis x `Stella de Oro`	Stella de Oro Daylily	1 gal.	36
	PAL	Perovskia atriplicifolia `Little Spire`	Little Spire Russian Sage	1 gal.	26
SYMBOL	**CODE**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**QTY**
GROUND COVERS					
	KB	Poa pratensis	Kentucky Bluegrass	sod	235,183 sf

OVERALL PHASES 2-3 REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION	QTY	DETAIL
1	RIVER ROCK, SIZE 2"	93,774 sf	
2	PLAYGROUND WOOD MULCH, 14" DEPTH	1,385 sf	
3	STEEL EDGING, TBD.	5,216 lf	
4	PICNIC SHELTER, T.B.D.	1	
5	PLAYGROUND STRUCTURE, T.B.D.	1	
6	BENCH, TBD.	4	

LANDSCAPE NOTES

1. LAWN AREAS WILL BE SODDED WITH KENTUCKY BLUEGRASS BLEND OVER 4 INCHES GOOD GRADE TOPSOIL.
2. TOP DRESS ALL SHRUB BED AREAS AND OTHER AREAS LABELED RIVER ROCK OR CRUSHED GRAVEL WITH A 4" DEPTH OF MULCH BY TYPE AND PLAN LOCATION AS SPECIFIED IN THE REFERENCE NOTE SCHEDULE. PLACE ROCK MULCH OVER DEWITT PRO-5 WEED BARRIER FABRIC. FABRIC SHALL BE INSTALLED AFTER PRE-EMERGENT HAS BEEN APPLIED.
3. INSTALL STEEL EDGING FOR MOW STRIPS BETWEEN LAWN AREAS AND PLANTING BEDS.
4. CONTRACTOR TO CONDUCT THEIR OWN QUANTITY TAKE-OFFS IN THE PLAN AND VERIFY ANY DISCREPANCIES WITH THE LANDSCAPE ARCHITECT.

NOTE:
REFERENCE SHEET L1.10 FOR DETAILS AND SEPARATE LANDSCAPE TABULATION CHARTS & SCHEDULES FOR PHASES 2&3.

N

S

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100ft.

OWNER/APPLICANT
DERK PARDOE
3454 STONE MOUNTAIN LN.
SANDY, UT 84092
801-808-2357

OWNER/APPLICANT
JASON RAMSEY
RAMSEY CONSTRUCTION
7950 HORSESHOE BEND RD. STE. 106
BOISE, ID 83714
208-941-1711

SURVEYOR
JOHN GLETNE
VALLEY LAND SURVEYING
5099 S VALLEY ST.
BOISE, ID 83709
208-261-2226

PLANNER
CHAD GARNER
FOCUS ENGINEERING & SURVEYING
6949 S HIGH TECH DR. STE. 200
MIDVALE, UT 84047
801-352-0075

ENGINEER
JACOB HOLMES
FOCUS ENGINEERING & SURVEYING
1001 N ROSARIO ST. STE. 100
MERIDIAN, ID
801-352-0075

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TALEGA VILLAGE PHASE 2 & 3
STAR CITY, IDAHO
OVERALL LANDSCAPE PLAN

REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
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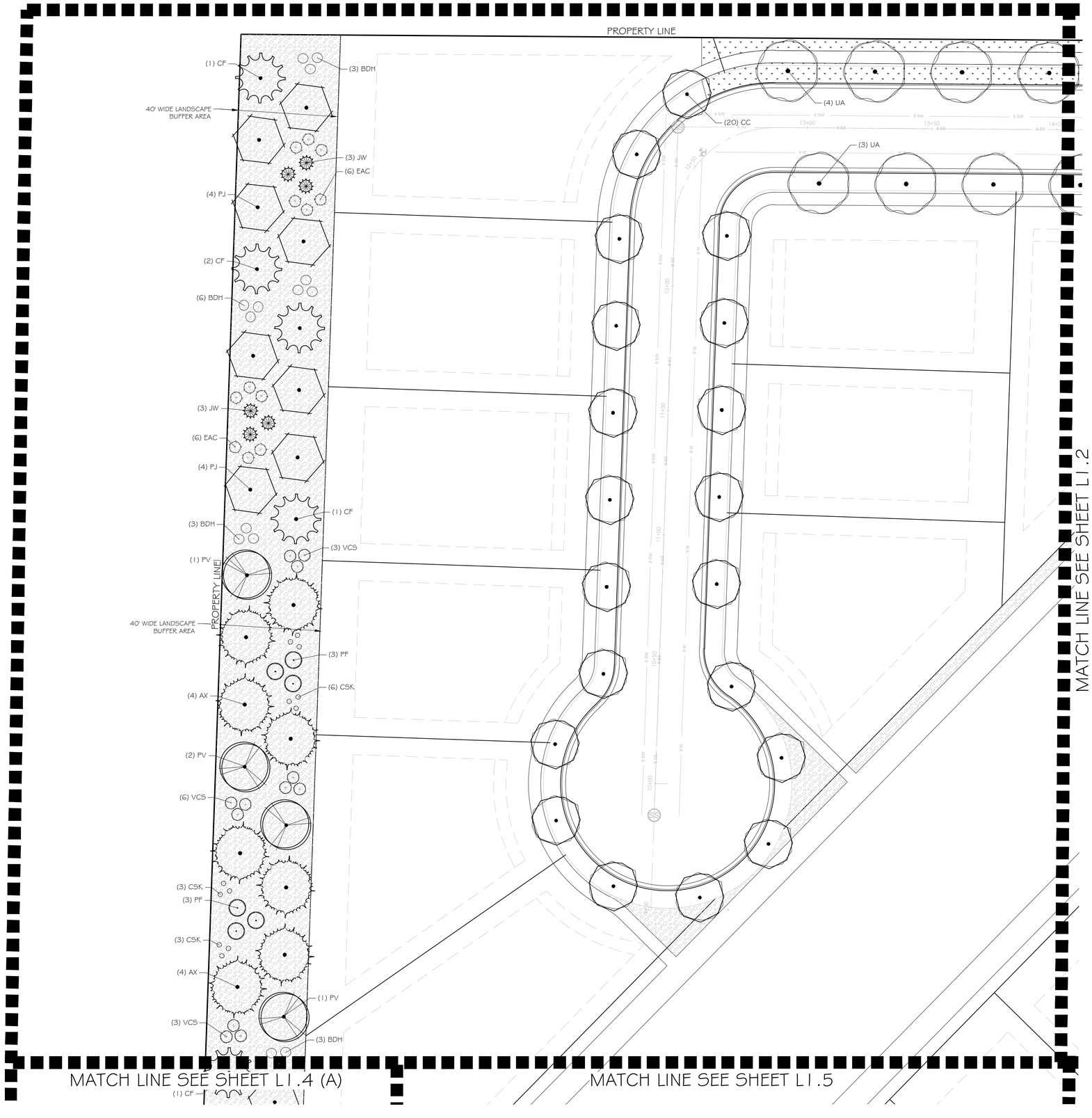
OVERALL LANDSCAPE PLAN

Scale:	1"=100'	Drawn:	BW
Date:	11/29/2023	Job #:	21-0488
Sheet:	L1.0		

2021\21-0488 talega village\design 21-0488.dwg\sheets apartments CUP\L1.0 - L1.2 LANDSCAPE PLAN TOWNS.dwg



OVERALL PHASES 2-3 PLANT SCHEDULE

	CODE	BOTANICAL NAME	COMMON NAME
TREES			
	AP	Acer platanoides	Norway Maple
	AX	Acer x freemanii	Freeman Maple
	SB	Amelanchier x grandiflora	Serviceberry
	CC	Cercis canadensis	Eastern Redbud
	CF	Cornus florida	Flowering Dogwood
	GY	Ginkgo biloba 'JN9' TM	Sky Tower Ginkgo
	JW	Juniperus scopulorum 'Wichita Blue'	Wichita Blue Juniper
	MS	Malus x `Spring Snow`	Spring Snow Crabapple
	PF	Pinus aristata 'Formal Form'	Formal Form Bristlecone Pine
	PV	Prunus virginiana `Canada Red`	Canada Red Chokecherry
	PJ	Pyrus calleryana 'Jaczam' TM	Jack Gallery Pear
	QR	Quercus robur	English Oak
	UA	Ulmus x `Accolade`	Accolade Elm
SHRUBS			
	AMG	Aronia melanocarpa `UCONNAM012` TM	Ground Hug Black Chokeberry
	BTC	Berberis thunbergii `Concorde`	Concorde Japanese Barberry
	BG	Berberis thunbergii 'Gorvzam' TM	Golden Ruby Japanese Barberry
	BDH	Buddleja davidii `Buzz Hot Raspberry`	Hot Raspberry Butterfly Bush
	BGM	Buxus x `Green Mountain`	Green Mountain Boxwood
	CAB	Cornus alba `Bailhalo` TM	Ivory Halo Dogwood
	CSK	Cornus sericea `Kelseyi`	Kelsey's Dwarf Red Twig Dogwood
	EAC	Euonymus alatus 'Grove Compactus'	Grove Compact Burning Bush
	POL	Physocarpus opulifolius `Donna May` TM	Little Devil Ninebark
	PMM	Pinus mugo var. pumilio	Dwarf Mugo Pine
	PLC	Prunus laurocerasus `Chestnut Hill`	Chestnut Hill English Laurel
	SSS	Sorbaria sorbifolia `Sem`	Sem Ash Leaf Spirea
	SJD	Spiraea japonica `Double Play Doozie`	Doozie Spirea
	SBL	Syringa x `SMSJBP7` `Bloomerang`	Bloomerang Dark Purple Lilac
	VCS	Viburnum carlesii 'SMVCB' TM	Spice Baby Koreanspice Viburnum
ORNAMENTAL GRASSES			
	CAK	Calamagrostis x acutiflora `Karl Foerster`	Karl Foerster Feather Reed Grass
	HSS	Helictotrichon sempervirens `Sapphire`	Sapphire Blue Oat Grass
	MSG	Miscanthus sinensis `Gold Bar`	Gold Bar Eulalia Grass
	PAH	Pennisetum alopecuroides `Hameln`	Hameln Fountain Grass
PERENNIALS			
	HSO	Hemerocallis x `Stella de Oro`	Stella de Oro Daylily
	PAL	Perovskia atriplicifolia `Little Spire`	Little Spire Russian Sage

SYMBOL	CODE	BOTANICAL NAME	COMMON NAME
GROUND COVERS			
	KB	Poa pratensis	Kentucky Bluegrass

OVERALL PHASES 2-3 REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
1	RIVER ROCK, SIZE 2"
2	PLAYGROUND WOOD MULCH, 14" DEPTH
3	STEEL EDGING, TBD.
4	PICNIC SHELTER, T.B.D.
5	PLAYGROUND STRUCTURE, T.B.D.
6	BENCH, TBD.

NOTE:
REFERENCE SHEET L1.11 FOR DETAILS AND SEPARATE LANDSCAPE TABULATION CHARTS & SCHEDULES FOR PHASES 2&3.

N

S

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
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TALEGA VILLAGE PHASE 3
STAR CITY, IDAHO
LANDSCAPE PLAN

REVISION BLOCK

#	DATE	DESCRIPTION
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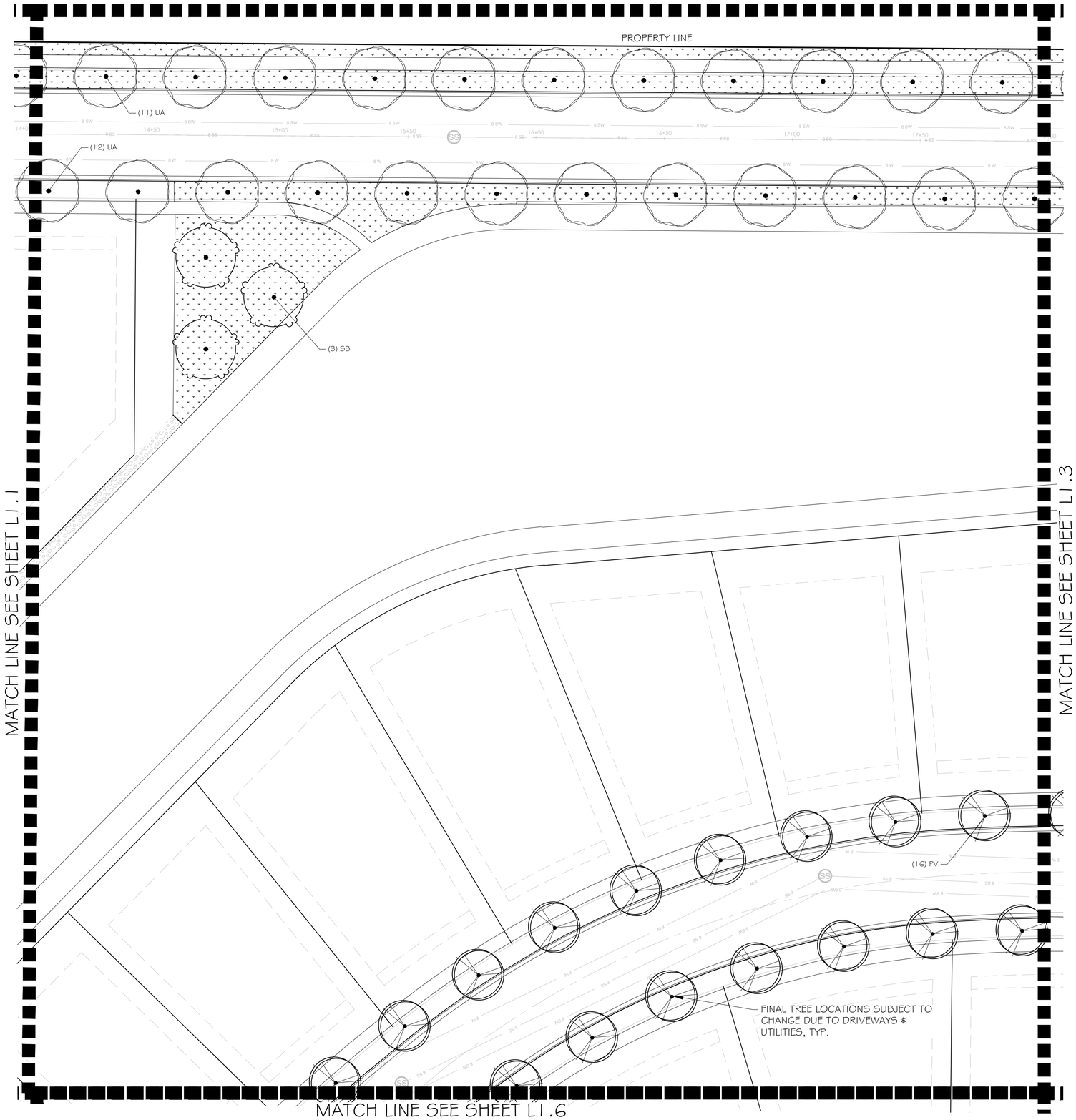
LANDSCAPE PLAN

Scale:	1"=20'	Drawn:	BW
Date:	11/29/2023	Job #:	21-0488
Sheet:	L1.1		



OVERALL PHASES 2-3 PLANT SCHEDULE

	CODE	BOTANICAL NAME	COMMON NAME
TREES			
	AP	Acer platanoides	Norway Maple
	AX	Acer x freemanii	Freeman Maple
	SB	Amelanchier x grandiflora	Serviceberry
	CC	Cercis canadensis	Eastern Redbud
	CF	Cornus florida	Flowering Dogwood
	GY	Ginkgo biloba 'JN9' TM	Sky Tower Ginkgo
	JW	Juniperus scopulorum 'Wichita Blue'	Wichita Blue Juniper
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	PF	Pinus anstata 'Formal Form'	Formal Form Bristlecone Pine
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	UA	Ulmus x `Accolade`	Accolade Elm
SHRUBS			
	AMG	Aronia melanocarpa `UCONNAMO12` TM	Ground Hug Black Chokeberry
	BTC	Berberis thunbergii `Concorde`	Concorde Japanese Barberry
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	BGM	Buxus x `Green Mountain`	Green Mountain Boxwood
	CAB	Cornus alba `Bailhalo` TM	Ivory Halo Dogwood
	CSK	Cornus sericea `Kelseyi`	Kelsey`s Dwarf Red Twig Dogwood
	EAC	Euonymus alatus 'Grove Compactus'	Grove Compact Burning Bush
	POL	Physocarpus opulifolius `Donna May` TM	Little Devil Ninebark
	PMM	Pinus mugo var. pumilio	Dwarf Mugo Pine
	PLC	Prunus laurocerasus `Chestnut Hill`	Chestnut Hill English Laurel
	SSS	Sorbaria sorbifolia `Sem`	Sem Ash Leaf Spirea
	SJD	Spiraea japonica `Double Play Doozie`	Doozie Spirea
	SBL	Syringa x 'SMSJBP7' `Bloomerang`	Bloomerang Dark Purple Lilac
	VCS	Viburnum carlesii 'SMVCB' TM	Spice Baby Koreanspice Viburnum
ORNAMENTAL GRASSES			
	CAK	Calamagrostis x acutiflora `Karl Foerster`	Karl Foerster Feather Reed Grass
	HSS	Helictotrichon sempervirens `Sapphire`	Sapphire Blue Oat Grass
	MSG	Miscanthus sinensis `Gold Bar`	Gold Bar Eulalia Grass
	PAH	Pennisetum alopecuroides `Hameln`	Hameln Fountain Grass
PERENNIALS			
	HSO	Hemerocallis x `Stella de Oro`	Stella de Oro Daylily
	PAL	Perovskia atriplicifolia `Little Spire`	Little Spire Russian Sage
SYMBOL	**CODE**	**BOTANICAL NAME**	**COMMON NAME**
GROUND COVERS			
	KB	Poa pratensis	Kentucky Bluegrass

OVERALL PHASES 2-3 REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
1	RIVER ROCK, SIZE 2"
2	PLAYGROUND WOOD MULCH, 14" DEPTH
3	STEEL EDGING, TBD.
4	PICNIC SHELTER, T.B.D.
5	PLAYGROUND STRUCTURE, T.B.D.
6	BENCH, TBD.

NOTE:
REFERENCE SHEET L1.11 FOR DETAILS AND SEPARATE LANDSCAPE TABULATION CHARTS & SCHEDULES FOR PHASES 2&3.

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GRAPHIC SCALE

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TALEGA VILLAGE PHASE 3
STAR CITY, IDAHO
LANDSCAPE PLAN

REVISION BLOCK

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LANDSCAPE PLAN

Scale:	1"=20'	Drawn:	BW
Date:	11/29/2023	Job #:	21-0488
Sheet:	L1.2		

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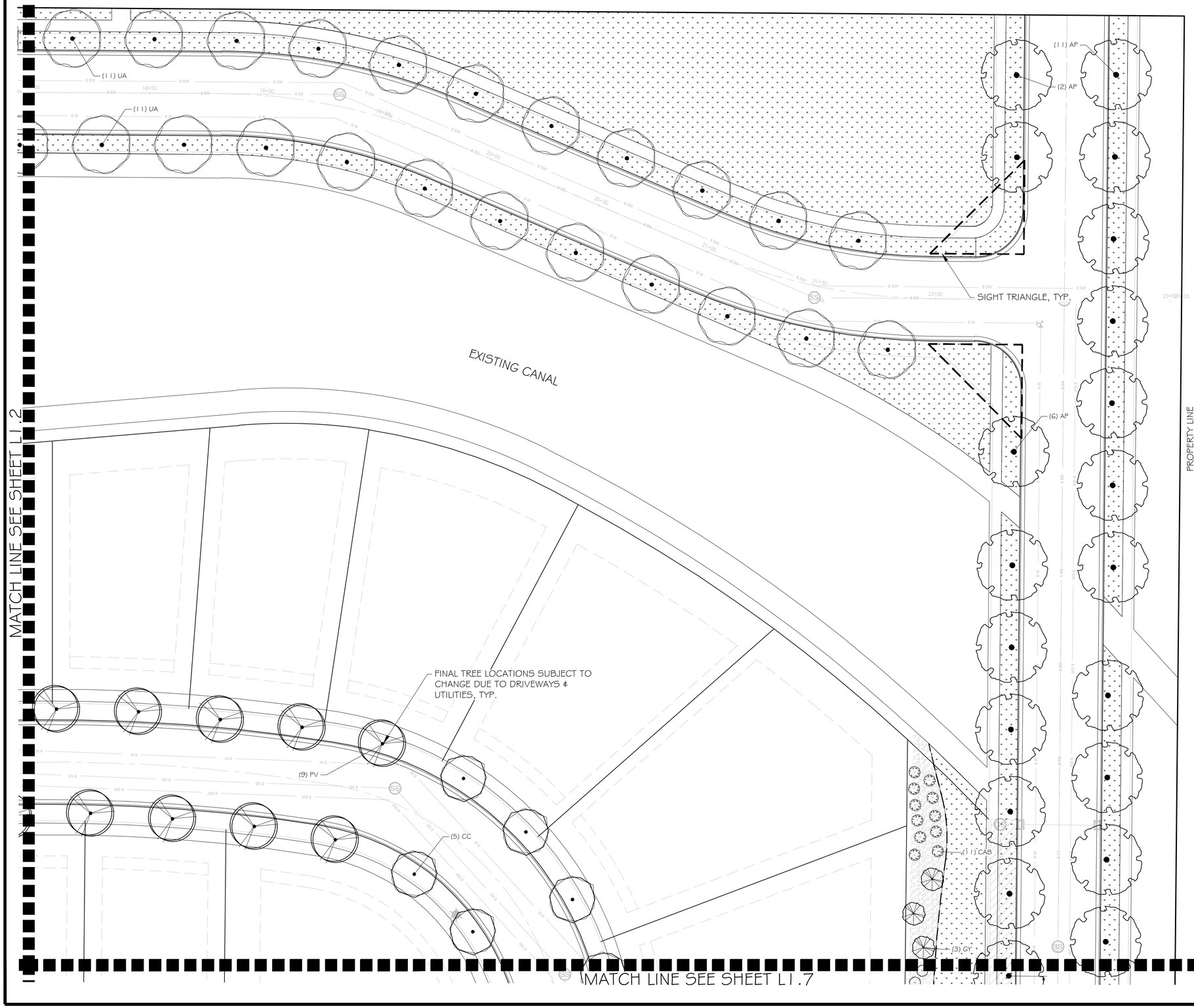

OVERALL PHASES 2-3 PLANT SCHEDULE

	CODE	BOTANICAL NAME	COMMON NAME
TREES			
	AP	Acer platanoides	Norway Maple
	AX	Acer x freemanii	Freeman Maple
	SB	Amelanchier x grandiflora	Serviceberry
	CC	Cercis canadensis	Eastern Redbud
	CF	Cornus florida	Flowering Dogwood
	GY	Ginkgo biloba 'JN9' TM	Sky Tower Ginkgo
	JW	Juniperus scopulorum 'Wichita Blue'	Wichita Blue Juniper
	MS	Malus x 'Spring Snow'	Spring Snow Crabapple
	PF	Pinus aristata 'Formal Form'	Formal Form Bristlecone Pine
	PV	Prunus virginiana 'Canada Red'	Canada Red Chokecherry
	PJ	Pyrus calleryana 'Jaczam' TM	Jack Callery Pear
	QR	Quercus robur	English Oak
	UA	Ulmus x 'Accolade'	Accolade Elm
SHRUBS			
	AMG	Aronia melanocarpa 'UCONNAM012' TM	Ground Hug Black Chokeberry
	BTC	Berberis thunbergii 'Concorde'	Concorde Japanese Barberry
	BG	Berberis thunbergii 'Gonzam' TM	Golden Ruby Japanese Barberry
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	BGM	Buxus x 'Green Mountain'	Green Mountain Boxwood
	CAB	Cornus alba 'Bailhalo' TM	Ivory Halo Dogwood
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	POL	Physocarpus opulifolius 'Donna May' TM	Little Devil Ninebark
	PMM	Pinus mugo var. pumilio	Dwarf Mugo Pine
	PLC	Prunus laurocerasus 'Chestnut Hill'	Chestnut Hill English Laurel
	SSS	Sorbaria sorbifolia 'Sem'	Sem Ash Leaf Spirea
	SJD	Spiraea japonica 'Double Play Doozie'	Doozie Spirea
	SBL	Syringa x 'SMSJBP7' 'Bloomerang'	Bloomerang Dark Purple Lilac
	VCS	Viburnum carlesii 'SMVCB' TM	Spice Baby Koreanspice Viburn
ORNAMENTAL GRASSES			
	CAK	Calamagrostis x acutiflora 'Karl Foerster'	Karl Foerster Feather Reed Gra
	HSS	Helictotrichon sempervirens 'Sapphire'	Sapphire Blue Oat Grass
	MSG	Miscanthus sinensis 'Gold Bar'	Gold Bar Eulalia Grass
	PAH	Pennisetum alopecuroides 'Hameln'	Hameln Fountain Grass
PERENNIALS			
	HSO	Hemerocallis x 'Stella de Oro'	Stella de Oro Daylily
	PAL	Perovskia atriplicifolia 'Little Spire'	Little Spire Russian Sage

SYMBOL	CODE	BOTANICAL NAME	COMMON NAME
GROUND COVERS			
	KB	Poa pratensis	Kentucky Bluegrass

OVERALL PHASES 2-3 REFERENCE NOTES

SYMBOL	DESCRIPTION
1	RIVER ROCK, SIZE 2"
2	PLAYGROUND WOOD MULCH, 14" DEPTH
3	STEEL EDGING, TBD.
4	PICNIC SHELTER, T.B.D.
5	PLAYGROUND STRUCTURE, T.B.D.
6	BENCH, TBD.

NOTE:
REFERENCE SHEET L1.11 FOR DETAILS AND SEPARATE LANDSCAPE TABULATION CHARTS & SCHEDULES FOR PHASES 2&3.

N

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GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
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LANDSCAPE PLAN

Scale:	1"=20'	Drawn:	BW
Date:	11/29/2023	Job #:	21-0488
Sheet:	L1.3		

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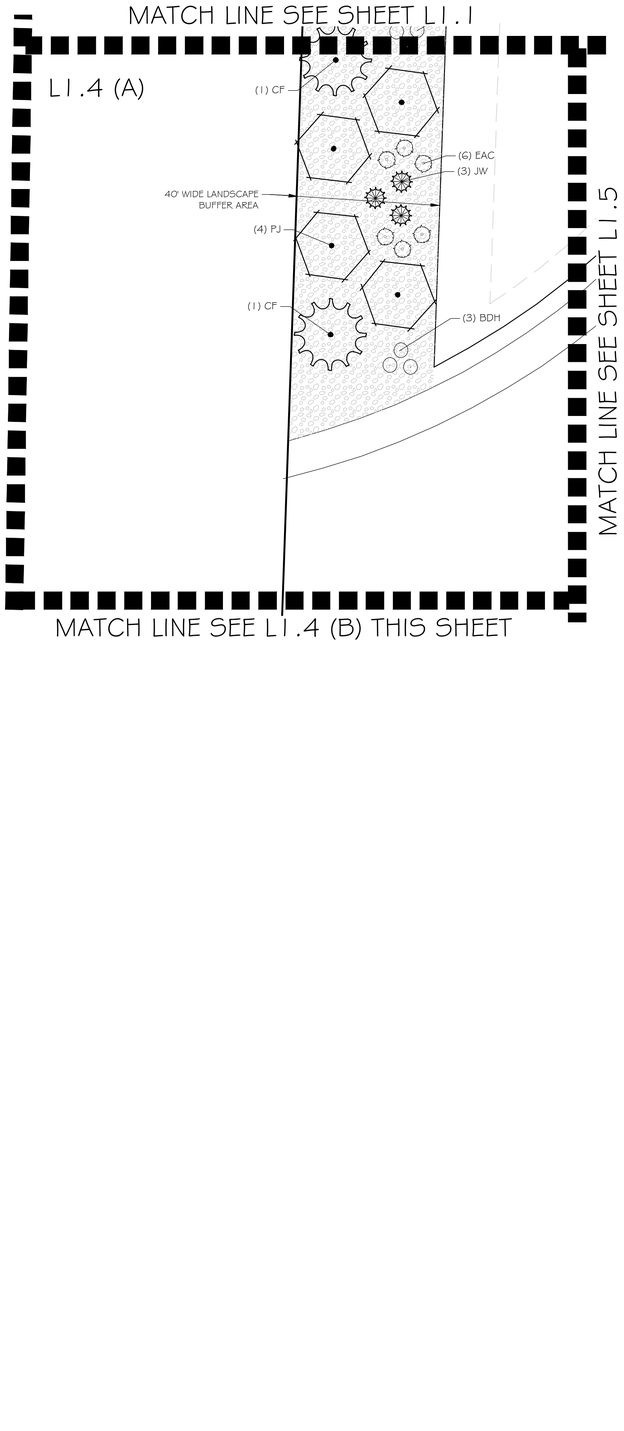

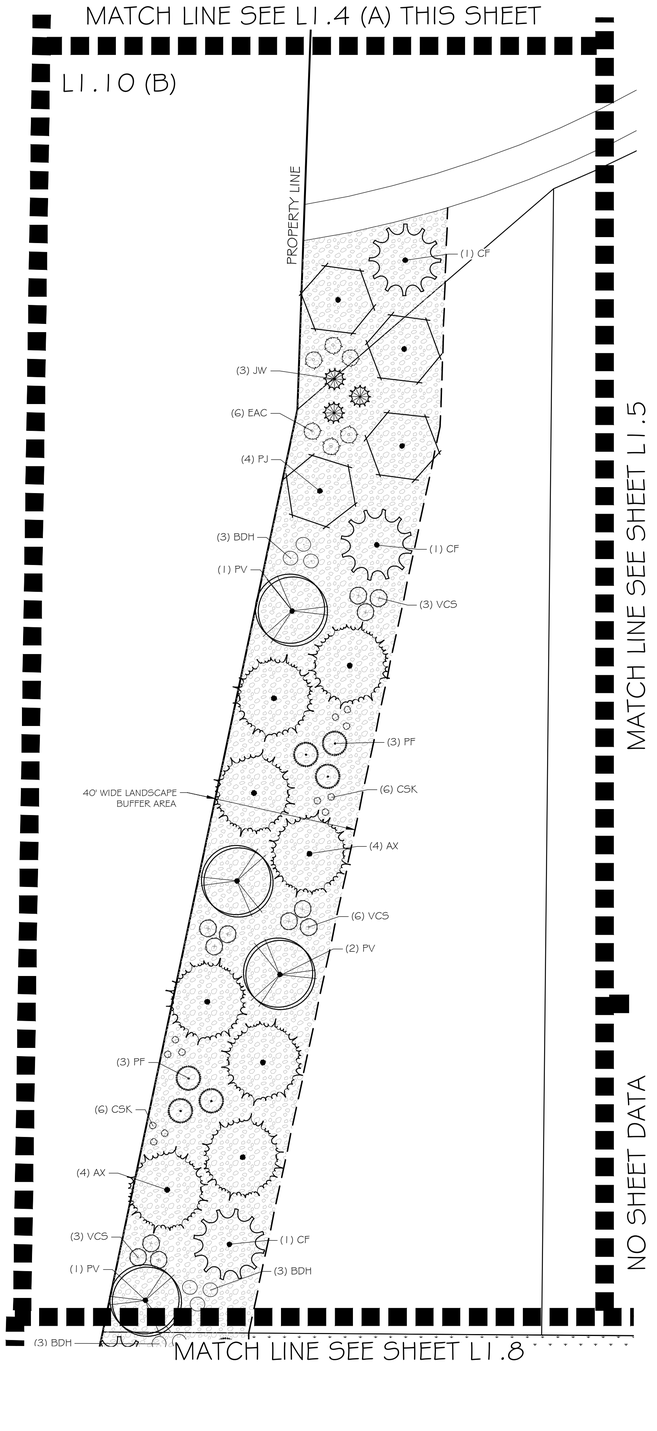

OVERALL PHASES 2-3 PLANT SCHEDULE

	CODE	BOTANICAL NAME	COMMON NAME
TREES			
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	AX	Acer x freemanii	Freeman Maple
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	VCS	Viburnum carlesii 'SMVCB' TM	Spice Baby Koreanspice Viburnum
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	CAK	Calamagrostis x acutiflora `Karl Foerster`	Karl Foerster Feather Reed Grass
	HSS	Helictotrichon sempervirens `Sapphire`	Sapphire Blue Oat Grass
	MSG	Miscanthus sinensis `Gold Bar`	Gold Bar Eulalia Grass
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	HSO	Hemerocallis x `Stella de Oro`	Stella de Oro Daylily
	PAL	Perovskia atriplicifolia `Little Spire`	Little Spire Russian Sage

SYMBOL	CODE	BOTANICAL NAME	COMMON NAME
GROUND COVERS			
	KB	Poa pratensis	Kentucky Bluegrass

OVERALL PHASES 2-3 REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
1	RIVER ROCK, SIZE 2"
2	PLAYGROUND WOOD MULCH, 14" DEPTH
3	STEEL EDGING, TBD.
4	PICNIC SHELTER, T.B.D.
5	PLAYGROUND STRUCTURE, T.B.D.
6	BENCH, TBD.

NOTE:
REFERENCE SHEET L1.11 FOR DETAILS AND SEPARATE LANDSCAPE TABULATION CHARTS & SCHEDULES FOR PHASES 2&3.

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GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
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LANDSCAPE PLAN

REVISION BLOCK

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LANDSCAPE PLAN

Scale:	1"=20'	Drawn:	BW
Date:	11/29/2023	Job #:	21-0488
Sheet:	L1.4		

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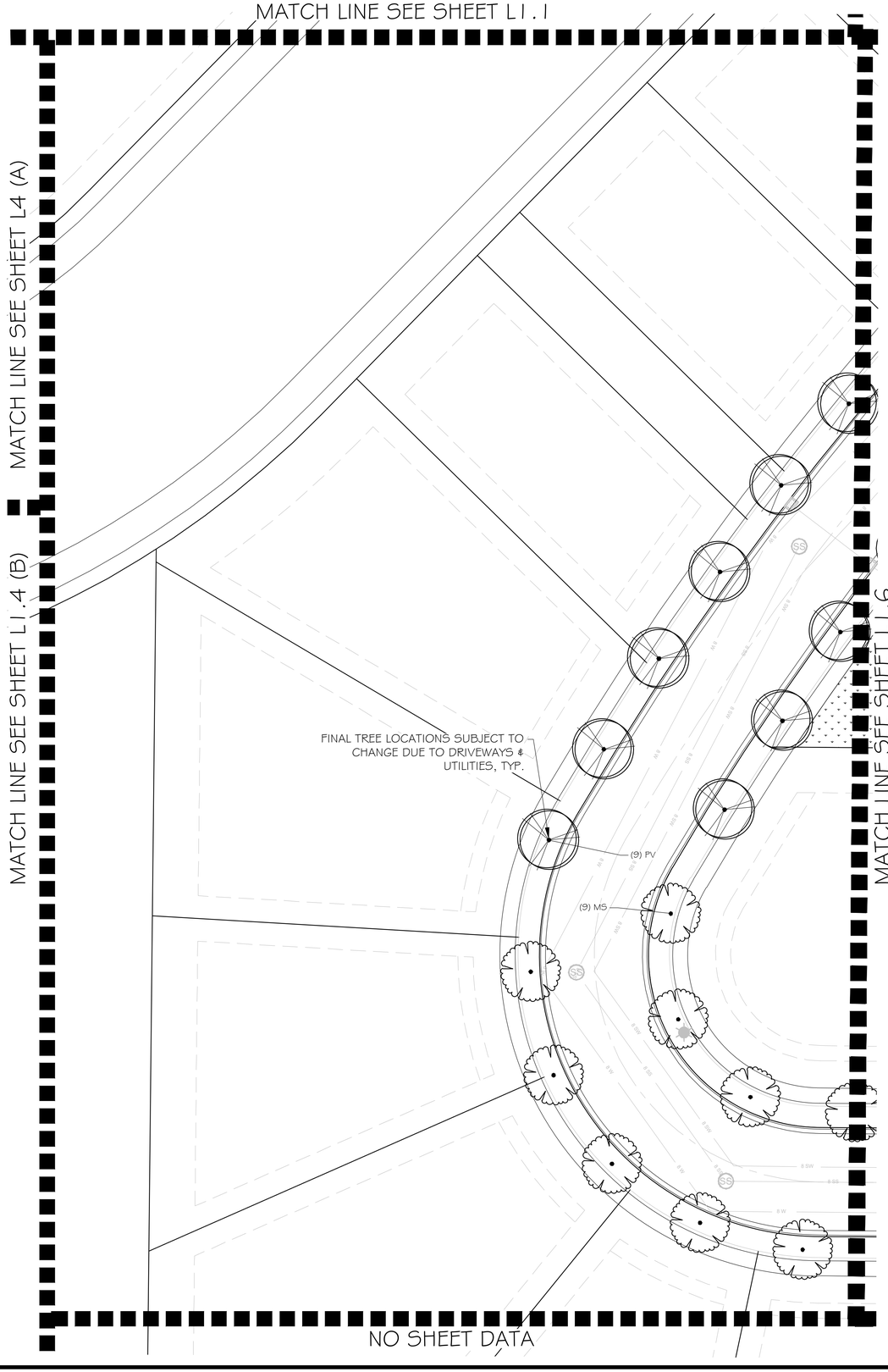

OVERALL PHASES 2-3 PLANT SCHEDULE

	CODE	BOTANICAL NAME	COMMON NAME
TREES			
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	AX	Acer x freemanii	Freeman Maple
	SB	Amelanchier x grandiflora	Serviceberry
	CC	Cercis canadensis	Eastern Redbud
	CF	Cornus florida	Flowering Dogwood
	GY	Ginkgo biloba 'JN9' TM	Sky Tower Ginkgo
	JW	Juniperus scopulorum 'Wichita Blue'	Wichita Blue Juniper
	MS	Malus x `Spring Snow`	Spring Snow Crabapple
	PF	Pinus aristata 'Formal Form'	Formal Form Bristlecone Pine
	PV	Prunus virginiana `Canada Red`	Canada Red Chokecherry
	PJ	Pyrus calleryana 'Jaczam' TM	Jack Callery Pear
	QR	Quercus robur	English Oak
	UA	Ulmus x `Accolade`	Accolade Elm
SHRUBS			
	AMG	Aronia melanocarpa `UCONNAM012` TM	Ground Hug Black Chokeberry
	BTC	Berberis thunbergii `Concorde`	Concorde Japanese Barberry
	BG	Berberis thunbergii 'Goruzam' TM	Golden Ruby Japanese Barberry
	BDH	Buddleja davidii `Buzz Hot Raspberry`	Hot Raspberry Butterfly Bush
	BGM	Buxus x `Green Mountain`	Green Mountain Boxwood
	CAB	Cornus alba `Bailhalo` TM	Ivory Halo Dogwood
	CSK	Cornus sericea `Kelseyi`	Kelsey`s Dwarf Red Twig Dogwood
	EAC	Euonymus alatus 'Grove Compactus'	Grove Compact Burning Bush
	POL	Physocarpus opulifolius `Donna May` TM	Little Devil Ninebark
	PMM	Pinus mugo var. pumilio	Dwarf Mugo Pine
	PLC	Prunus laurocerasus `Chestnut Hill`	Chestnut Hill English Laurel
	SSS	Sorbaria sorbifolia `Sem`	Sem Ash Leaf Spirea
	SJD	Spiraea japonica `Double Play Dooze`	Dooze Spirea
	SBL	Syringa x `SMSJBP7` `Bloomerang`	Bloomerang Dark Purple Lilac
	VCS	Viburnum carlesii 'SMVCB' TM	Spice Baby Koreanspice Viburnum
ORNAMENTAL GRASSES			
	CAK	Calamagrostis x acutiflora `Karl Foerster`	Karl Foerster Feather Reed Grass
	HSS	Helictotrichon sempervirens `Sapphire`	Sapphire Blue Oat Grass
	MSG	Miscanthus sinensis `Gold Bar`	Gold Bar Eulalia Grass
	PAH	Pennisetum alopecuroides `Hameln`	Hameln Fountain Grass
PERENNIALS			
	HSO	Hemerocallis x `Stella de Oro`	Stella de Oro Daylily
	PAL	Perovskia atriplicifolia `Little Spire`	Little Spire Russian Sage
SYMBOL	**CODE**	**BOTANICAL NAME**	**COMMON NAME**
GROUND COVERS			
	KB	Poa pratensis	Kentucky Bluegrass

OVERALL PHASES 2-3 REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
1	RIVER ROCK, SIZE 2"
2	PLAYGROUND WOOD MULCH, 14" DEPTH
3	STEEL EDGING, TBD.
4	PICNIC SHELTER, T.B.D.
5	PLAYGROUND STRUCTURE, T.B.D.
6	BENCH, TBD.

NOTE:
REFERENCE SHEET L1.11 FOR DETAILS AND SEPARATE LANDSCAPE TABULATION CHARTS & SCHEDULES FOR PHASES 2&3.

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GRAPHIC SCALE

20 0 10 20 40 80

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TALEGA VILLAGE PHASE 3
STAR CITY, IDAHO
LANDSCAPE PLAN

REVISION BLOCK

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LANDSCAPE PLAN

Scale:	1"=20'	Drawn:	BW
Date:	11/29/2023	Job #:	21-0488
Sheet:	L1.5		

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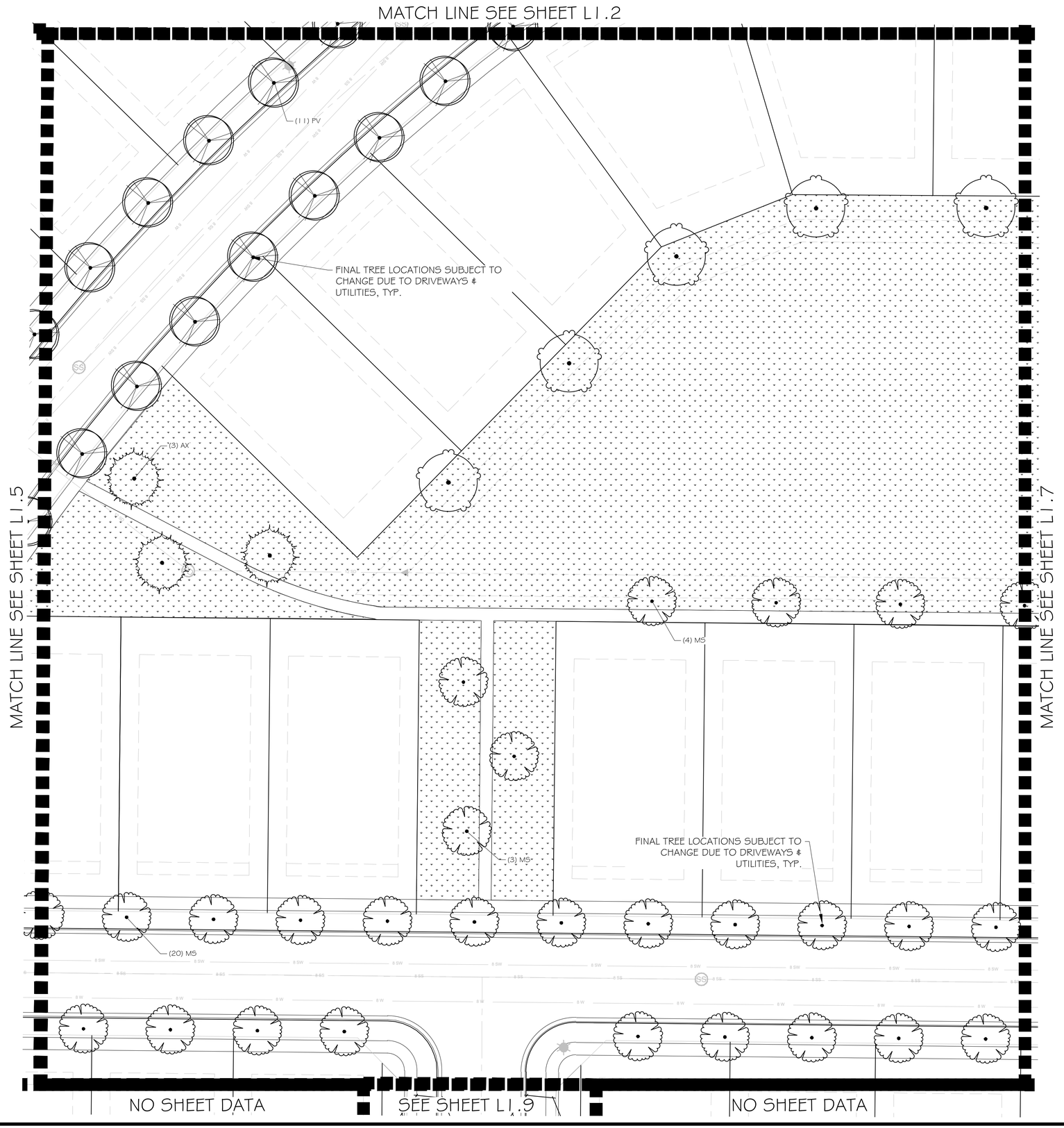

OVERALL PHASES 2-3 PLANT SCHEDULE

	CODE	BOTANICAL NAME	COMMON NAME
TREES			
	AP	Acer platanoides	Norway Maple
	AX	Acer x freemanii	Freeman Maple
	SB	Amelanchier x grandiflora	Serviceberry
	CC	Cercis canadensis	Eastern Redbud
	CF	Cornus florida	Flowering Dogwood
	GY	Ginkgo biloba 'JN9' TM	Sky Tower Ginkgo
	JW	Juniperus scopulorum 'Wichita Blue'	Wichita Blue Juniper
	MS	Malus x `Spring Snow`	Spring Snow Crabapple
	PF	Pinus aristata 'Formal Form'	Formal Form Bristlecone Pine
	PV	Prunus virginiana `Canada Red`	Canada Red Chokecherry
	PJ	Pyrus calleryana 'Jaczam' TM	Jack Gallery Pear
	QR	Quercus robur	English Oak
	UA	Ulmus x `Accolade`	Accolade Elm
SHRUBS			
	AMG	Aronia melanocarpa `UCONNAM012` TM	Ground Hug Black Chokeberry
	BTC	Berberis thunbergii `Concorde`	Concorde Japanese Barberry
	BG	Berberis thunbergii 'Goruzam' TM	Golden Ruby Japanese Barberry
	BDH	Buddleja davidii `Buzz Hot Raspberry`	Hot Raspberry Butterfly Bush
	BGM	Buxus x `Green Mountain`	Green Mountain Boxwood
	CAB	Cornus alba `Bailhalo` TM	Ivory Halo Dogwood
	CSK	Cornus sericea `Kelseyi`	Kelsey's Dwarf Red Twig Dogwood
	EAC	Euonymus alatus 'Grove Compactus'	Grove Compact Burning Bush
	POL	Physocarpus opulifolius `Donna May` TM	Little Devil Ninebark
	PMM	Pinus mugo var. pumilio	Dwarf Mugo Pine
	PLC	Prunus laurocerasus `Chestnut Hill`	Chestnut Hill English Laurel
	SSS	Sorbaria sorbifolia `Sem`	Sem Ash Leaf Spirea
	SJD	Spiraea japonica `Double Play Doozie`	Doozie Spirea
	SBL	Syringa x `SMSJBP7` `Bloomerang`	Bloomerang Dark Purple Lilac
	VCS	Viburnum carlesii 'SMVCB' TM	Spice Baby Koreanspice Viburnum
ORNAMENTAL GRASSES			
	CAK	Calamagrostis x acutiflora `Karl Foerster`	Karl Foerster Feather Reed Grass
	HSS	Helictotrichon sempervirens `Sapphire`	Sapphire Blue Oat Grass
	MSG	Miscanthus sinensis `Gold Bar`	Gold Bar Eulalia Grass
	PAH	Pennisetum alopecuroides `Hameln`	Hameln Fountain Grass
PERENNIALS			
	HSO	Hemerocallis x `Stella de Oro`	Stella de Oro Daylily
	PAL	Perovskia atriplicifolia `Little Spire`	Little Spire Russian Sage

SYMBOL	CODE	BOTANICAL NAME	COMMON NAME
GROUND COVERS			
	KB	Poa pratensis	Kentucky Bluegrass

OVERALL PHASES 2-3 REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
1	RIVER ROCK, SIZE 2"
2	PLAYGROUND WOOD MULCH, 14" DEPTH
3	STEEL EDGING, TBD.
4	PICNIC SHELTER, T.B.D.
5	PLAYGROUND STRUCTURE, T.B.D.
6	BENCH, TBD.

NOTE:
REFERENCE SHEET L1.11 FOR DETAILS AND SEPARATE LANDSCAPE TABULATION CHARTS & SCHEDULES FOR PHASES 2&3.

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GRAPHIC SCALE

20 0 10 20 40 80

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TALEGA VILLAGE PHASE 3
STAR CITY, IDAHO
LANDSCAPE PLAN

REVISION BLOCK

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LANDSCAPE PLAN

Scale:	1"=20'	Drawn:	BW
Date:	11/29/2023	Job #:	21-0488
Sheet:	L1.6		

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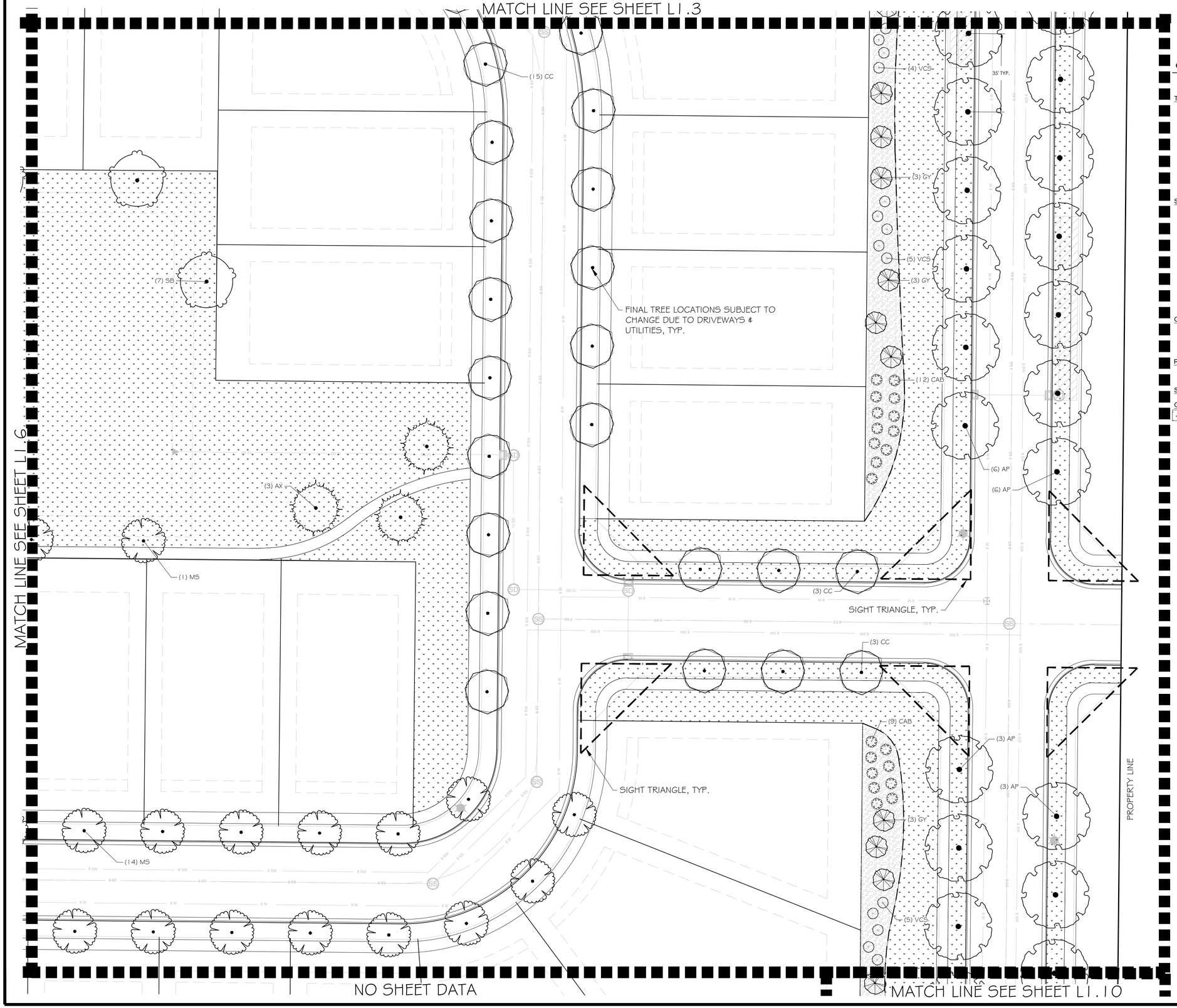

OVERALL PHASES 2-3 PLANT SCHEDULE

	CODE	BOTANICAL NAME	COMMON NAME
TREES			
	AP	Acer platanoides	Norway Maple
	AX	Acer x freemanii	Freeman Maple
	SB	Amelanchier x grandiflora	Serviceberry
	CC	Cercis canadensis	Eastern Redbud
	CF	Cornus florida	Flowering Dogwood
	GY	Ginkgo biloba 'JN9' TM	Sky Tower Ginkgo
	JW	Juniperus scopulorum 'Wichita Blue'	Wichita Blue Juniper
	MS	Malus x 'Spring Snow'	Spring Snow Crabapple
	PF	Pinus aristata 'Formal Form'	Formal Form Bristlecone Pine
	PV	Prunus virginiana 'Canada Red'	Canada Red Chokecherry
	PJ	Pyrus calleryana 'Jaczam' TM	Jack Callery Pear
	QR	Quercus robur	English Oak
	UA	Ulmus x 'Accolade'	Accolade Elm
SHRUBS			
	AMG	Aronia melanocarpa 'UCONNAMO12' TM	Ground Hug Black Chokeberry
	BTC	Berberis thunbergii 'Concorde'	Concorde Japanese Barberry
	BG	Berberis thunbergii 'Gonzam' TM	Golden Ruby Japanese Barberry
	BDH	Buddleja davidii 'Buzz Hot Raspberry'	Hot Raspberry Butterfly Bush
	BGM	Buxus x 'Green Mountain'	Green Mountain Boxwood
	CAB	Cornus alba 'Bailhalo' TM	Ivory Halo Dogwood
	CSK	Cornus sericea 'Kelseys'	Kelsey's Dwarf Red Twig Dogwoo
	EAC	Euonymus alatus 'Grove Compactus'	Grove Compact Burning Bush
	POL	Physocarpus opulifolius 'Donna May' TM	Little Devil Ninebark
	PMM	Pinus mugo var. pumilio	Dwarf Mugo Pine
	PLC	Prunus laurocerasus 'Chestnut Hill'	Chestnut Hill English Laurel
	SSS	Sorbaria sorbifolia 'Sem'	Sem Ash Leaf Spirea
	SJD	Spiraea japonica 'Double Play Dooze'	Dooze Spirea
	SBL	Syringa x 'SMSJBP7' 'Bloomerang'	Bloomerang Dark Purple Lilac
	VCS	Viburnum carlesii 'SMVCB' TM	Spice Baby Koreanspice Viburnum
ORNAMENTAL GRASSES			
	CAK	Calamagrostis x acutiflora 'Karl Foerster'	Karl Foerster Feather Reed Grass
	HSS	Helictotrichon sempervirens 'Sapphire'	Sapphire Blue Oat Grass
	MSG	Miscanthus sinensis 'Gold Bar'	Gold Bar Eulalia Grass
	PAH	Pennisetum alopecuroides 'Hameln'	Hameln Fountain Grass
PERENNIALS			
	HSO	Hemerocallis x 'Stella de Oro'	Stella de Oro Daylily
	PAL	Perovskia atriplicifolia 'Little Spire'	Little Spire Russian Sage

SYMBOL	CODE	BOTANICAL NAME	COMMON NAME
GROUND COVERS			
	KB	Poa pratensis	Kentucky Bluegrass

OVERALL PHASES 2-3 REFERENCE NOTES

SYMBOL	DESCRIPTION
1	RIVER ROCK, SIZE 2"
2	PLAYGROUND WOOD MULCH, 14" DEPTH
3	STEEL EDGING, TBD.
4	PICNIC SHELTER, T.B.D.
5	PLAYGROUND STRUCTURE, T.B.D.
6	BENCH, TBD.

NOTE:
REFERENCE SHEET L1.11 FOR DETAILS AND SEPARATE LANDSCAPE TABULATION CHARTS & SCHEDULES FOR PHASES 2&3.

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GRAPHIC SCALE

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TALEGA VILLAGE PHASE 3
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LANDSCAPE PLAN

REVISION BLOCK

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LANDSCAPE PLAN

Scale:	1"=20'	Drawn:	BW
Date:	11/29/2023	Job #:	21-0488
Sheet:	L1.7		

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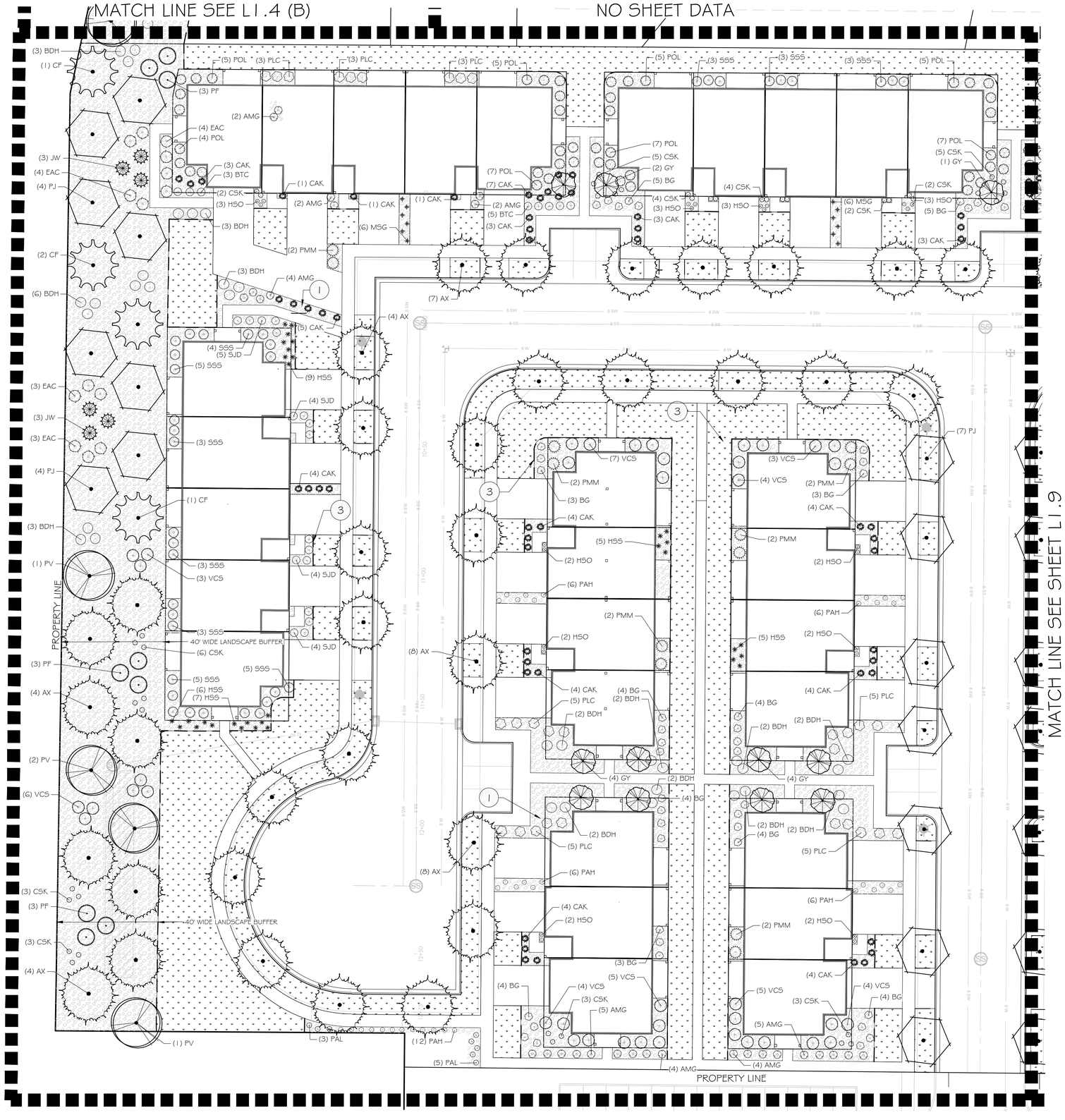

OVERALL PHASES 2-3 PLANT SCHEDULE

	CODE	BOTANICAL NAME	COMMON NAME
TREES			
	AP	Acer platanoides	Norway Maple
	AX	Acer x freemanii	Freeman Maple
	SB	Amelanchier x grandiflora	Serviceberry
	CC	Cercis canadensis	Eastern Redbud
	CF	Cornus florida	Flowering Dogwood
	GY	Ginkgo biloba 'JN9' TM	Sky Tower Ginkgo
	JW	Juniperus scopulorum 'Wichita Blue'	Wichita Blue Juniper
	MS	Malus x `Spring Snow`	Spring Snow Crabapple
	PF	Pinus anstata 'Formal Form'	Formal Form Bristlecone Pine
	PV	Prunus virginiana `Canada Red`	Canada Red Chokecherry
	PJ	Pyrus calleryana 'Jaczam' TM	Jack Gallery Pear
	QR	Quercus robur	English Oak
	UA	Ulmus x `Accolade`	Accolade Elm
SHRUBS			
	AMG	Aronia melanocarpa `UCONNAMO12` TM	Ground Hug Black Chokeberry
	BTC	Berberis thunbergii `Concorde`	Concorde Japanese Barberry
	BG	Berberis thunbergii 'Goruzam' TM	Golden Ruby Japanese Barberry
	BDH	Buddleja davidii `Buzz Hot Raspberry`	Hot Raspberry Butterfly Bush
	BGM	Buxus x `Green Mountain`	Green Mountain Boxwood
	CAB	Cornus alba `Bailhalo` TM	Ivory Halo Dogwood
	CSK	Cornus sericea `Kelseyi`	Kelsey's Dwarf Red Twig Dogwood
	EAC	Euonymus alatus 'Grove Compactus'	Grove Compact Burning Bush
	POL	Physocarpus opulifolius `Donna May` TM	Little Devil Ninebark
	PMM	Pinus mugo var. pumilio	Dwarf Mugo Pine
	PLC	Prunus laurocerasus `Chestnut Hill`	Chestnut Hill English Laurel
	SSS	Sorbaria sorbifolia `Sem`	Sem Ash Leaf Spirea
	SJD	Spiraea japonica `Double Play Doozie`	Doozie Spirea
	SBL	Syringa x `SMSJBP7` `Bloomerang`	Bloomerang Dark Purple Lilac
	VCS	Viburnum carlesii 'SMVCB' TM	Spice Baby Koreanspice Viburnum
ORNAMENTAL GRASSES			
	CAK	Calamagrostis x acutiflora `Karl Foerster`	Karl Foerster Feather Reed Grass
	HSS	Helictotrichon sempervirens `Sapphire`	Sapphire Blue Oat Grass
	MSG	Miscanthus sinensis `Gold Bar`	Gold Bar Eulalia Grass
	PAH	Pennisetum alopecuroides `Hameln`	Hameln Fountain Grass
PERENNIALS			
	HSO	Hemerocallis x `Stella de Oro`	Stella de Oro Daylily
	PAL	Perovskia atriplicifolia `Little Spire`	Little Spire Russian Sage

SYMBOL	CODE	BOTANICAL NAME	COMMON NAME
GROUND COVERS			
	KB	Poa pratensis	Kentucky Bluegrass

OVERALL PHASES 2-3 REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
1	RIVER ROCK, SIZE 2"
2	PLAYGROUND WOOD MULCH, 14" DEPTH
3	STEEL EDGING, TBD.
4	PICNIC SHELTER, T.B.D.
5	PLAYGROUND STRUCTURE, T.B.D.
6	BENCH, TBD.

NOTE:
REFERENCE SHEET L1.11 FOR DETAILS AND SEPARATE LANDSCAPE TABULATION CHARTS & SCHEDULES FOR PHASES 2&3.

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GRAPHIC SCALE

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LANDSCAPE PLAN

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LANDSCAPE PLAN

Scale:	1"=20'	Drawn:	BW
Date:	11/29/2023	Job #:	21-0488
Sheet:	L1.8		

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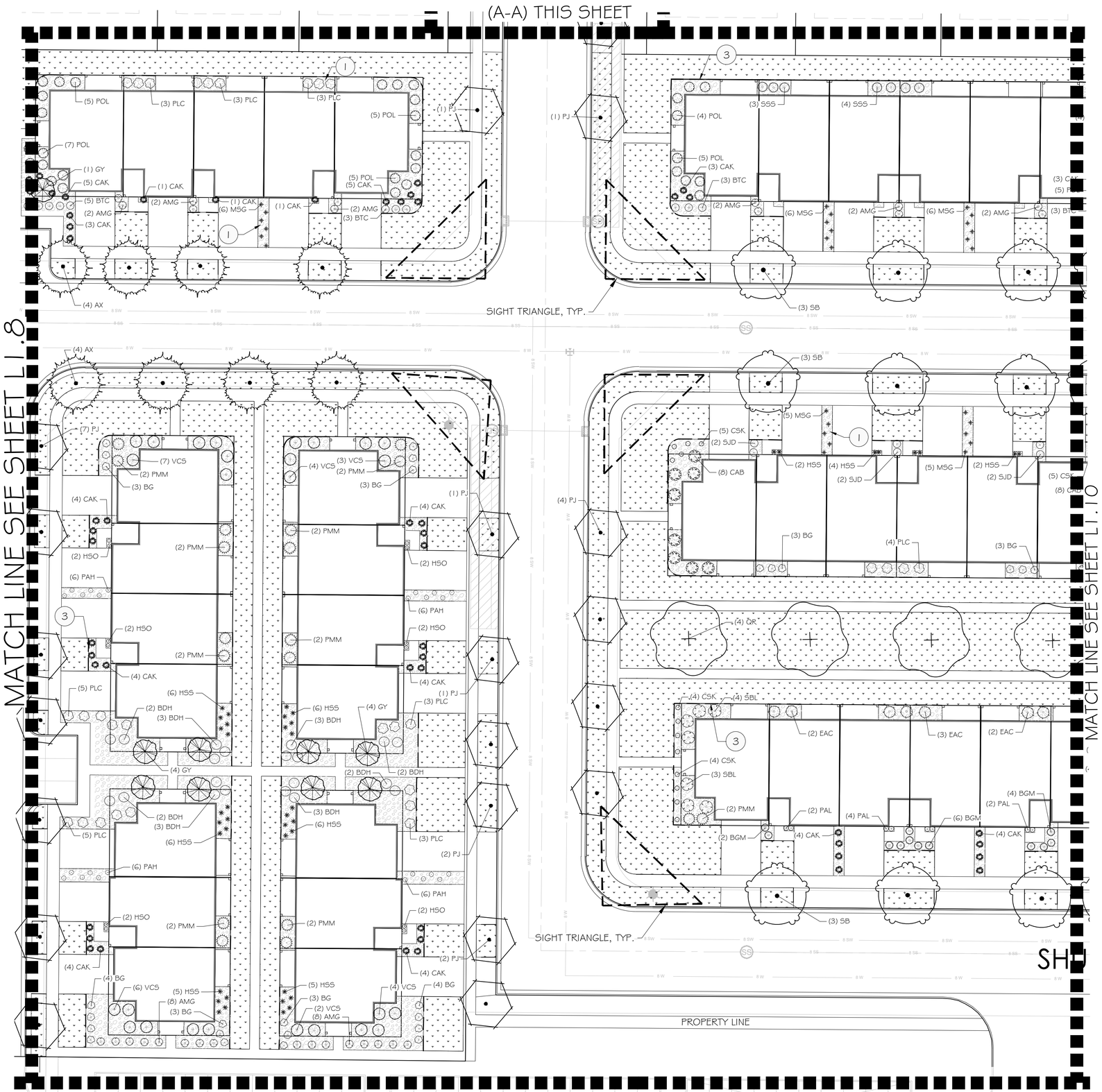

OVERALL PHASES 2-3 PLANT SCHEDULE

	CODE	BOTANICAL NAME	COMMON NAME
TREES			
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	JW	Juniperus scopulorum 'Wichita Blue'	Wichita Blue Juniper
	MS	Malus x `Spring Snow`	Spring Snow Crabapple
	PF	Pinus aristata 'Formal Form'	Formal Form Bristlecone Pine
	PV	Prunus virginiana `Canada Red`	Canada Red Chokecherry
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	BDH	Buddleja davidii `Buzz Hot Raspberry`	Hot Raspberry Butterfly Bush
	BGM	Buxus x `Green Mountain`	Green Mountain Boxwood
	CAB	Cornus alba `Bailhalo` TM	Ivory Halo Dogwood
	CSK	Cornus sencea `Kelseyi`	Kelsey`s Dwarf Red Twig Dogwood
	EAC	Euonymus alatus 'Grove Compactus'	Grove Compact Burning Bush
	POL	Physocarpus opulifolius `Donna May` TM	Little Devil Ninebark
	PMM	Pinus mugo var. pumilio	Dwarf Mugo Pine
	PLC	Prunus laurocerasus `Chestnut Hill`	Chestnut Hill English Laurel
	SSS	Sorbaria sorbifolia `Sem`	Sem Ash Leaf Spirea
	SJD	Spiraea japonica `Double Play Doozie`	Doozie Spirea
	SBL	Syringa x `SMSJBP7` `Bloomerang`	Bloomerang Dark Purple Lilac
	VCS	Viburnum carlesii 'SMVCB' TM	Spice Baby Koreanspice Viburnum
ORNAMENTAL GRASSES			
	CAK	Calamagrostis x acutiflora `Karl Foerster`	Karl Foerster Feather Reed Grass
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SYMBOL	**CODE**	**BOTANICAL NAME**	**COMMON NAME**
GROUND COVERS			
	KB	Poa pratensis	Kentucky Bluegrass

OVERALL PHASES 2-3 REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
1	RIVER ROCK, SIZE 2"
2	PLAYGROUND WOOD MULCH, 14" DEPTH
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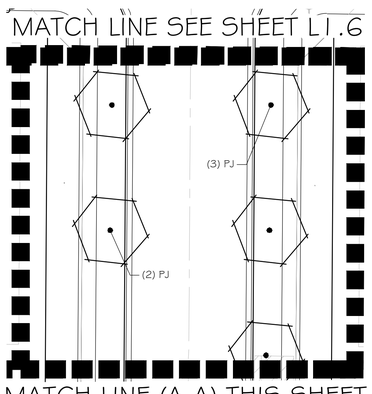
6	BENCH, TBD.

NOTE:
REFERENCE SHEET L1.11 FOR DETAILS AND SEPARATE LANDSCAPE TABULATION CHARTS & SCHEDULES FOR PHASES 2&3.



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LANDSCAPE PLAN

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LANDSCAPE PLAN

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Sheet:	L1.9		

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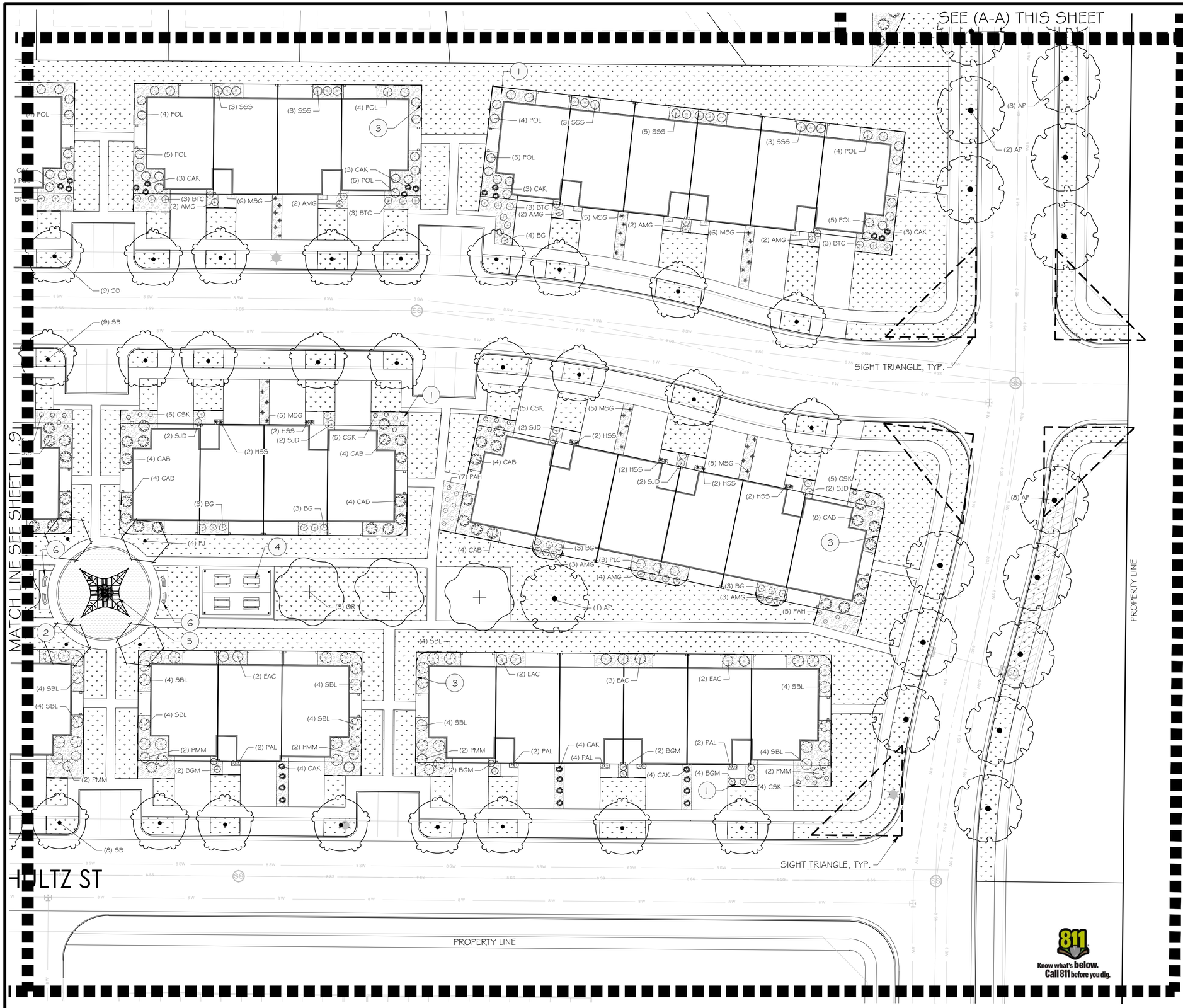

OVERALL PHASES 2-3 PLANT SCHEDULE

	CODE	BOTANICAL NAME	COMMON NAME
TREES			
	AP	Acer platanoides	Norway Maple
	AX	Acer x freemanii	Freeman Maple
	SB	Amelanchier x grandiflora	Serviceberry
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	PV	Prunus virginiana 'Canada Red'	Canada Red Chokecherry
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	AMG	Aronia melanocarpa 'UCONNAM012' TM	Ground Hug Black Chokeberry
	BTC	Berberis thunbergii 'Concorde'	Concorde Japanese Barberry
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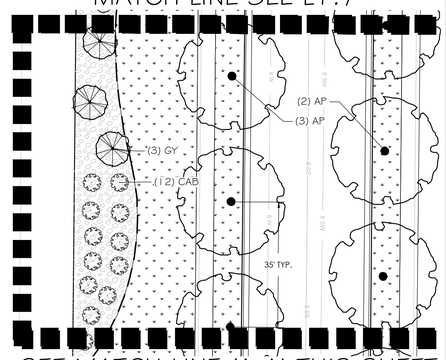
	BGM	Buxus x 'Green Mountain'	Green Mountain Boxwood
	CAB	Cornus alba 'Bailhalo' TM	Ivory Halo Dogwood
	CSK	Cornus sericea 'Kelseyi'	Kelsey's Dwarf Red Twig Dogwood
	EAC	Euonymus alatus 'Grove Compactus'	Grove Compact Burning Bush
	POL	Physocarpus opulifolius 'Donna May' TM	Little Devil Ninebark
	PMM	Pinus mugo var. pumilio	Dwarf Mugo Pine
	PLC	Prunus laurocerasus 'Chestnut Hill'	Chestnut Hill English Laurel
	SSS	Sorbaria sorbifolia 'Sem'	Sem Ash Leaf Spirea
	SJD	Spiraea japonica 'Double Play Doozie'	Doozie Spirea
	SBL	Syringa x 'SMSJBP7' 'Bloomerang'	Bloomerang Dark Purple Lilac
	VCS	Viburnum carlesii 'SMVCB' TM	Spice Baby Koreanspice Viburnum
ORNAMENTAL GRASSES			
	CAK	Calamagrostis x acutiflora 'Karl Foerster'	Karl Foerster Feather Reed Grass
	HSS	Helictotrichon sempervirens 'Sapphire'	Sapphire Blue Oat Grass
	MSG	Miscanthus sinensis 'Gold Bar'	Gold Bar Eulalia Grass
	PAH	Pennisetum alopecuroides 'Hameln'	Hameln Fountain Grass
PERENNIALS			
	HSO	Hemerocallis x 'Stella de Oro'	Stella de Oro Daylily
	PAL	Perovskia atriplicifolia 'Little Spire'	Little Spire Russian Sage

SYMBOL	CODE	BOTANICAL NAME	COMMON NAME
GROUND COVERS			
	KB	Poa pratensis	Kentucky Bluegrass

OVERALL PHASES 2-3 REFERENCE NOTES

SYMBOL	DESCRIPTION
1	RIVER ROCK, SIZE 2"
2	PLAYGROUND WOOD MULCH, 14" DEPTH
3	STEEL EDGING, TBD.
4	PICNIC SHELTER, T.B.D.
5	PLAYGROUND STRUCTURE, T.B.D.
6	BENCH, TBD.

NOTE:
REFERENCE SHEET L1.11 FOR DETAILS AND SEPARATE LANDSCAPE TABULATION CHARTS & SCHEDULES FOR PHASES 2&3.



SEE MATCH LINE (A-A) THIS SHEET

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GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

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FOR REVIEW ONLY

TALEGA VILLAGE PHASE 2
STAR CITY, IDAHO
LANDSCAPE PLAN

REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
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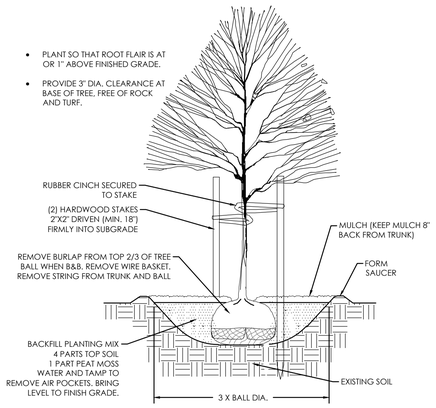
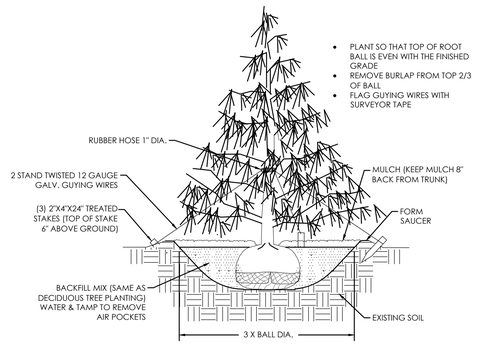
LANDSCAPE PLAN

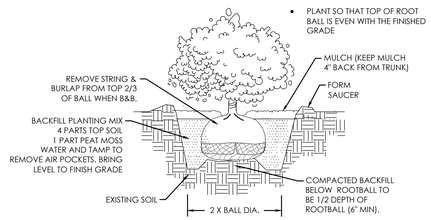
Scale: 1"=20' | Drawn: BW
Date: 11/28/2023 | Job #: 21-0488
Sheet: L1.10



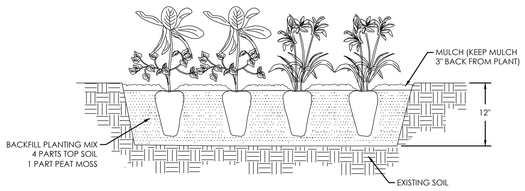
A TREE PLANTING & STAKING
NOT TO SCALE



B EVERGREEN PLANTING & GUYING
NOT TO SCALE



C SHRUB PLANTING
NOT TO SCALE



D PERENNIAL PLANTING
NOT TO SCALE

PLANT SCHEDULE TOWNHOMES PH.2

CODE	BOTANICAL NAME	COMMON NAME	SIZE	QTY
TREES				
AP	Acer platanoides	Norway Maple	2" Cal.	14
AX	Acer x freemanii	Freeman Maple	2" Cal.	43
SB	Amelanchier x grandiflora	Serviceberry	2" Cal.	35
CF	Cornus florida	Flowering Dogwood	2" Cal.	4
GY	Ginkgo biloba 'JN9' TM	Sky Tower Ginkgo	2" Cal.	20
JW	Juniperus scopulorum 'Wichita Blue'	Wichita Blue Juniper	6` Ht.	6
PF	Pinus anstata 'Formal Form'	Formal Form Bristlecone Pine	6` Ht.	9
PV	Prunus virginiana `Canada Red`	Canada Red Chokecherry	2" Cal.	4
PJ	Pyrus calleryana 'Jaczam' TM	Jack Callery Pear	2" Cal.	38
QR	Quercus robur	English Oak	2" Cal.	7
SHRUBS				
AMG	Aronia melanocarpa `UCONNAMO12` TM	Ground Hug Black Chokeberry	2 gal.	76
BTC	Berberis thunbergii `Concorde`	Concorde Japanese Barberry	5 gal.	34
BG	Berberis thunbergii 'Goruzam' TM	Golden Ruby Japanese Barberry	5 gal.	85
BDH	Buddleja davidii `Buzz Hot Raspberry`	Hot Raspberry Butterfly Bush	2 gal.	54
BGM	Buxus x `Green Mountain`	Green Mountain Boxwood	5 gal.	22
CAB	Cornus alba `Bailhalo` TM	Ivory Halo Dogwood	5 gal.	48
CSK	Cornus sericea `Kelseyi`	Kelsey`s Dwarf Red Twig Dogwood	2 gal.	84
EAC	Euonymus alatus 'Grove Compactus'	Grove Compact Burning Bush	5 gal.	30
POL	Physocarpus opulifolius `Donna May` TM	Little Devil Ninebark	5 gal.	121
PMM	Pinus mugo var. pumilio	Dwarf Mugo Pine	5 gal.	40
PLC	Prunus laurocerasus `Chestnut Hill`	Chestnut Hill English Laurel	5 gal.	61
SSS	Sorbaria sorbifolia `Sem`	Sem Ash Leaf Spirea	5 gal.	61
SJD	Spiraea japonica `Double Play Doozie`	Doozie Spirea	2 gal.	33
SBL	Syringa x `SMSJBP7` `Bloomerang`	Bloomerang Dark Purple Lilac	5 gal.	47
VCS	Viburnum carlesii 'SMVCB' TM	Spice Baby Koreanspice Viburnum	5 gal.	67
ORNAMENTAL GRASSES				
CAK	Calamagrostis x acutiflora `Karl Foerster`	Karl Foerster Feather Reed Grass	1 gal.	133
HSS	Helictotrichon sempervirens `Sapphire`	Sapphire Blue Oat Grass	1 gal.	86
MSG	Miscanthus sinensis `Gold Bar`	Gold Bar Eulalia Grass	1 gal.	72
PAH	Pennisetum alopecuroides `Hameln`	Hameln Fountain Grass	1 gal.	72
PERENNIALS				
HSO	Hemerocallis x `Stella de Oro`	Stella de Oro Daylily	1 gal.	36
PAL	Perovskia atriplicifolia `Little Spire`	Little Spire Russian Sage	1 gal.	26

SYMBOL	CODE	BOTANICAL NAME	COMMON NAME	SIZE	QTY
GROUND COVERS					
	KB	Poa pratensis	Kentucky Bluegrass	sod	100,104 sf

REFERENCE NOTES TOWNHOMES PH.2

SYMBOL	DESCRIPTION	QTY	DETAIL
1	RIVER ROCK, SIZE 2"	51,153 sf	
2	PLAYGROUND WOOD MULCH, 14" DEPTH	1,385 sf	
3	STEEL EDGING, TBD.	4,041 lf	
4	PICNIC SHELTER, T.B.D.	1	
5	PLAYGROUND STRUCTURE, T.B.D.	1	
6	BENCH, TBD.	4	

Star Idaho Landscape City Requirements - Townhomes Phase 2						
Mandatory Provisions						
Existing Site Trees	Existing trees identified by species and size					
Site Trees	1 Tree per 4,000 sf of overall landscape area					
Perimeter Landscape Buffer Strip	When a commercial or indusrial use abuts a residential use, a 10 foor wide by 6 foot high landscaped buffer i.e. plants, berms, fences, or walls					
Street Trees	A minimum of one street tree shall be plated for every 35 linear feet of street frontage					
Parking Lot Trees	A terminal island for a single row of parking spaces shall be landscaped with at least one tree and shurbs, ground cover, or grass. A terminal island for a double row of parking spaces shall contain not less than two tree and shrubs, ground cover, or grass.					
Dumpster Screen	To conceal outdoor storage areas or trash receptacles when adjacent to or in view from a residential activity or public street right of way, a three foot wide by six foot high landscaped buffer is required.					
Internal Parking Landscape	Any lot with 51 or more parking spaces shall provide a minimum of 8% interior landscaping of the total overall lot area.					
Site Trees			**Required**	**Provided**	**Comments**	
Overall Landscape Area: 153,094 sf (3.5 ac.)	153,094 sf /4,000=	38.27 Trees	39	**39**	See parking lot tree quanities below.	
Use-able Landscape Area:	63,326 sf open space					
Parking Lot Trees			**Required**	**Provided**	**Comments**	
One canopy tree placed in landscape islands at the terminus of each parking row. A termial island for a double row of parking spaces shall contain not less than two trees.			N/A	**N/A**		
Landscape Internal Parking			**Required**	**Provided**	**Comments**	
6 ft height masonry wall provided on South property line			N/A	**N/A**	Not applicable. No residential adj. exists	
Street Trees			**Required**	**Provided**	**Comments**	
All public & private streets to receive one street tree for every 35' linear feet of frontage			102	**102**		
Buffer Area			**Required**	**Provided**	**Comments**	
40' wide landscape buffer on western property line. Per each 100 linear feet of frontage provide 4 shade trees, 3 evergreen trees, 2 ornamental trees, and 12 shrubs			Yes	Yes	16 Canopy Trees, 8 Ornamental Trees, 15 Evergreen Trees, and 43 Shrubs	
Internal Parking Landscape			**Required**	**Provided**	**Comments**	

Star Idaho Landscape City Requirements - Single-Family Phase 3					
Mandatory Provisions					
Existing Site Trees	Existing trees identified by species and size				
Site Trees	1 Tree per 4,000 sf of overall landscape area				
Perimeter Landscape Buffer Strip	When a commercial or indusrial use abuts a residential use, a 10 foor wide by 6 foot high landscaped buffer i.e. plants, berms, fences, or walls				
Street Trees	A minimum of one street tree shall be plated for every 35 linear feet of street frontage				
Parking Lot Trees	A terminal island for a single row of parking spaces shall be landscaped with at least one tree and shurbs, ground cover, or grass. A terminal island for a double row of parking spaces shall contain not less than two tree and shrubs, ground cover, or grass.				
Dumpster Screen	To conceal outdoor storage areas or trash receptacles when adjacent to or in view from a residential activity or public street right of way, a three foot wide by six foot high landscaped buffer is required.				
Internal Parking Landscape	Any lot with 51 or more parking spaces shall provide a minimum of 8% interior landscaping of the total overall lot area.				
Site Trees			**Required**	**Provided**	**Comments**
Total Landscape Area: 152,910 sf (3.51 ac.)	152,910 sf /4,000=	38.23 Trees	39	**39**	See parking lot tree quanities below.
Use-able Landscape Area:	96,240 sf open space				
Parking Lot Trees			**Required**	**Provided**	**Comments**
One canopy tree placed in landscape islands at the terminus of each parking row. A termial island for a double row of parking spaces shall contain not less than two trees.			N/A	**N/A**	
Landscape Internal Parking			**Required**	**Provided**	**Comments**
6 ft height masonry wall provided on South property line			N/A	**N/A**	Not applicable. No residential adj. exists
Street Trees			**Required**	**Provided**	**Comments**
All public & private streets to receive one street tree for every 35' linear feet of frontage			236	**236**	
Buffer Area			**Required**	**Provided**	**Comments**
40' wide landscape buffer on western property line. Per each 100 linear feet of frontage provide 4 shade trees, 3 evergreen trees, 2 ornamental trees, and 12 shrubs			Yes	Yes	32 Canopy Trees, 17 Ornamental Trees, 24 Evergreen Trees, and 96 Shrubs
Internal Parking Landscape			**Required**	**Provided**	**Comments**
Parking Lot Landscape: None Provided			N/A	**N/A**	Single family residential, no parking lot.

PLANT SCHEDULE SINGLE FAMILY PH.3

CODE	BOTANICAL NAME	COMMON NAME	SIZE	QTY
TREES				
AP	Acer platanoides	Norway Maple	2" Cal.	42
AX	Acer x freemanii	Freeman Maple	2" Cal.	22
SB	Amelanchier x grandiflora	Serviceberry	2" Cal.	10
CC	Cercis canadensis	Eastern Redbud	2" Cal.	46
CF	Cornus florida	Flowering Dogwood	2" Cal.	9
GY	Ginkgo biloba 'JN9' TM	Sky Tower Ginkgo	2" Cal.	15
JW	Juniperus scopulorum 'Wichita Blue'	Wichita Blue Juniper	6` Ht.	12
MS	Malus x `Spring Snow`	Spring Snow Crabapple	2" Cal.	51
PF	Pinus anstata 'Formal Form'	Formal Form Bristlecone Pine	6` Ht.	12
PV	Prunus virginiana `Canada Red`	Canada Red Chokecherry	2" Cal.	53
PJ	Pyrus calleryana 'Jaczam' TM	Jack Callery Pear	2" Cal.	21
UA	Ulmus x `Accolade`	Accolade Elm	2" Cal.	52
SHRUBS				
BDH	Buddleja davidii `Buzz Hot Raspberry`	Hot Raspberry Butterfly Bush	2 gal.	24
CAB	Cornus alba `Bailhalo` TM	Ivory Halo Dogwood	5 gal.	44
CSK	Cornus sericea `Kelseyi`	Kelsey`s Dwarf Red Twig Dogwood	2 gal.	24
EAC	Euonymus alatus 'Grove Compactus'	Grove Compact Burning Bush	5 gal.	24
VCS	Viburnum carlesii 'SMVCB' TM	Spice Baby Koreanspice Viburnum	5 gal.	38

SYMBOL	CODE	BOTANICAL NAME	COMMON NAME	SIZE	QTY
GROUND COVERS					
	KB	Poa pratensis	Kentucky Bluegrass	sod	137,439 sf

REFERENCE NOTES- SINGLE FAMILY PH.3

SYMBOL	DESCRIPTION	QTY	DETAIL
1	RIVER ROCK, SIZE 2"	42,621 sf	
3	STEEL EDGING, TBD.	1,175 lf	

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FOR REVIEW ONLY

TALEGA VILLAGE PHASE 2 & 3
STAR CITY, IDAHO
LANDSCAPE DETAILS

REVISION BLOCK		
#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

LANDSCAPE DETAILS

Scale:		Drawn:	BW
Date:	11/29/2023	Job #:	21-0488
Sheet:	L1.11		

2021\21-0488 Talega Village\Design 21-0488.dwg\sheets apartments CUP\L1.0 - L1.2 LANDSCAPE PLAN TOWNS.dwg

SINGLE FAMILY ELEVATIONS




TOWNHOME ELEVATIONS




APARTMENT ELEVATIONS





TALEGA VILLAGE home plan elevations exhibit

STAR CITY, ADA COUNTY
5/17/2023
21-0488

Note: This plan is for illustrative purposes. Boundaries may be based on information obtained through public data and we can't confirm it's accuracy. It is recommended that a boundary survey be performed to determine actual boundary size and dimensions as well as other potential boundary conflicts.

FOCUS ENGINEERING AND SURVEYING, LLC

Z:_2021\21-0488 Talega Village\design\21-0488 (dwg) exhibits\Home Plan Elevations Exhibit.dwg

Project/File: **Talega Village/ SPP22-0006/ AZ-22-11/ RZ-22-03/ DA-22-12/ CU-22-05/ PP-22-17/ PR-22-08**
This is an annexation, a rezone, a conditional use permit, a private street and a preliminary plat application to allow for the development of a 181-lot mixed use subdivision on 66-acres. The site is located at the northwest corner of SH-44 and SH-16.

Lead Agency: City of Star

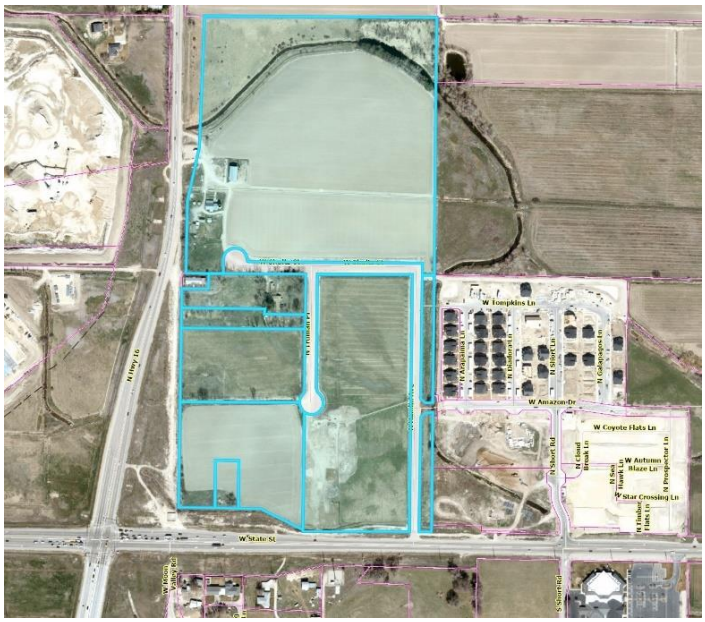
Site address: 58 N. Truman Place

Staff Approval: September 26, 2023

Applicant: Derk Pardoe
3454 Stone Mountain Lane
Sandy, UT 84092

Representative: Chad Garner
Focus Engineering & Surveying
6949 High Tech Drive Suite 200
Midvale, UT 84047

Staff Contact: Dawn Battles, Senior Planner
Phone: 387-6218
E-mail: dbattles@achdidaho.org



A. Findings of Fact

1. **Description of Application:** The applicant is requesting approval of an annexation with rezone from RUT (Rural-Urban Transition), R1 (Estate Residential) and C-2 (Commercial) to R-10-DA (Residential), a conditional use permit, a private street and a preliminary plat application to allow for the development of a 181 lot mixed-use development consisting of 1 commercial lot, 1 multi-family lot, 65 single family residential lots, 95 townhome lots, 5 common lots and 14 open space lots which will include 340 apartment units on 66-acres. The application includes a development agreement with the City of Star. The applicant's rezone proposal is consistent with the City of Star's future land use map which designates this area as commercial, high density residential, neighborhood residential and compact residential.

2. **Description of Adjacent Surrounding Area:**

Direction	Land Use	Zoning
North	Rural-Urban Transition (Ada County)	RUT
South	Rural-Urban Transition (Ada County), Residential, Commercial	RUT, R-1, C-1
East	Rural-Urban Transition (Ada County), Residential, Commercial	RUT, R-5-DA, C-2
West	Rural-Urban Transition (Ada County), Mixed Use, Light Industrial	RUT, MU, LI-DA

3. **Site History:** ACHD staff previously reviewed a portion of this site for an annexation with rezone and a comprehensive plan map amendment (STAR18-0004) in January 2018. The requirements of this staff report have been updated to reflect the current proposed site plan.

4. **Adjacent Development:** The following developments are pending or underway in the vicinity of the site:

   - Everton, a 241 lot mixed use development consisting of 212 single-family residential lots, 11 commercial lots and 18 common lots on 77-acres is located southeast of the site at the northeast corner of Palmer Lane and SH-44 and was approved by ACHD in August 2023.
   - Cascade Springs, a 470 lot residential subdivision consisting of 400 residential lots and 70 common lots is located directly adjacent to the north of the site and was approved by ACHD in March 2023.
   - Junction Crossing 2, a 9 lot mixed-use subdivision consisting of 3 mixed use lots, 3 commercial lots and 3 buildable lots which will comprise of 32 multi-family units, 80,000 square feet of commercial/office, an amphitheater, common areas and a park is located adjacent to the east of the site at the northeast corner of SH-44 and Hamlin Avenue and was approved in October 2022.
   - Junction Crossing, a 4 lot commercial subdivision consisting of 2 commercial lots and 2 common lots is located east of the site at the northeast corner of SH-44 and Short Road and was approved by ACHD in January 2022.
   - Fountain Park, a 278 residential lot subdivision consisting of 251 residential lots and 27 common lots on 60-acres is located directly adjacent to the east and was approved in August 2021.

5. **Transit:** Transit services are not available to serve this site.

6. **Pathway Crossings:** United States Access Board R304.5.1.2 Shared Use Paths. In shared use paths, the width of curb ramps runs and blended transitions shall be equal to the width of the shared use path.

   AASHTO's Guidelines for the Development of Bicycle Facilities 5.3.5 Other Intersection Treatments: The opening of a shared use path at the roadway should be at least the same width as the shared use path itself. If a curb ramp is provided, the ramp should be the full width of the path, not including any flared sides if utilized. . . . Detectable warnings should be placed across the full width of the ramp.

   FHWA's "Designing Sidewalks and Trails for Access" (1999) reflected common ADA-related concepts: Chapter 6, Page 16-6: The width of the ramp should be at least as wide as the average width of the trail to improve safety for users who will be traveling at various speeds. In addition, the overall width of the trail should be increased, so the curb ramp can be slightly offset to the side. The increased width reduces conflict at the intersection by providing more space for users at the bottom of the ramp.

7. **New Center Lane Miles:** The proposed development includes 1.06 centerline miles of new public road.

8. **Impact Fees:** There will be an impact fee that is assessed and due prior to issuance of any building permits. The assessed impact fee will be based on the impact fee ordinance that is in effect at that time. The impact fee assessment will not be released until the civil plans are approved by ACHD.

9. **Capital Improvements Plan (CIP)/ Integrated Five Year Work Plan (IFYWP):**

   There are no roadways, bridges or intersections in the general vicinity of the project that are in the Integrated Five Year Work Plan (IFYWP) or the District's Capital Improvement Plan (CIP).

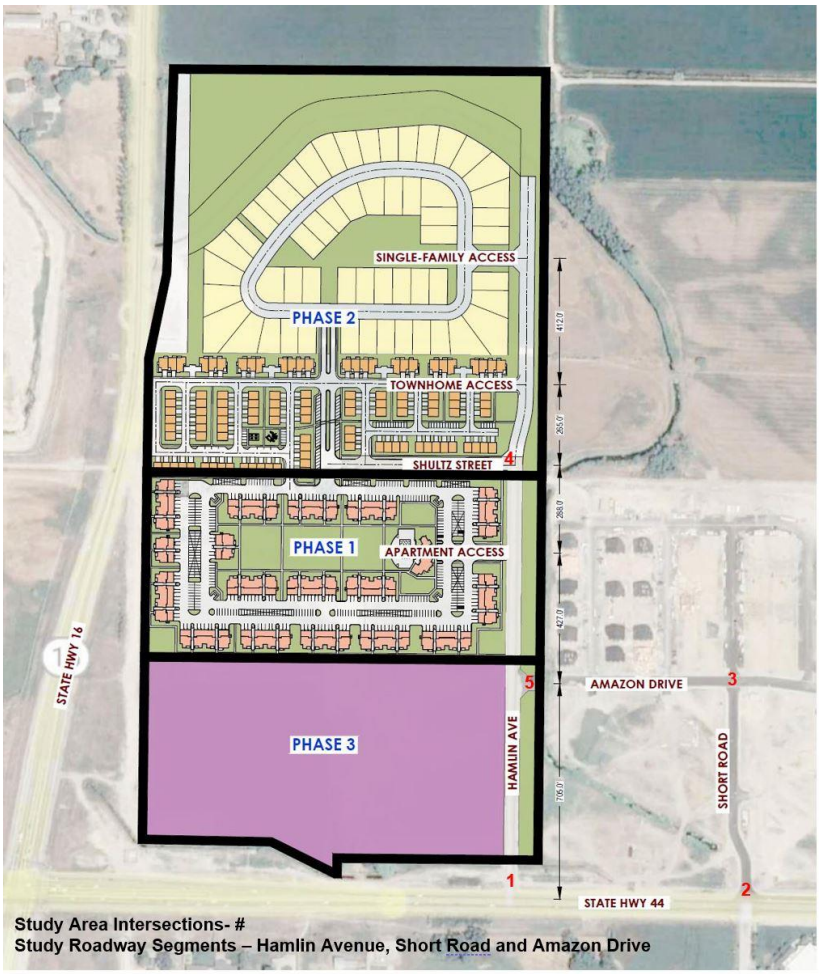
10. **Roadways to Bikeways Master Plan:** ACHD's Roadways to Bikeways Master Plan (BMP) was adopted by the ACHD Commission in May of 2009 and was update in 2018. The plan seeks to implement the Planned Bicycle Network to support bicycling as a viable transportation option for Ada County residents with a wide range of ages and abilities, maintain bicycle routes in a state of good repair in order to ensure they are consistently available for use, promote awareness of existing bicycle routes and features and support encouragement programs and to facilitate coordination and cooperation among local jurisdictions in implementing the Roadways to Bikeways Plan recommendations.

    The BMP identifies Palmer Lane located east of the site as Level 2 facilities that will be constructed as part of a future ACHD project. The BMP does not identify bike facilities on Hamlin Avenue, Short Road, Schultz Street or Amazon Drive.

B. Traffic Findings for Consideration

1. **Trip Generation:** This development is estimated to generate 4,529 vehicle trips per day; 417 vehicle trips per hour in the PM peak hour, based on the traffic impact study.

2. **Traffic Impact Study**
    Focus Engineering and Surveying, Inc. prepared a traffic impact study for the proposed Talega Village development. The executive summary of the findings **as presented by Focus Engineering and Surveying, Inc.** can be found as Attachment 3. The following executive summary is **not the opinion of ACHD staff**. ACHD has reviewed the submitted traffic impact study for consistency with ACHD policies and practices and may have additional requirements beyond what is noted in the summary. ACHD Staff comments on the submitted traffic impact study can be found below under staff comments.



a. Policy:

Mitigation Proposals: Mitigation recommendations shall be provided within the report. At a minimum, for each roadway segment and intersection that does not meet the minimum acceptable level of service planning threshold or v/c ratio, the report must discuss feasible measures to avoid or reduce the impact to the system. To be considered adequate, measures should be specific and feasible. Mitigation may also include:

- Revision to the Phasing Plan to coincide with the District's planning Capital Projects.
- Reducing the scope and/or scale of the project.

Alternative Mitigation Measures: 7106.7.3 states that if traditional mitigation measures such as roadway widening and intersection improvements are infeasible as determined by ACHD, the TIS may recommend alternative mitigation measures. Alternative mitigation measures shall demonstrate that impacts from the project will be offset.

- If the impacted roadway segments and/or intersections are programmed as funded in the Integrated Five Year Work Plan (IFYWP) or the Capital Improvements Plan (CIP); no alternative mitigation is required.
- If the impacted roadway segments and/or intersections are not programmed in either the IFYWP or the CIP; the applicant may (i) analyze the shoulder hour and (ii) provide a safety analysis to determine alternative mitigation requirements.
    - If the impacted roadway segments and intersections meet the minimum acceptable level of service planning thresholds in the shoulder hour the applicant may suggest feasible alternative mitigation such as: sidewalks, bike facilities, connectivity, safety improvements, etc. within 1.5 miles of the proposed development.
    - If the shoulder hour planning thresholds are exceeded the applicant may request to enter into a Development Agreement and pay into the Priority Corridor Fund an amount determined by the ACHD to offset impacts from the project.
- Alternative Mitigation may also include:
    - Revision to the Phasing Plan to coincide with the District's future Capital Projects.
    - Reducing the scope and/or scale of the project.

Level of Service Planning Thresholds: District Policy 7206.4.1 states that, Level of Service Planning Thresholds have been established for principal arterials and minor arterials within ACHD's Capital Improvement Plan and are also listed in section 7106. Unless otherwise required to provide a Traffic Impact Study under section 7106, a proposed development with site traffic less than 10% of the existing downstream roadway or intersection peak hour traffic shall not be required to provide mitigation for a roadway or intersection that currently exceeds the minimum acceptable level of service planning threshold or V/C ratio.

b. TIS Findings: Staff have reviewed the submitted traffic impact study (TIS) and generally agree with the findings and recommendations. The TIS analyzed phases which included 2023 Plus Phase 1 total traffic, 2024 Plus Phase 2 total traffic, and 2030 Plus Phase 3 total traffic.

The study found the following intersection deficiencies described below, coupled with the percentage site traffic contributions relative to the PM peak hour total traffic, followed with their recommendations for improvements.

Intersections:

- Short Road/ SH-44 (8%)
    - The northbound and southbound left-turn lane exceeds ACHD's acceptable Level of Service Planning Thresholds in the AM and PM peak hours under 2030 background and 2030 total traffic conditions. In 2022, ITD widened SH-44 to five lanes between SH-16 and Linder Road. The TIS recommended the following capacity improvements under 2023 Plus Phase 1 total traffic, 2024 Plus Phase 2 total traffic and 2030 total traffic conditions:
        - Restrict to right-in/right-out/left-in
            - If restricted, then the eastbound left-turn lane exceeds ACHD's acceptable Level of Service Planning Thresholds in the PM peak hour under 2030 total traffic conditions.
        - Signal Warrant analysis indicated that the intersection meets warrants under 2030 total traffic conditions.
        - ITD did not submit comments regarding the TIS.
            - No additional improvements are recommended at this intersection on the ACHD roadways, as the proposed site traffic at this intersection will be less than 10% of the 2030 total traffic conditions. Therefore, consistent with District policy 7205.3.1 Level of Service Planning Threshold, which states, a proposed development with site traffic less than 10% of the existing downstream roadway or intersection peak hour traffic shall not be required to provide mitigation.
            - The applicant should coordinate with ITD and the City of Star to determine if any additional improvements or right-of-way are required on SH-44 at the intersection with Short Road.
- Hamlin Avenue and SH-44 (8%)
    - The southbound right-turn lane exceeds ACHD's acceptable Level of Service Planning Thresholds in the PM peak hours under 2030 total traffic if the Short Road/SH-44 intersection is restricted to right-in/right-out/left-in only as intended in the State Street Corridor Study.
        - ITD did not submit comments regarding the TIS.
            - No additional improvements are recommended at this intersection on the ACHD roadways, as the proposed site traffic at this intersection will be less than 10% of the 2030 total traffic conditions. Therefore, consistent with District policy 7205.3.1 Level of Service Planning Threshold, which states, a proposed development with site traffic less than 10% of the existing downstream roadway or intersection peak hour traffic shall not be required to provide mitigation.
            - The applicant should coordinate with ITD and the City of Star to determine if any additional improvements or right-of-way are required on SH-44 at the intersection with Hamlin Avenue.

Turn Lanes:
The applicant's TIS included turn lane warrant analysis at all off-site and site access study area intersections with the exception of the proposed local street access located at the site's north property line (See Findings #7), as the site plan was updated after the completion of the TIS. The following turn lanes are warranted based on the findings in the TIS:

- Short Road/SH-44
    - Extend the northbound approach an additional 140-feet
        - No site generated traffic is anticipated to impact this movement. Therefore, this improvement is not required.

c. Staff Comments/Recommendations: Based on the findings of the TIS, no additional improvements are recommended at the above listed intersections on the ACHD roadways, as the proposed site traffic at these intersections will be less than 10% of the 2030 total traffic conditions.

The applicant should coordinate with ITD and the City of Star to determine if any additional improvements or right-of-way are required on SH-44 at the intersection with Short Road and Hamlin Avenue.

3. Condition of Area Roadways
Traffic Count is based on Vehicles per hour (VPH)

Roadway	Frontage	Functional Classification	PM Peak Hour Traffic Count	PM Peak Hour Level of Service
**State Highway 44 State Street	1,085-feet	Principal Arterial	1,187	N/A
Hamlin Avenue	2,240-feet	Collector	6	Better than "D"
Short Road	None	Collector	13	Better than "D"
***Amazon Drive	88-feet	Commercial	N/A	N/A

* Acceptable level of service for a two-lane collector is "D" (425 VPH).
* Acceptable level of service for a three-lane collector is "D" (530 VPH).
** ACHD does not set level of service thresholds for State Highways.
*** ACHD does not set level of service planning thresholds for local roads.

4. Average Daily Traffic Count (VDT)
Average daily traffic counts are based on ACHD's most current traffic counts.

- The average daily traffic count for Hamlin Avenue north of SH-44 was estimated to be 28.
- The average daily traffic count on Amazon Drive west of Short Lane was estimated to be 774.
- The average daily traffic count on Short Road north of SH-44 was estimated to be 1,347.

C. Findings for Consideration

1. Public Streets vs. Private Streets

The applicant has proposed to improve a portion of an existing local public street, Shultz Street, abutting the site and is proposing to incorporate a portion of the existing local public streets, Shultz Street/Shultz Court and Truman Place into the site and to construct the internal local streets as public roadways. However, staff recommends the construction of private streets as there is no connectivity to the adjacent parcel to the north as it was approved to have lots constructed at the

site's north property line providing no public benefit and there is a proposed local street at the site's north property line that will provide access to only 10 single family lots. Furthermore, the internal street layout does not meet ACHD's policies as there is a local street proposed to dead end into a parking lot, there are roadways that exceed 750-feet in length and there are several perpendicular parking stalls proposed within the public right-of-way.

The following findings will provide three different scenarios which include the ACHD requirements if the roadways are to be constructed as private, the requirements for the existing public roadway, Hamlin Avenue, and if the roadways are to be constructed as public.

If Private Roads are constructed within the site, then the following conditions apply.

2. Private Roads

a. Policy:

Private Road Policy: District policy 7212.1 states that the lead land use agencies in Ada County establish the requirements for private streets. The District retains authority and will review the proposed intersection of a private and public street for compliance with District intersection policies and standards. The private road should have the following requirements:

- Designed to discourage through traffic between two public streets,
- Graded to drain away from public street intersection, and
- If a private road is gated, the gate or keypad (if applicable) shall be located a minimum of 50-feet from the near edge of the intersection and a turnaround shall be provided.

b. Staff Comments/Recommendations: As noted above, staff recommends the existing streets within the site, Shultz Street, Shultz Court, Truman Place be vacated or vacated/exchanged (See Findings for Consideration 3) and the internal roadways be constructed as private roadways. See image below for location of recommended private streets.

Additionally, if private roads are to be constructed, then the applicant should be required to vacate/exchange all of Shultz Street abutting the site.

If the City of Star approves private roads, the applicant shall be required to pave the private roadways their full widths and at least 30-feet into the site beyond the edge of pavement of all public streets and install pavement tapers with 15-foot curb radii abutting the existing roadway edge. If private roads are not approved by the City of Eagle, the applicant will be required to revise and resubmit the preliminary plat to provide public standard local streets in these locations.

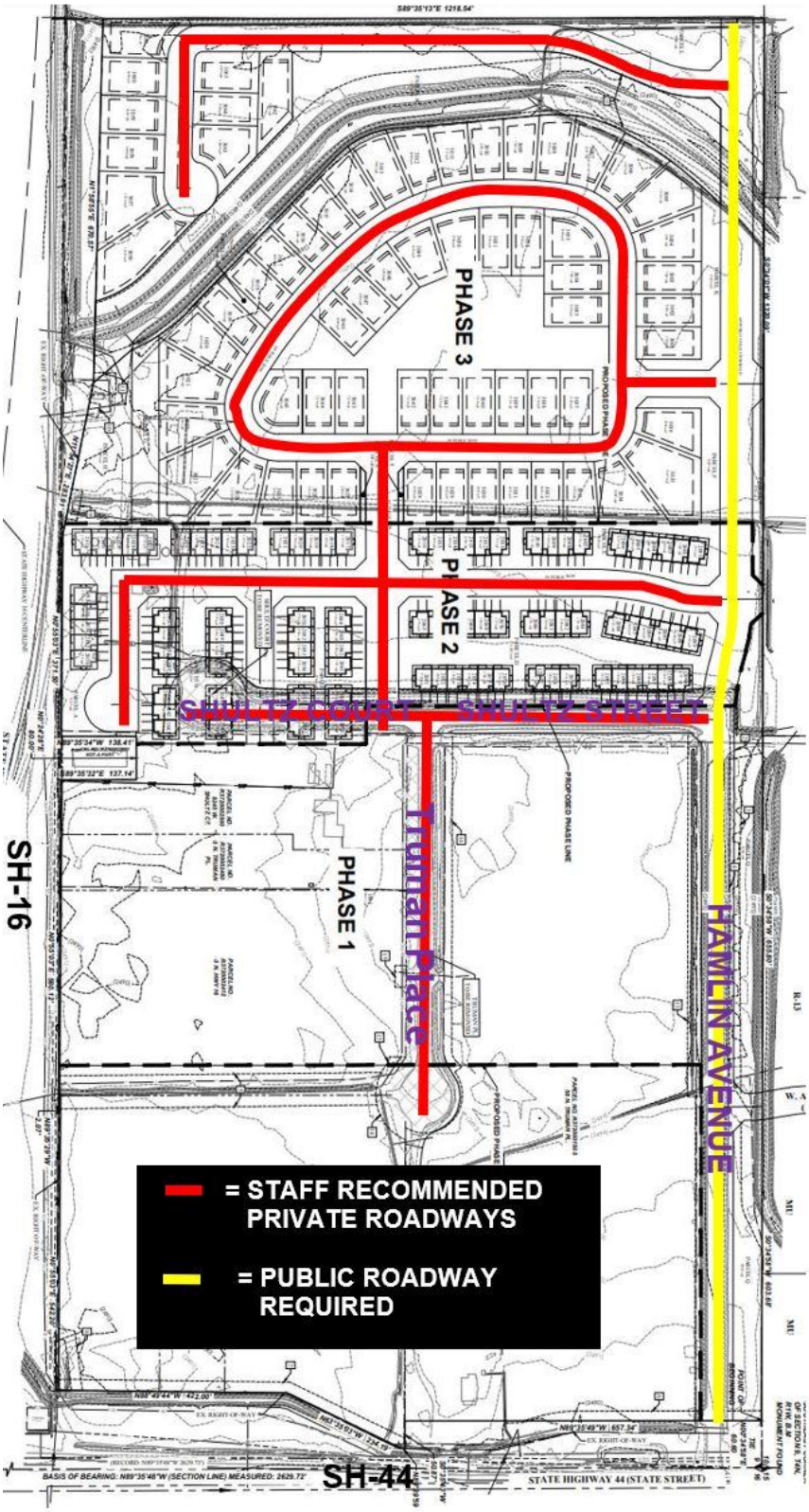
Street name and stop signs are required for the private road. The signs may be ordered through the District. Verification of the correct, approved name of the road is required.

ACHD does not make any assurances that the private road, which is a part of this application, will be accepted as a public road if such a request is made in the future. Substantial redesign and reconstruction costs may be necessary in order to qualify this road for public ownership and maintenance.

The following requirements must be met if the applicant wishes to dedicate the roadway to ACHD:

- Dedicate a minimum of 50-feet of right-of-way for the road.
- Construct the roadway to the minimum ACHD requirements.
- Construct a stub street to the surrounding parcels.

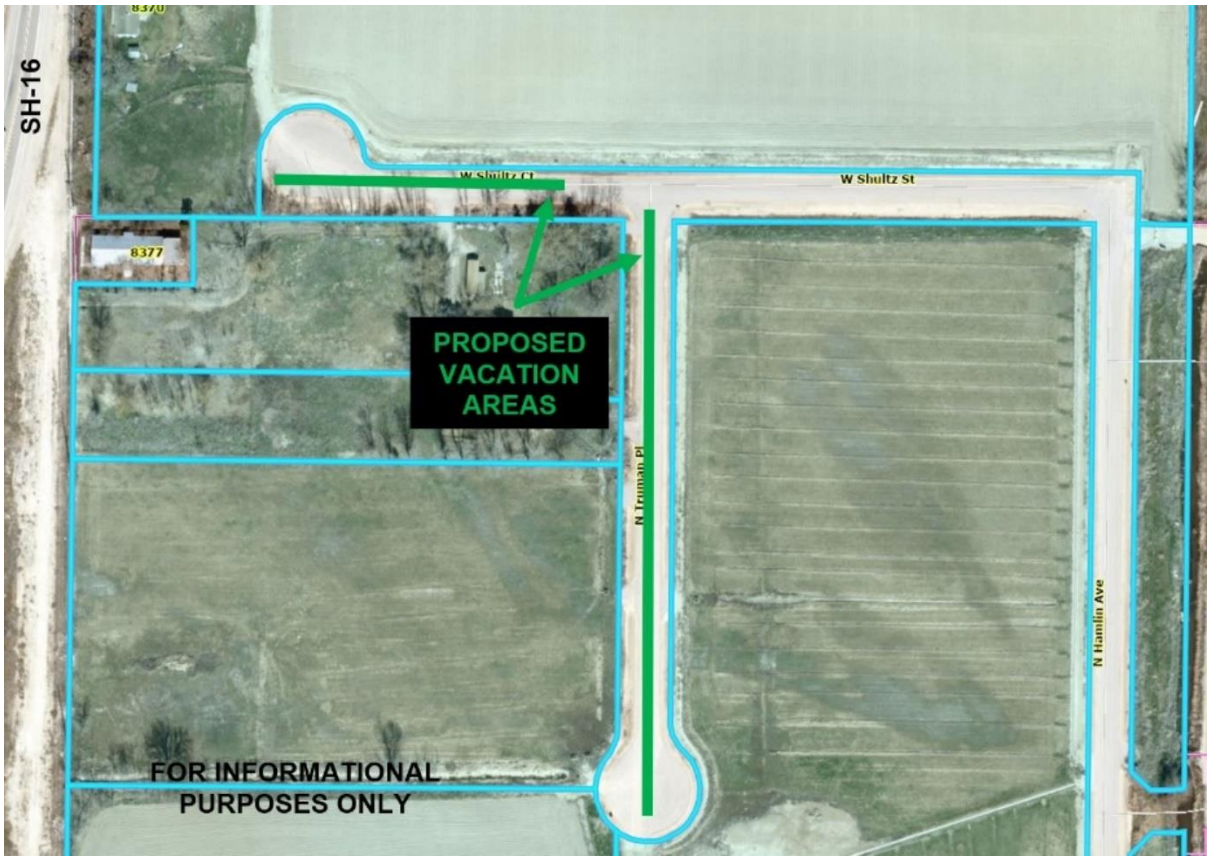
If the City of Star does not approve private roadways, then the applicant should be required to modify the site plan to meet District policies for ACHD to accept public streets.



The following conditions apply whether or not the internal roadways are public or private.

3. Vacation of Right-of-Way

a. Applicant's Proposal: The applicant is proposing to vacate a portion of the existing local streets, Shultz Street/Shultz Court and is proposing to vacate all of Truman Place within the site and incorporate those areas into the site as part of their development.



b. Staff Comments/Recommendations: At the time of this application, a vacation or vacation/exchange has not been completed. If the right-of-way is proposed to be vacated, then the applicant should apply to vacate/exchange a portion of Shultz Street/Shultz Court and Truman Place within the site by submitting an application to the Right-of-Way department prior to plan submittal. A right-of-way vacation or vacation/exchange is a separate application with its own public hearing process. Until the right-of-way of Shultz Street/Shultz Court and Truman Place have been vacated it is public right-of-way under the jurisdiction of ACHD. See Findings for Consideration #7 for the requirements of the roadways if they remain public right-of-way. If Shultz Street is not redesigned to meet District policy, then the applicant should apply to vacate/exchange the entire segment of Shultz Street abutting the site.

4. State Highway SH-44 / State Street

SH-44 is under the jurisdiction of the Idaho Transportation Department (ITD). The applicant, City of Star, and ITD should work together to determine if additional right-of-way or improvements are necessary on SH-44.

5. Maximum Traffic on One Access-Hamlin Avenue

a. Policy:

Maximum Traffic on One Access: District Policy 7206.3.3 states that if a proposed development only has one access to a public street that is a collector street, or if it proposes to

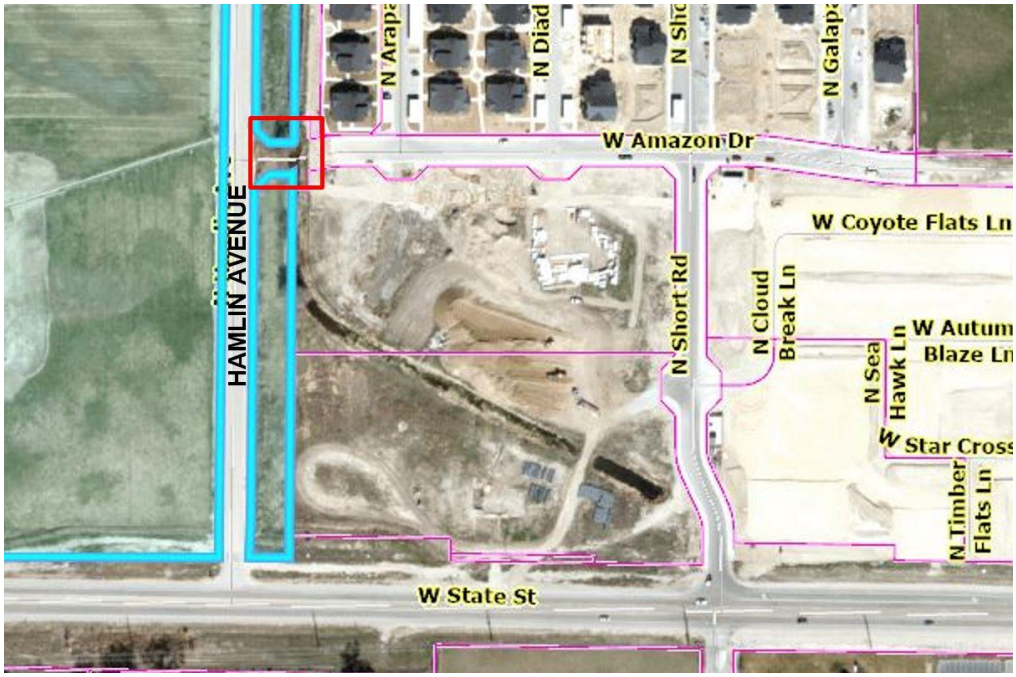
extend public streets from existing development with only collector street access to the public street system, the maximum forecast ADT (Average Daily Trips) to be allowed at any point on the collector street is 3,000. This volume may be reduced or increased based on information received from the lead land use agency, the applicable fire department, and/or emergency services. The District will also take into consideration the following items when determining whether or not to reduce or increase the maximum allowable ADT: railroad crossings, canal crossings, and topography.

Off-site Streets: District Policy 7208.2.3 states that if the proposed development is not served by a paved public street, the developer shall pave the street or widen the existing pavement to provide a 30-foot wide (minimum) paved street with 3-foot gravel shoulders from the proposed development to the public street specified by the District. Wider street widths may be required depending on the magnitude of the development and other factors, including the potential for bicycle, bus and pedestrian traffic.

b. Staff Comments/Recommendations: Amazon Drive on the east side of Hamlin Avenue across from the site was constructed as part of the first phase of the Amazon Falls development, with Amazon Drive stubbing to the Amazon Falls development's west property line. Originally, a spite strip restricted Amazon Drive from being constructed to connect to Hamlin Avenue; however, this issue has been resolved and the right-of-way for Amazon Drive to connect to Hamlin Avenue has been dedicated.

As part of ACHD's action on Junction Crossing 1, the applicant was required to construct Amazon Drive to intersect Hamlin Avenue prior to ACHD's approval of the first final plat for that development. The construction plans for the completion of Amazon Drive are currently under review by ACHD.

Until Amazon Drive can be constructed to intersect Hamlin Avenue, Hamlin Avenue will serve as the only public access for the site from SH-44. District Policy restricts the daily traffic to 3,000 trips per day for a collector road that serves as the sole access to a development. The study shows that the projected daily traffic on Hamlin Avenue will exceed 4,800 if Amazon Drive is not extended to connect to Hamlin Avenue. This development proposal is expected to generate approximately 4,529 daily trips which would cause the daily traffic on Hamlin Avenue to exceed 3,000 trips. Therefore, staff recommends that the applicant be required to construct Amazon Drive to intersect Hamlin Avenue with a minimum 30-feet of pavement and 3-foot wide gravel shoulders within the existing 50-feet of right-of-way prior to plan approval and ACHD's signature on the first final plat for this development. The applicant may also choose to fully construct Amazon Drive to connect to Hamlin Avenue as a 36-foot wide commercial street section with vertical curb, gutter and 5-foot wide attached concrete sidewalk



to match the existing Amazon Drive. All irrigation facilities are required to be relocated outside of the right-of-way.

6. Hamlin Avenue

a. Existing Conditions: Hamlin Avenue is an existing roadway abutting a portion of the site, intersects SH-44 at the site's south property line and extends 1,375-feet north to the intersection with Shultz Street and is improved with 2-travel lanes, 26-feet of pavement and no curb, gutter or sidewalk abutting the site. There is 50-feet of right-of-way for Hamlin Avenue (25-feet from centerline).

As part of ACHD's approval of Cascade Springs, Hamlin Avenue, proposed to stub to the site's north property line.

b. Policy:

Collector Street Policy: District policy 7206.2.1 states that the developer is responsible for improving all collector frontages adjacent to the site or internal to the development as required below, regardless of whether access is taken to all of the adjacent streets.

Master Street Map and Typologies Policy: District policy 7206.5 states that if the collector street is designated with a typology on the Master Street Map, that typology shall be considered for the required street improvements. If there is no typology listed in the Master Street Map, then standard street sections shall serve as the default.

Street Section and Right-of-Way Policy: District policy 7206.5.2 states that the standard right-of-way width for collector streets shall typically be 50 to 70-feet, depending on the location and width of the sidewalk and the location and use of the roadway. The right-of-way width may be reduced, with District approval, if the sidewalk is located within an easement; in which case the District will require a minimum right-of-way width that extends 2-feet behind the back-of-curb on each side.

The standard street section shall be 46-feet (back-of-curb to back-of-curb). This width typically accommodates a single travel lane in each direction, a continuous center left-turn lane, and bike lanes.

Residential Collector Policy: District policy 7206.5.2 states that the standard street section for a collector in a residential area shall be 36-feet (back-of-curb to back-of-curb). The District will consider a 33-foot or 29-foot street section with written fire department approval and taking into consideration the needs of the adjacent land use, the projected volumes, the need for bicycle lanes, and on-street parking.

Continuation of Streets Policy: District Policy 7206.2.4 states that an existing street, or a street in an approved preliminary plat, which ends at a boundary of a proposed development shall be extended in that development. The extension shall include provisions for continuation of storm drainage facilities. Benefits of connectivity include but are not limited to the following:

- Reduces vehicle miles traveled.
- Increases pedestrian and bicycle connectivity.
- Increases access for emergency services.
- Reduces need for additional access points to the arterial street system.
- Promotes the efficient delivery of services including trash, mail and deliveries.
- Promotes appropriate intra-neighborhood traffic circulation to schools, parks, neighborhood commercial centers, transit stops, etc.
- Promotes orderly development.

Sidewalk Policy: District policy 7206.5.6 requires a concrete sidewalk at least 5-feet wide to be constructed on both sides of all collector streets. A parkway strip at least 6-feet wide between the back-of-curb and street edge of the sidewalk is required to provide increased safety and protection of pedestrians. Consult the District's planter width policy if trees are to be placed within the parkway strip. Sidewalks constructed next to the back-of-curb shall be a minimum of 7-feet wide.

Detached sidewalks are encouraged and should be parallel to the adjacent roadway. Meandering sidewalks are discouraged.

A permanent right-of-way easement shall be provided if public sidewalks are placed outside of the dedicated right-of-way. The easement shall encompass the entire area between the right-of-way line and 2-feet behind the back edge of the sidewalk. Sidewalks shall either be located wholly within the public right-of-way or wholly within an easement.

ACHD Master Street Map: ACHD Policy Section 3111.1 requires the Master Street Map (MSM) guide the right-of-way acquisition, collector street requirements, and specific roadway features required through development. This segment of Hamlin Avenue is designated in the MSM as a Commercial Collector with 2-lanes and on-street bike lanes, a 36-foot street section within 54 to 70-feet of right-of-way.

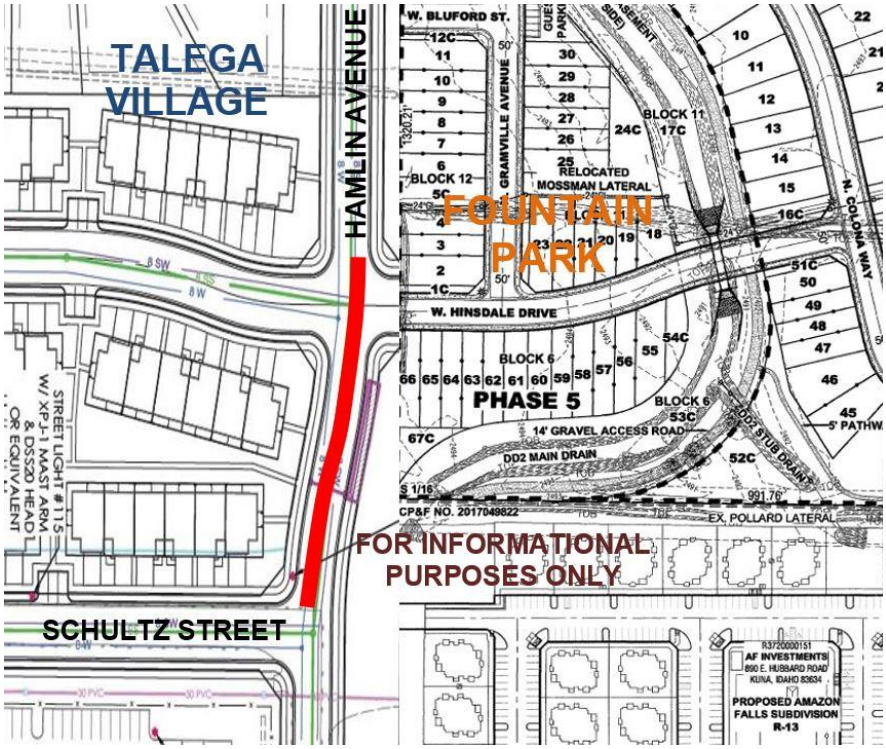
c. Applicant Proposal: The applicant is proposing to complete the existing segment of Hamlin Avenue from SH-44 north 1,375-feet to the intersection of Shultz Street as a complete 36-foot wide collector street section with vertical curb, gutter, a 6-foot wide planter strip and 5-foot wide detached concrete sidewalk on both sides of the roadway within 60-feet of right of way.

The applicant is proposing to extend Hamlin Avenue into the site from the intersection with Shultz Street north to stub to the site's north property line and in alignment with the stub street location approved as part of Cascade Springs located north of the site as a 36-foot wide collector street section with vertical curb, gutter, a 6-foot wide planter strip and 5-foot wide detached concrete sidewalk within 60-feet of right-of-way.

d. Staff Comments/Recommendations: The applicant's proposal to complete the existing segment of Hamlin Avenue from SH-44 north to the intersection with Shultz Street as a 36-foot wide collector street section with vertical curb, gutter, a 6-foot wide planter strip and 5-foot wide detached concrete sidewalk on both sides of the roadway meets District policy, as the applicant has control of both sides of the roadway and should be approved.

The applicant's proposal to extend Hamlin Avenue into the site from the intersection with Shultz Street north to stub to the site's north property line and in alignment with the stub street location approved as part of Cascade Springs located north of the site as a 36-foot wide collector street section with vertical curb, gutter, a 6-foot wide planter strip and 5-foot wide detached concrete sidewalk meets District policy and should be approved, as proposed.

As part of the approval of the Fountain Park subdivision located on the east side of Hamlin Avenue across from the site, the applicant was required to construct Hamlin Avenue from the intersection with Schultz Street north to the proposed local street, Hinsdale Drive, with a minimum 30-feet of pavement and 3-foot wide gravel shoulders or 24-feet of pavement, 3-foot gravel shoulders and a minimum 6-foot wide detached asphalt/concrete pedestrian facilities, or as a complete 36-foot wide collector street section with vertical curb, gutter and 5-foot wide attached or 7-foot wide detached concrete sidewalk (shown in red).



If Hamlin Avenue has been constructed from the intersection with Shultz Street north to the proposed local street, Hinsdale Drive as part of the Fountain Park subdivision, then the applicant should be required to construct this segment of Hamlin Avenue as ½ of a 36-foot wide collector street section with vertical curb, gutter, a 6-foot wide planter strip and 5-foot wide detached concrete sidewalk. Or, if Hamlin Avenue has been constructed as a complete 36-foot wide collector street section with vertical curb, gutter and 5-foot wide attached or 7-foot wide detached concrete sidewalk, then the applicant should have no additional requirements for the segment of Hamlin Avenue shown in red.

The applicant should be required to provide an 8-foot wide planter strip abutting Hamlin Avenue if street trees are desired.

The applicant should dedicate right-of-way for Hamlin Avenue to 2-feet behind back of sidewalk, or for detached sidewalk the applicant may reduce the right-of-way to 2-feet behind back of curb and provide a permanent right-of-way easement from the right-of-way line to extend to 2-feet behind back of sidewalk abutting the site on both sides of the roadway. Sidewalk should be located wholly within the right-of-way of wholly within an easement.

7. Stub Streets

a. Existing Conditions: As part of ACHD's approval of Cascade Springs one collector Street, Hamlin Avenue, is proposed to stub to the site's north property line.

b. Policy:

Stub Street Policy: District policy 7206.2.4.3 states that stub streets will be required to provide circulation or to provide access to adjoining properties. Stub streets will conform with the requirements described in Section 7206.2.4, except a temporary cul-de-sac will not be required if the stub street has a length no greater than 150-feet. A sign shall be installed at the terminus of the stub street stating that, "THIS IS A DESIGNATED COLLECTOR ROADWAY. THIS STREET WILL BE EXTENDED AND WIDENDED IN THE FUTURE."

In addition, stub streets must meet the following conditions:

- A stub street shall be designed to slope towards the nearest street intersection within the proposed development and drain surface water towards that intersection; unless an alternative storm drain system is approved by the District.
- The District may require appropriate covenants guaranteeing that the stub street will remain free of obstructions.

Temporary Dead End Streets Policy: District policy 7206.2.4.4 requires that the design and construction for cul-de-sac streets shall apply to temporary dead end streets. The temporary cul-de-sac shall be paved and shall be the dimensional requirements of a standard cul-de-sac. The developer shall grant a temporary turnaround easement to the District for those portions of the cul-de-sac which extend beyond the dedicated street right-of-way. In the instance where a temporary easement extends onto a buildable lot, the entire lot shall be encumbered by the easement and identified on the plat as a non-buildable lot until the street is extended.

c. Applicant's Proposal: The applicant is proposing to construct a collector stub street to the north, Hamlin Avenue, in alignment with the approved stub street to the site's north property line as part of ACHD's approval of Cascade Springs.

d. Staff Comments/Recommendations: The applicant's proposal meets District policy and should be approved, as proposed.

If Hamlin Avenue has not been constructed as a stub street to the site's north property line, as part of Cascade Springs, then the applicant should be required to install a sign at the terminus of the stub street stating, "THIS IS A DESIGNATED COLLECTOR ROADWAY. THIS STREET WILL BE EXTENDED AND WIDENDED IN THE FUTURE." A temporary turnaround is not required at the terminus of this stub street as it does not extend greater than 150-feet.

8. Driveways

8.1 Hamlin Avenue

a. Existing Conditions: There is an existing unimproved driveway from the site onto the east side of Hamlin Avenue located 670-feet north of Amazon Drive (measured centerline-to-centerline).

b. Policy:

Access Policy: District Policy 7205.4.1 states that all access points associated with development applications shall be determined in accordance with the policies in this section and Section 7202. Access points shall be reviewed only for a development application that is being considered by the lead land use agency. Approved access points may be relocated and/or restricted in the future if the land use intensifies, changes, or the property redevelops.

District Policy 7206.1 states that the primary function of a collector is to intercept traffic from the local street system and carry that traffic to the nearest arterial. A secondary function is to service adjacent property. Access will be limited or controlled. Collectors may also be designated at bicycle and bus routes.

Driveway Location Policy (Stop Controlled Intersection): District policy 7206.4.4 requires driveways located on collector roadways near a STOP controlled intersection to be located outside of the area of influence; OR a minimum of 150-feet from the intersection, whichever is greater. Dimensions shall be measured from the centerline of the intersection to the centerline of the driveway.

Successive Driveways: District policy 7206.4.5 Table 1, requires driveways located on collector roadways with a speed limit of 25 MPH or less and daily traffic volumes greater than 100 VTD to align or offset a minimum of 245-feet from any existing or proposed driveway.

Driveway Width Policy: District policy 7206.4.6 restricts high-volume driveways (100 VTD or more) to a maximum width of 36-feet and low-volume driveways (less than 100 VTD) to a maximum width of 30-feet. Curb return type driveways with 30-foot radii will be required for high-volume driveways with 100 VTD or more. Curb return type driveways with 15-foot radii will be required for low-volume driveways with less than 100 VTD.

Driveway Paving Policy: Graveled driveways abutting public streets create maintenance problems due to gravel being tracked onto the roadway. In accordance with District policy, 7206.4.6, the applicant should be required to pave the driveway its full width and at least 30-feet into the site beyond the edge of pavement of the roadway and install pavement tapers in accordance with Table 2 under District Policy 7206.4.6.

c. Applicant's Proposal: The applicant is proposing to close the existing unimproved driveway onto the east side of Hamlin Avenue located 672-feet north of Amazon Drive with vertical curb, gutter, a 6-foot wide planter strip and 5-foot wide detached concrete sidewalk.

The applicant is proposing to construct a curb return type driveway/private road onto Hamlin Avenue located 285-feet south of Shultz Street with two 20-foot wide travel lanes and two 10-foot wide center landscape islands.

d. Staff Comments/Recommendations: The applicant's proposal to close the existing driveway on the east side of Hamlin Avenue meets District policy and should be approved, as proposed.

The applicant's proposal to construct a curb return type driveway onto Hamlin Avenue located 285-feet south of Shultz Street with two 20-foot wide travel lanes and two 10-foot wide center landscape islands meet District policy and should be approved. The applicant should be required to construct the driveway to a maximum width of 36-feet within the right-of-way. Once outside of the right-of-way the driveway/private road may be widened. The center landscape islands should be located outside of the right-of-way.

The following conditions apply if the City of Star does not approve private roads and public streets are constructed within the site.

9. Shultz Street/Shultz Court & Truman Place

a. Existing Conditions: Shultz Street is improved with 2-travel lanes, 26-feet of pavement and no curb, gutter and sidewalk abutting the site. Shultz Street changes to Shultz Court and is improved as a temporary turnaround with 96-feet of pavement and no curb, gutter, or sidewalk abutting the site. There is 60-feet of right-of-way for Shultz Street with an additional 130-feet of right-of-way for the temporary turnaround.

Truman Place is improved with 2-travel lanes, 26-feet of pavement and no curb, gutter and sidewalk and terminates into a temporary turnaround that is improved with 98-feet of pavement and no curb, gutter and sidewalk abutting the site. There is 60-feet of right-of-way for Truman Place with an additional 116-feet of right-of-way for the cul-de-sac turnaround.

b. Policy:

Local Roadway Policy: District Policy 7207.2.1 states that the developer is responsible for improving all local street frontages adjacent to the site regardless of whether or not access is taken to all of the adjacent streets.

Street Section and Right-of-Way Policy: District Policy 7207.5 states that right-of-way widths for all local streets shall generally not be less than 47-feet wide and that the standard street section shall be 33-feet (back-of-curb to back-of-curb).

Standard Urban Local Street—33-foot Street Section and Right-of-way Policy: District Policy 7207.5.2 states that the standard street section shall be 33-feet (back-of-curb to back-of-curb) for developments with any buildable lot that is less than 1 acre in size. This street section

shall include curb, gutter, and minimum 5-foot wide concrete sidewalks on both sides and shall typically be constructed within 47-feet of right-of-way.

For the City of Kuna and City of Star: Unless otherwise approved by Kuna or Star, the standard street section shall be 36-feet (back-of-curb to back-of-curb) for developments with any buildable lot that is less than 1 acre in size. This street section shall include curb, gutter, and minimum 5-foot wide concrete sidewalks on both sides and shall typically be constructed within 50-feet of right-of-way.

Sidewalk Policy: District Policy 7207.5.7 states that five-foot wide concrete sidewalk is required on both sides of all local street, except those in rural developments with net densities of one dwelling unit per 1.0 acre or less, or in hillside conditions where there is no direct lot frontage, in which case a sidewalk shall be constructed along one side of the street. Some local jurisdictions may require wider sidewalks.

The sidewalk may be placed next to the back-of-curb. Where feasible, a parkway strip at least 8-feet wide between the back-of-curb and the street edge of the sidewalk is recommended to provide increased safety and protection of pedestrians and to allow for the planting of trees in accordance with the District's Tree Planting Policy. If no trees are to be planted in the parkway strip, the applicant may submit a request to the District, with justification, to reduce the width of the parkway strip.

Detached sidewalks are encouraged and should be parallel to the adjacent roadway. Meandering sidewalks are discouraged.

A permanent right-of-way easement shall be provided if public sidewalks are placed outside of the dedicated right-of-way. The easement shall encompass the entire area between the right-of-way line and 2-feet behind the back edge of the sidewalk. Sidewalks shall either be located wholly within the public right-of-way or wholly within an easement.

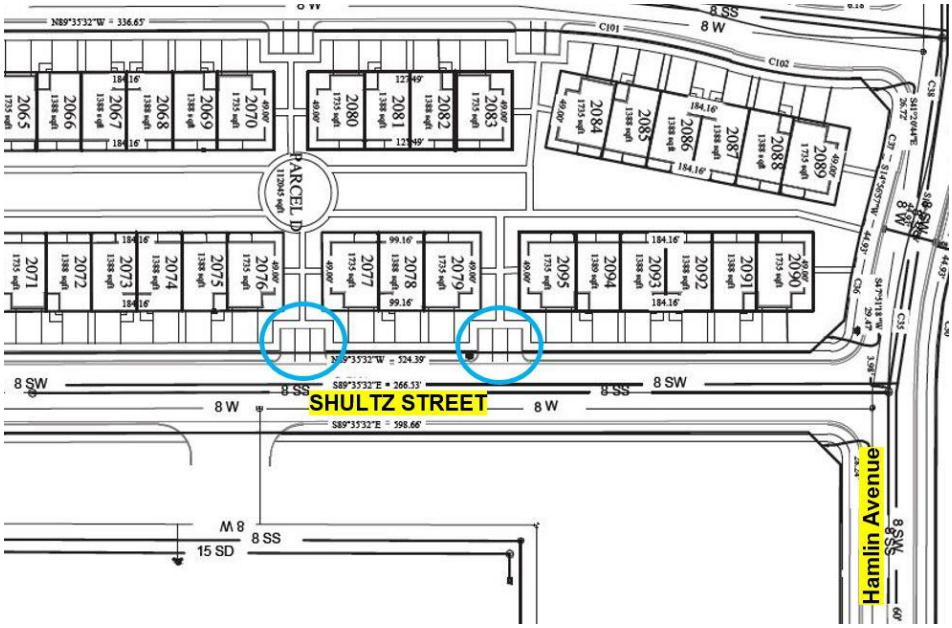
Cul-de-sac Streets Policy: District policy 7207.5.8 requires cul-de-sacs to be constructed to provide a minimum turning radius of 50-feet; in rural areas or for temporary cul-de-sacs the emergency service providers may require a greater radius. Landscape and parking islands may be constructed in turnarounds if a minimum 29-foot street section is constructed around the island. The pavement width shall be sufficient to allow the turning around of a standard AASHTO SU design vehicle without backing. The developer shall provide written approval from the appropriate fire department for this design element.

The District will consider alternatives to the standard cul-de-sac turnaround on a case-by-case basis. This will be based on turning area, drainage, maintenance considerations and the written approval of the agency providing emergency fire service for the area where the development is located.

c. **Applicant's Proposal:** The applicant is proposing to construct Shultz Street from the intersection with Hamlin Avenue approximately 615-feet to the west as a 40-foot wide street section with vertical curb, gutter, a 6-foot wide planter strip and 5-foot wide detached concrete sidewalk.

As noted above, the applicant is proposing to vacate a portion of the existing local streets, Shultz Street/Shultz Court and is proposing to vacate all of Truman Place (see image-page 9) abutting the site and incorporate those areas into the site as part of their development.

The applicant is proposing to construct 6 perpendicular parking stalls within a portion of the right-of-way of Shultz Street.



d. Staff Comments/Recommendations: The applicant's proposal to construct Shultz Street from the intersection with Hamlin Avenue approximately 615-feet to the west as a 40-foot wide street section exceeds District policy which requires the construction of a 36-foot wide local street section (measured back-of-curb to back-of-curb) and should not be approved as proposed. The applicant should be required to construct Shultz Street as a 36-foot wide local street section with curb, gutter, a 6-foot wide planter strip and 5-foot wide detached concrete sidewalk abutting the site.

The applicant's proposal to incorporate a portion of Shultz Street/Shultz Court and Truman Place into the site as part of their development does not meet District policy as those roadways are public right-of-way and should not be approved, as proposed. The applicant should be required to either improve or vacate the right-of-way (See Findings 3 above) for Shultz Street/Shultz Court and Truman Place.

If the right-of-way is improved then, complete Shultz Street/Shultz Court and Truman Place as 36-foot wide local street sections with curb, gutter and 5-foot wide concrete sidewalk abutting the site. The cul-de-sac turnarounds at the terminus of Shultz Court and Truman Place should be constructed with curb, gutter and 5-foot wide concrete sidewalk and a minimum turning radius of 50-feet.

The applicant's proposal to construct 6 perpendicular parking stalls within a portion of the right-of-way of Shultz Street is not approved, as ACHD does not allow parking stalls within the right-of-way and does not allow backing out onto a public street. If additional parking is needed to serve the site, then the applicant should redesign the site to add additional parking to the parking lots proposed to serve the site. If Shultz Street is not redesigned to meet District policy, then the applicant should apply to vacate/exchange the entire segment of Shultz Street abutting the site.

10. Internal Local Streets

a. Existing Conditions: There are no local streets within the site.

a. Policy:

Local Roadway Policy: District Policy 7207.2.1 states that the developer is responsible for improving all local street frontages adjacent to the site regardless of whether or not access is taken to all of the adjacent streets.

Street Section and Right-of-Way Policy: District Policy 7207.5 states that right-of-way widths for all local streets shall generally not be less than 47-feet wide and that the standard street section shall be 33-feet (back-of-curb to back-of-curb).

Standard Urban Local Street—33-foot Street Section and Right-of-way Policy: District Policy 7207.5.2 states that the standard street section shall be 33-feet (back-of-curb to back-of-curb) for developments with any buildable lot that is less than 1 acre in size. This street section shall include curb, gutter, and minimum 5-foot wide concrete sidewalks on both sides and shall typically be constructed within 47-feet of right-of-way.

For the City of Kuna and City of Star: Unless otherwise approved by Kuna or Star, the standard street section shall be 36-feet (back-of-curb to back-of-curb) for developments with any buildable lot that is less than 1 acre in size. This street section shall include curb, gutter, and minimum 5-foot wide concrete sidewalks on both sides and shall typically be constructed within 50-feet of right-of-way.

Sidewalk Policy: District Policy 7207.5.7 states that five-foot wide concrete sidewalk is required on both sides of all local street, except those in rural developments with net densities of one dwelling unit per 1.0 acre or less, or in hillside conditions where there is no direct lot frontage, in which case a sidewalk shall be constructed along one side of the street. Some local jurisdictions may require wider sidewalks.

The sidewalk may be placed next to the back-of-curb. Where feasible, a parkway strip at least 8-feet wide between the back-of-curb and the street edge of the sidewalk is recommended to provide increased safety and protection of pedestrians and to allow for the planting of trees in accordance with the District's Tree Planting Policy. If no trees are to be planted in the parkway strip, the applicant may submit a request to the District, with justification, to reduce the width of the parkway strip.

Detached sidewalks are encouraged and should be parallel to the adjacent roadway. Meandering sidewalks are discouraged.

A permanent right-of-way easement shall be provided if public sidewalks are placed outside of the dedicated right-of-way. The easement shall encompass the entire area between the right-of-way line and 2-feet behind the back edge of the sidewalk. Sidewalks shall either be located wholly within the public right-of-way or wholly within an easement.

Landscape Medians Policy: District policy 7207.5.16 states that landscape medians are permissible where adequate pavement width is provided on each side of the median to accommodate the travel lanes and where the following is provided:

- The median is platted as right-of-way owned by ACHD.
- The width of an island near an intersection is 12-feet maximum for a minimum distance of 150-feet. Beyond the 150-feet, the island may increase to a maximum width of 30-feet.
- At an intersection that is signalized or is to be signalized in the future, the median width shall be reduced to accommodate the necessary turn lane storage and tapers.
- The Developer or Homeowners Association shall apply for a license agreement if landscaping is to be placed within these medians.
- The license agreement shall contain the District's requirements of the developer including, but not limited to, a "hold harmless" clause; requirements for maintenance by the developer; liability insurance requirements; and restrictions.
- Vertical curbs are required around the perimeter of any raised median. Gutters shall slope away from the curb preventing ponding.

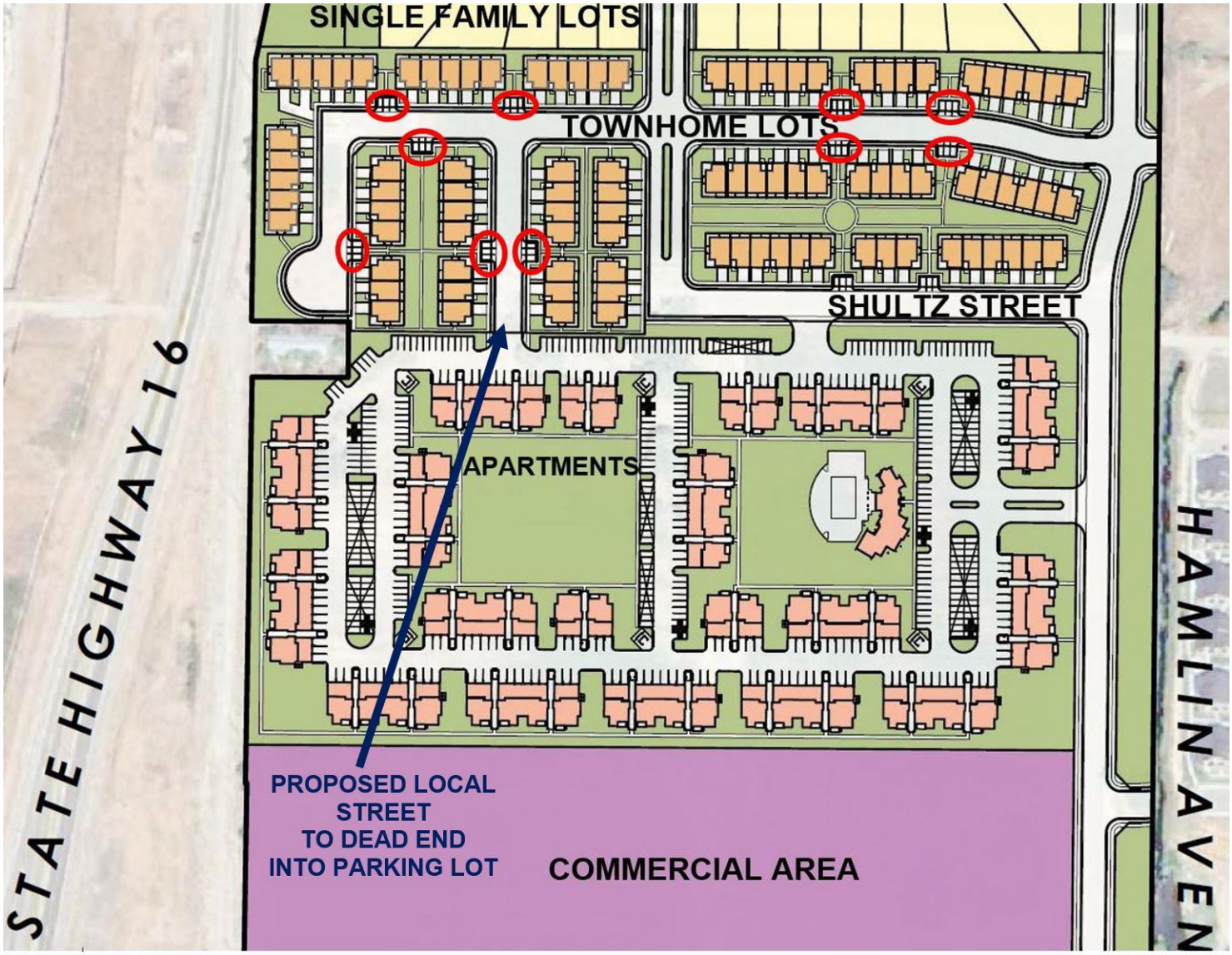
b. Applicant's Proposal: The applicant is proposing to construct a new local street that runs north/south from Shultz Street located 613-feet west of Hamlin Avenue (measured centerline-to-centerline) for approximately 485-feet with two 20-foot wide travel lanes, two 10-foot wide center landscape islands, vertical curb, gutter, a 6-foot wide planter strip within 60-feet of right-of-way and 5-foot wide detached concrete sidewalk located outside of the right-of-way.

The applicant is proposing to construct the other internal local streets as 40-foot wide street sections with vertical curb, gutter, a 6-foot wide planter strip within 50-feet of right-of-way and 5-foot wide detached concrete sidewalk located outside of the right-of-way.

The applicant is proposing to construct two cul-de-sac turnarounds within the site.

The applicant is proposing to construct a local street that dead-ends into a parking lot located 614-feet west of Hamlin Avenue to the apartment portion of the site shown below.

The applicant is proposing 30 perpendicular parking stalls within a portion of the right-of-way of the internal local streets. (See Findings 4 above regarding the parking stalls on Shultz Street.) The locations are shown below:



c. Staff Comments/Recommendations: As noted above, staff recommends the construction of private streets internal to the site. If the City of Star does not approve the private roads, then the applicant should construct the roadways to meet District policy.

The applicant's proposal to construct a new local street that runs north/south from Shultz Street located 613-feet west of Hamlin Avenue (measured centerline-to-centerline) for approximately 485-feet with two 20-foot wide travel lanes, two 10-foot wide center landscape islands, vertical curb, gutter, a 6-foot wide planter strip and 5-foot wide detached concrete sidewalk meets District policy and should be approved, as proposed.

The applicant's proposal to construct the other internal local streets as 40-foot wide local street sections with vertical curb, exceeds District policy which requires the construction of a 36-foot wide street section with rolled curb (measured back-of-curb to back-of-curb) and should not be approved, as proposed. The applicant should be required to construct the internal local streets as 36-foot wide street sections with rolled curb, gutter, a 6-foot wide planter strip and 5-foot wide detached concrete sidewalk.

The applicant should be required to dedicate right-of-way to 2-feet behind back of sidewalk, or for detached sidewalk, the applicant may reduce the right-of-way to total 2-feet behind the back of curb and provide a permanent right-of-way easement that extends from the right-of-way line to 2-feet behind back of sidewalk. Sidewalk shall be located wholly within right-of-way or wholly within an easement.

The applicant should be required to construct both cul-de-sacs turnarounds with a minimum turning radius of 50-feet.

The applicant's proposal to construct a local street that dead-ends into a parking lot located 614-feet west of Hamlin Avenue to the apartment portion of the site does not meet District policy which does not allow dead end roadways. The applicant should be required to construct a permanent cul-de-sac turnaround with a minimum turning radius of 50-feet at the terminus of the proposed local street that dead ends into the apartment portion of the site.

The applicant's proposal to construct 30 perpendicular parking stalls within a portion of the right-of-way of the internal local streets is not approved, as ACHD does not allow parking stalls within the right-of-way and does not allow backing out onto a public street. If additional parking is needed to serve the site, then the applicant should redesign the site to add additional parking to the parking lots proposed to serve the site.

11. Roadway Offsets

a. Existing Conditions: There are no existing roadways within the site.

b. Policy:

Collector Offset Policy: District policy 7206.4.5, states that the preferred spacing for a new local street intersecting a collector roadway to align or offset a minimum of 330-feet from any other street (measured centerline to centerline).

Local Offset Policy: District policy 7207.4.2, requires local roadways to align or provide a minimum offset of 125-feet from any other street (measured centerline to centerline).

c. Applicant's Proposal: The applicant is proposing to construct three new local streets to intersect Hamlin Avenue, a collector roadway, located as follows:

- 245-feet north of Shultz Street and in alignment with Hinsdale Drive, a proposed local street approved as part of Fountain Park subdivision located on the east side of Hamlin Avenue across from the site

- 629-feet north of Shultz Street and in alignment with Bluford Street, a proposed local street approved as part of Fountain Park subdivision located on the east side of Hamlin Avenue across from the site
- 1,254-feet north of Shultz Street and 179-feet south of Whetstone Street, a proposed local street approved as part of Cascade Springs located north of the site.

The applicant is proposing to construct all other internal local streets to align or offset by a minimum of 125-feet.

d. Staff Comments/Recommendations: The applicant's proposal to construct the two following local streets meets District policy and should be approved:

- 245-feet north of Shultz Street and in alignment with Hinsdale Drive, a proposed local street approved as part of Fountain Park subdivision located on the east side of Hamlin Avenue across from the site
- 629-feet north of Shultz Street and in alignment with Bluford Street, a proposed local street approved as part of Fountain Park subdivision located on the east side of Hamlin Avenue across from the site

The applicant's proposal to construct a local street onto Hamlin Avenue located 1,254-feet north of Shultz Street and 179-feet south of Whetstone Street, does not meet District Collector Offset policy which requires a new local street intersecting a collector roadway to align or offset a minimum of 330-feet from any other street and should not be approved as proposed. As noted above, staff recommend this roadway be constructed as a private street, as it only provides access to 10 single family lots or be constructed to intersect Hamlin Avenue with a minimum offset of 330-feet from any other street.

12. Driveways

12.1 Shultz Court and Truman Place

a. Existing Conditions: There are two existing unimproved driveways from the site onto Shultz Court located as follows (measured centerline-to-centerline):

- 22-foot wide driveway located 238-feet west of Truman Place
- 18-foot wide driveway located at the terminus of the temporary turnaround

There are five existing unimproved driveways from the site onto Truman Place located as follows:

- 13-foot wide driveway located 50-feet south of Shultz Street
- 22-foot wide driveway located 285-feet south of Shultz Street
- 22-foot wide driveway located 358-feet south of Shultz Street
- 18-foot wide driveway located 476-feet south of Shultz Street
- 24-foot wide driveway located 484-feet south of Shultz Street

b. Policy:

Driveway Location Policy: District policy 7208.4.1 requires driveways near intersections to be located a minimum of 75-feet (measured centerline-to-centerline) from the nearest local street intersection, and 150-feet from the nearest collector/arterial or arterial street intersection.

Successive Driveways: District Policy 7208.4.1 states that successive driveways away from an intersection shall have no minimum spacing requirements for access points along a local street, but the District does encourage shared access points where appropriate.

Driveway Width Policy: District policy 7208.4.3 restricts commercial driveways to a maximum width of 40-feet. Most commercial driveways will be constructed as curb-cut type facilities.

Driveway Paving Policy: Graveled driveways abutting public streets create maintenance problems due to gravel being tracked onto the roadway. In accordance with District policy, 7208.4.3, the applicant should be required to pave the driveway its full width and at least 30-feet into the site beyond the edge of pavement of the roadway.

Driveway Design Requirements: District policy 7208.4.3 states if an access point is to be gated, the gate or keypad (whichever is closer) shall be located a minimum of 50-feet from the near edge of the intersection and a turnaround shall be provided.

c. Applicant's Proposal: The applicant is proposing to close the two existing driveways onto Shultz Court and the five existing driveways onto Truman Place by incorporating the roadways into the site as part of the development.

The applicant is proposing to construct a 48-foot wide curb return type driveway onto Shultz Street located 410-feet west of Hamlin Avenue.

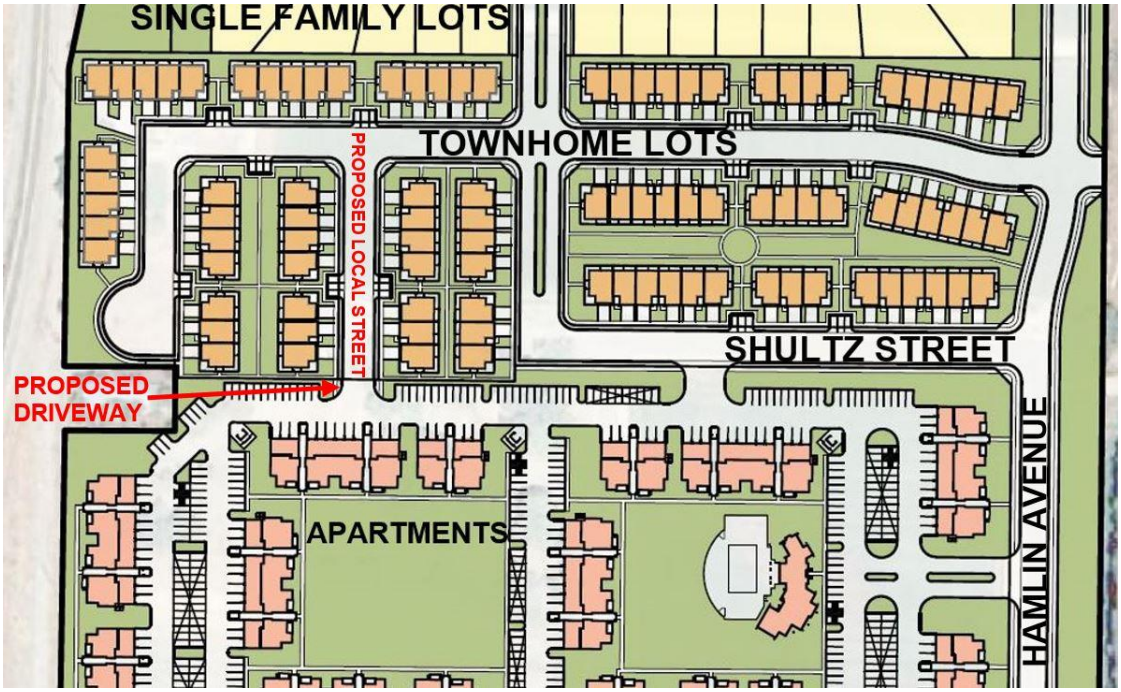
The applicant is proposing to construct a 38-foot wide driveway in alignment with the proposed local street located 613-feet west of Hamlin Avenue to provide access to the apartment area of the site.

d. Staff Comments/Recommendations: The applicant's proposal to close the two existing driveways onto Shultz Court and the five existing driveways onto Truman Place by incorporating the roadways into the site as part of the development does not meet District policy as the roadways are public right-of-way and under the jurisdiction of ACHD. See Findings C3b above regarding the vacation requirements for Shultz Street/Shultz Court and Truman Place.

If Shultz Street/Shultz Court and Truman Place are not vacated and are improved the applicant should be required to close the two existing driveways onto Shultz Court and the five existing driveways onto Truman Place with curb, gutter and 5-foot wide concrete sidewalk.

The applicant's proposal to construct a curb return type driveway onto Shultz Street located 410-feet west of Hamlin Avenue meets District policy and should be approved. The driveway will be restricted to a maximum width of 36-feet.

The applicant's proposal to construct a driveway in alignment with the proposed local street located 613-feet west of Hamlin Avenue meets District policy; however, the driveway should be constructed as a curb return type driveway approach and be designed to look like a driveway and not an extension of the proposed local street. The driveway will be restricted to a maximum width of 36-feet.



13. Traffic Calming

a. Policy:

Speed Control and Traffic Calming Policy: District policy 7207.3.7 states that the design of local street systems should discourage excessive speeds by using passive design elements. If the design or layout of a development is anticipated to necessitate future traffic calming implementation by the District, then the District will require changes to the layout and/or the addition of passive design elements such as horizontal curves, bulb-outs, chokers, etc. The District will also consider texture changes to the roadway surface (i.e. stamped concrete) as a passive design element. These alternative methods may require maintenance and/or license agreement.

b. Staff Comments/Recommendations: The applicant is proposing to construct two roadways, a local street located at the site's north property line and a local street located 236-feet north of Shults Street which are greater in length than 750-feet and should be required to be redesigned to reduce the length or include passive design elements and submit a revised preliminary plat showing the redesigned roadway for review and approval prior to ACHD's signature on the first final plat.

Stop signs, speed humps/bumps and valley gutters will not be accepted as traffic calming.

14. Bridge for Lateral 12 and Middleton Mill Canal Crossing

The District will require that the applicant have ACHD approved plans for the crossing of the Lateral 12 (Amazon Drive) and the Middleton Mill (Hamlin Avenue) canal crossing prior to the pre-construction meeting and final plat approval. Note: Timing of project plan submittals should take into account review times, lead time for precast members and potential roadway closures. To ensure construction prior to irrigation season, approval of the project plans must be attained by January 15th. The District retains the right to modify road closure approvals on any project based on the needs of the District. Construction of projects approved after January 15th may be postponed until after irrigation season is over in October. It is recommended that bridge submittals be submitted before the end of the current irrigation season to ensure the best time frame for

construction is attained. Submittals will need to include the street section extending over the bridge to ensure the requirements of the roadway are met.

15. Tree Planters

Tree Planter Policy: Tree Planter Policy: The District's Tree Planter Policy prohibits all trees in planters less than 8-feet in width without the installation of root barriers. Class II trees may be allowed in planters with a minimum width of 8-feet, and Class I and Class III trees may be allowed in planters with a minimum width of 10-feet.

16. Landscaping

Landscaping Policy: A license agreement is required for all landscaping proposed within ACHD right-of-way or easement areas. Trees shall be located no closer than 10-feet from all public storm drain facilities. Landscaping should be designed to eliminate site obstructions in the vision triangle at intersections. District Policy 5104.3.1 requires a 40-foot vision triangle and a 3-foot height restriction on all landscaping located at an uncontrolled intersection and a 50-foot offset from stop signs. Landscape plans are required with the submittal of civil plans and must meet all District requirements prior to signature of the final plat and/or approval of the civil plans.

17. Other Access

Hamlin Avenue is classified as a collector roadway. Other than the access specifically approved with this application, direct lot access is prohibited to this roadway and should be noted on the final plat.

D. Site Specific Conditions of Approval

If Private Roads are constructed within the site, then the following conditions apply.

1. If the City of Star approves private roads, then construct the internal streets as private. See image on page 8 for location of recommended private streets and apply to vacate/exchange Shultz Street/Shultz Court and Truman Place abutting the site by submitting an application to the Right-of-Way department. A right-of-way vacation is a separate application with its own public hearing process. Until the right-of-way of Shultz Street/Shultz Court and Truman Place have been vacated it is public right-of-way under the jurisdiction of ACHD.

2. If the City of Star approves private roads, the applicant shall be required to pave the private roadways their full widths and at least 30-feet into the site beyond the edge of pavement.

3. Install street name and stop signs for the private road/drive aisle. The signs may be ordered through the District. Verification of the correct, approved name of the road is required.

The following conditions apply whether or not the internal roadways are public or private.

4. Construct Amazon Drive to intersect Hamlin Avenue with a minimum of 30-feet of pavement and 3-foot wide gravel shoulders within the existing 50-feet of right-of-way. The applicant may also fully construct Amazon Drive as a 36-foot wide commercial street section with vertical curb, gutter and 5-foot wide attached concrete sidewalk to match the existing Amazon Drive prior to ACHD's signature on the first final plat. Relocate irrigation facilities outside of the right-of-way.

5. Complete the existing segment of Hamlin Avenue from SH-44 north to the intersection with Shultz Street as a 36-foot wide collector street section with vertical curb, gutter, a 6-foot wide planter strip and 5-foot wide detached concrete sidewalk on both sides of the roadway, as proposed.

6. Extend Hamlin Avenue into the site from the intersection with Shultz Street north to stub to the site's north property line and in alignment with the stub street location approved as part of Cascade Springs located north of the site as a 36-foot wide collector street section with vertical curb, gutter, a 6-foot wide planter strip and 5-foot wide detached concrete sidewalk, as proposed.

7. If Hamlin Avenue has been constructed from the intersection with Shultz Street north to the proposed local street, Hinsdale Drive, as part of the Cascade Springs development (see image on page 10) with a minimum 30-feet of pavement and 3-foot wide gravel shoulders or 24-feet of pavement, 3-foot gravel shoulders and a minimum 6-foot wide detached asphalt/concrete pedestrian facilities as part of the Fountain Park subdivision, then construct this segment of Hamlin Avenue as ½ of a 36-foot wide collector street section with vertical curb, gutter, a 6-foot wide planter strip and 5-foot wide detached concrete sidewalk.

8. Dedicate right-of-way for Hamlin Avenue to 2-feet behind back of sidewalk, or for detached sidewalk the applicant may reduce the right-of-way to 2-feet behind back of curb and provide a permanent right-of-way easement from the right-of-way line to extend to 2-feet behind back of sidewalk abutting the site on both sides of the roadway. Sidewalk should be located wholly within the right-of-way of wholly within an easement. Provide an 8-foot wide planter strip if street trees are desired.

9. Construct a collector stub street to the north, Hamlin Avenue, located in alignment with the approved stub street to the site's north property line, as proposed. If Hamlin Avenue has not been constructed to the site's north property line, then install a sign at the terminus of the stub street stating, "THIS IS A DESIGNATED COLLECTOR ROADWAY. THIS STREET WILL BE EXTENDED AND WIDENDED IN THE FUTURE."

10. Close the existing unimproved driveway onto the east side of Hamlin Avenue located 672-feet north of Amazon Drive with vertical curb, gutter, a planter strip and concrete sidewalk, as proposed.

11. Construct a 36-foot wide curb return type driveway onto Hamlin Avenue located 285-feet south of Shultz Street with two 20-foot wide travel lanes and two 10-foot wide center landscape. Once outside of the right-of-way the driveway/private road may be widened to two 20-foot wide travel lanes and two 10-foot wide center landscape islands. The center landscape islands should be located outside of the right-of-way.

12. Provide ACHD approved plans for the crossing of the Lateral 12 (Amazon Drive) and the Middleton Mill (Hamlin Avenue) canal crossing prior to the pre-construction meeting and final plat approval. Note: Timing of project plan submittals should take into account review times, lead time for precast members and potential roadway closures. To ensure construction prior to irrigation season, approval of the project plans must be attained by January 15th. The District retains the right to modify road closure approvals on any project based on the needs of the District. Construction of projects approved after January 15th may be postponed until after irrigation season is over in October. It is recommended that bridge submittals be submitted before the end of the current irrigation season to ensure the best time frame for construction is attained. Submittals will need to include the street section extending over the bridge to ensure the requirements of the roadway are met.

The following conditions apply if the City of Star does not approve private roads and public streets are constructed within the site.

13. Construct Shultz Street as a 36-foot wide local street section with curb, gutter, a 6-foot wide planter strip and 5-foot wide detached concrete sidewalk abutting the site.

14. Complete Shultz Street/Shultz Court and Truman Place as 36-foot wide local street sections with curb, gutter and 5-foot wide concrete sidewalk abutting the site. Construct the cul-de-sac turnarounds at the terminus of Shultz Court and Truman Place with curb, gutter and 5-foot wide concrete sidewalk and a minimum turning radius of 50-feet.

15. Revise the preliminary plat to remove the parking stalls on Shultz Street prior to ACHD's plan approval of the first final plat.

16. Construct the internal local streets as 36-foot wide street sections with curb, gutter, a 6-foot wide planter strip and 5-foot wide detached concrete sidewalk.

17. Construct the proposed local street onto Hamlin Avenue located 1,254-feet north of Shultz Street and 179-feet south of Whetstone Street as a private road/driveway or construct the roadway to intersect Hamlin Avenue with a minimum offset of 330-feet from Whetstone Street.

18. Construct a new local street that runs north/south from Shultz Street located 613-feet west of Hamlin Avenue (measured centerline-to-centerline) for approximately 485-feet with two 20-foot wide travel lanes, two 10-foot wide center landscape islands, vertical curb, gutter, a 6-foot wide planter strip and 5-foot wide detached concrete sidewalk.

19. Construct a permanent cul-de-sac turnaround with a minimum turning radius of 50-feet at the terminus of the proposed local street located 614-feet west of Hamlin Avenue that dead ends into the apartment portion of the site.

20. Construct both proposed cul-de-sacs within the site with a minimum turning radius of 50-feet.

21. Revise the site plan prior to ACHD's plan approval of the first final plat to remove the parking stalls on the internal local streets.

22. Dedicate right-of-way to 2-feet behind back of sidewalk, or for detached sidewalk, the applicant may reduce the right-of-way to total 2-feet behind the back of curb and provide a permanent right-of-way easement that extends from the right-of-way line to 2-feet behind back of sidewalk. Sidewalk shall be located wholly within right-of-way or wholly within an easement. Provide an 8-foot wide planter strip if street trees are desired.

23. Construct the two proposed local streets in the following locations:

- 245-feet north of Shultz Street and in alignment with Hinsdale Drive, a proposed local street approved as part of Fountain Park subdivision located on the east side of Hamlin Avenue across from the site
- 629-feet north of Shultz Street and in alignment with Bluford Street, a proposed local street approved as part of Fountain Park subdivision located on the east side of Hamlin Avenue across from the site

24. Close the two existing driveways onto Shultz Court and the five existing driveways onto Truman Place with curb, gutter and 5-foot wide concrete sidewalk.

25. Construct a 36-foot wide curb return type driveway onto Shultz Street located 410-feet west of Hamlin Avenue.

26. Construct a 36-foot wide curb return type driveway in alignment with the proposed local street located 613-feet west of Hamlin Avenue designed to look like a driveway and not an extension of the proposed local street (see image on page 16).

27. Redesign the proposed roadway located at the site's north property line and the local street located 236-feet north of Shultz Street to reduce the length or include passive design elements and submit a revised preliminary plat showing the redesigned roadway for review and approval prior to ACHD's signature on the first final plat.

Stop signs, speed humps/bumps and valley gutters will not be accepted as traffic calming.

28. Other than the access specifically approved with this application, direct lot access is prohibited to Hamlin Avenue and should be noted on the final plat.

29. Submit civil plans to ACHD Development Services for review and approval. The impact fee assessment will not be released until the civil plans are approved by ACHD.

30. Payment of impact fees is due prior to issuance of a building permit.

31. Comply with all Standard Conditions of Approval.

E. Standard Conditions of Approval

1. All proposed irrigation facilities shall be located outside of the ACHD right-of-way (including all easements). Any existing irrigation facilities shall be relocated outside of the ACHD right-of-way (including all easements).

2. Private Utilities including sewer or water systems are prohibited from being located within the ACHD right-of-way.

3. In accordance with District policy, 7203.3, the applicant may be required to update any existing non-compliant pedestrian improvements abutting the site to meet current Americans with Disabilities Act (ADA) requirements. The applicant's engineer should provide documentation of ADA compliance to District Development Review staff for review.

4. Replace any existing damaged curb, gutter and sidewalk and any that may be damaged during the construction of the proposed development. Contact Construction Services at 387-6280 (with file number) for details.

5. A license agreement and compliance with the District's Tree Planter policy is required for all landscaping proposed within ACHD right-of-way or easement areas.

6. All utility relocation costs associated with improving street frontages abutting the site shall be borne by the developer.

7. It is the responsibility of the applicant to verify all existing utilities within the right-of-way. The applicant at no cost to ACHD shall repair existing utilities damaged by the applicant. The applicant shall be required to call DIGLINE (1-811-342-1585) at least two full business days prior to breaking ground within ACHD right-of-way. The applicant shall contact ACHD Traffic Operations 387-6190 in the event any ACHD conduits (spare or filled) are compromised during any phase of construction.

8. Utility street cuts in pavement less than five years old are not allowed unless approved in writing by the District. Contact the District's Utility Coordinator at 387-6258 (with file numbers) for details.

9. All design and construction shall be in accordance with the ACHD Policy Manual, ISPWC Standards and approved supplements, Construction Services procedures and all applicable ACHD Standards unless specifically waived herein. An engineer registered in the State of Idaho shall prepare and certify all improvement plans.

10. Construction, use and property development shall be in conformance with all applicable requirements of ACHD prior to District approval for occupancy.

11. No change in the terms and conditions of this approval shall be valid unless they are in writing and signed by the applicant or the applicant's authorized representative and an authorized representative of ACHD. The burden shall be upon the applicant to obtain written confirmation of any change from ACHD.

12. If the site plan or use should change in the future, ACHD Planning Review will review the site plan and may require additional improvements to the transportation system at that time. Any change in the planned use of the property which is the subject of this application, shall require the applicant to comply with ACHD Policy and Standard Conditions of Approval in place at that time unless a waiver/variance of the requirements or other legal relief is granted by the ACHD Commission.

F. Conclusions of Law

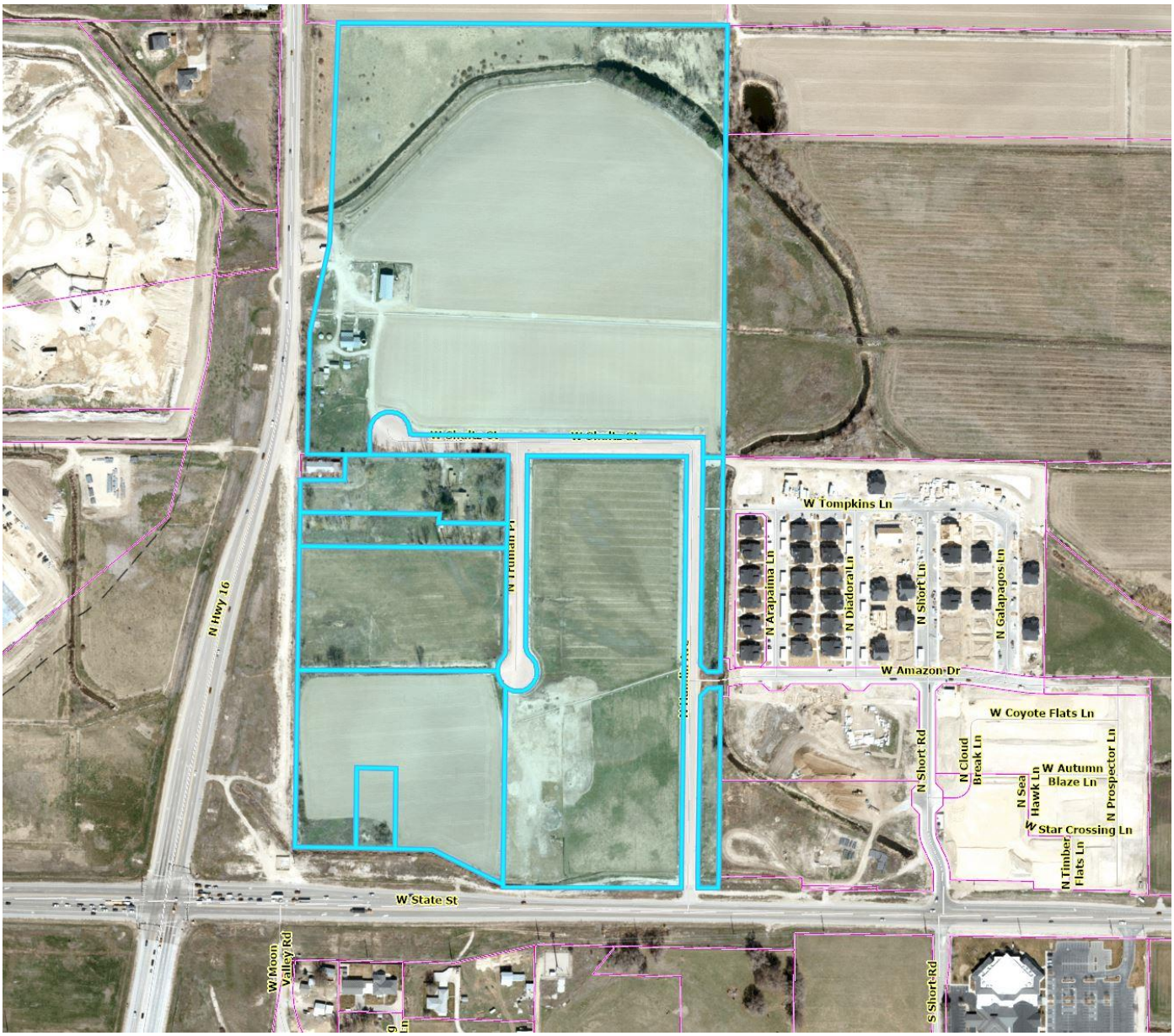
1. The proposed site plan is approved, if all of the Site Specific and Standard Conditions of Approval are satisfied.

2. ACHD requirements are intended to assure that the proposed use/development will not place an undue burden on the existing vehicular transportation system within the vicinity impacted by the proposed development.

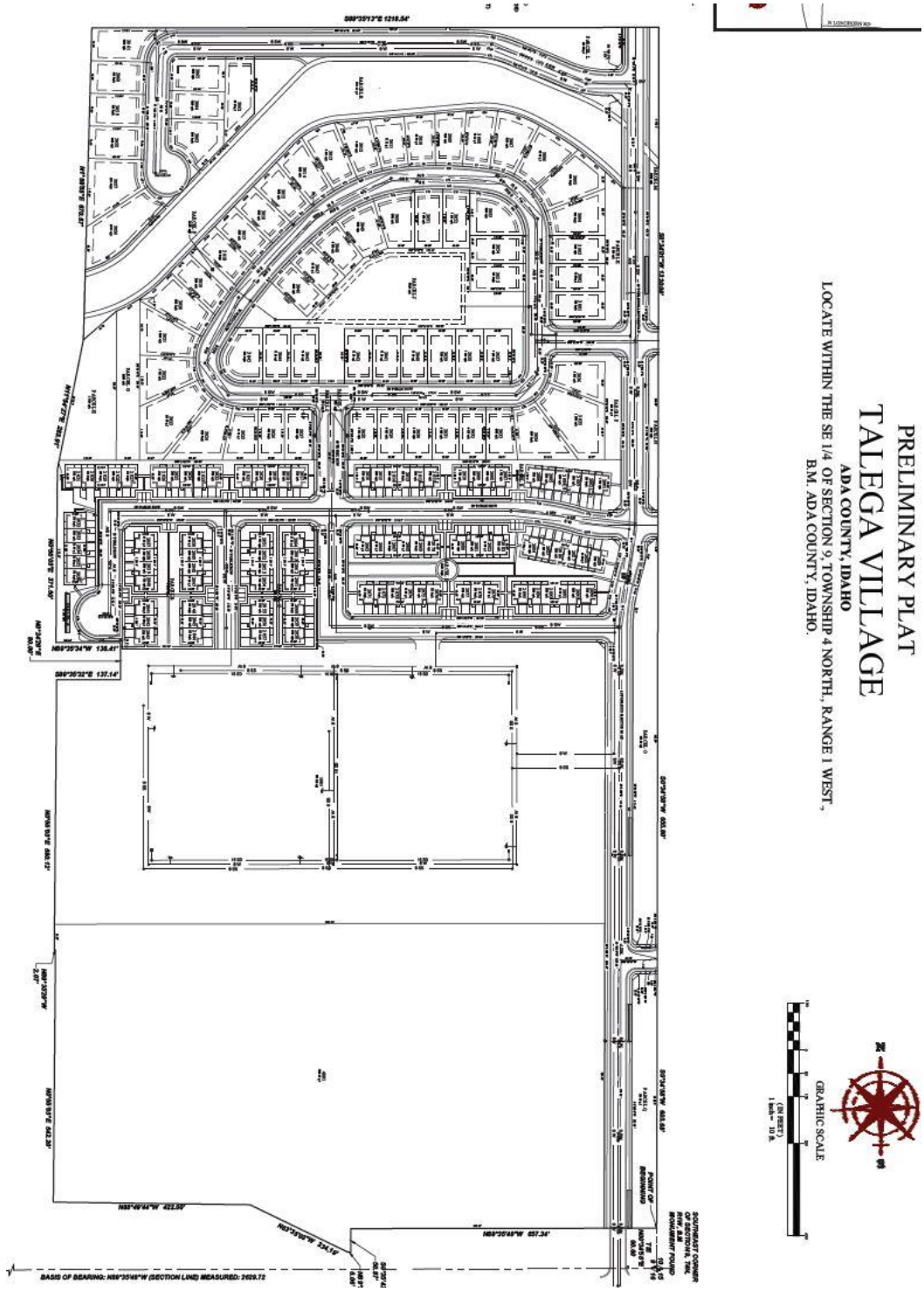
G. Attachments

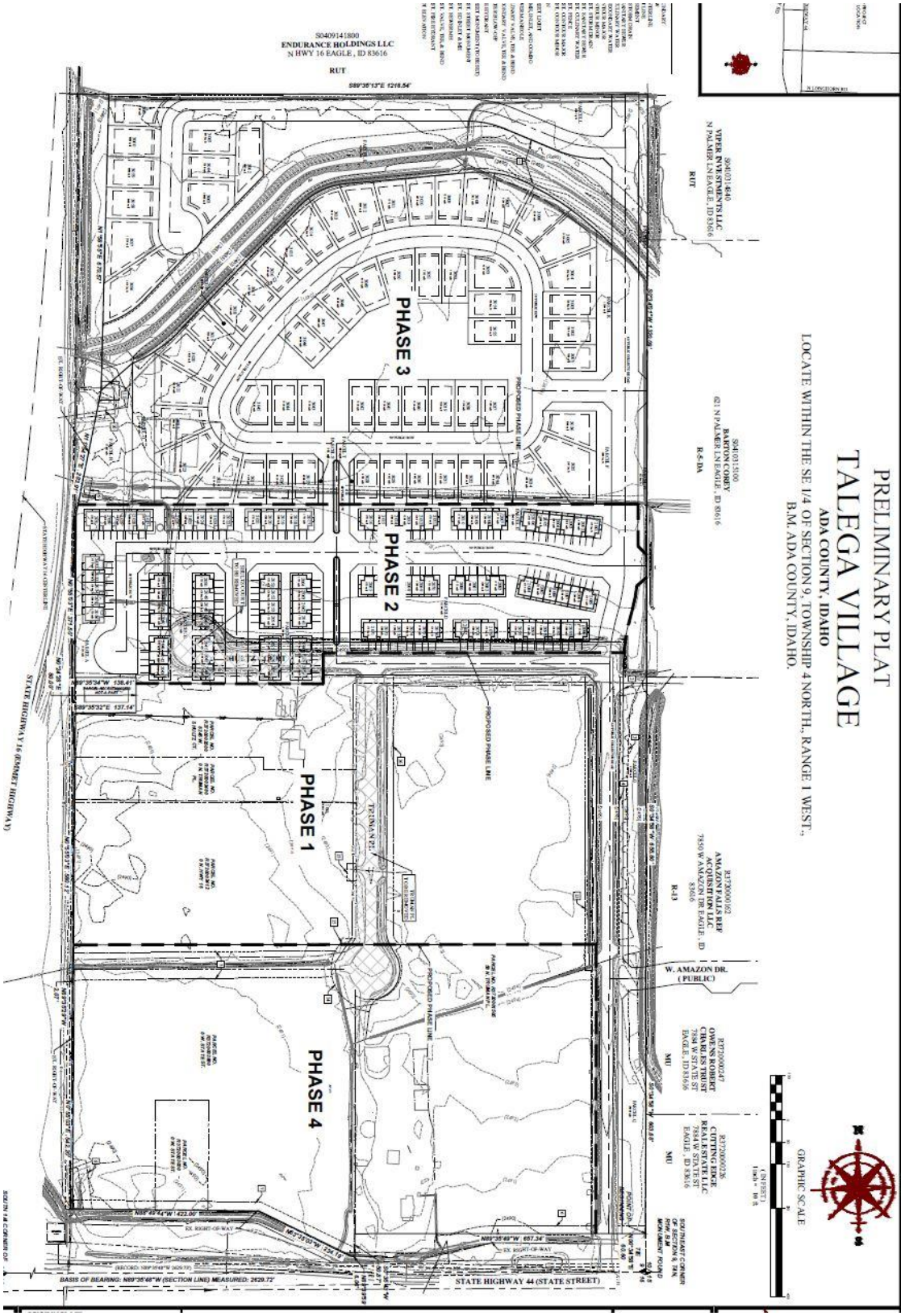
1. Vicinity Map
2. Site Plan
3. TIS Executive Summary
4. Utility Coordinating Council
5. Development Process Checklist
6. Appeal Guidelines

VICINITY MAP



SITE PLANS


PRELIMINARY PLAT
TALEGA VILLAGE
ADA COUNTY, IDAHO
LOCATE WITHIN THE SE 1/4 OF SECTION 9, TOWNSHIP 4 NORTH, RANGE 1 WEST,
B.M. ADA COUNTY, IDAHO.
GRAPHIC SCALE
BASIS OF BEARING: N89°35'45"W (SECTION LINE) MEASURED: 2629.72
POINT OF BEGINNING


PRELIMINARY PLAT
TALEGA VILLAGE
ADA COUNTY, IDAHO
LOCATE WITHIN THE SE 1/4 OF SECTION 9, TOWNSHIP 4 NORTH, RANGE 1 WEST,
B.M. ADA COUNTY, IDAHO.
PHASE 1
PHASE 2
PHASE 3
PHASE 4
PROPOSED PHASE LINE
TAHUAN PL.
W. AMAZON DR.
(PUBLIC)
STATE HIGHWAY 16 (EAGLE HIGHWAY)
STATE HIGHWAY 44 (STATE STREET)
BASIS OF BEARING: N89°35'48"W (SECTION LINE) MEASURED: 2629.72'
GRAPHIC SCALE
S0409141800
ENDURANCE HOLDINGS LLC
N HWY 16 EAGLE , ID 83616
RUT
S0401014840
VIPER INVESTMENTS LLC
N PALMER LN EAGLE, ID 83616
RUT
S0401015100
BARTON COREY
621 N PALMER LN EAGLE, ID 83616
R-5-DA
R3730000162
AMAZON FALLS REP
7950 W AMAZON DR EAGLE, ID 83616
R-3-DA
R3730000247
OWENS ROBERT
CHARLES TRUST
7584 W STATE ST
EAGLE, ID 83616
MU
R3730000236
CUTTING EDGE
REAL ESTATE LLC
7584 W STATE ST
EAGLE, ID 83616
MU
SOUTHEAST CORNER
FND 5/8" REBAR & CAP
MONUMENT FOUND

1.0 Executive Summary

1.1 DESCRIPTION OF PROJECT

This report presents the results of a traffic impact analysis for the Northern Star Development, located in Star, Idaho. The project site is located north of State Highway (SH) 44, east of State Highway 16 and west of Hamlin Avenue. Currently the proposed parcel of land consists of farmland with a few residential homes. Figure 1 illustrates the Vicinity Map and the location of this development related to the adjacent roadway network.

This proposed Northern Star Development will consist of:

- 55 single-family dwelling units
- 110 townhome units
- 310 apartment units
- 18 acres of commercial/office

Refer to Figure 2 for the site plan of this development and the location of the proposed accesses onto the surrounding roadways.

Coordinating with Ada County (ACHD) and Idaho Transportation Department (ITD), it was determined the study area for this traffic impact study would include the following intersections:

- Hamlin Avenue/SH 44 (existing)
- Short Road/SH 44 (existing)
- Amazon Drive/Short Lane (existing)
- Shultz Street/Hamlin Avenue (existing)
- Amazon Drive/Hamlin Avenue (future)

It is anticipated, at full build-out, the Northern Star Development will generate 4,529 average daily trips with 379 AM peak hour trips and 417 PM peak hour trips. With a mix of residential and commercial/office within the same development, it is anticipated there will be some internal trips between the two land uses. It is not anticipated a large reduction in trips due to internal capture, but using the ITE Trip Generation reduction, roughly 6 vehicles in the AM peak hour and 14 in the PM peak hour are anticipated to be shared between land uses.

It is anticipated the Northern Star Development will be constructed in three main phases. The first phase is planned for the 310 apartment units and will be fully occupied by the end of 2023. The second phase will consist of the 55 single-family units and the 110 townhomes and be constructed by the end of 2024. The third and final phase will consist of the 18 acres of commercial/office and is planned to be constructed by 2030. Therefore, the study years for this development are 2022 existing, 2023 background, 2024 background and 2030 background.

As part of the analysis for the Northern Star Development, projected future traffic volumes from surrounding developments were included in the Background traffic volumes. Currently the Amazon Falls Phase 1 development is under construction and is planned for full build-out by the end of this year. Therefore the 2023 Background traffic volumes include the full build-out traffic from the Amazon Falls Phase 1 development. The Amazon Falls Phase 2 development and the Fountain Park development are also planned developments in this area; however, they are planned for full build-out by 2025, therefore their projected traffic volumes are included in the 2030 Background traffic scenario. Recommendations from the traffic impact studies from these surrounding developments were implemented in the analysis for this Northern Star Development. Recommended improvements included:

- By 2023, SH 44 be widened to two lanes in each direction with separate right turn lanes at the Short Road intersection
- By 2025, the SH 44 and Short Road intersection be restricted to right-in/right-out with left turn (RIROLI) in movements only.

1.2 PRINCIPAL FINDINGS & RECOMMENDATIONS

The following is a summary of the principal findings and recommendations for the addition of the Northern Star Development.

2022 Existing Conditions

State Highway 44 and Hamlin Avenue

- Under the 2022 existing traffic conditions, each traffic movement at the SH 44 and Hamlin Avenue intersection currently functions at a Level of Service (LOS) "C" or better in the AM and PM peak hours. This intersection was recently constructed to only allow right-in and right-out movements. No additional improvements are needed.

Short Road and SH 44

- The northbound and southbound approaches of the SH 44 and Short Road, currently function at a LOS "F" on both the AM and PM peak hours. However, the volume to capacity ratio is acceptable, not higher than 1.0 for ACHD guidelines or 0.90 for ITD guidelines.

Amazon Drive and Short Road

- The Amazon Drive and Short Road intersection was recently constructed and currently functions with a LOS "A". Traffic volumes are fairly light at this intersection as the development in this area are under construction. No improvements are needed.

Shultz Court and Hamlin Avenue

- The Shultz Court and Hamlin Avenue currently consists of a northbound left turn and an eastbound right turn that accesses the residential home and farmland. This intersection functions with acceptable levels of service with very minimal traffic.

Roadway Segment LOS

Under the 2022 Existing conditions, Hamlin Avenue, Short Road and Amazon Drive all meet the planning level of service threshold for roadway segments within the study area.

2023 Background Traffic Conditions

Growth in traffic was applied using growth rates provided by COMPASS and also using the future build-out traffic volumes from the Amazon Phase 1 development to generate the 2023 Background traffic volumes. As outlined in the Idaho Transportation Invest Program (ITIP), SH 44 is planned to be widened to two lanes in each direction by 2023. Therefore, the 2023 Background traffic conditions illustrate SH 44 as two lanes in each direction at each of the study area intersections.

SH 44 and Hamlin Avenue

- With this intersection functioning and continuing to function as a right in/right out intersection, it is anticipated this intersection will continue to function at a LOS "C" or better under the background scenarios and no improvements are needed.

Short Road and SH 44

- With the proposed widening of SH 44, this intersection will continue to function with a LOS "F" in the northbound and southbound movements, and the v/c ratio will continue to function below the recommended threshold.

Amazon Drive and Short Road

- The traffic volumes for a fully built-out Amazon Falls 1 development were applied to this intersection to generate the 2023 Background traffic volumes. This intersection will continue to function with a LOS "A" in all movements and stop controlled movements along Short Road and free-flowing traffic along Amazon Drive.

Shultz Court and Hamlin Avenue

- In the 2023 Background conditions, this intersection will continue to function with minimal traffic that only accesses the single residents in this area and functions with acceptable levels of service.

Roadway Segment LOS

Under the 2023 Background conditions, Hamlin Avenue, Short Road and Amazon Drive all meet the planning level of service threshold for roadway segments within the study area.

2023 Background with Project Traffic Conditions

By 2023, it is planned the Phase 1 of the Northern Star development will be at full buildout. This phase will consist of the 310 apartment units.

SH44 and Hamlin Avenue

- With the addition of the Northern Star Development's first phase, this intersection will continue to function with an acceptable LOS "C" or better and will continue to function as right-in/right-out.

Short Road and SH 44

- With the addition of the Northern Star Development's first phase, the Short Road and SH 44 intersection will continue to experience similar levels of service as it experiences without the proposed development. The northbound and southbound traffic movements will still experience a LOS "F". The v/c ratio for the southbound left turning movements will fall above the minimum required of 1.0 per Ada County standards.

- As has been proposed in the Amazon Falls Phase 2 traffic study, signalizing this intersection will improve the LOS and v/c ratio, however, this location does not meet the signal spacing per Idaho Department of Transportation.

Short Road and Amazon Drive

- This intersection will continue to function with LOS "A" at each traffic movement with the addition of the Northern Star Development. No additional improvements are needed.

Hamlin Avenue and Shultz Court

- With the addition of Phase 1, the Shultz Court and Hamlin Avenue intersection will continue to function with acceptable levels of service.
- It is recommended Hamlin Avenue be constructed with one lane in each direction as a Collector Road, to provide access into the proposed development.

Hamlin Avenue and Amazon Drive

- With the addition of Phase 1, the Hamlin Avenue and Amazon Drive intersection will function with acceptable levels of service.
- Under the 2023 Background with Project scenario, the turning volumes at this intersection do not warrant separate left or right turn lanes. Therefore, each leg of the intersection should be constructed with one lane in each direction.

Hamlin Avenue and the Apartment Access

- This intersection will function with acceptable levels of service under the 2023 Background with Project scenario.
- It is recommended this intersection be constructed with one lane in each direction as the traffic volumes do not meet the warrants for separate left and right turn lanes.

Roadway Segment LOS

Under the 2023 Background with Project conditions, Hamlin Avenue, Short Road and Amazon Drive all meet the planning level of service threshold for roadway segments within the study area.

2024 Background Traffic Conditions

Hamlin Avenue and SH 44

- This intersection will continue to function with acceptable levels of service "C" or better under the 2024 Background traffic conditions. This intersection is proposed to continue to function as right-in/right-out. It is recommended SH 44 be widened to two lanes in each direction with a separate westbound right turn lane as planned with ITD.

Short Road and SH 44

- Under the 2024 Background traffic conditions, it is assumed the Amazon Falls Phase 1 development will be built-out. The traffic at this intersection will continue to function with a LOS "F" in the northbound and southbound directions.

- Amazon Falls 2 development is not planned for full build-out until 2025, however, this study does recommend this intersection follow the recommended access management strategies identified in the SH 44 corridor study. It was also recommended this intersection be restricted to a right-in/right-out with left-in.

- As outlined in the Amazon Falls Phase 2 traffic study, this intersection is planned to restrict left turn movements onto SH 44 as a right-in-right-out with left turn in movements. With this modification, the intersection will function with acceptable levels of service and also acceptable v/c ratios. It should be noted, by restricting turning movements at this intersection, it would be assumed vehicles from the Northern Star Development will not use this intersection to exit onto SH 44. With restrictions to left turn movements so vehicles can only exit to the west, most vehicles will just use the existing SH 44 and Hamlin Avenue intersection as it functions with the same controlled movements. With re-distribution of the traffic

from Phase 1, all intersections will function with acceptable levels of service and acceptable v/c ratios.

- It should also be noted if the Palmer Lane and SH 44 is signalized, which is planned, additional gaps in traffic along SH 44 may be present to reduce the average vehicle delay on Short Road which is not measured with the Synchro software.

Short Road and Amazon Drive

- In the 2024 Background scenario, the Short Road and Amazon Drive intersection will function with LOS "A" at each movement and v/c ratio's that are below 1.0.

Hamlin Avenue and Shultz Court

- This intersection will continue to function with minimal traffic under the 2024 Background scenario and the LOS and v/c ratios will be acceptable.

Roadway Segment LOS

Under the 2024 Background conditions, Hamlin Avenue, Short Road and Amazon Drive all meet the planning level of service threshold for roadway segments within the study area.

2024 Background with Project Traffic Conditions

It is planned by 2024, Phase 2 of the Northern Star development will be constructed. This phase will consist of the townhomes and single-family homes located on the north end of the proposed project.

Hamlin Avenue and SH 44

- With the addition of phase 2 of the Northern Star development, the Hamlin Avenue and SH 44 will continue to function with right-in and right-out movements. SH 44 is planned to be widened to two lanes in the eastbound and westbound directions with a separate westbound right turn lane.

- This intersection will continue to function with acceptable LOS "C" or better and acceptable v/c ratios for each movement.

Short Road and SH 44

- Similar operations will continue to occur at the Short Road and SH 44 intersection. It is planned SH 44 will be widened to two lanes in each direction with separate right turn lanes in the eastbound and westbound directions. It is also planned the southbound approach of this intersection will consist of separate right/through and left turn lanes.

- With the addition of the phase 2 traffic from the Northern Star development, and the above-mentioned recommendations in the Background scenarios, this intersection will continue to function with LOS "F" in the southbound and northbound approaches and the southbound approach.

- If the Short Road and SH 44 intersection is modified to RIROLI movements, it is also assumed traffic from the Northern Star development will use Hamlin Avenue to access SH 44 and little to no traffic will use Short Road. With this assumption, all intersections will continue to function with acceptable levels of service and acceptable v/c ratios.

Short Road and Amazon Drive

- This intersection will continue to function with acceptable levels of service "A" and v/c ratios during both the AM and PM peak hours.

- This intersection will continue to function as a two-way stop-controlled intersection with the stop-control along Amazon Drive.

Hamlin Avenue and Shultz Court

- With the addition of Phase 2, this intersection will continue to function with one lane in each direction as turn lanes are not warranted with the projected traffic volumes.

- This intersection will function with acceptable LOS "A" and v/c ratios for all vehicular movements.

Hamlin Avenue and Amazon Drive

- This intersection also continues to function with acceptable LOS "A" and v/c ratios for all vehicular movements under the 2024 Background with Project traffic conditions.

Hamlin Avenue and Apartment Access

- This access to apartments will continue to function with a LOS "A" and v/c ratios for all traffic movements with the addition of phase 2.

Hamlin Avenue and Single-Family Housing Access

- This access will function with acceptable LOS "A" and v/c ratios for all traffic movements with the addition of Phase 2.

- It is recommended this intersection be constructed with one lane in each direction to service the development. Projected traffic volumes do not warrant the need for separate left or right turn lanes.

Roadway Segment LOS

Under the 2024 Background with Project conditions, Hamlin Avenue, Short Road and Amazon Drive all meet the planning level of service threshold for roadway segments within the study area.

2030 Background Traffic Conditions

Under the 2030 Background traffic conditions, it is planned multiple developments surrounding the proposed Northern Star Development will be fully built out and occupied. These developments include Amazon Falls Phase 2 (planned for full build-out by 2025), Fountain Park Subdivision (planned for full build-out by 2025).

Hamlin Avenue and SH 44

- This intersection will continue to function with acceptable LOS "D" or better under the AM and PM peak hours. This intersection is planned to continue to function with a right-in/right-out turning movements.

Short Road and SH 44

- This intersection will continue to function with unacceptable LOS and v/c ratios during the AM and PM peak hours for the northbound and southbound left turn movements. All other traffic movements will continue to function with acceptable LOS.

- If the recommendations from the Amazon Falls Phase 2 traffic study are implemented, this intersection would become a right-in/right-out with left in only movements. With these improvements, this intersection will function with acceptable LOS in all traffic movements. The v/c ratio will also be acceptable for each traffic movement. It should be noted, with future development that may occur to the east, Amazon Drive would extend to Palmer Lane and provide another access/connection of the roadways. It would be assumed with a connection along Amazon Drive to Palmer Lane, a large majority of the traffic making left turn movements at the Short Road and SH 44 intersection would use the Amazon Drive route to travel eastbound. However, since this connection of Amazon Drive will be driven by future developments, these developments are not planned so therefore this connection was not used in this study.

Short Road and Amazon Drive

- The Short Road and Amazon Drive intersection will continue to function with acceptable LOS "A" and v/c ratios during the AM and PM peak hour for each traffic movement.

Hamlin Avenue and Shultz Court

- It is assumed this intersection will continue to service the existing residents in this area under the 2030 Background conditions and will function with minimal delays, a LOS "A" and v/c ratios that all meet minimal requirements.

Roadway Segment LOS

Under the 2030 Background conditions, Hamlin Avenue, Short Road and Amazon Drive all meet the planning level of service threshold for roadway segments within the study area.

2030 Background with Project Traffic Conditions

In 2030, it is planned the final Phase 3 will be constructed and fully built. This phase of the Northern Star Development will consist of roughly 18 acres of commercial/office space. For purposes of this study, 20% of the overall 18 acreage was determined to be occupied by the building and the land use for Office Space was used to calculate the project generated traffic for this phase.

Hamlin Avenue and SH 44

- The Hamlin Avenue and SH 44 intersection is planned to continue to function with right-in/right-out traffic movements.
- Under the AM peak hour this intersection is planned to continue to function with acceptable LOS "C" or better for each traffic movements and an acceptable v/c ratio.
- Under the PM peak hour, this intersection may function with a LOS "F", however the v/c ratio of 0.93 is acceptable per county guidelines but fall below the ITD guidelines of 0.90. However, since this intersection will not be signalized, and already functions with a right-in and right-out movements, no other improvements can be made.

Short Road and SH 44

- Similar to previous study years, this intersection will continue to function with unacceptable levels of service and v/c ratio for the northbound and southbound left turn movements. If this intersection is modified to RIROLI movements, the intersection will function with acceptable LOS and v/c ratios in the AM peak hour, however will fall below the threshold in the PM peak hour.

- If this intersection cannot be signalized, the connection of Amazon Drive to Palmer Lane will help provide an additional route for traffic to exit the development and travel eastbound along SH 44.

Short Road and Amazon Drive

- This intersection will continue to function with acceptable LOS "A" and v/c ratios under both the AM and PM peak hours. It is recommended this intersection be designed and constructed to meet city standards. It is also recommended adequate sight distance be accounted for in the design at this intersection with no obstructions within the required line of sight.

Hamlin Avenue and Amazon Drive

- With the addition of the Northern Star Phase 3, the west leg of this intersection will be added to this intersection. This intersection is recommended to be constructed with one lane in each direction as turn lane warrants are not met with the projected traffic volumes. This intersection will also continue to function with acceptable LOS "A" and v/c ratios for each traffic movements under the AM and PM peak hours.

Hamlin Avenue and Shultz Court

- Each turning movement at the Hamlin Avenue and Shultz Court intersection will continue to function with acceptable LOS "B" or better under the 2030

Background with Project traffic conditions and continue with acceptable v/c ratios.

Hamlin Avenue and Apartment Access

- Each traffic movement at this intersection will also continue to function with acceptable LOS and v/c ratio.

Hamlin Avenue and Single-Family Housing Access

- This intersection will also continue to function with acceptable LOS "A" and acceptable v/c ratio for each traffic movements.

Roadway Segment LOS

Under the 2030 Background with Project conditions, Hamlin Avenue, Short Road and Amazon Drive all meet the planning level of service threshold for roadway segments within the study area.

Ada County Utility Coordinating Council

Developer/Local Improvement District
Right of Way Improvements Guideline Request

Purpose: To develop the necessary avenue for proper notification to utilities of local highway and road improvements, to help the utilities in budgeting and to clarify the already existing process.

1) **Notification:** Within five (5) working days upon notification of required right of way improvements by Highway entities, developers shall provide written notification to the affected utility owners and the Ada County Utility Coordinating Council (UCC). Notification shall include but not be limited to, project limits, scope of roadway improvements/project, anticipated construction dates, and any portions critical to the right of way improvements and coordination of utilities.

2) **Plan Review:** The developer shall provide the highway entities and all utility owners with preliminary project plans and schedule a plan review conference. Depending on the scale of utility improvements, a plan review conference may not be necessary, as determined by the utility owners. Conference notification shall also be sent to the UCC. During the review meeting the developer shall notify utilities of the status of right of way/easement acquisition necessary for their project. At the plan review conference each company shall have the right to appeal, adjust and/or negotiate with the developer on its own behalf. Each utility shall provide the developer with a letter of review indicating the costs and time required for relocation of its facilities. Said letter of review is to be provided within thirty calendar days after the date of the plan review conference.

3) **Revisions:** The developer is responsible to provide utilities with any revisions to preliminary plans. Utilities may request an updated plan review meeting if revisions are made in the preliminary plans which affect the utility relocation requirements. Utilities shall have thirty days after receiving the revisions to review and comment thereon.

4) **Final Notification:** The developer will provide highway entities, utility owners and the UCC with final notification of its intent to proceed with right of way improvements and include the anticipated date work will commence. This notification shall indicate that the work to be performed shall be pursuant to final approved plans by the highway entity. The developer shall schedule a preconstruction meeting prior to right of way improvements. Utility relocation activity shall be completed within the times established during the preconstruction meeting, unless otherwise agreed upon.

Notification to the Ada County UCC can be sent to: 50 S. Cole Rd. Boise 83707, or Visit iducc.com for e-mail notification information.

Development Process Checklist

Items Completed to Date:

☒Submit a development application to a City or to Ada County

☒The City or the County will transmit the development application to ACHD

☒The ACHD **Planning Review Section** will receive the development application to review

☒The **Planning Review Section** will do one of the following:

☐Send a **"No Review"** letter to the applicant stating that there are no site specific conditions of approval at this time.

☒Write a **Staff Level** report analyzing the impacts of the development on the transportation system and evaluating the proposal for its conformance to District Policy.

☒Write a **Commission Level** report analyzing the impacts of the development on the transportation system and evaluating the proposal for its conformance to District Policy.

Items to be completed by Applicant:

☐For **ALL** development applications, including those receiving a **"No Review"** letter:

- The applicant should submit one set of engineered plans directly to ACHD for review by the **Development Review Section** for plan review and assessment of impact fees. (Note: if there are no site improvements required by ACHD, then architectural plans may be submitted for purposes of impact fee assessment.)
- The applicant is required to get a permit from Construction Services (ACHD) for ANY work in the right-of-way, including, but not limited to, driveway approaches, street improvements and utility cuts.

☐Pay Impact Fees prior to issuance of building permit. Impact fees cannot be paid prior to plan review approval.

DID YOU REMEMBER:
Construction (Non-Subdivisions)
☐ **Driveway or Property Approach(s)**

- Submit a "Driveway Approach Request" form to ACHD Construction (for approval by Development Services & Traffic Services). There is a one week turnaround for this approval.

☐ **Working in the ACHD Right-of-Way**

- Four business days prior to starting work have a bonded contractor submit a "Temporary Highway Use Permit Application" to ACHD Construction – Permits along with:
  a) Traffic Control Plan
  b) An Erosion & Sediment Control Narrative & Plat, done by a Certified Plan Designer, if trench is >50' or you are placing >600 sf of concrete or asphalt.

Construction (Subdivisions)
☐ **Sediment & Erosion Submittal**

- At least one week prior to setting up a Pre-Construction Meeting an Erosion & Sediment Control Narrative & Plan, done by a Certified Plan Designer, must be turned into ACHD Construction to be reviewed and approved by the ACHD Stormwater Section.

☐ **Idaho Power Company**

- Vic Steelman at Idaho Power must have his IPCO approved set of subdivision utility plans prior to Pre-Con being scheduled.

☐ **Final Approval from Development Services is required** prior to scheduling a Pre-Con.

Request for Appeal of Staff Decision

1. **Appeal of Staff Decision:** The Commission shall hear and decide appeals by an applicant of the final decision made by the Development Services Manager when it is alleged that the Development Services Manager did not properly apply this section 7101.6, did not consider all of the relevant facts presented, made an error of fact or law, abused discretion or acted arbitrarily and capriciously in the interpretation or enforcement of the ACHD Policy Manual.

    a. Filing Fee: The Commission may, from time to time, set reasonable fees to be charged the applicant for the processing of appeals, to cover administrative costs.

    b. Initiation: An appeal is initiated by the filing of a written notice of appeal with the Secretary and Clerk of the District, which must be filed within ten (10) working days from the date of the decision that is the subject of the appeal. The notice of appeal shall refer to the decision being appealed, identify the appellant by name, address and telephone number and state the grounds for the appeal. The grounds shall include a written summary of the provisions of the policy relevant to the appeal and/or the facts and law relied upon and shall include a written argument in support of the appeal. The Commission shall not consider a notice of appeal that does not comply with the provisions of this subsection.

    c. Time to Reply: The Development Services Manager shall have ten (10) working days from the date of the filing of the notice of appeal to reply to the notice of the appeal, and may during such time meet with the appellant to discuss the matter, and may also consider and/or modify the decision that is being appealed. A copy of the reply and any modifications to the decision being appealed will be provided to the appellant prior to the Commission hearing on the appeal.

    d. Notice of Hearing: Unless otherwise agreed to by the appellant, the hearing of the appeal will be noticed and scheduled on the Commission agenda at a regular meeting to be held within thirty (30) days following the delivery to the appellant of the Development Services Manager's reply to the notice of appeal. A copy of the decision being appealed, the notice of appeal and the reply shall be delivered to the Commission at least one (1) week prior to the hearing.

    e. Action by Commission: Following the hearing, the Commission shall either affirm or reverse, in whole or part, or otherwise modify, amend or supplement the decision being appealed, as such action is adequately supported by the law and evidence presented at the hearing.

ADA COUNTY DEVELOPMENT SERVICES

200 W. FRONT STREET, BOISE, IDAHO 83702-7300
https://adacounty.id.gov/developmentservices

PHONE (208) 287-7900
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BUILDING • COMMUNITY PLANNING • ENGINEERING & SURVEYING • PERMITTING

February 27, 2023

Shawn Nickel
City of Star Planning & Zoning
10769 W State St
Star, ID 83669

RE: AZ-22-11 / Northeast Corner of SH-16 and SH-44 / Talega Village Subdivision

Shawn,

The City of Star has requested feedback regarding the proposed annexation and preliminary plat for the Talega Village Subdivision, which will consist of 55 single-family homes, 98 Townhome units, 340 multi-family units, and 1 commercial lot on 65.7 acres located on the northeast corner of SH-16 and SH-44/ State Street (Parcels: R3720002880, R3720003030, R3720002500, R3720002480, R3720001505, R3720002412, & S0409417201). Ada County supports the application due to its compatibility with the Star Comprehensive Plan, as adopted by Ada County, which designates the site as a mixture of *Multiple Use 1*, and *Commercial*.

The proposal to include single-family and multi-family housing within the development is supported by *Multiple Use Policy 2*, which encourages diverse housing types and densities, and the proposed mix of residential and commercial development is compatible with *Multiple Use Policy 6* which encourages residential uses near commercial uses. The proposal to set aside over 34% (16.4 acres) as common area, which will include playgrounds, dog parks, and pedestrian pathways, is also compatible with *Residential Policy 3* of the Star Comprehensive Plan which encourages neighborhood parks and open spaces to be provided within residential areas.

It is suggested that a pedestrian pathway be considered along the Dry Creek Canal as encouraged by *Goal 1.2d* of the Ada County Comprehensive Plan, which supports the enhancement of manmade drainage ways as valuable resources for recreational pathways and potential pedestrian and bicycle routes.

Thank you for this opportunity to provide feedback.

Sincerely,

Stacey Yarrington

Stacey Yarrington
Community & Regional Planner
Ada County Development Services

Communities in Motion (CIM) Development Review Ch

Development Name:	Talega Village
CIM Vision Category:	Future Neighborhood
Consistent with CIM Vision?	YES
New Households:	493 **New Jobs:** ±220

Safety

How safe and comfortable is the nearest major road (minor arterial or above) for bicyclists and pedestrians? Analysis is limited to existing roadway conditions.

State Highway 44 (West State Street)

Pedestrian level of stress	✗
Bicycle level of stress	✗

Economic Vitality

To what extent does the project enable people, government, and businesses to prosper?

Economic Activity Center Access	✓
Impact on Existing Surrounding Farmland	✓
Net Fiscal Impact	✓

Convenience

What services are available within 0.5 miles (green) or 1 mile (yellow) of the project?

Nearest bus stop	✗
Nearest public school	✗
Nearest public park	✗

Quality of Life

Checked boxes indicate that additional information is attached.

Active Transportation	
Automobile Transportation	
Public Transportation	✓
Roadway Projects	✓

✓ **Improves performance** ✓ **Does not improve or reduce performance** ✗ **Reduces performance**

Comments:
When developing the site plan for Phase 4 consider including a public multiuse pathway along the southern boundary, as shown in the City of Star's *Pathways Master Plan*. To support future transit along State Street consider installing sidewalks that are wide enough to allow for passenger and wheelchair loading and unloading (72-84 inches).

Who we are: *The Community Planning Association of Southwest Idaho (COMPASS) is the metropolitan planning organization for Ada and Canyon Counties. This review evaluates whether land developments are consistent with Communities in Motion, the regional long-range transportation plan for Ada and Canyon Counties. This checklist is not intended to be prescriptive, but rather a guidance document. Past checklists are available online. See the* ***Development Review User Guide*** for more information on the red, yellow, and green checklist thresholds.

Sent: 3/13/23

www.compassidaho.org
info@compassidaho.org
COMPASS COMMUNITY PLANNING ASSOCIATION of Southwest Idaho

Complete Network Appendix

Checkmarks (✓) below indicate suggested changes to a site plan, based on the COMPASS Complete Network Policy (No. 2022-01). Both the Complete Network Policy and site-specific suggestions are intended to better align land use with identified transportation uses in the corridor. Please see the Complete Network map for primary and secondary uses for roadways (minor arterial and above) in Ada and Canyon Counties.

Corridor Name:	State Highway 44 (West State Street)
Primary Use:	Public Transportation
Secondary Use:	Freight

Land Use to Support Public Transportation

✓ Orient buildings toward potential transit corridors, with parking on the back side rather than the street side

The COMPASS-compiled catalog of Transit Oriented Developments in the *Communities in Motion Implementation Guidebook* provides examples of how higher-density development can integrate in existing neighborhoods.

Public Transportation Infrastructure

✓ Provide sidewalks and/or bike paths designed to meet the needs of all users (including elderly, children, and individuals with disabilities) to connect development to transit stops

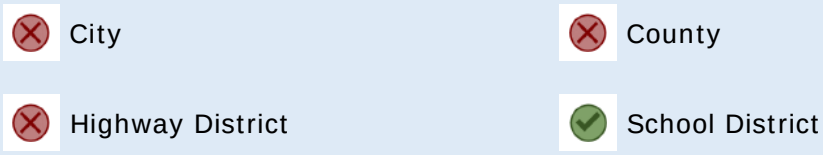
✓ Include doors with 32 inches of clear passage space, and at least one zero-step entrance and accessible bathroom on the main floor to support those with limited mobility

Fiscal Impact Analysis

Below are the expected revenues and costs to local governments from this project. The purpose of this analysis is to help the public, stakeholders, and the decision-makers better manage growth.

Capital and operating expenditures are determined based on service and infrastructure needs, including persons per household, student generation rates, lot sizes, street frontages, vehicle trip and trip adjustment factors, average trip lengths, construction values, income, discretionary spending, and employment densities.

Net Fiscal Impact by Agency



Breakeven point across all agencies: 16 years

Additional Information:

- City of Star fiscal impact is estimated to be positive prior to phase 4.
- The largest estimated expense to City of Star is law enforcement (50% of total expenses).
- Highway District fiscal impact is estimated to be positive in stabilization year (on-going impact), however capital costs to state highway system result in breakeven point beyond 20 years.

Disclaimer*: This tool only looks out 20 years and does not include replacement costs for infrastructure, public utilities, or unfunded transportation needs in the project area. More information about the COMPASS Fiscal Impact Tool is available at:* [*www.compassidaho.org/prodserv/fiscalimpact.htm*](www.compassidaho.org/prodserv/fiscalimpact.htm)

Long-Term Funded and Unfunded Capital Projects

CIM Priority Corridor: State Highway 44 (West State Street)

Widening State Highway 44 (West State Street) is a short-term funded project in *Communities in Motion 2050* (Key# 20266 in the FY23-29 Transportation Improvement Program).

More information on transportation needs and projects based on forecasted future growth is available at: https://compassidaho.maps.arcgis.com/apps/instant/portfolio/index.html?appid=6c1eebca233d49c4935825136f338fac

Short-Term Funded Capital Projects

SH-44 (State Street), SH-16 to Linder Road, Ada County

Regionally Significant: ☑ ☑ **Inflated**

Key # : 20266

Requesting Agency: ITD

Project Year: 2023

Total Previous Allocations: $654

Total Programmed Budget: $7,017

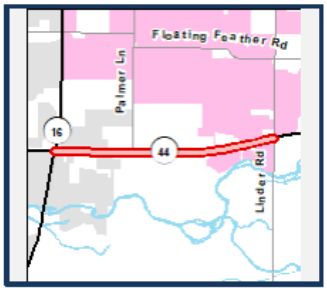
Total Cost (Prev. + Prog.): $7,671

TIP Achievement:

System Performance

NHS-LOTTR

Safety



Project Description

Add an additional westbound and eastbound lane to improve congestion and reduce crashes along State Highway 44 (State Street), from State Highway 16 to Linder Road near the City of Eagle.

Funding Source HB132 and HB312 **Program** State Hwy - Safety & Capacity (Capacity) **Local Match** 100.00%

Cost Year*	Preliminary Engineering	Preliminary Engineering Consulting	Right-of-Way	Utilities	Construction Engineering	Construction	Total	Federal Share	Local Share
2023	0	0	0	0	1,145	5,872	7,017	0	7,017
Fund Totals:	$0	$0	$0	$0	**$1,145**	**$5,872**	**$7,017**	$0	**$7,017**

Study, SH-16, SH-44 to Junction SH-52, Environmental Reevaluation

Regionally Significant: ☑ ☐ **Inflated**

Key # : 23175

Requesting Agency: ITD

Project Year: 2023

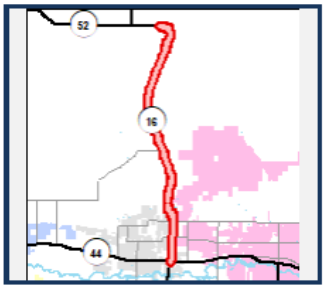
Total Previous Allocations: $0

Total Programmed Budget: $3,000

Total Cost (Prev. + Prog.): $3,000

TIP Achievement:

Support



Project Description

Reevaluate the environmental assessment regarding proposed improvements to State Highway 16 from State Highway 44 in Ada County to the junction of State Highway 52 in the City of Emmett to reaffirm the Idaho Transportation Department's proposed improvements on the corridor.

Funding Source STBG-State **Program** State Hwy - Early Development **Local Match** 7.34%

Cost Year*	Preliminary Engineering	Preliminary Engineering Consulting	Right-of-Way	Utilities	Construction Engineering	Construction	Total	Federal Share	Local Share
2023	50	2,950	0	0	0	0	3,000	2,780	220
Fund Totals:	**$50**	**$2,950**	$0	$0	$0	$0	**$3,000**	**$2,780**	**$220**

Source: *The* COMPASS Transportation Improvement Program (TIP). *The TIP is a short-range (seven-year) budget of transportation projects for which federal funds are anticipated, along with non-federally funded projects that are regionally significant and is available at:* https://www.compassidaho.org/documents/prodserv/trans/FY22/FY23_29TIPdoc.pdf

West Ada SCHOOL DISTRICT

March 29, 2023

RE: Talega Village Subdivision
PP-22-17, CU-22-05

Dear Planners:

West Ada School District has experienced sustained growth in student enrollment during the last ten years. Based on current enrollment data specific to new development (within the last 5 years) in proximity to this proposed development, we estimate this development consisting of 55 single-family lots, 98 townhomes and 340 multifamily units could house approximately **109 school aged children.** Approval of this application will affect enrollments at the following schools in West Ada School District based on attendance areas for the 2022-23 school year. For your information, included in this data is the number of approved lots and multi-family units approved by this and other agencies.

	Enrollment	Capacity	Approved lots per attendance area	Approved MF units per attendance area	Projected Students from Approved Dev.
Eagle Elementary	**342**	**500**	**2841**	**60**	**259**
Star Middle School	**906**	**1000**	**9938**	**622**	**913**
Eagle High School	**1787**	**1800**	**6499**	**357**	**859**
School of Choice Options					
Galileo STEM Academy	**744**	**775**	**N/A**	**N/A**	

West Ada School District supports economic growth. Based on future enrollment forecasts, the middle and high schools are projected to be operating above building capacity upon the completion of the previously approved lots. Future developments will continue to have an impact on the district's capacity.

To meet the need for additional school capacity in this area one or more of the following may need to be accomplished:

- Transporting students to an alternate school with available classrooms.
- Attendance area adjustments if there is availability in a nearby school.
- Portable classrooms placed on the property.
- Passage of a bond or plant facilities levy to build new schools to fit the enrollment needs.

Please encourage the developer to provide safe walkways, bike paths and pedestrian access for our students.

Sincerely,

Marci Horner
Planning and Development Administrator

Your Safety • Your Mobility
Your Economic Opportunity

IDAHO TRANSPORTATION DEPARTMENT
P.O. Box 8028 • Boise, ID 83707-2028
(208) 334-8300 • itd.idaho.gov

March 21, 2023

City of Star
Shawn Nickels, P&Z Administrator
10769 W State St
Star, ID 83669
snickel@staridaho.org

Re: Talega Village Subdivision, File #s: AZ-22-11, RZ-22-03, DA-22-12, CU-22-05, PP-22-17, PR-22-08

Dear Mr. Nickels,

Idaho Transportation Department (ITD) appreciates this opportunity to provide comments regarding Talega Village Subdivision located near milepost 100.2, on the east side of SH-16 and north of SH-44, Star, Idaho. Please see the below comments:

1. This project abuts State Highway 16 (SH-16).
2. No direct access to the State Highway system has been requested with this application and none is approved.
3. N Hamlin Avenue is currently designed as a right-in right-out. It is possible that Hamlin will eventually be a right-in only. The location of N Hamlin Avenue and SH-44 is the beginning of the taper for the widening of Chinden to three (3) more lanes to its west. The development to the east of Hamlin is supposed to eventually have its interior road connected to Hamlin at which point a right-out can happen there.
4. Traffic generation numbers were not provided with this application. ITD needs more information on the trip generations to determine what mitigations if any, the applicant may be required to construct on the State Highway system. If the new development generates 100 or more new trips in the peak hour or 1,000 new trips in a day, a Traffic Impact Study (TIS) is required. Mitigations identified by the Traffic Impact Study shall be the responsibility of the applicant to install.
5. Idaho Code 40-1910 does not allow advertising within the right-of-way of any State highway.
6. The Idaho Administrative Procedures Act (IDAPA) 39.03.60 governs advertising along the State highway system. The applicant may contact Justin Pond, Program Manager for ITD's Headquarters Right-of-Way Section at (208) 334-8832 for more information.

The City is reminded the SH-20/26 corridor is already congested. This project will increase the number of vehicle trips in the corridor. As the City continues to add additional trips to the corridor through development, the congestion will worsen until the roadway system is ultimately overloaded and fails.

ITD reserves the right to make further comments upon review of the submitted TIS and any other documentation.

Sincerely,

Wendy I. Howell, Development Services Coordinator

CENTRAL DISTRICT HEALTH

Ada County Transmittal

Division of Community and Environmental Health

Return to:
- ☐ ACZ
- ☐ Boise
- ☐ Eagle
- ☐ Garden City
- ☐ Meridian
- ☐ Kuna
- ☑ Star

Rezone/OTD # _____

Conditional/Accessory Use # _____

Preliminary / Final / Short Plat PP-22-17

Development Name/Section Talega Village

☐ 1. We have No Objections to this Proposal.

☐ 2. We recommend Denial of this Proposal.

☐ 3. Specific knowledge as to the exact type of use must be provided before we can comment on this Proposal.

☐ 4. Before we can comment concerning individual sewage disposal, we will require more data concerning the depth of:
☐ high seasonal ground water ☐ waste flow characteristics
☐ bedrock from original grade ☐ other _____

☐ 5. This office may require a study to assess the impact of nutrients and pathogens to receiving ground waters and surface waters.

☑ 6. After written approvals from appropriate entities are submitted, we can approve this proposal for:
☑ central sewage ☐ community sewage system ☐ community water well
☐ interim sewage ☑ central water
☐ individual sewage ☐ individual water

☑ 7. The following plan(s) must be submitted to and approved by the Idaho Department of Environmental Quality:
☑ central sewage ☐ community sewage system ☐ community water
☐ sewage dry lines ☑ central water

☑ 8. Infiltration beds for storm water disposal are considered shallow injection wells. If they are not in the City of Boise or ACHD right-of-way, an application and fee per well, vicinity map and construction plans must be submitted to CDH.

☐ 9. If restroom or plumbing facilities are to be installed, then a sewage system MUST be installed to meet Idaho State Sewage Regulations.

☐ 10. An accessory use application, fee, detailed site plan and floor plans must be submitted to CDH for review.

☐ 11. Land development application, fee per lot, test holes and full engineering report is required.

☐ 12. CDH makes no guarantee a septic permit will be issued on the split off lot. A speculative site evaluation is recommended.

☐ 13. We will require plans be submitted for a plan review for any:
☐ food establishment ☐ swimming pools or spas ☐ child care center
☐ beverage establishment ☐ grocery store

☐ 14. _____

_____

_____

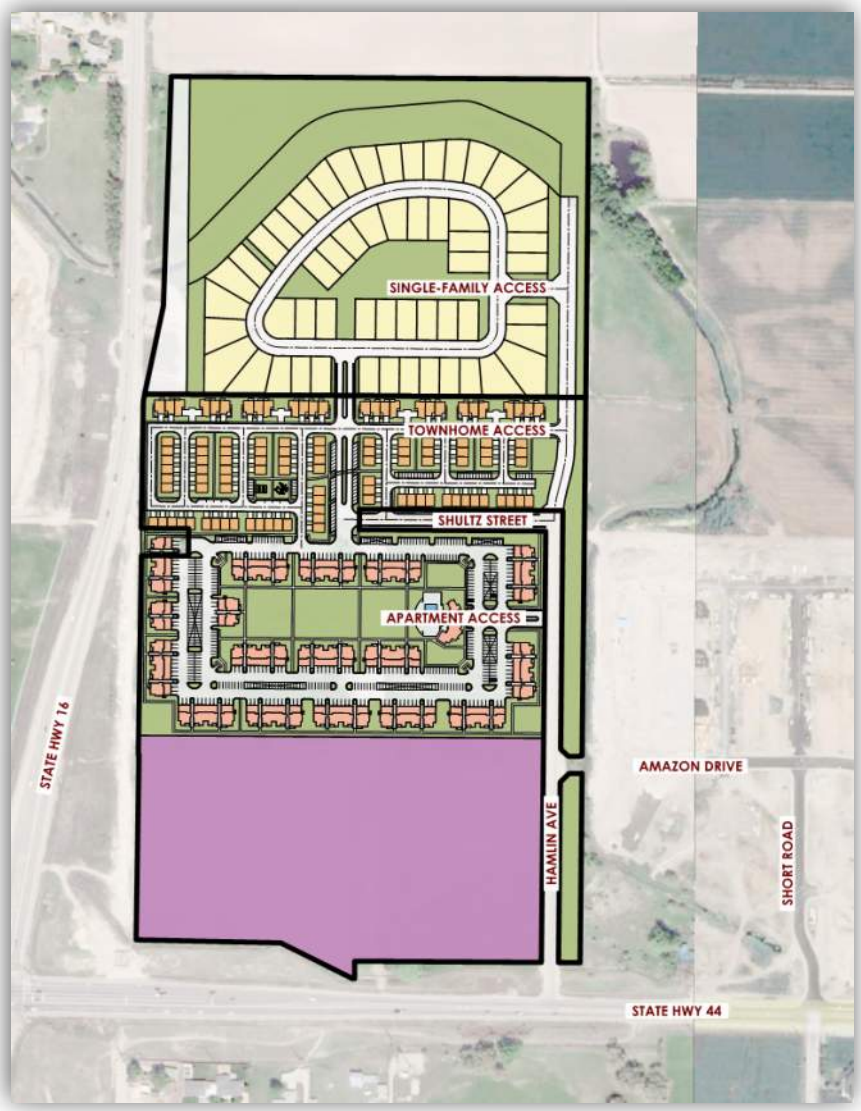
Reviewed By: _____ Date: 3/3/23

3/22 lb

NORTHERN STAR DEVELOPMENT

TRAFFIC IMPACT STUDY

STAR, IDAHO



FOCUS
ENGINEERING & SURVEYING, LLC

August, 2022

6949 South High Tech Drive, Suite 200, Midvale, Utah 84047 p 801.352.0075

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1.0 Executive Summary

1.1 DESCRIPTION OF PROJECT

This report presents the results of a traffic impact analysis for the Northern Star Development, located in Star, Idaho. The project site is located north of State Highway (SH) 44, east of State Highway 16 and west of Hamlin Avenue. Currently the proposed parcel of land consists of farmland with a few residential homes. Figure 1 illustrates the Vicinity Map and the location of this development related to the adjacent roadway network.

This proposed Northern Star Development will consist of:

- 55 single-family dwelling units
- 110 townhome units
- 310 apartment units
- 18 acres of commercial/office

Refer to Figure 2 for the site plan of this development and the location of the proposed accesses onto the surrounding roadways.

Coordinating with Ada County (ACHD) and Idaho Transportation Department (ITD), it was determined the study area for this traffic impact study would include the following intersections:

- Hamlin Avenue/SH 44 (existing)
- Short Road/SH 44 (existing)
- Amazon Drive/Short Lane (existing)
- Shultz Street/Hamlin Avenue (existing)
- Amazon Drive/Hamlin Avenue (future)

It is anticipated, at full build-out, the Northern Star Development will generate 4,529 average daily trips with 379 AM peak hour trips and 417 PM peak hour trips. With a mix of residential and commercial/office within the same development, it is anticipated there will be some internal trips between the two land uses. It is not anticipated a large reduction in trips due to internal capture, but using the ITE Trip Generation reduction, roughly 6 vehicles in the AM peak hour and 14 in the PM peak hour are anticipated to be shared between land uses.

It is anticipated the Northern Star Development will be constructed in three main phases. The first phase is planned for the 310 apartment units and will be fully occupied by the end of 2023. The second phase will consist of the 55 single-family units and the 110 townhomes and be constructed by the end of 2024. The third and final phase will consist of the 18 acres of commercial/office and is planned to be constructed by 2030. Therefore, the study years for this development are 2022 existing, 2023 background, 2024 background and 2030 background.

As part of the analysis for the Northern Star Development, projected future traffic volumes from surrounding developments were included in the Background traffic volumes. Currently the Amazon Falls Phase 1 development is under construction and is planned for full build-out by the end of this year. Therefore the 2023 Background traffic volumes include the full build-out traffic from the Amazon Falls Phase 1 development. The Amazon Falls Phase 2 development and the Fountain Park development are also planned developments in this area; however, they are planned for full build-out by 2025, therefore their projected traffic volumes are included in the 2030 Background traffic scenario. Recommendations from the traffic impact studies from these surrounding developments were implemented in the analysis for this Northern Star Development. Recommended improvements included:

- By 2023, SH 44 be widened to two lanes in each direction with separate right turn lanes at the Short Road intersection
- By 2025, the SH 44 and Short Road intersection be restricted to right-in/right-out with left turn (RIROLI) in movements only.

1.2 PRINCIPAL FINDINGS & RECOMMENDATIONS

The following is a summary of the principal findings and recommendations for the addition of the Northern Star Development.

2022 Existing Conditions

State Highway 44 and Hamlin Avenue

- Under the 2022 existing traffic conditions, each traffic movement at the SH 44 and Hamlin Avenue intersection currently functions at a Level of Service (LOS) "C" or better in the AM and PM peak hours. This intersection was recently constructed to only allow right-in and right-out movements. No additional improvements are needed.

Short Road and SH 44

- The northbound and southbound approaches of the SH 44 and Short Road, currently function at a LOS "F" on both the AM and PM peak hours. However, the volume to capacity ratio is acceptable, not higher than 1.0 for ACHD guidelines or 0.90 for ITD guidelines.

Amazon Drive and Short Road

- The Amazon Drive and Short Road intersection was recently constructed and currently functions with a LOS "A". Traffic volumes are fairly light at this intersection as the development in this area are under construction. No improvements are needed.

Shultz Court and Hamlin Avenue

- The Shultz Court and Hamlin Avenue currently consists of a northbound left turn and an eastbound right turn that accesses the residential home and farmland. This intersection functions with acceptable levels of service with very minimal traffic.

Roadway Segment LOS

Under the 2022 Existing conditions, Hamlin Avenue, Short Road and Amazon Drive all meet the planning level of service threshold for roadway segments within the study area.

2023 Background Traffic Conditions

Growth in traffic was applied using growth rates provided by COMPASS and also using the future build-out traffic volumes from the Amazon Phase 1 development to generate the 2023 Background traffic volumes. As outlined in the Idaho Transportation Invest Program (ITIP), SH 44 is planned to be widened to two lanes in each direction by 2023. Therefore, the 2023 Background traffic conditions illustrate SH 44 as two lanes in each direction at each of the study area intersections.

SH 44 and Hamlin Avenue

- With this intersection functioning and continuing to function as a right in/right out intersection, it is anticipated this intersection will continue to function at a LOS "C" or better under the background scenarios and no improvements are needed.

Short Road and SH 44

- With the proposed widening of SH 44, this intersection will continue to function with a LOS "F" in the northbound and southbound movements, and the v/c ratio will continue to function below the recommended threshold.

Amazon Drive and Short Road

- The traffic volumes for a fully built-out Amazon Falls 1 development were applied to this intersection to generate the 2023 Background traffic volumes. This intersection will continue to function with a LOS "A" in all movements and stop controlled movements along Short Road and free-flowing traffic along Amazon Drive.

Shultz Court and Hamlin Avenue

- In the 2023 Background conditions, this intersection will continue to function with minimal traffic that only accesses the single residents in this area and functions with acceptable levels of service.

Roadway Segment LOS

Under the 2023 Background conditions, Hamlin Avenue, Short Road and Amazon Drive all meet the planning level of service threshold for roadway segments within the study area.

2023 Background with Project Traffic Conditions

By 2023, it is planned the Phase 1 of the Northern Star development will be at full buildout. This phase will consist of the 310 apartment units.

SH44 and Hamlin Avenue

- With the addition of the Northern Star Development's first phase, this intersection will continue to function with an acceptable LOS "C" or better and will continue to function as right-in/right-out.

Short Road and SH 44

- With the addition of the Northern Star Development's first phase, the Short Road and SH 44 intersection will continue to experience similar levels of service as it experiences without the proposed development. The northbound and southbound traffic movements will still experience a LOS "F". The v/c ratio for the southbound left turning movements will fall above the minimum required of 1.0 per Ada County standards.

- As has been proposed in the Amazon Falls Phase 2 traffic study, signalizing this intersection will improve the LOS and v/c ratio, however, this location does not meet the signal spacing per Idaho Department of Transportation.

Short Road and Amazon Drive

- This intersection will continue to function with LOS "A" at each traffic movement with the addition of the Northern Star Development. No additional improvements are needed.

Hamlin Avenue and Shultz Court

- With the addition of Phase 1, the Shultz Court and Hamlin Avenue intersection will continue to function with acceptable levels of service.
- It is recommended Hamlin Avenue be constructed with one lane in each direction as a Collector Road, to provide access into the proposed development.

Hamlin Avenue and Amazon Drive

- With the addition of Phase 1, the Hamlin Avenue and Amazon Drive intersection will function with acceptable levels of service.
- Under the 2023 Background with Project scenario, the turning volumes at this intersection do not warrant separate left or right turn lanes. Therefore, each leg of the intersection should be constructed with one lane in each direction.

Hamlin Avenue and the Apartment Access

- This intersection will function with acceptable levels of service under the 2023 Background with Project scenario.
- It is recommended this intersection be constructed with one lane in each direction as the traffic volumes do not meet the warrants for separate left and right turn lanes.

Roadway Segment LOS

Under the 2023 Background with Project conditions, Hamlin Avenue, Short Road and Amazon Drive all meet the planning level of service threshold for roadway segments within the study area.

2024 Background Traffic Conditions

Hamlin Avenue and SH 44

- This intersection will continue to function with acceptable levels of service "C" or better under the 2024 Background traffic conditions. This intersection is proposed to continue to function as right-in/right-out. It is recommended SH 44 be widened to two lanes in each direction with a separate westbound right turn lane as planned with ITD.

Short Road and SH 44

- Under the 2024 Background traffic conditions, it is assumed the Amazon Falls Phase 1 development will be built-out. The traffic at this intersection will continue to function with a LOS "F" in the northbound and southbound directions.

- Amazon Falls 2 development is not planned for full build-out until 2025, however, this study does recommend this intersection follow the recommended access management strategies identified in the SH 44 corridor study. It was also recommended this intersection be restricted to a right-in/right-out with left-in.

- As outlined in the Amazon Falls Phase 2 traffic study, this intersection is planned to restrict left turn movements onto SH 44 as a right-in-right-out with left turn in movements. With this modification, the intersection will function with acceptable levels of service and also acceptable v/c ratios. It should be noted, by restricting turning movements at this intersection, it would be assumed vehicles from the Northern Star Development will not use this intersection to exit onto SH 44. With restrictions to left turn movements so vehicles can only exit to the west, most vehicles will just use the existing SH 44 and Hamlin Avenue intersection as it functions with the same controlled movements. With re-distribution of the traffic

from Phase 1, all intersections will function with acceptable levels of service and acceptable v/c ratios.

- It should also be noted if the Palmer Lane and SH 44 is signalized, which is planned, additional gaps in traffic along SH 44 may be present to reduce the average vehicle delay on Short Road which is not measured with the Synchro software.

Short Road and Amazon Drive

- In the 2024 Background scenario, the Short Road and Amazon Drive intersection will function with LOS "A" at each movement and v/c ratio's that are below 1.0.

Hamlin Avenue and Shultz Court

- This intersection will continue to function with minimal traffic under the 2024 Background scenario and the LOS and v/c ratios will be acceptable.

Roadway Segment LOS

Under the 2024 Background conditions, Hamlin Avenue, Short Road and Amazon Drive all meet the planning level of service threshold for roadway segments within the study area.

2024 Background with Project Traffic Conditions

It is planned by 2024, Phase 2 of the Northern Star development will be constructed. This phase will consist of the townhomes and single-family homes located on the north end of the proposed project.

Hamlin Avenue and SH 44

- With the addition of phase 2 of the Northern Star development, the Hamlin Avenue and SH 44 will continue to function with right-in and right-out movements. SH 44 is planned to be widened to two lanes in the eastbound and westbound directions with a separate westbound right turn lane.

- This intersection will continue to function with acceptable LOS "C" or better and acceptable v/c ratios for each movement.

Short Road and SH 44

- Similar operations will continue to occur at the Short Road and SH 44 intersection. It is planned SH 44 will be widened to two lanes in each direction with separate right turn lanes in the eastbound and westbound directions. It is also planned the southbound approach of this intersection will consist of separate right/through and left turn lanes.

- With the addition of the phase 2 traffic from the Northern Star development, and the above-mentioned recommendations in the Background scenarios, this intersection will continue to function with LOS "F" in the southbound and northbound approaches and the southbound approach.

- If the Short Road and SH 44 intersection is modified to RIROLI movements, it is also assumed traffic from the Northern Star development will use Hamlin Avenue to access SH 44 and little to no traffic will use Short Road. With this assumption, all intersections will continue to function with acceptable levels of service and acceptable v/c ratios.

Short Road and Amazon Drive

- This intersection will continue to function with acceptable levels of service "A" and v/c ratios during both the AM and PM peak hours.

- This intersection will continue to function as a two-way stop-controlled intersection with the stop-control along Amazon Drive.

Hamlin Avenue and Shultz Court

- With the addition of Phase 2, this intersection will continue to function with one lane in each direction as turn lanes are not warranted with the projected traffic volumes.

- This intersection will function with acceptable LOS "A" and v/c ratios for all vehicular movements.

Hamlin Avenue and Amazon Drive

- This intersection also continues to function with acceptable LOS "A" and v/c ratios for all vehicular movements under the 2024 Background with Project traffic conditions.

Hamlin Avenue and Apartment Access

- This access to apartments will continue to function with a LOS "A" and v/c ratios for all traffic movements with the addition of phase 2.

Hamlin Avenue and Single-Family Housing Access

- This access will function with acceptable LOS "A" and v/c ratios for all traffic movements with the addition of Phase 2.

- It is recommended this intersection be constructed with one lane in each direction to service the development. Projected traffic volumes do not warrant the need for separate left or right turn lanes.

Roadway Segment LOS

Under the 2024 Background with Project conditions, Hamlin Avenue, Short Road and Amazon Drive all meet the planning level of service threshold for roadway segments within the study area.

2030 Background Traffic Conditions

Under the 2030 Background traffic conditions, it is planned multiple developments surrounding the proposed Northern Star Development will be fully built out and occupied. These developments include Amazon Falls Phase 2 (planned for full build-out by 2025), Fountain Park Subdivision (planned for full build-out by 2025).

Hamlin Avenue and SH 44

- This intersection will continue to function with acceptable LOS "D" or better under the AM and PM peak hours. This intersection is planned to continue to function with a right-in/right-out turning movements.

Short Road and SH 44

- This intersection will continue to function with unacceptable LOS and v/c ratios during the AM and PM peak hours for the northbound and southbound left turn movements. All other traffic movements will continue to function with acceptable LOS.

- If the recommendations from the Amazon Falls Phase 2 traffic study are implemented, this intersection would become a right-in/right-out with left in only movements. With these improvements, this intersection will function with acceptable LOS in all traffic movements. The v/c ratio will also be acceptable for each traffic movement. It should be noted, with future development that may occur to the east, Amazon Drive would extend to Palmer Lane and provide another access/connection of the roadways. It would be assumed with a connection along Amazon Drive to Palmer Lane, a large majority of the traffic making left turn movements at the Short Road and SH 44 intersection would use the Amazon Drive route to travel eastbound. However, since this connection of Amazon Drive will be driven by future developments, these developments are not planned so therefore this connection was not used in this study.

Short Road and Amazon Drive

- The Short Road and Amazon Drive intersection will continue to function with acceptable LOS "A" and v/c ratios during the AM and PM peak hour for each traffic movement.

Hamlin Avenue and Shultz Court

- It is assumed this intersection will continue to service the existing residents in this area under the 2030 Background conditions and will function with minimal delays, a LOS "A" and v/c ratios that all meet minimal requirements.

Roadway Segment LOS

Under the 2030 Background conditions, Hamlin Avenue, Short Road and Amazon Drive all meet the planning level of service threshold for roadway segments within the study area.

2030 Background with Project Traffic Conditions

In 2030, it is planned the final Phase 3 will be constructed and fully built. This phase of the Northern Star Development will consist of roughly 18 acres of commercial/office space. For purposes of this study, 20% of the overall 18 acreage was determined to be occupied by the building and the land use for Office Space was used to calculate the project generated traffic for this phase.

Hamlin Avenue and SH 44

- The Hamlin Avenue and SH 44 intersection is planned to continue to function with right-in/right-out traffic movements.
- Under the AM peak hour this intersection is planned to continue to function with acceptable LOS "C" or better for each traffic movements and an acceptable v/c ratio.
- Under the PM peak hour, this intersection may function with a LOS "F", however the v/c ratio of 0.93 is acceptable per county guidelines but fall below the ITD guidelines of 0.90. However, since this intersection will not be signalized, and already functions with a right-in and right-out movements, no other improvements can be made.

Short Road and SH 44

- Similar to previous study years, this intersection will continue to function with unacceptable levels of service and v/c ratio for the northbound and southbound left turn movements. If this intersection is modified to RIROLI movements, the intersection will function with acceptable LOS and v/c ratios in the AM peak hour, however will fall below the threshold in the PM peak hour.

- If this intersection cannot be signalized, the connection of Amazon Drive to Palmer Lane will help provide an additional route for traffic to exit the development and travel eastbound along SH 44.

Short Road and Amazon Drive

- This intersection will continue to function with acceptable LOS "A" and v/c ratios under both the AM and PM peak hours. It is recommended this intersection be designed and constructed to meet city standards. It is also recommended adequate sight distance be accounted for in the design at this intersection with no obstructions within the required line of sight.

Hamlin Avenue and Amazon Drive

- With the addition of the Northern Star Phase 3, the west leg of this intersection will be added to this intersection. This intersection is recommended to be constructed with one lane in each direction as turn lane warrants are not met with the projected traffic volumes. This intersection will also continue to function with acceptable LOS "A" and v/c ratios for each traffic movements under the AM and PM peak hours.

Hamlin Avenue and Shultz Court

- Each turning movement at the Hamlin Avenue and Shultz Court intersection will continue to function with acceptable LOS "B" or better under the 2030

Background with Project traffic conditions and continue with acceptable v/c ratios.

Hamlin Avenue and Apartment Access

- Each traffic movement at this intersection will also continue to function with acceptable LOS and v/c ratio.

Hamlin Avenue and Single-Family Housing Access

- This intersection will also continue to function with acceptable LOS "A" and acceptable v/c ratio for each traffic movements.

Roadway Segment LOS

Under the 2030 Background with Project conditions, Hamlin Avenue, Short Road and Amazon Drive all meet the planning level of service threshold for roadway segments within the study area.

2.0 Introduction

2.1 DEVELOPMENT DESCRIPTION

The proposed Northern Star Development is situated on roughly 63 acres of vacant land within the City of Star. Refer to the Vicinity Map and Site Plan in Figures 1 and 2, respectively. The proposed site will consist of:

- 55 single-family dwelling units
- 110 townhome units
- 310 apartment units
- 18 acres of commercial

Full build-out of this development is anticipated for 2030. Phase 1 will consist of the apartments units and is planned to be constructed by 2023. The second phase will consist of the single-family and townhome units and is planned to be constructed by 2024. The third phase will finish with the commercial/office parcel by 2030.

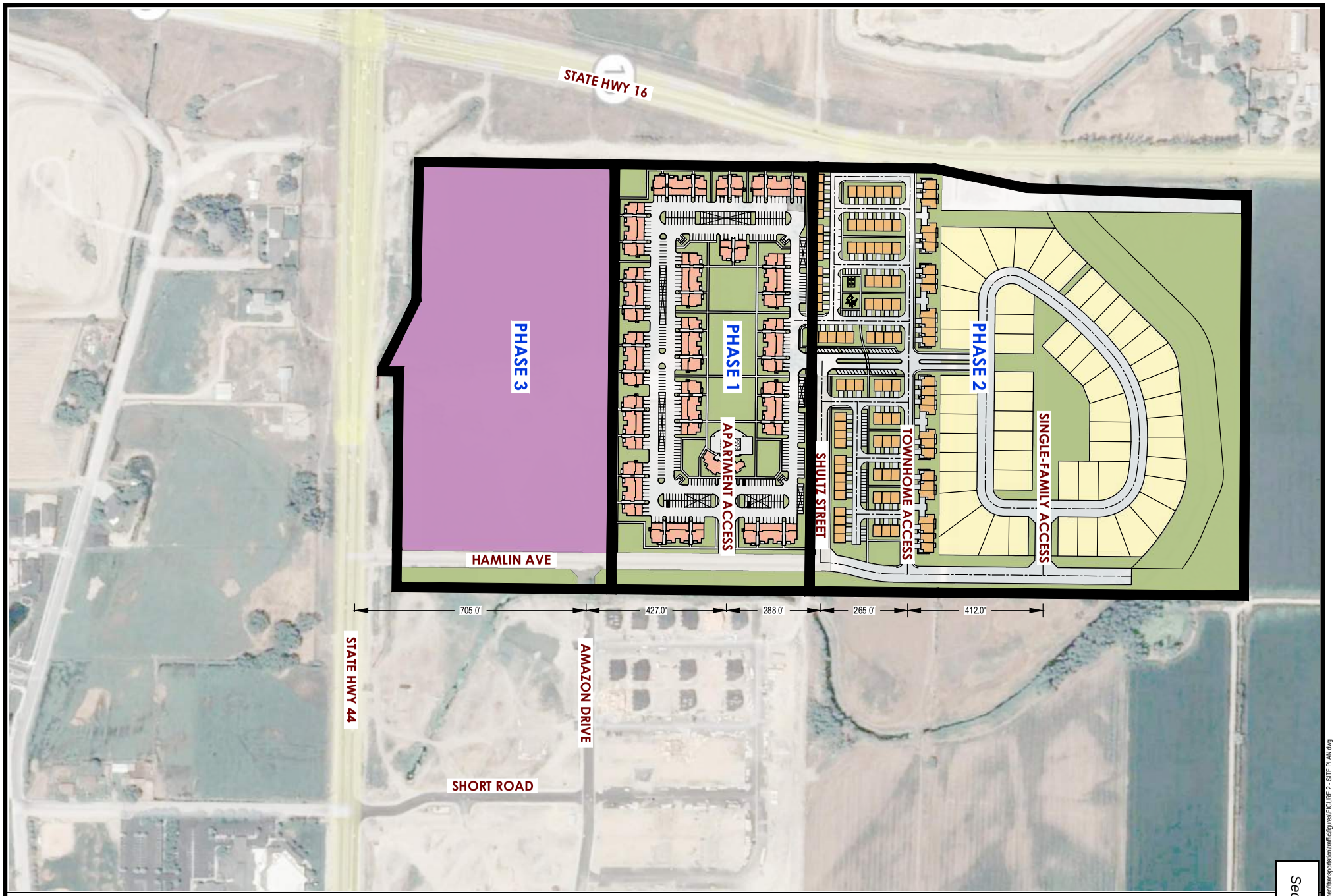
The proposed development is surrounded by SH 16 to the west, SH 44 to the south and Hamlin Avenue to the east. To the north is farmland.

Northern Star is anticipated to generate 4,529 average daily trips with 379 AM peak hour trips and 417 PM peak hour trips.

NORTHERN STAR DEVELOPMENT

FIGURE 1 - VICINITY MAP

FOCUS
ERING AND SURVEYING, LLC
9 S. HIGH TECH DRIVE SUITE 200
ALE, UTAH 84047 PH: (801) 352-0075
www.focusutah.com



NORTHERN STAR DEVELOPMENT

FIGURE 2 - SITE PLAN

FOCUS©
ENGINEERING AND SURVEYING, LLC
1149 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focusutah.com

3.0 Existing Conditions

3.1 ROADWAYS

State Highway 44 is a major roadway through this study area and extends east and west through Star's city limits. SH 44 currently consists of one lane in each direction with a center two-way left turn lane. SH 44 is planned to be widened and will consist of two lanes in each direction with the center two-way left turn lane by the end of 2023. Future improvements of SH 44 and SH 16 will consist of a full freeway interchange. The posted speed limit is 55 mph.

Short Road is a two-lane roadway that connects SH 44 and Moon Valley Road. Recently Short Road was constructed to the north of SH 44 to provide access to the Amazon Falls Phase 1 development. Phase 2 of Amazon Fallis is also planned and will access off Short Road. Short Road consists of one lane in each direction with separate left and right turn lanes at the intersection with SH 44. The posted speed limit along Short Road is 25 mph.

Hamlin Avenue is a two-lane roadway that runs between SH 44 and Shultz Court. Hamlin Ave primarily serves the existing homes on the proposed property. Hamlin will be improved to add a two-way left turn lane to provide safe turning movements onto the cross streets. The Hamlin Avenue and SH 44 intersection was recently improved to only allow right turn movements on and off Hamlin Avenue. The posted speed limit is 25 mph.

Amazon Drive is planned as a Collector roadway that currently runs within the Amazon Falls development. Amazon Drive consists of one lane in each direction. Currently Amazon Drive terminates prior to Hamlin Avenue and just east of Short Road. With the addition of the Northern Star Development, Amazon Drive will connect to Hamlin Avenue. As future developments occur in this area, Amazon Drive will extend east, eventually tying into Palmer Lane. However, the timeframe for this connection is unknown and will be based on future development in this area and therefore was not anticipated for the analysis and traffic distribution in this study.

3.2 EXISTING TRAFFIC VOLUMES

Coordinating with Ada County and ITD at the beginning of this traffic study, it was determined the following intersections would be analyzed within the study area:

- Hamlin Avenue/SH-44 (existing)
- Short Road/SH-44 (existing)
- Amazon Drive/Short Road (existing)

Existing traffic counts were collected on January 20, 2022 at the study area intersection. Existing AM and PM peak hour traffic volumes were collected between the peak hours of 7 AM to 9 AM and 4 PM to 6 PM. From the existing counts that were collected, it was determined the peak hours at the study area intersections are from 7:15 AM to 8:15 AM and from 4:45 PM to 5:45 PM. These volumes are illustrated in Figure 3.

3.3 ROADWAY SEGMENT PLANNING LEVEL OF SERVICE

Roadway segments within the study area consisting of Hamlin Avenue, Amazon Drive and Short Lane were analyzed using the guidelines outlined with ACHD for planning level of service. Using the existing lane configuration, traffic volumes and projected ADT volumes from the Amazon 1 traffic study, the following table illustrates that each roadway segment meets the level of service planning threshold.

Table 1 – Roadway Segment LOS – 2022 Existing Traffic

Roadway	Segment	ADT	Functional Classification (No. of Lanes)	Left-Turn Lane Type	ACHD Planning Threshold (vph)	Peak Hour Directional Volumes (vph)*		Meets LOS Planning Threshold?
						AM Peak	PM Peak	
Hamlin Avenue	Shultz Ct. to SH 44	28	Local Road (2)	None	N/A	6(SB)	4(SB)	Yes ADT < 1,000
Amazon Drive	Hamlin Ave to Short Ln	774	Collector (2)	None	425	8(WB)	5(WB)	Yes
Short Road	Amazon Dr to SH 44	1347	Collector (2)	None	425	13(NB)	8(NB)	Yes

* = Direction of higher volume shown in ()

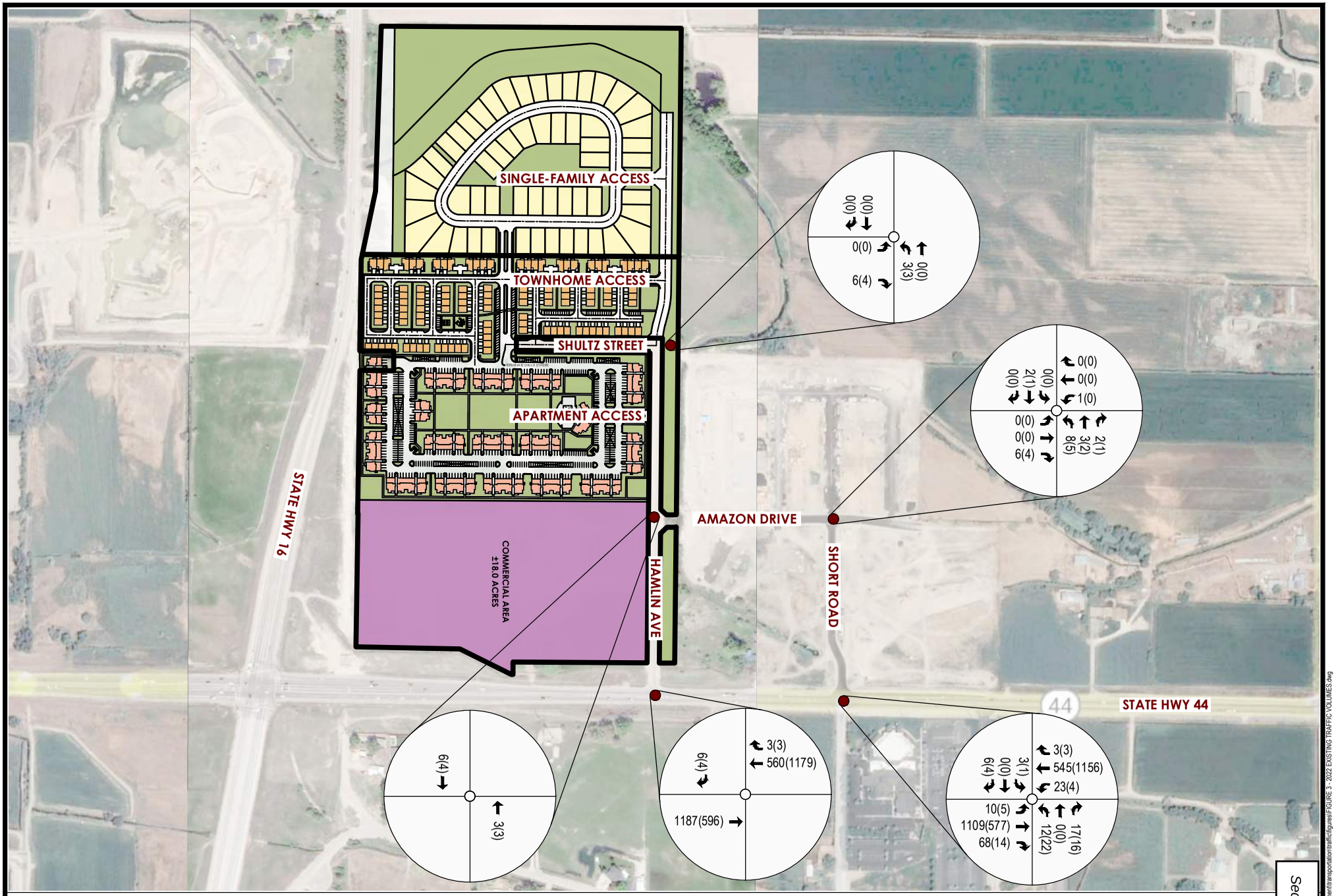


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FIGURE 3 - 2022 EXISTING TRAFFIC VOLUMES

XX(XX) = AM(PM) PEAK HOUR TRAFFIC VOLUMES

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Z:_2021\21-0488 CIG Star Idaho Development\transportation\traffic\figures\FIGURE 3 - 2022 EXISTING TRAFFIC VOLUMES.dwg

4.0 Background Year Traffic Volumes

In coordinating with Ada County, COMPASS and ITD, it was determined the Background Year and build-out of the Northern Star development phases would be 2023, 2024, and 2030. Population projections along SH 44 were provided by COMPASS and were used to project the future traffic volumes within this study. A projected growth in traffic of 9.9% along SH 44 is planned until 2025. After 2025 the growth rate is anticipated to adjust to 4.9%. These growth rates were applied to the existing traffic volumes to establish the 2023, 2024 and 2030 Background traffic scenarios.

It should also be noted, surrounding developments are planned in this area. To the east are the Amazon Falls Phase 1 and 2 developments. Phase 1 is currently under construction and is planned for full build-out by this year, 2022. Therefore, the projected traffic volumes from the Amazon Falls Phase 1 traffic impact study were incorporated into the 2023 Background traffic volumes and are illustrated in Figure 4.

The 2024 Background Year traffic volumes are illustrated in Figure 5 and represent growth in traffic along SH 44, however very minor growth, if any, will occur along Short Road and Hamlin Avenue due to no new development occurring by the year 2024.

The 2030 Background traffic volumes are illustrated in Figure 6, and include the projected traffic volumes from the Amazon Falls Phase 2 development and also the Fountain Park development. Both these proposed developments are planned to be constructed and full build-out by 2025 and were therefore included in the 2030 Background traffic conditions.

All these volumes are the anticipated traffic volumes on the existing roadway network whether the proposed Northern Star development is constructed or not.

4.1 ROADWAY SEGMENT PLANNING LEVEL OF SERVICE

Using the 2023 Background, 2024 Background and 2030 Background traffic volumes, the roadway segments within the study area were analyzed for level of service following the

guidelines outline by ACHD. The following tables outline the levels of service and if the roadways meet the thresholds. As can be seen, under the background scenarios, all roadways will meet the planning level thresholds for roadway classifications.

Table 2 – Roadway Segment LOS – 2023 Background Traffic

Roadway	Segment	ADT	Functional Classification (No. of Lanes)	Left-Turn Lane Type	ACHD Planning Threshold (vph)	Peak Hour Directional Volumes (vph)*		Meets LOS Planning Threshold?
						AM Peak	PM Peak	
Hamlin Avenue	Shultz Ct. to SH 44	28	Local Road (2)	None	N/A	7(SB)	4(SB)	Yes ADT < 1,000
Amazon Drive	Hamlin Ave to Short Ln	774	Collector (2)	None	425	33(EB)	33(WB)	Yes
Short Lane	Amazon Dr to SH 44	1347	Collector (2)	None	425	67(SB)	67(NB)	Yes

* = Direction of higher volume shown in ()

The Average Daily Traffic (ADT) volumes were taken from the Amazon Falls 1 traffic impact study, which by 2023 will be the only development fully built out in this study area and is represented by the traffic volumes in Figure 4.

Table 3 – Roadway Segment LOS – 2024 Background Traffic

Roadway	Segment	ADT	Functional Classification (No. of Lanes)	Left-Turn Lane Type	ACHD Planning Threshold (vph)	Peak Hour Directional Volumes (vph)*		Meets LOS Planning Threshold?
						AM Peak	PM Peak	
Hamlin Avenue	Shultz Ct. to SH 44	28	Local Road (2)	None	N/A	7(SB)	5(SB)	Yes ADT < 1,000
Amazon Drive	Hamlin Ave to Short Ln	774	Collector (2)	None	425	33(EB)	33(WB)	Yes
Short Lane	Amazon Dr to SH 44	1347	Collector (2)	None	425	67(SB)	67(NB)	Yes

* = Direction of higher volume shown in ()

As outlined in the Amazon Falls 1 and Amazon Falls 2 traffic impact studies, by 2024, the Amazon Falls 1 development will be fully built out. Therefore, the ADT represented in Table 3 illustrates the traffic from that development, similar to the traffic volumes in Figure 5.

Table 4 – Roadway Segment LOS – 2030 Background Traffic

Roadway	Segment	ADT	Functional Classification (No. of Lanes)	Left-Turn Lane Type	ACHD Planning Threshold (vph)	Peak Hour Directional Volumes (vph)*		Meets LOS Planning Threshold?
						AM Peak	PM Peak	
Hamlin Avenue	Shultz Ct. to SH 44	311	Local Road (2)	None	N/A	42(SB)	27(SB)	Yes ADT < 1,000
Amazon Drive	Hamlin Ave to Short Ln	774	Collector (2)	None	425	39(EB)	33(WB)	Yes
Short Lane	Amazon Dr to SH 44	7467	Collector (2)	None	425	189(SB)	297(NB)	Yes

* = Direction of higher volume shown in ()

As outlined in the Amazon Falls 2 and the Fountain Park traffic impact studies, by 2030, this development will be built out and generate the traffic within this study area. Therefore, the ADT represented in Table 4 illustrates the traffic from these development along these roadways, similar to the traffic volumes in Figure 6.

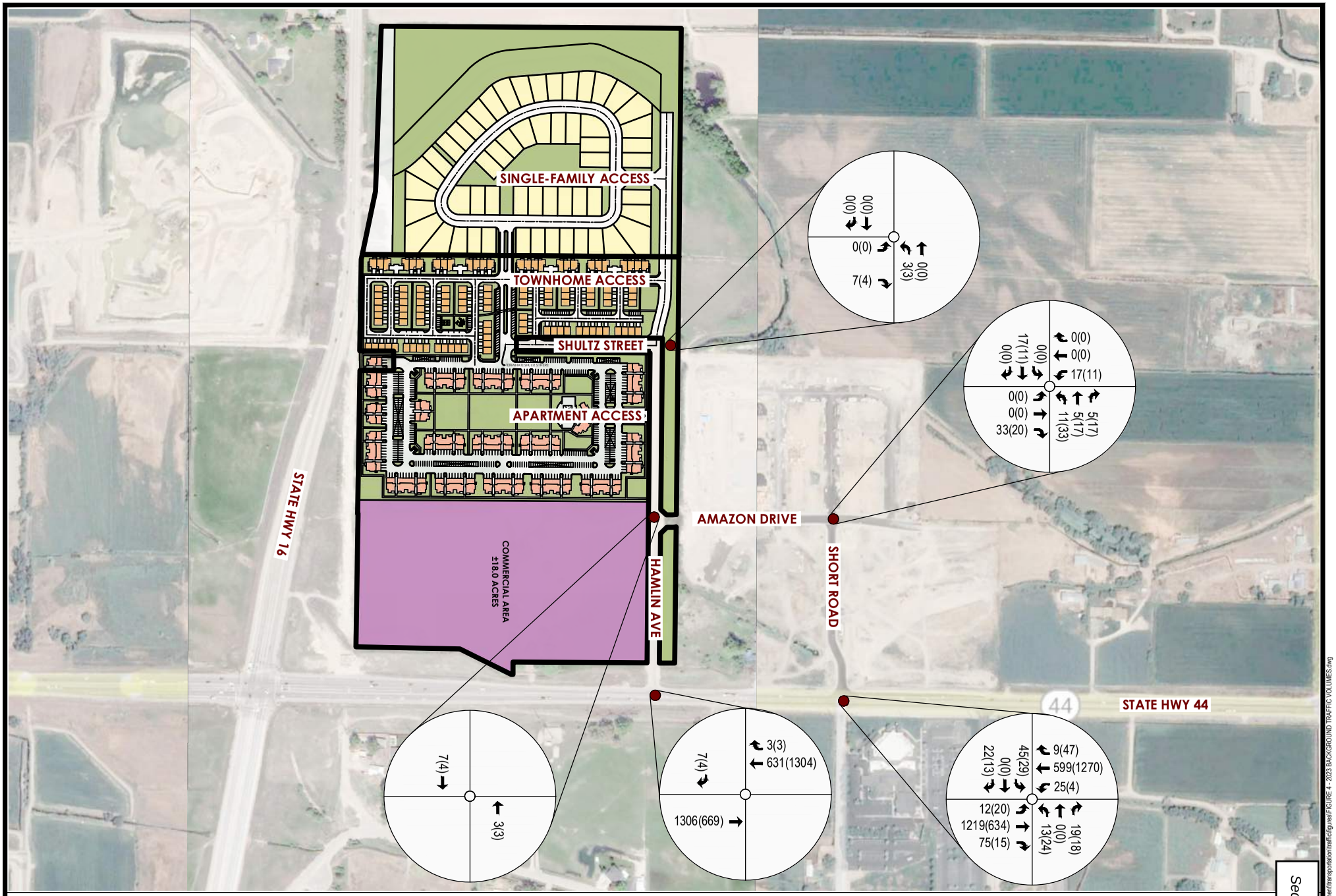

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FIGURE 4 - 2023 BACKGROUND TRAFFIC VOLUMES

XX(XX) = AM(PM) PEAK HOUR TRAFFIC VOLUMES

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Z:_2021\21-0488 CIG Star Idaho Development\transportation\traffic\figures\FIGURE 4 - 2023 BACKGROUND TRAFFIC VOLUMES.dwg

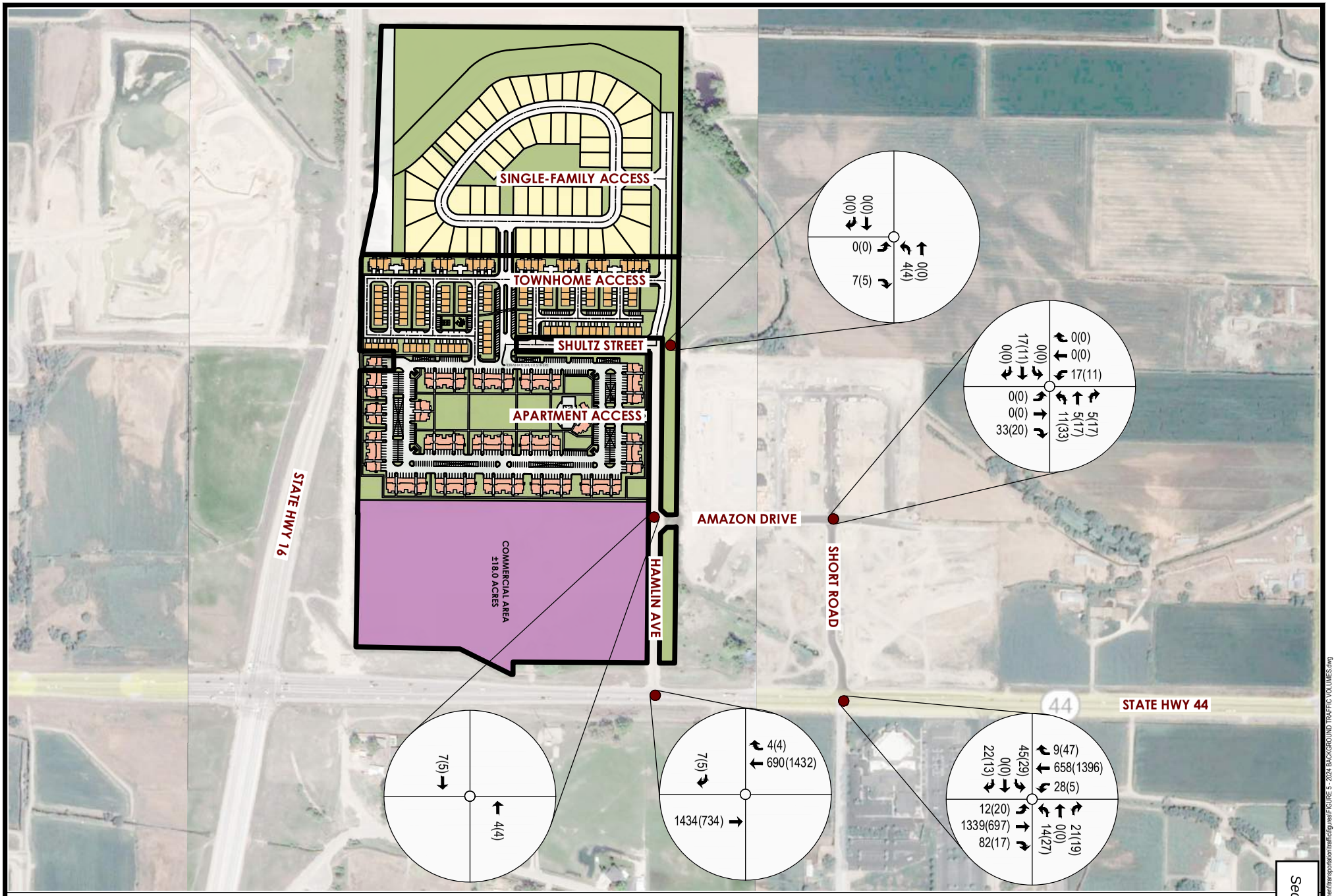

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FIGURE 5 - 2024 BACKGROUND TRAFFIC VOLUMES

XX(XX) = AM(PM) PEAK HOUR TRAFFIC VOLUMES

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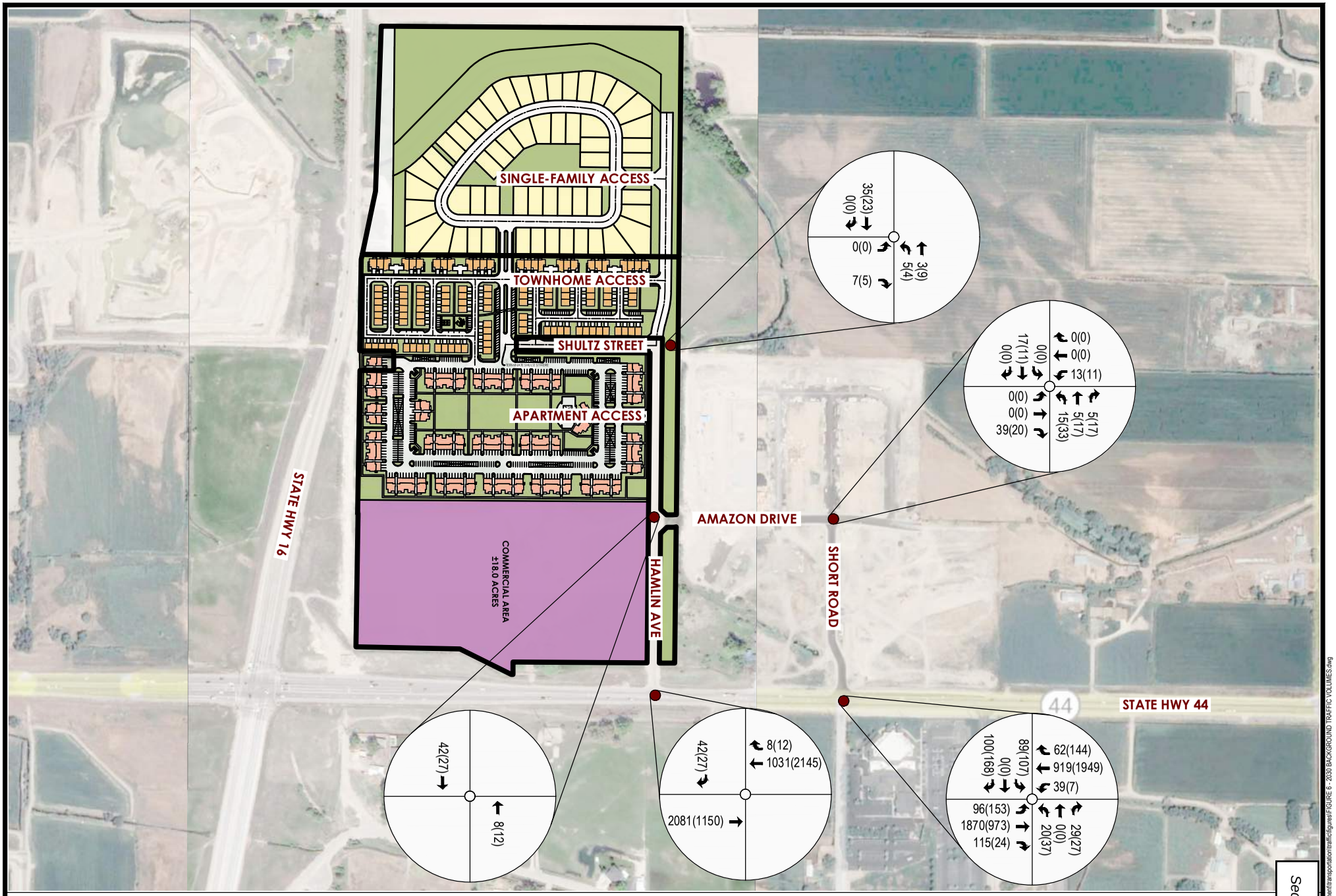

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FIGURE 6 - 2030 BACKGROUND TRAFFIC VOLUMES

XX(XX) = AM(PM) PEAK HOUR TRAFFIC VOLUMES

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5.0 Trip Generation and Trip Distribution

5.1 TRIP GENERATION

For purposes of this study, the trip generation was performed for each phase of the development. It is planned the first phase will consist of the 310 apartment units in 2023. In 2024, the second phase will be constructed that will consist of the 110 townhomes and the 55 single-family homes. The third phase will be constructed by 2030 and will consist of the 18 acres of the commercial/office space. The third phase is still undetermined with the specific land use, but is planned for office buildings. To generate the anticipated number of vehicles entering and exiting the proposed site during a typical weekday a.m. and p.m. peak hour, the *Institute of Transportation Engineer's (ITE) Trip Generation Manual* is used. For single-family residential lots, the land use codes 210 – Single-Family Detached Housing, 220 – Multifamily Housing (Low-Rise), and 221 – Multifamily Housing (Mid-Rise) were used to generate the number of trips entering and exiting the development. The Mid-Rise land use was used for the apartments as they are planned for three story apartment buildings. Since the specific land use for the 18 acres of commercial is unknown at this time, land use code 710 for General Office Building was used. It was assumed 20% of the overall acreage would be used as the actual building size. Using these assumptions, roughly 156,000 square foot office building was used to calculate the trip generation.

Trips generated by the proposed development, which will occur during the peak hours of the proposed development, were used for the analysis. For purposes of this study, the Peak Hour of Adjacent Street Traffic rates are used to generate the AM and PM Peak Hour Volumes. The trips generated from the proposed development are presented in Table 1.

Table 5 - Trip Generation – Average Weekday Driveway Volumes

ITE Land Use Code	Land Use Description	Size	Daily (AADT)	Trip Generation (AM)		Trip Generation (PM)	
				Enter	Exit	Enter	Exit
210	Single-Family	55 DU	519	10	31	34	20
220	Low-Rise	110 DU	805	12	39	39	23
221	Mid-Rise	310 DU	1686	29	83	83	53
710	Gen Office	156 TGFA	1519	156	25	29	150

As can be seen in Table 1, the Northern Star Development will generate approximately 4,529 daily trips, with 385 trips occurring in the AM peak hour (207 entering, 178 exiting) and 431 trips occurring in the PM peak hour (185 entering, 246 exiting). It is assumed with the combination of residential and office within the development, there is potential for internal capture trips. With the internal capture trips, this development will generate 379 total AM peak hour trips (204 entering, 175 exiting) and 417 PM peak hour trips (178 entering, 239 exiting).

5.2 SITE TRAFFIC DISTRIBUTION & GENERATION

The project trip distribution onto the existing and proposed roadways at each project site access is based on the area of impact model runs by COMPASS, review of the roadway system by ACHD and ITD, as well as knowledge of travel patterns in this study area. Based on the land use types for this development, the distribution will vary between residential and office space. In order to illustrate this, Figure 7 illustrates the trip distribution for the residential portions of this development. Figure 8 illustrates the proposed distribution percentages for the commercial/office land use. Using these distribution percentages combined with the trip generation volumes from Table 1, the project generated traffic volumes for the apartments are illustrated in Figure 9. Figure 10 illustrates the traffic volumes generated by the apartments combined with the townhomes and single-family units. Figure 11 illustrates the project generated traffic volumes for the full build-out of all phases of the Northern Star development and their distribution onto the surrounding roadways within the study area.

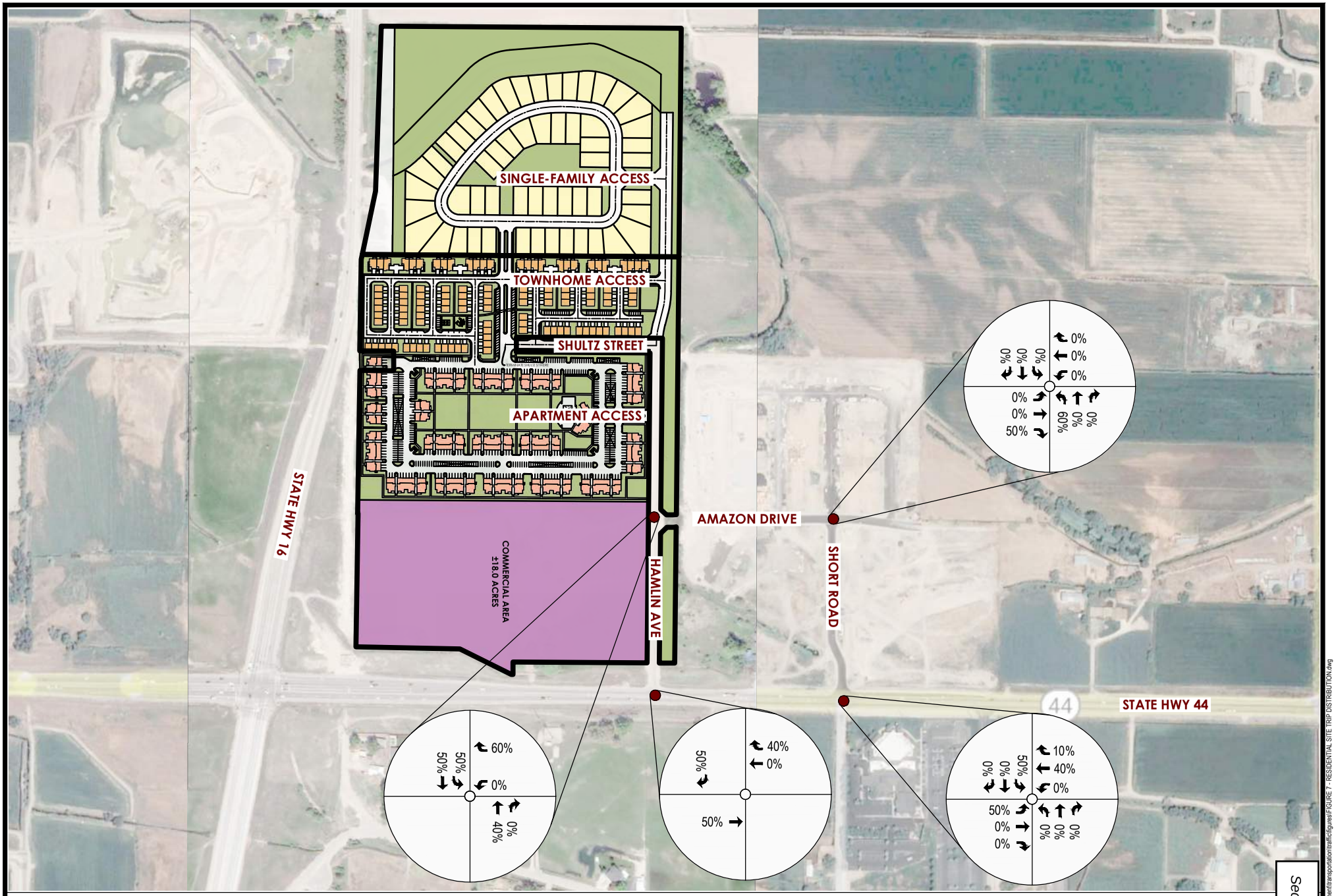

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FIGURE 7 - RESIDENTIAL TRIP DISTRIBUTION PERCENTAGES

XX% = DISTRIBUTION PERCENTAGES

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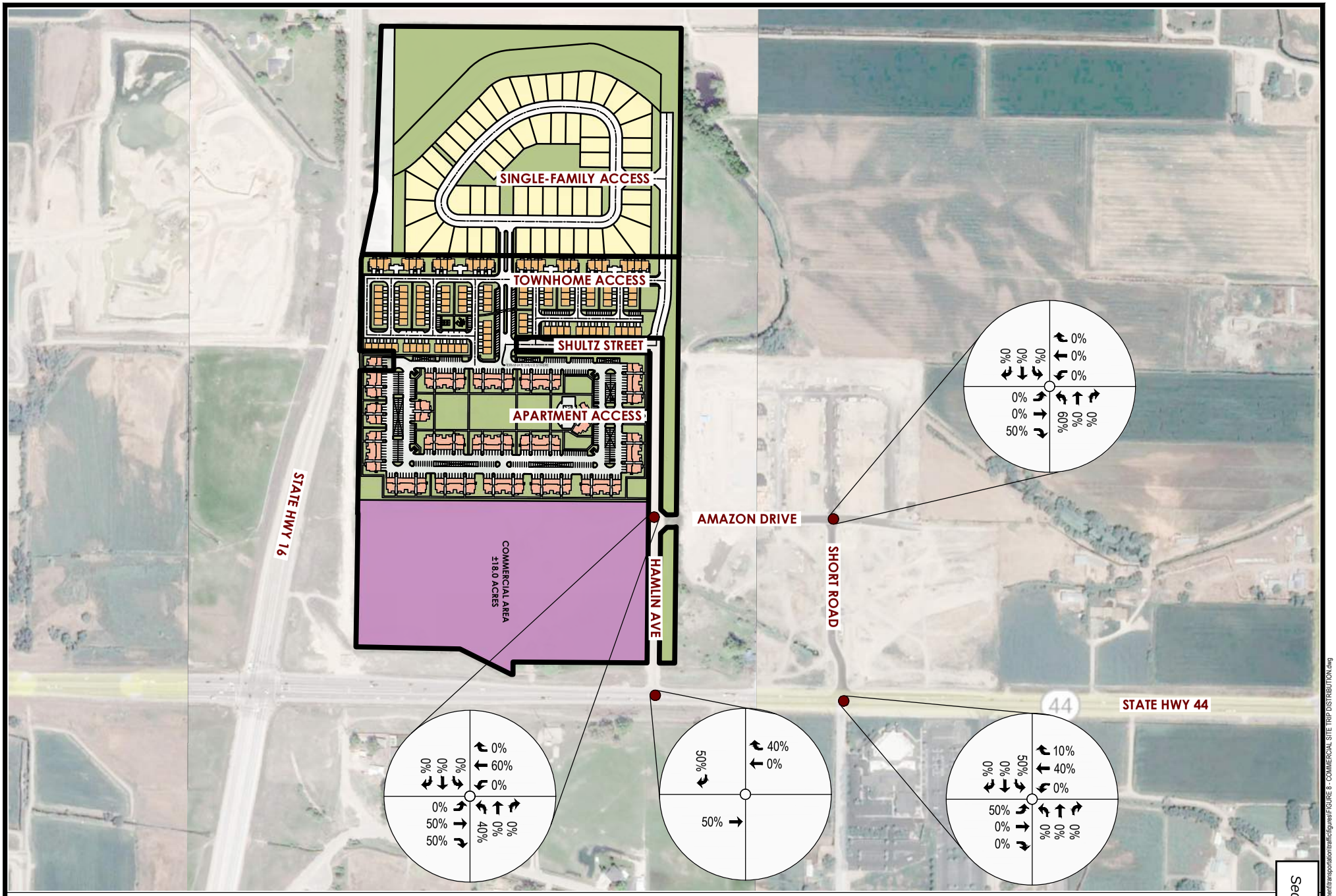

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FIGURE 8 - COMMERCIAL/OFFICE TRIP DISTRIBUTION PERCENTAGES

XX% = DISTRIBUTION PERCENTAGES

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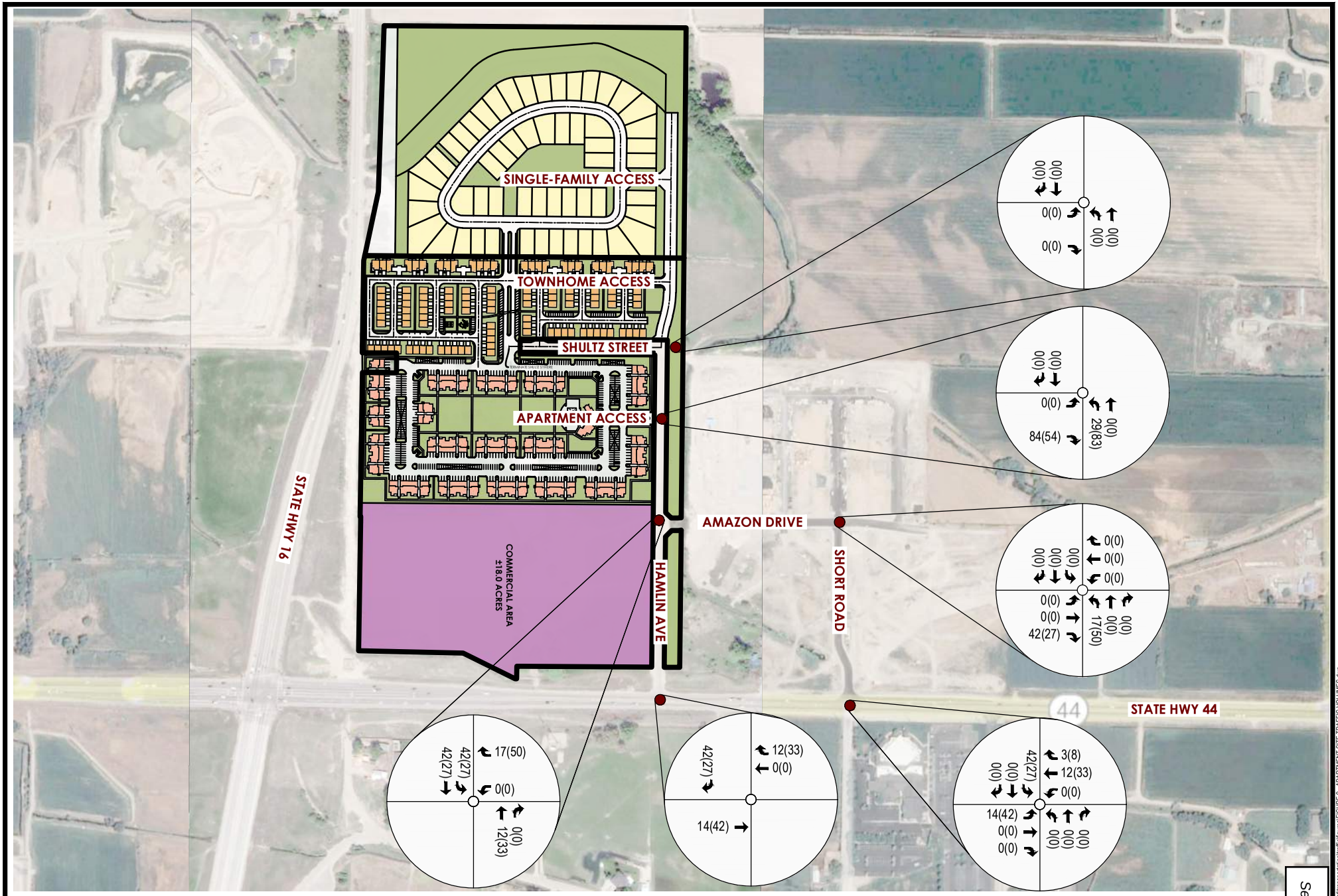

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FIGURE 9 - 2023 PROJECT GENERATED TRAFFIC VOLUMES

XX(XX) = AM(PM) PEAK HOUR TRAFFIC VOLUMES

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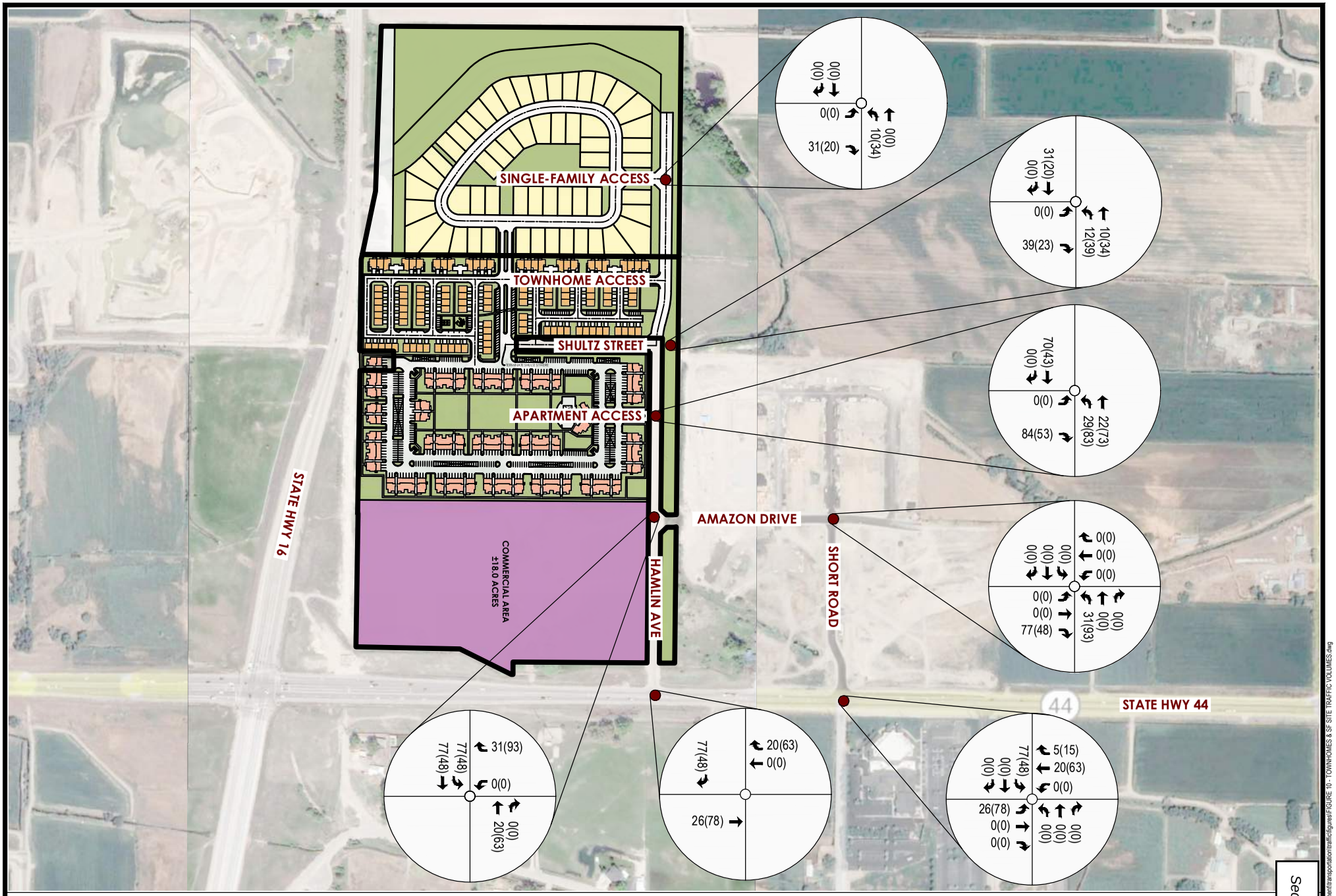

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FIGURE 10 - 2024 PROJECT GENERATED TRAFFIC VOLUMES

XX(XX) = AM(PM) PEAK HOUR TRAFFIC VOLUMES

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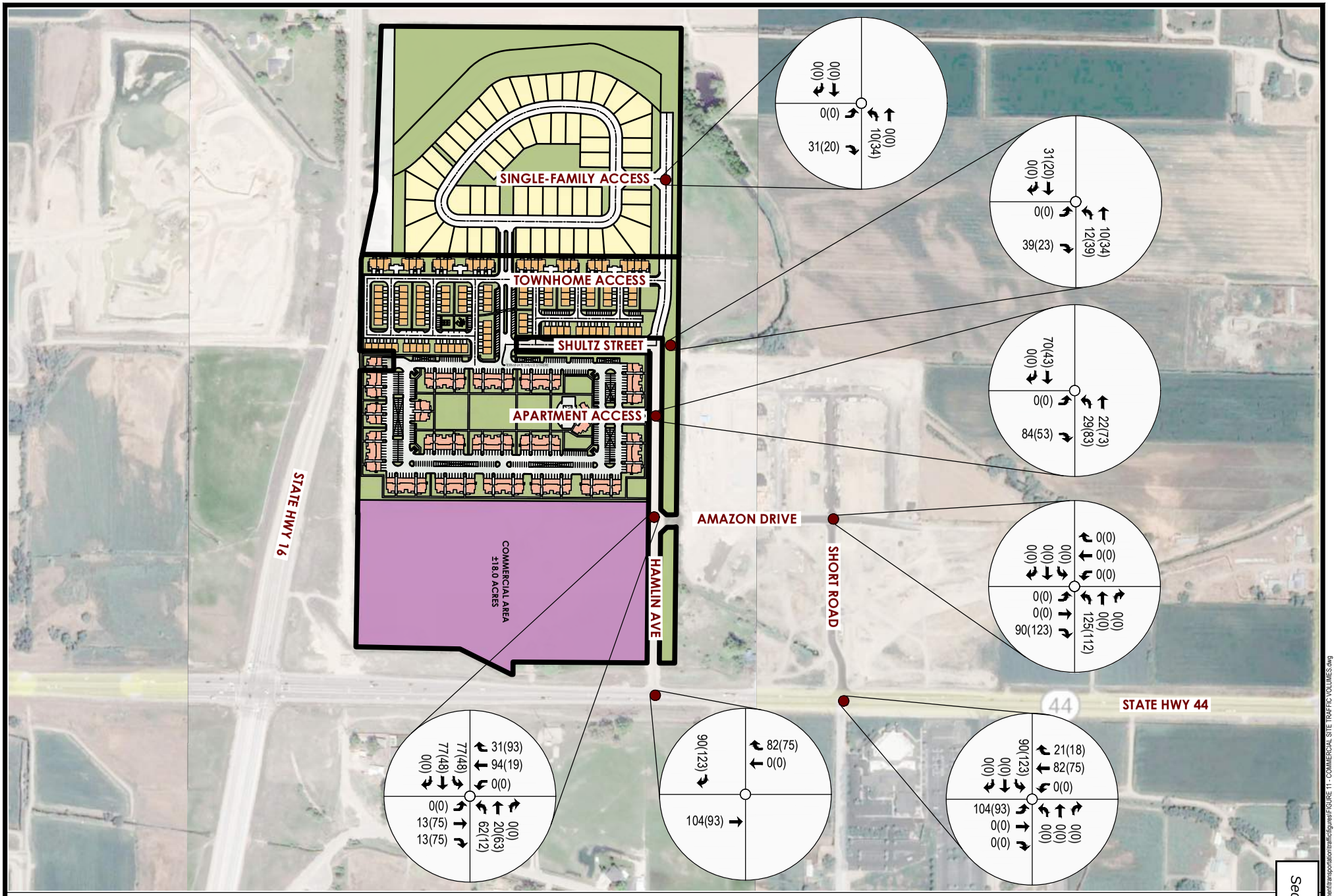

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FIGURE 11 - 2030 PROJECT GENERATED TRAFFIC VOLUMES

XX(XX) = AM(PM) PEAK HOUR TRAFFIC VOLUMES

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Z:_2021\21-0488 CIG Star Idaho Development\transportation\traffic\figures\FIGURE 11 - COMMERCIAL SITE TRAFFIC VOLUMES.dwg

6.0 Background Year with Project Traffic Conditions

The Background Year with Project traffic volumes represent the traffic that will be added to the study area with the addition of the proposed Northern Star development. Using the 2023 Background Year traffic volumes (Figure 4) and the site generated traffic volumes (Figure 9), the 2023 Background Year with Project traffic volumes are generated. Per the developer's schedule, it is anticipated Phase 1 will be built out in 2023. The 2023 Background Year with Project traffic volumes, which illustrate the full build-out of Phase 1, are illustrated in Figure 12. Combining the 2024 Background Year traffic volumes (Figure 5) and the site generated traffic volumes (Figure 9), Figure 13 represents the 2024 Background Year with Project traffic volumes. The 2030 Background Year with Project traffic volumes, which combine the 2030 Background Year traffic volumes (Figure 6) with the full build-out project generated traffic volumes (Figure 11), are illustrated in Figure 14.

6.1 ROADWAY SEGMENT PLANNING LEVEL OF SERVICE

With the addition of the Northern Star development, the roadway segments within the study area were analyzed for roadway classification. Using the traffic volumes in the 2023 Background with Project, 2024 Background with Project and 2030 Background with Project scenarios, the roadway segments within the study area were analyzed for level of service following the guidelines outlined by ACHD. The following tables outline the roadway segment planning levels of service and if the roadways meet the thresholds. With the addition of the Northern Star development, it is planned Hamlin Avenue will become a Collector Roadway with two lanes and no left turn lanes. As can be seen, under the background scenarios, all roadways will meet the planning level thresholds for roadway classifications.

I this table the Average Daily Traffic volumes are also illustrated. These ADT volumes are generated from taking the trip generation ADT volumes for the different phases of this development and combining them with the ADT volumes from the Background conditions found in Section 4 of this report.

Table 6 – Roadway Segment LOS – 2023 Background w/ Project Traffic

Roadway	Segment	ADT	Functional Classification (No. of Lanes)	Left-Turn Lane Type	ACHD Planning Threshold (vph)	Peak Hour Directional Volumes (vph)*		Meets LOS Planning Threshold?
						AM Peak	PM Peak	
Hamlin Avenue	Shultz Ct. to SH 44	788	Collector (2)	None	425	49(SB)	36(NB)	Yes
Amazon Drive	Hamlin Ave to Short Ln	1702	Collector (2)	None	425	75(EB)	83(WB)	Yes
Short Lane	Amazon Dr to SH 44	2275	Collector (2)	None	425	109(SB)	117(NB)	Yes

* = Direction of higher volume shown in ()

Table 7 – Roadway Segment LOS – 2024 Background w/ Project Traffic

Roadway	Segment	ADT	Functional Classification (No. of Lanes)	Left-Turn Lane Type	ACHD Planning Threshold (vph)	Peak Hour Directional Volumes (vph)*		Meets LOS Planning Threshold?
						AM Peak	PM Peak	
Hamlin Avenue	Shultz Ct. to SH 44	1384	Collector (2)	None	425	77(SB)	63(NB)	Yes
Amazon Drive	Hamlin Ave to Short Ln	2430	Collector (2)	None	425	110(EB)	126(WB)	Yes
Short Lane	Amazon Dr to SH 44	3003	Collector (2)	None	425	144(SB)	160(NB)	Yes

* = Direction of higher volume shown in ()

Table 8 – Roadway Segment LOS – 2030 Background w/ Project Traffic

Roadway	Segment	ADT	Functional Classification (No. of Lanes)	Left-Turn Lane Type	ACHD Planning Threshold (vph)	Peak Hour Directional Volumes (vph)*		Meets LOS Planning Threshold?
						AM Peak	PM Peak	
Hamlin Avenue	Shultz Ct. to SH 44	2351	Collector (2)	None	425	125(SB)	146(SB)	Yes
Amazon Drive	Hamlin Ave to Short Ln	3266	Collector (2)	None	425	140(WB)	145(WB)	Yes
Short Lane	Amazon Dr to SH 44	9959	Collector (2)	None	425	283(NB)	408(NB)	Yes

* = Direction of higher volume shown in ()

6.2 SITE TRAFFIC CONTRIBUTION PERCENTAGE

The following tables illustrate the site traffic contribution as a percentage of the 2023 Background with Project total traffic, 2024 Background with Project total traffic, and the 2030 Background with Project total traffic volumes entering the intersection.

Table 9 – Site Traffic Percentage of 2023 Total Traffic

Intersection		% Site Traffic of 2023 Total Traffic		
		AM Peak	PM Peak	Average
1	Hamlin Ave & SH 44	3.4%	4.9%	4.2%
2	Short Rd & SH 44	3.4%	5.0%	4.2%

Table 10 – Site Traffic Percentage of 2024 Total Traffic

Intersection		% Site Traffic of 2024 Total Traffic		
		AM Peak	PM Peak	Average
1	Hamlin Ave & SH 44	5.5%	8.0%	6.8%
2	Short Rd & SH 44	5.4%	8.3%	6.9%

Table 11 – Site Traffic Percentage of 2030 Total Traffic

Intersection		% Site Traffic of 2030 Total Traffic		
		AM Peak	PM Peak	Average
1	Hamlin Ave & SH 44	8.0%	8.0%	8.0%
2	Short Rd & SH 44	8.2%	7.9%	8.1%

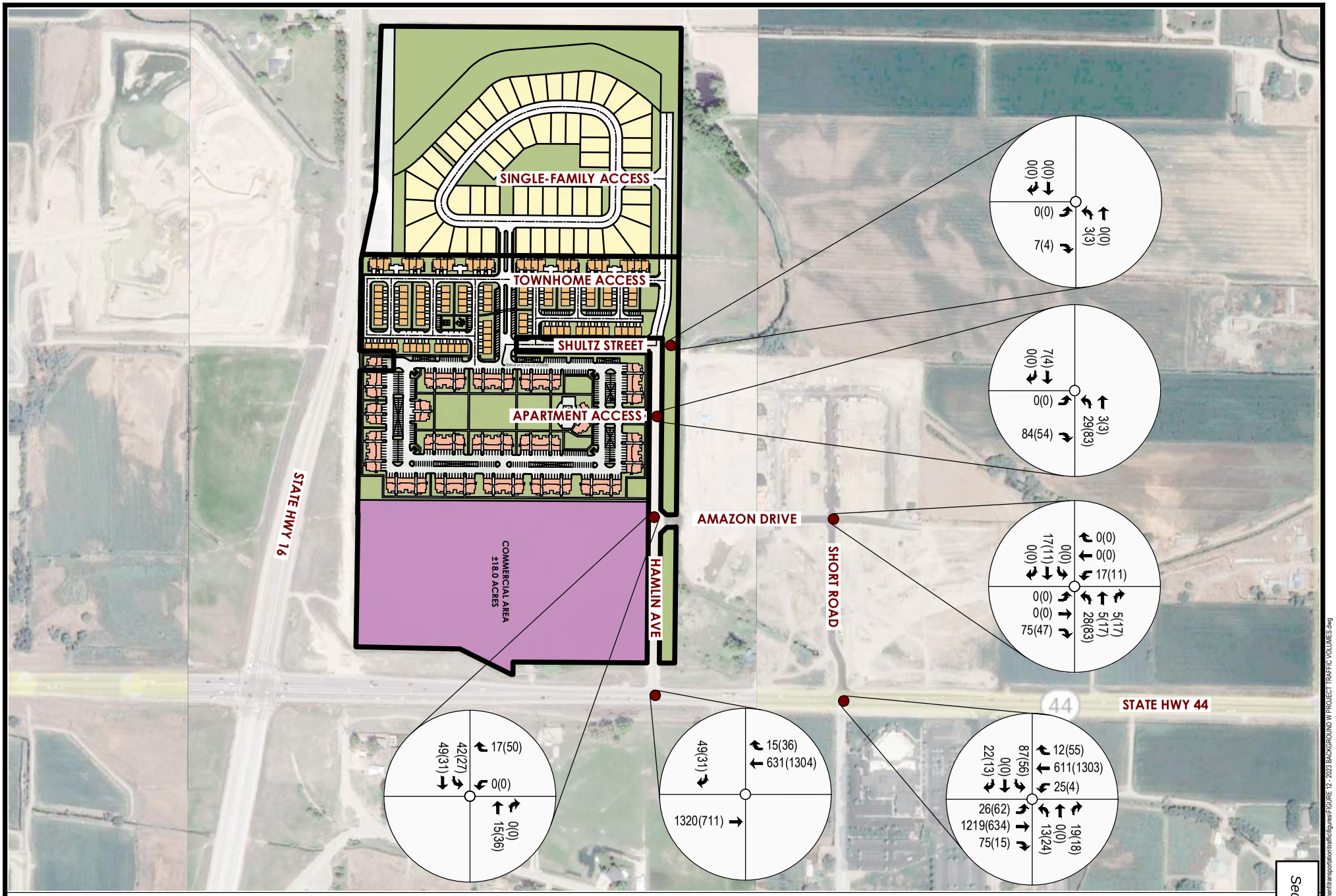

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FIGURE 12 - 2023 BACKGROUND W/ PROJECT TRAFFIC VOLUMES

XX(XX) = AM(PM) PEAK HOUR TRAFFIC VOLUMES

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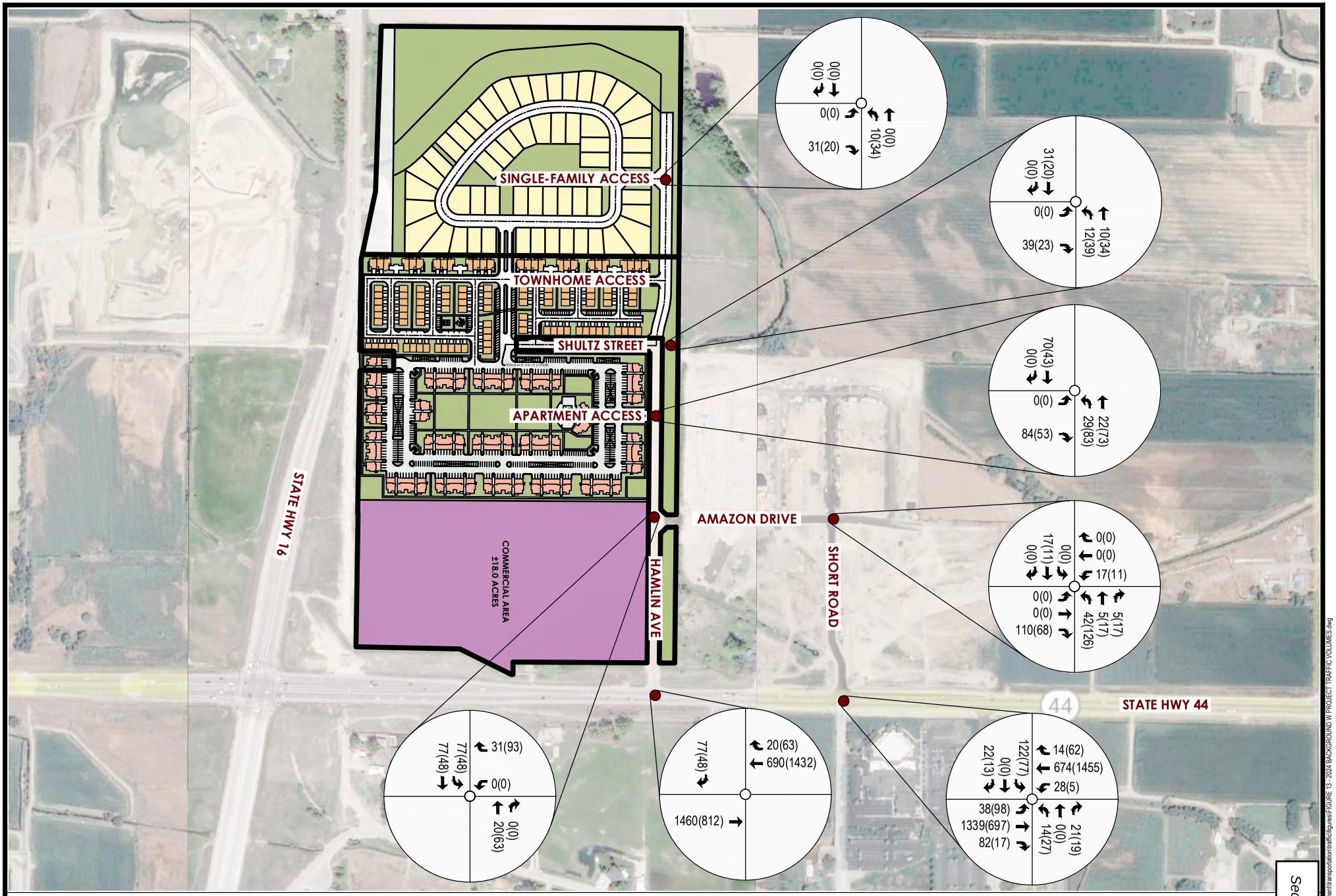

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FIGURE 13 - 2024 BACKGROUND W/ PROJECT TRAFFIC VOLUMES

XX(XX) = AM(PM) PEAK HOUR TRAFFIC VOLUMES

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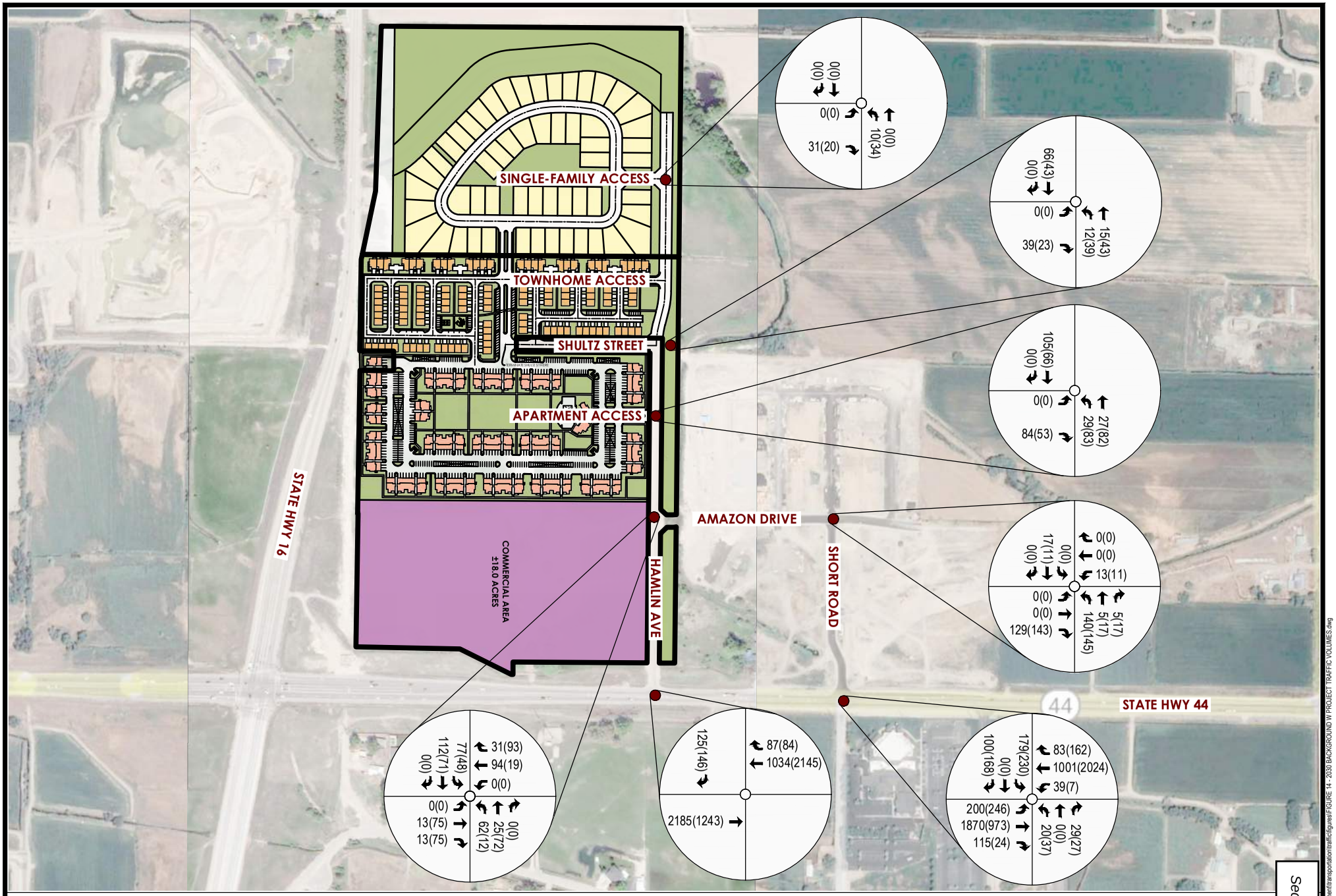

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FIGURE 14 - 2030 BACKGROUND W/ PROJECT TRAFFIC VOLUMES

XX(XX) = AM(PM) PEAK HOUR TRAFFIC VOLUMES

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7.0 Capacity Analysis

Intersection capacity analysis was performed at the study area intersections. Synchro© Version 11 was used to analyze the study intersection for the proposed trip conditions according to methods put forth by the Transportation Research Board's *Highway Capacity Manual (HCM) 6th Edition.*

The Level of Service (LOS) of an intersection range from A to F where LOS A has a low vehicular delay indicating smooth free-flowing traffic. LOS F has a high vehicular delay and indicates the worst-case scenario with high congestion and a complete breakdown of traffic flow. Although LOS A through C are the desired levels, LOS D is considered acceptable in urban conditions. Traffic conditions with LOS of E or F are generally deemed unacceptable and represent significant travel delay, increased accident potential, and inefficient motor vehicle operation. Table 2 shows the relation between LOS and vehicular delay for signalized and unsignalized intersections.

Table 12 - Signalized and Unsignalized intersection LOS and Delay Parameters

Level of Service (LOS)	Vehicular Delay (seconds/vehicle)	
	Signalized Intersection	Stop Controlled Approach
A	0.0 ≤10.0	0.0 < 10.0
B	>10.0 ≤ 20.0	> 10.0 < 15.0
C	> 20.0 ≤ 35.0	> 15.0 < 25.0
D	> 35.0 ≤ 55.0	> 25.0 < 35.0
E	> 55.0 ≤ 80.0	> 35.0 < 50.0
F	> 80.0	> 50.0

Using guidelines for operational threshold from both ACHD and ITD, each of the study area intersections were analyzed on both the level of service and also the volume to capacity ratio. ACHD minimum threshold for level of service is D with a v/c ratio of 0.90 for overall intersection and 1.00 for lane movement. ITD minimum threshold is level of service D with a v/c ratio of 0.90 for overall intersection and lane movements.

The 2022 Existing, 2023 Background Year, 2024 Background Year, and 2030 Background Year traffic volumes at each of the study area intersections were input into the Synchro Software. The levels of service and v/c ratio at each of the turning movements can be seen in the following tables.

Table 13 – 2022 Existing Level of Service

Intersection		Lane Group	AM Peak Hour			PM Peak Hour		
			LOS	Delay (s/veh)	v/c ratio	LOS	Delay (s/veh)	v/c ratio
1	Hamlin Ave & SH 44	EBT	-	-	-	-	-	-
		WBTR	-	-	-	-	-	-
		SBR	B	12.5	0.03	C	22.1	0.06
2	Short Rd & SH 44	NBL	**F**	**116.7**	0.37	**F**	**174.2**	0.70
		NBTR	C	23.8	0.12	B	13.3	0.06
		EBL	A	8.7	0.01	B	11.2	0.01
		EBTR	-	-	-	-	-	-
		WBL	B	11.9	0.05	A	8.9	<0.01
		WBT	-	-	-	-	-	-
		WBR	-	-	-	-	-	-
		SBL	**F**	**101.3**	0.18	**F**	**81.9**	0.07
		SBTR	B	12.3	0.03	C	21.7	0.06
3	Short Rd & Amazon Dr	NB	-	-	-	A	8.7	0.01
		EB	A	0	-	A	0	-
		WB	A	7.2	<0.01	A	0	-
		SB	-	-	-	A	9.1	<0.01
4	Hamlin Ave & Shultz Ct	NB	A	8.6	<0.01	A	8.5	<0.01
		EB	A	0	-	A	0	-
		SB	-	-	-	-	-	-

Under the 2022 Existing conditions, all movements at the SH 44 and Hamlin Ave intersection currently function with acceptable LOS and v/c ratio. The Short Road and Amazon Drive intersection also functions with acceptable LOS and v/c ratio. Hamlin Avenue and Shultz Court intersection also functions with acceptable LOS and v/c ratios. All traffic movements at the Short Road and SH 44 intersection function with acceptable levels of service and v/c ratios except the northbound and southbound left turning

movements. The northbound and southbound left turn movements functions with an unacceptable LOS, but the v/c ratio is acceptable.

Table 14 – 2023 Background Year Level of Service

Intersection		Lane Group	AM Peak Hour			PM Peak Hour		
			LOS	Delay (s/veh)	v/c ratio	LOS	Delay (s/veh)	v/c ratio
1	Hamlin Ave & SH 44	EBT	-	-	-	-	-	-
		WBTR	-	-	-	-	-	-
		SBR	B	10.7	0.01	B	14.9	0.01
2	Short Rd & SH 44	NBL	**F**	**109.5**	0.30	**F**	**67.7**	0.32
		NBTR	B	14.2	0.05	B	10.8	0.03
		EBL	A	9	0.01	B	13.3	0.05
		EBT	-	-	-	-	-	-
		EBR	-	-	-	-	-	-
		WBL	B	13.2	0.06	A	9.1	<0.01
		WBT	-	-	-	-	-	-
		WBR	-	-	-	-	-	-
		SBL	**F**	**93.5**	0.58	**F**	**186.8**	0.70
		SBTR	B	10.6	0.04	B	14.9	0.04
3	Short Rd & Amazon Dr	NB	-	-	-	-	-	-
		EB	A	0	-	A	0	-
		WB	A	7.3	0.01	A	7.3	0.01
		SB	-	-	-	-	-	-
4	Hamlin Ave & Shultz Ct	NB	A	8.6	<0.01	A	8.5	<0.01
		EB	A	0	-	A	0	-
		SB	-	-	-	-	-	-

All intersections and movements will continue to function with acceptable levels of service and v/c ratios at the Hamlin Ave and SH44 intersection, Short Rd and Amazon Dr intersection and the Hamlin Ave and Shultz Ct intersection. With the proposed widening and improvements to SH 44 to 5-lanes by 2023, the v/c ratios at the Short Rd and SH 44 intersection will continue to be acceptable levels, however the LOS will still remain an "F" for the northbound and southbound left turn movements.

Table 15 – 2024 Background Year Level of Service

Intersection		Lane Group	AM Peak Hour			PM Peak Hour		
			LOS	Delay (s/veh)	v/c ratio	LOS	Delay (s/veh)	v/c ratio
1	Hamlin Ave & SH 44	EBT	-	-	-	-	-	-
		WBTR	-	-	-	-	-	-
		SBR	B	11.0	0.01	C	16.1	0.02
2	Short Rd & SH 44	NBL	**F**	**173.1**	0.44	**F**	**103.4**	0.47
		NBTR	C	15.8	0.07	B	11.1	0.04
		EBL	A	9.2	0.02	B	14.4	0.06
		EBT	-	-	-	-	-	-
		EBR	-	-	-	-	-	-
		WBL	B	14.4	0.08	A	9.3	0.01
		WBT	-	-	-	-	-	-
		WBR	-	-	-	-	-	-
		SBL	**F**	**151.9**	0.76	**F**	**327.8**	**0.98**
		SBTR	B	10.9	0.04	C	16.1	0.04
3	Short Rd & Amazon Dr	NB	-	-	-	-	-	-
		EB	A	0	-	A	0	-
		WB	A	7.3	0.01	A	7.3	0.01
		SB	-	-	-	-	-	-
4	Hamlin Ave & Shultz Ct	NB	A	8.6	<0.01	A	8.6	<0.01
		EB	A	0	-	A	0	-
		SB	-	-	-	-	-	-

Under the 2024 Background Year conditions all movements at the SH 44 and Hamlin Ave, Short Rd and Amazon Dr intersection, as well as the Hamlin Ave and Shultz Ct intersection will continue to function at an acceptable LOS "C" or better. SH 44 and Short Road will continue to function with an unacceptable LOS "F" for the northbound and southbound movements, and the v/c ration for the southbound left turn movement will fall to an unacceptable lever by ITD requirements.

Table 16 – 2030 Background Year Level of Service

Intersection		Lane Group	AM Peak Hour			PM Peak Hour		
			LOS	Delay (s/veh)	v/c ratio	LOS	Delay (s/veh)	v/c ratio
1	Hamlin Ave & SH 44	EBT	-	-	-	-	-	-
		WBTR	-	-	-	-	-	-
		SBR	B	13.7	0.1	D	29.3	0.17
2	Short Rd & SH 44	NBL	**F**	**$**	**5.56**	**F**	**$**	**41.11**
		NBTR	C	23.5	0.14	B	12.9	0.06
		EBL	B	11.8	0.17	**F**	**69.2**	0.81
		EBT	-	-	-	-	-	-
		EBR	-	-	-	-	-	-
		WBL	C	23.8	0.18	B	10.8	0.01
		WBT	-	-	-	-	-	-
		WBR	-	-	-	-	-	-
		SBL	**F**	**$**	**8.24**	**F**	**$**	**59.44**
		SBTR	B	14.1	0.22	**F**	**80.3**	0.88
3	Short Rd & Amazon Dr	NB	-	-	-	-	-	-
		EB	A	0	-	A	0	-
		WB	A	7.3	0.01	A	7.3	0.01
		SB	-	-	-	-	-	-
4	Hamlin Ave & Shultz Ct	NB	A	7.3	<0.01	A	7.3	<0.01
		EB	A	8.5	0.01	A	8.4	<0.01
		SB	-	-	-	-	-	-

Under the 2030 Background Year conditions all movements at the SH 44 and Hamlin Ave intersection, the Short Rd and Amazon DR intersection and the Hamlin Ave and Shultz Ct intersection will continue to function at an acceptable LOS "C" or better and acceptable v/c ratios. SH 44 and Short Road will continue to function with an unacceptable LOS "F" and experience a significant increase in delay time for the northbound and southbound movements. The v/c ratios in both the northbound and southbound directions will fall to unacceptable levels under these conditions.

With the addition of the Northern Star Development, the following tables illustrate the anticipated levels of service and v/c ratios at each of the study area intersections.

Table 17 – 2023 Background Year w/ Project Level of Service

Intersection		Lane Group	AM Peak Hour			PM Peak Hour		
			LOS	Delay (s/veh)	v/c ratio	LOS	Delay (s/veh)	v/c ratio
1	Hamlin Ave & SH 44	EBT	-	-	-	-	-	-
		WBTR	-	-	-	-	-	-
		SBR	B	11.2	0.09	C	16.2	0.1
2	Short Rd & SH 44	NBL	**F**	**122.6**	0.33	**F**	**101.2**	0.43
		NBTR	B	14.6	0.05	B	10.8	0.03
		EBL	A	9.1	0.03	B	14.7	0.16
		EBT	-	-	-	-	-	-
		EBR	-	-	-	-	-	-
		WBL	B	13.2	0.06	A	9.1	<0.01
		WBT	-	-	-	-	-	-
		WBR	-	-	-	-	-	-
		SBL	**F**	**274.2**	**1.24**	**F**	**677.0**	**1.89**
		SB	B	10.7	0.04	B	15.2	0.04
3	Short Rd & Amazon Dr	NB	-	-	-	-	-	-
		EB	A	0	-	A	0	-
		WB	A	7.4	0.01	A	7.3	0.01
		SB	-	-	-	-	-	-
4	Hamlin Ave & Shultz Ct	NB	A	8.6	<0.01	A	8.5	<0.01
		EB	A	0	-	A	0	-
		SB	-	-	-	-	-	-
5	Hamlin Ave & Amazon Dr	NB	-	-	-	-	-	-
		WBL	A	0	-	A	0	-
		WBR	A	8.5	0.02	A	8.7	0.05
		SB	A	7.3	0.03	A	7.3	0.02
6	Hamlin Ave & Apartment Access	NBL	A	7.3	0.02	A	7.4	0.06
		NBT	A	0	-	-	-	-
		EB	A	8.7	0.09	A	8.5	0.05
		SB	-	-	-	-	-	-

Under the 2023 Background Year with Project conditions, all movements at the study area intersection will continue with acceptable LOS and v/c ratios, except for the northbound LOS and the southbound LOS and v/c at SH 44 and Short Road.

With the proposed mitigations as outlined in the Amazon Falls 2 traffic impact study to restrict Short Road to right-in right-out movements, the following table illustrates the levels of service and v/c ratios at the Hamlin Ave and Short Road intersections with SH 44.

Table 18 – 2023 Background Year w/ Project w/ Mitigations Level of Service

Intersection		Lane Group	AM Peak Hour			PM Peak Hour		
			LOS	Delay (s/veh)	v/c ratio	LOS	Delay (s/veh)	v/c ratio
1	Hamlin Ave & SH 44	EBT	-	-	-	-	-	-
		WBTR	-	-	-	-	-	-
		SBR	B	11.9	0.16	C	17.4	0.18
2	Short Rd & SH 44	NBR	C	15.0	0.09	B	11.0	0.07
		EBL	A	9.1	0.03	B	14.7	0.16
		EBT	-	-	-	-	-	-
		EBR	-	-	-	-	-	-
		WBL	B	13.2	0.06	A	9.1	<0.01
		WBT	-	-	-	-	-	-
		WBR	-	-	-	-	-	-
		SBR	B	11.2	0.11	C	16.2	0.13

The Hamlin Ave and SH 44 intersection will continue to function with acceptable LOS and v/c ratios. The Short Road and SH 44 intersection will improve to acceptable LOS "C" or better and v/c ratios at each turning movements with right and left turning movements in along SH 44 and right-out movements along Short Road.

Table 19 – 2024 Background Year w/ Project Level of Service

Intersection		Lane Group	AM Peak Hour			PM Peak Hour		
			LOS	Delay (s/veh)	v/c ratio	LOS	Delay (s/veh)	v/c ratio
1	Hamlin Ave & SH 44	EBT	-	-	-	-	-	-
		WBTR	-	-	-	-	-	-
		SBR	B	11.9	0.14	C	18.8	0.17
2	Short Rd & SH 44	NBL	**F**	**206.0**	0.50	**F**	**264.7**	0.83
		NBTR	C	15.8	0.07	B	11.1	0.04
		EBL	A	9.5	0.05	C	18.5	0.29
		EBT	-	-	-	-	-	-
		EBR	-	-	-	-	-	-
		WBL	B	14.4	0.08	A	9.4	0.01
		WBT	-	-	-	-	-	-
		WBR	-	-	-	-	-	-
		SBL	**F**	**803.9**	**2.42**	**F**	**$**	**5.03**
		SB	B	11.0	0.04	C	16.7	0.05
3	Short Rd & Amazon Dr	NB	-	-	-	-	-	-
		EB	A	0	-	A	0	-
		WB	A	7.5	0.01	A	7.4	0.01
		SB	-	-	-	-	-	-
4	Hamlin Ave & Shultz Ct	NB	A	7.3	0.01	A	7.3	0.03
		EB	A	8.6	0.04	A	8.5	0.02
		SB	A	0	-	A	0	-
5	Hamlin Ave & Amazon Dr	NB	-	-	-	-	-	-
		WBL	A	0	-	A	0	-
		WBR	A	8.5	0.03	A	9	0.10
		SB	A	7.4	0.05	A	7.4	0.04
6	Hamlin Ave & Apartment Access	NBL	A	7.4	0.02	A	7.5	0.06
		NBT	-	-	-	-	-	-
		EB	A	9.0	0.1	A	8.7	0.06
		SB	-	-	-	-	-	-
7	Hamlin Ave & SF Housing Access	NBL	A	7.2	0.01	A	7.3	0.02
		NBT	-	-	-	-	-	-
		EB	A	8.4	0.03	A	8.4	0.02
		SB	-	-	-	-	-	-

Under the 2024 Background Year with Project conditions, and assuming Short Rd and Hamlin Ave are full traffic movements, all movements will continue to function with acceptable LOS and v/c ratios except the northbound and southbound left turn movements at Short Road and SH 44. The northbound left turn will have acceptable v/c ratios, but the level of service will fail.

With the proposed improvements as outlined in the Amazon Falls 2 traffic impact study to restrict left turning movements out of Short Road onto SH 44, the following table illustrates the LOS and v/c ratios at the Hamlin Ave and Short Road intersections with SH 44 as traffic would be redistributed to all use the Hamlin Ave connection.

Table 20 – 2024 Background Year w/ Project w/ Mitigations Level of Service

Intersection		Lane Group	AM Peak Hour			PM Peak Hour		
			LOS	Delay (s/veh)	v/c ratio	LOS	Delay (s/veh)	v/c ratio
1	Hamlin Ave & SH 44	EBT	-	-	-	-	-	-
		WBTR	-	-	-	-	-	-
		SBR	B	13.6	0.29	C	22.4	0.34
2	Short Rd & SH 44	NBR	C	16.3	0.11	B	11.4	0.08
		EBL	A	9.5	0.05	C	18.5	0.29
		EBT	-	-	-	-	-	-
		EBR	-	-	-	-	-	-
		WBL	B	14.4	0.08	A	9.4	<0.01
		WBT	-	-	-	-	-	-
		WBR	-	-	-	-	-	-
		SBR	B	11.6	0.12	C	18.0	0.14

With the recommended improvements under the Amazon Falls 2 traffic impact study, these two intersections will continue to function with acceptable LOS and v/c ratios.

Table 21 – 2030 Background Year w/ Project Level of Service

Intersection		Lane Group	AM Peak Hour			PM Peak Hour		
			LOS	Delay (s/veh)	v/c ratio	LOS	Delay (s/veh)	v/c ratio
1	Hamlin Ave & SH 44	EBT	-	-	-	-	-	-
		WBTR	-	-	-	-	-	-
		SBR	C	17.4	0.32	**F**	**117.4**	**0.97**
2	Short Rd & SH 44	NBL	**F**	**$**	**11.11**	**F**	**$**	**$**
		NBTR	C	23.5	0.14	B	12.9	0.06
		EBL	C	15.2	0.39	**F**	**264.3**	**1.42**
		EBT	-	-	-	-	-	-
		EBR	-	-	-	-	-	-
		WBL	C	23.8	0.18	B	10.8	0.01
		WBT	-	-	-	-	-	-
		WBR	-	-	-	-	-	-
		SBL	**F**	**$**	**33.15**	**F**	**$**	**$**
		SB	B	14.9	0.23	**F**	**97.6**	**0.94**
3	Short Rd & Amazon Dr	NB	-	-	-	-	-	-
		EB	A	0	-	A	0	-
		WB	A	7.5	0.01	A	7.6	0.01
		SB	-	-	-	-	-	-
4	Hamlin Ave & Shultz Ct	NB	A	7.4	0.01	A	7.4	0.03
		EB	A	8.8	0.04	A	8.6	0.03
		SB	-	-	-	A	0	-
5	Hamlin Ave & Amazon Dr	NBL	A	7.6	0.05	A	7.4	0.01
		NBTR	-	-	-	-	-	-
		EBL	A	0	-	A	0	-
		EBTR	B	11.3	0.05	B	11.3	0.23
		WBL	A	0	-	A	0	-
		WBTR	B	14.4	0.27	A	9.8	0.14
		SBL	A	7.4	0.05	A	7.5	0.04
		SBTR	-	-	-	-	-	-
6	Hamlin Ave & Apartment Access	NBL	A	7.5	0.02	A	7.5	0.06
		NBT	-	-	-	-	-	-
		EB	A	9.3	0.1	A	8.9	0.06
		SB	-	-	-	-	-	-

7	Hamlin Ave & SF Housing Access	NBL	A	7.2	0.01	A	7.3	0.02
		NBT	-	-	-	-	-	-
		EB	A	8.4	0.03	A	8.4	0.02
		SB	-	-	-	-	-	-

$ = values from analysis exceed capacity

Under the 2030 Background Year with Project conditions, all movements at the Amazon Dr and Short Road intersection, the Hamlin Dr and Shultz Ct intersection and the Amazon Dr and Hamlin Ave intersection will continue to function at an acceptable LOS "B" or better. The Hamlin Ave and access to the apartments will also continue to function with acceptable levels of service. The Hamlin Ave and access to the single-family housing will continue to function at acceptable levels of service. The northbound and southbound movements at the SH 44 and Hamlin Avenue intersection will function with a LOS "F", and the v/c ratio will be unacceptable.

With the improvements as outlined in the Amazon Falls 2 traffic impact study to make the intersection of Short Road and SH 44 a right-in, left-in and right-out, the following table outlines the projected LOS and v/c ratios as the traffic patterns will change.

Table 22 – 2030 Background Year w/ Project w/ Mitigations Level of Service

Intersection		Lane Group	AM Peak Hour			PM Peak Hour		
			LOS	Delay (s/veh)	v/c ratio	LOS	Delay (s/veh)	v/c ratio
1	Hamlin Ave & SH 44	EBT	-	-	-	-	-	-
		WBTR	-	-	-	-	-	-
		SBR	D	30.0	0.64	F	532.1	2.02
2	Short Rd & SH 44	NBR	D	25.8	0.24	B	13.7	0.15
		EBL	C	15.2	0.39	**F**	**264.3**	**1.42**
		EBT	-	-	-	-	-	-
		EBR	-	-	-	-	-	-
		WBL	C	23.8	0.18	B	10.8	0.01
		WBT	-	-	-	-	-	-
		WBR	-	-	-	-	-	-
		SBR	C	18.4	0.44	**F**	**307.9**	**1.54**

8.0 Traffic Signal Warrant Analysis

As part of the traffic impact study, the SH 44 and Short Road intersection will experience some heavy delays in the northbound direction with the increase of traffic along SH 44 and the level of service will drop to an unacceptable level. In order to improve the intersection, we analyzed the need for a traffic signal at the intersection. In order to analyze the need for a traffic signal, the 2009 Edition of the *Manual on Traffic Control Devices (MUTCD)*, Part 4 is used. As per the *MUTCD* there are nine signal warrants and even if one warrant is met, a signal may be installed at the study intersection. The warrants are:

Warrant 1 - Eight Hour Vehicular Volume

Warrant 2 - Four Hour Vehicular Volume

Warrant 3 - Peak Hour

Warrant 4 - Pedestrian Volume

Warrant 5 - School Crossing

Warrant 6 - Coordinated Signal System

Warrant 7 - Crash Experience

Warrant 8 - Roadway Network

Warrant 9 - Intersection near a Grade Crossing

Based on the study location, traffic patterns and information we have available at this time, only Warrant 3 - Peak Hour was able to be analyzed with the projected peak hour traffic volumes under the 2023 Background, 2024 Background and 2030 Background Years. The following paragraphs provide the details of the signal warrant analysis. It should be noted that this Peak Hour Warrant Analysis was performed using the projected traffic volumes. It is strongly recommended the intersection be monitored when actual traffic volumes are present and the signal warrant analysis be performed.

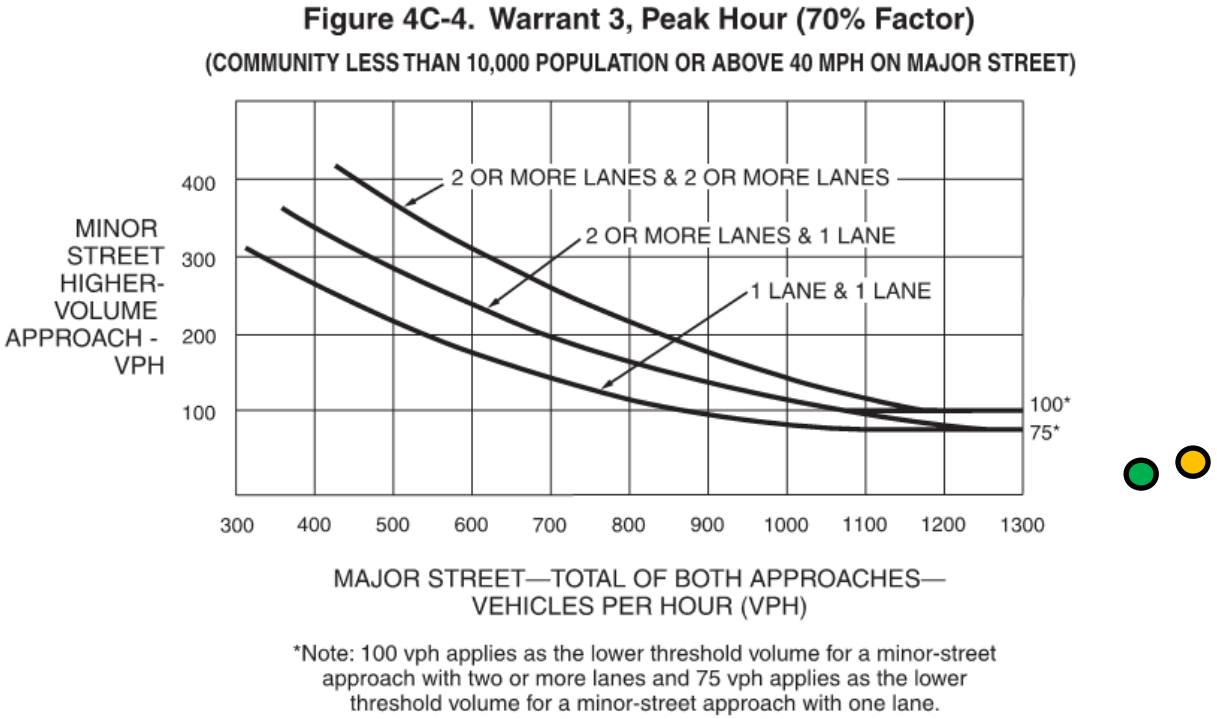
Note that in all scenarios that were analyzed for a traffic signal warrant, the Major Street totals for both directions does not include the vehicles making a right turn from the Major Street. Right turning vehicles when in a separate right turn lane from the Major Streets are not often counted in a Traffic Signal Warrant Analysis as they do not impede the Minor Street traffic from making their appropriate movement.

Warrant 3 (Peak Hour)

This traffic signal warrant analysis was performed at the SH 44 and Short Road intersection. The graph from the MUTCD that is used to analyze the need for a signal. SH 44 is considered the Major Street for this analysis with Short Road as the Minor Street. It is anticipated that for the future years used in this analysis, SH 44 will be two lanes in each direction with separate left turn lanes and right turn lanes at the intersections. Short Road is only one lane in each direction. The speed limit along the Major Street (SH 44) is above 40 mph, therefore the 70% Factor graph is used in this analysis per the MUTCD.

Figure 15 illustrates the signal warrant analysis for the AM and PM peak hour traffic volumes under the 2023 Background Year scenario. The Major Street (SH 44) will see 1,854 vph in the AM peak hour, and 1,923 vph in the PM peak hour. The Minor Street (Short Road) will have 32 vph in the AM peak hour and 42 vph in the PM peak hour.

Figure 15 – SH 44 and Short Road 2023 Background Signal Warrant



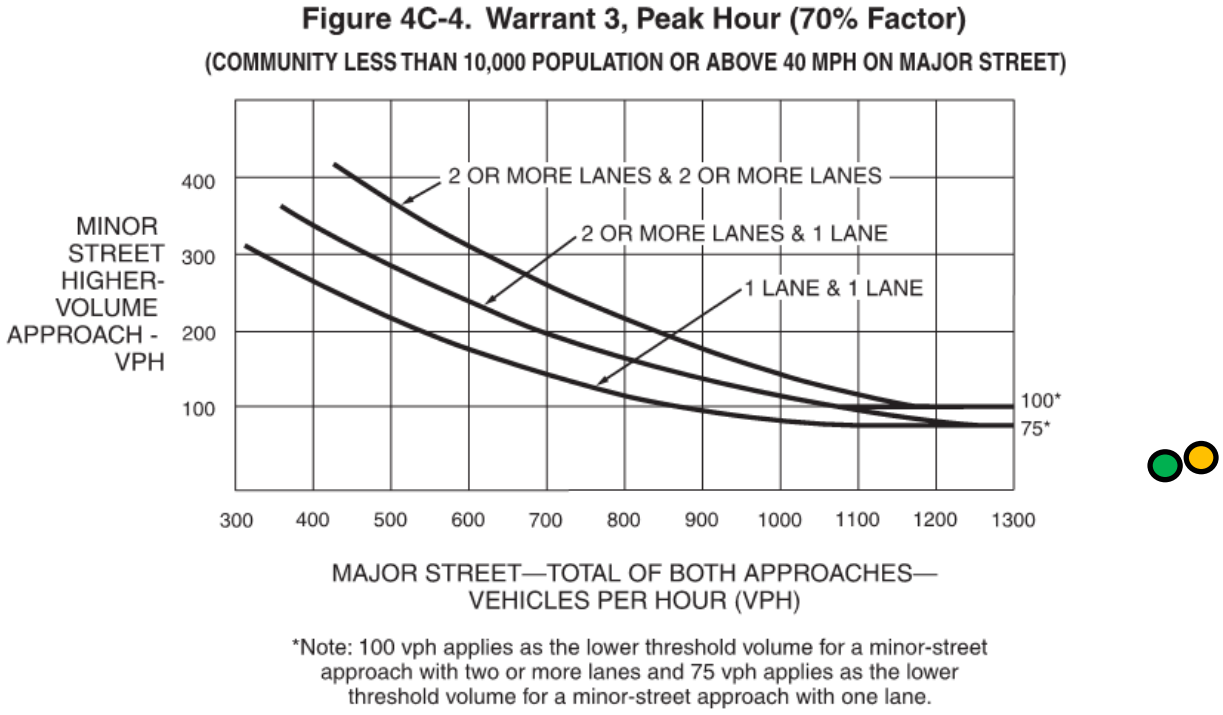
= 2023 Background Year Traffic Volumes. (AM Peak Hour)

= 2023 Background Year Traffic Volumes. (PM Peak Hour)

As seen in Figure 15, the plotted points of these volumes fall well below the applicable curve and therefore do not warrant a traffic signal at this time. Since the projected traffic volumes do not warrant a traffic signal under the 2023 Background scenario, it is recommended the city monitor this intersection for when actual traffic volumes are present since the intersection experience an unacceptable level of service.

Figure 16 illustrates the signal warrant analysis for the AM and PM peak hour traffic volumes under the 2024 Background Year scenario. The Major Street (SH 44) will see 2,037 vph in the AM peak hour, and 2,104 vph in the PM peak hour. The Minor Street (Short Road) will have 35 vph in the AM peak hour and 46 vph in the PM peak hour.

Figure 16 – SH 44 and Short Road 2024 Background Signal Warrant



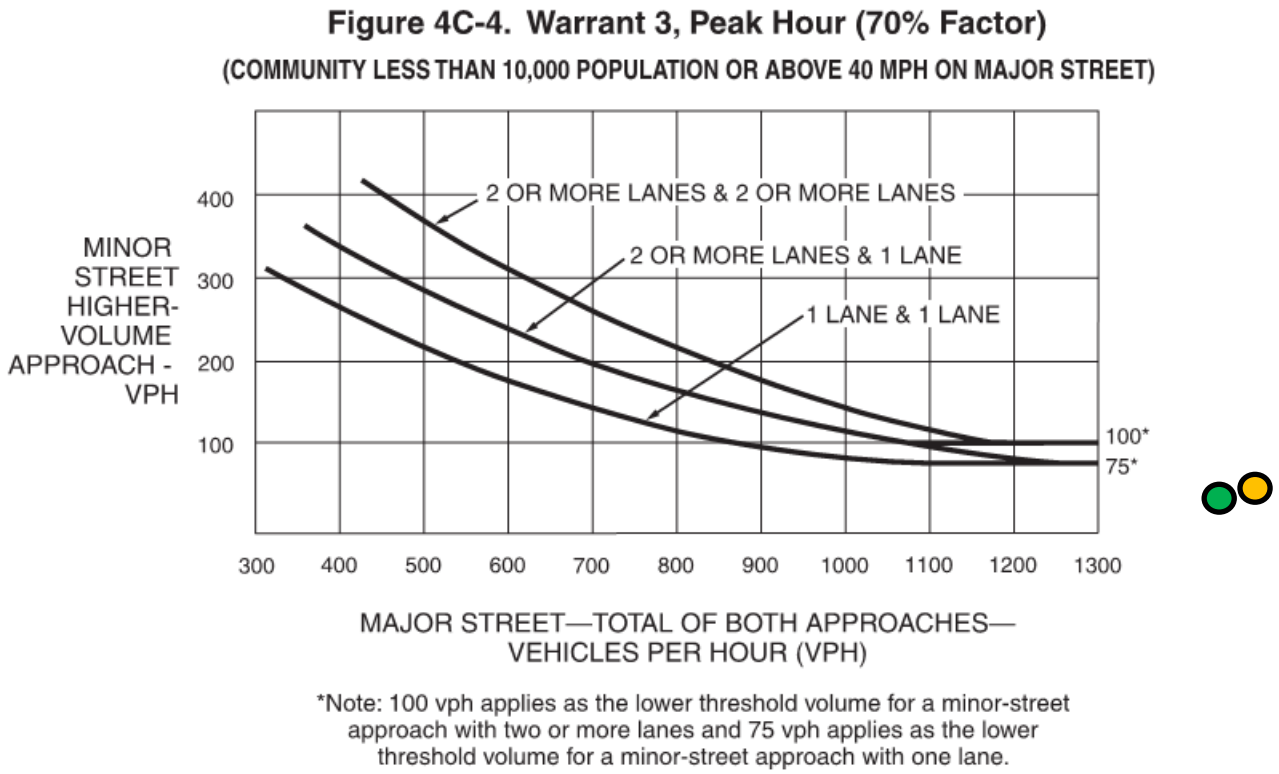
= 2024 Background Year Traffic Volumes. (AM Peak Hour)

= 2024 Background Year Traffic Volumes. (PM Peak Hour)

As seen in Figure 16, the plotted points of these volumes fall well below the applicable curve and therefore do not warrant a traffic signal at this time. It is recommended the city monitor this intersection for when actual traffic volumes are present.

Figure 17 illustrates the signal warrant analysis for the AM and PM peak hour traffic volumes under the 2030 Background Year scenario. The Major Street (SH 44) will see 2,845 vph in the AM peak hour, and 2,937 vph in the PM peak hour. The Minor Street (Short Road) will have 49 vph in the AM peak hour and 64 vph in the PM peak hour.

Figure 17 – SH 44 and Short Road 2030 Background Signal Warrant



= 2030 Background Year Traffic Volumes. (AM Peak Hour)

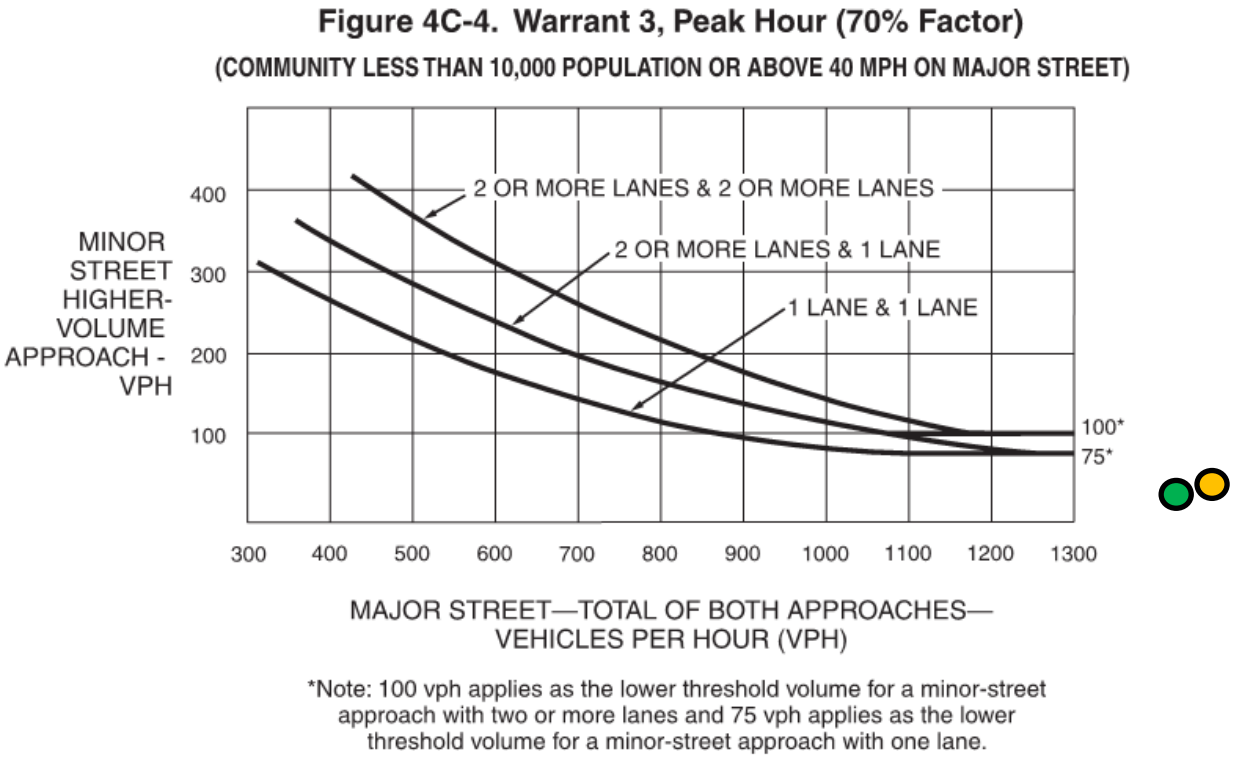
= 2030 Background Year Traffic Volumes. (PM Peak Hour)

As seen in Figure 17, the plotted points of these volumes fall well below the applicable curve and therefore do not warrant a traffic signal at this time. It is recommended the city monitor this intersection for when actual traffic volumes are present.

With the addition of the Northern Start Development, we also analyzed the SH 44 and Short Road intersection for a traffic signal warrant. Figure 18 illustrates the signal warrant analysis for the AM and PM peak hour traffic volumes under the 2023 Background Year with Project scenario. The Major Street (SH 44) will see 1,880 vph in the AM peak hour, and

1,988 vph in the PM peak hour. The Minor Street (Short Road) will have 52 vph in the AM peak hour and 42 vph in the PM peak hour.

Figure 18 – SH 44 and Short Road 2023 Background w/ Project Signal Warrant



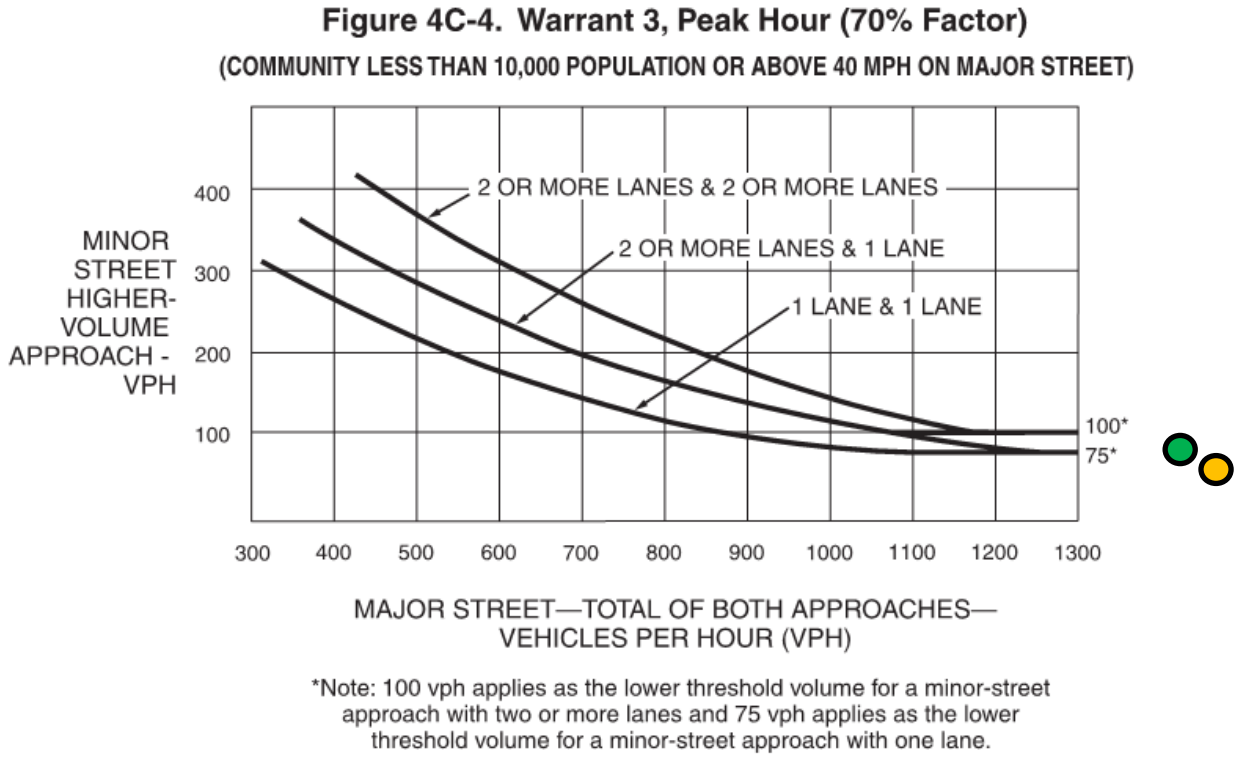
= 2023 Background Year with Project Traffic Volumes. (AM Peak Hour)

= 2023 Background Year with Project Traffic Volumes. (PM Peak Hour)

As seen in Figure 18, the plotted points of these volumes fall below the applicable curve and therefore do not warrant a traffic signal at this time.

Figure 19 illustrates the signal warrant analysis for the AM and PM peak hour traffic volumes under the 2024 Background Year with Project scenario. The Major Street (SH 44) will see 2,083 vph in the AM peak hour, and 2,245 vph in the PM peak hour. The Minor Street (Short Road) will run with 88 vph in the AM peak hour and 46 vph in the PM peak hour.

Figure 19 – SH 44 and Short Road 2024 Background w/ Project Signal Warrant



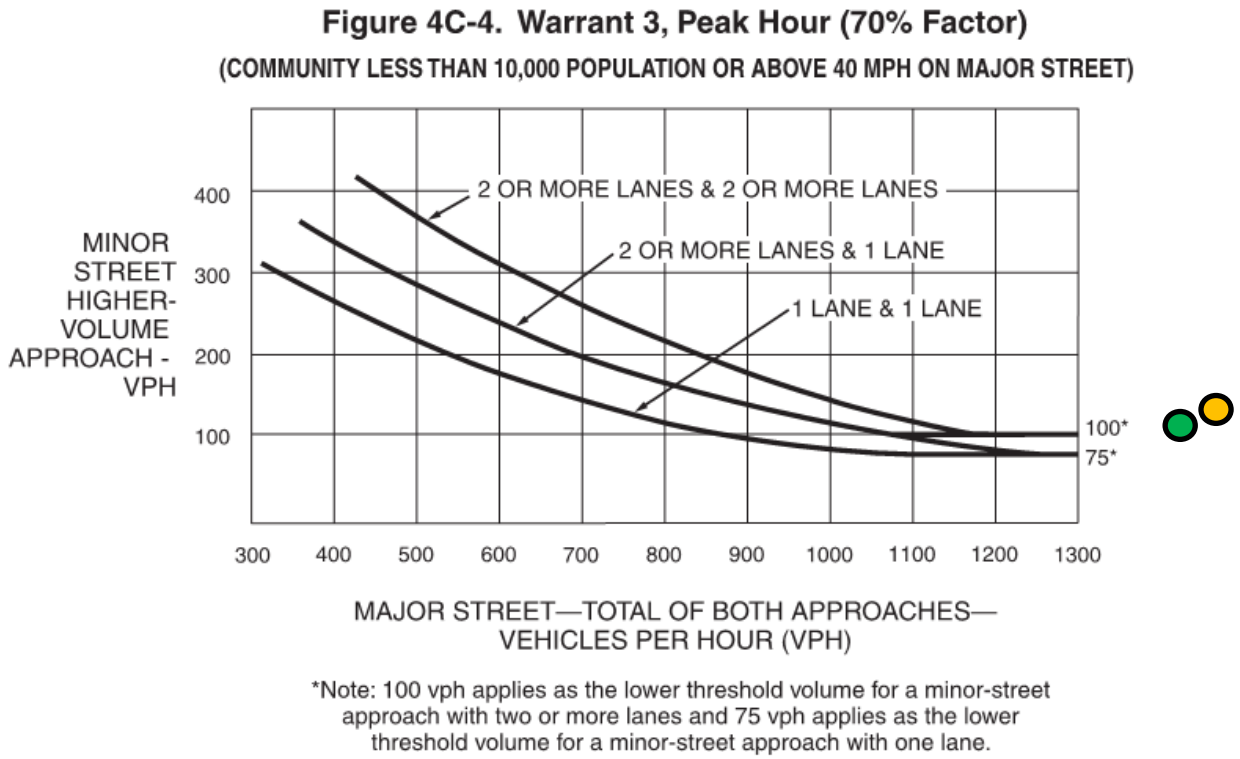
= 2024 Background Year with Project Traffic Volumes. (AM Peak Hour)

= 2024 Background Year with Project Traffic Volumes. (PM Peak Hour)

As seen in Figure 19, the plotted points of these volumes fall below the applicable curve and therefore do not warrant a traffic signal at this time.

Figure 20 illustrates the signal warrant analysis for the AM and PM peak hour traffic volumes under the 2030 Background Year with Project scenario. The Major Street (SH 44) will see 3,031 vph in the AM peak hour, and 3,105 vph in the PM peak hour. The Minor Street (Short Road) will run with 105 vph in the AM peak hour and 132 vph in the PM peak hour.

Figure 20 – SH 44 and Short Road 2030 Background w/ Project Signal Warrant



= 2030 Background Year with Project Traffic Volumes. (AM Peak Hour)

= 2030 Background Year with Project Traffic Volumes. (PM Peak Hour)

As seen in Figure 20, the plotted points of these volumes will warrant a traffic signal as the plotted points fall above the applicable curve. It is recommended since these traffic volumes are projected volumes for the 2030 year, and this intersection will function with unacceptable levels of service well before 2030, this intersection continue to be monitored.

9.0 Turn Lane Warrant Analysis

Following the District Policy as outlined in 7106.4.4, the proposed intersections along Hamlin Avenue with the addition of the Northern Star Development were analyzed for turn lane warrants. For major roads at an intersection, District Policy per NCHRP Reports 279 and 457 were used applying Figure 1 for Left-Turn Guidelines for Two-Lane Roads less than or equal to 40 mph. For minor roads, the evaluation of a second lane per NCHRP Report 457 was followed. Within this study area, Hamlin Ave would follow the major roadway analysis, where the site accesses would fall under the minor roadway analysis. The following Advancing Volumes and Opposing Volumes under the different scenarios were used. Refer to the appendix of this report for the graphs from the NCHRP Reports and District Policy.

Hamlin Avenue and Amazon Drive:

2030 Background with Project Northbound Left Turn Lane: **Does Not Warrant**

AM Northbound Advancing Volume = 87 vph (71% left turns)

AM Southbound Opposing Volumes = 112 vph

PM Northbound Advancing Volumes = 84 vph (15% left turns)

PM Southbound Opposing Volumes = 71 vph

2030 Background with Project Southbound Left Turn Lane: **Does Not Warrant**

AM Southbound Advancing Volumes = 189 vph (41% left turns)

AM Northbound Opposing Volumes = 25 vph

PM Southbound Advancing Volumes = 119 vph (40% left turns)

PM Northbound Opposing Volumes = 72 vph

2030 Background with Project Westbound Left Turn Lane: **Does Not Warrant as "0" vehicles are planned to make this movement**

2030 Background with Project Eastbound Left Turn Lane: **Does Not Warrant as "0" vehicles are proposed to make this turning moment.**

2030 Background with Project Northbound Right Turn Lane: **Does Not Warrant as "0" vehicles are proposed to make this turning moment.**

2030 Background with Project Southbound Right Turn Lane: **Does Not Warrant as "0" vehicles are proposed to make this turning moment.**

The following analysis was performed using the NCHRP Report 457 for evaluation of a second lane for minor roads.

2030 Background Eastbound Right Turn Lane: **Does Not Warrant**

AM Eastbound Minor Road Volume = 26 vph

AM Major Road Volume = 276 vph

PM Eastbound Minor Road Volume = 150 vph

PM Major Road Volume = 203 vph

2030 Background Westbound Right Turn Lane: **Does Not Warrant**

AM Westbound Minor Road Volumes = 125 vph

AM Major Road Volumes = 276 vph

PM Westbound Right Turn Volumes = 112 vph

PM Major Road Volumes = 203 vph

Hamlin Avenue and Apartment Access:

2030 Background with Project Northbound Left Turn Lane: **Does Not Warrant**

AM Northbound Advancing Volume = 56 vph (52% left turns)

AM Southbound Opposing Volumes = 105 vph

PM Northbound Advancing Volumes = 165 vph (50% left turns)

PM Southbound Opposing Volumes = 66 vph

2030 Background with Project Westbound Left Turn Lane: **Does Not Warrant as "0" vehicles are planned to make this movement**

2030 Background with Project Southbound Right Turn Lane: **Does Not Warrant as "0" vehicles are proposed to make this turning moment.**

The following analysis was performed using the NCHRP Report 457 for evaluation of a second lane for minor roads.

2030 Background Eastbound Right Turn Lane: **Does Not Warrant**

AM Eastbound Minor Road Volume = 84 vph

AM Major Road Volume = 161 vph

PM Eastbound Minor Road Volume = 53 vph

PM Major Road Volume = 231 vph

Hamlin Avenue and Shultz Court:

2030 Background with Project Northbound Left Turn Lane: **Does Not Warrant**

AM Northbound Advancing Volume = 27 vph (44% left turns)

AM Southbound Opposing Volumes = 66 vph

PM Northbound Advancing Volumes = 82 vph (48% left turns)

PM Southbound Opposing Volumes = 43 vph

2030 Background with Project Westbound Left Turn Lane: **Does Not Warrant as "0" vehicles are planned to make this movement**

2030 Background with Project Southbound Right Turn Lane: **Does Not Warrant as "0" vehicles are proposed to make this turning moment.**

The following analysis was performed using the NCHRP Report 457 for evaluation of a second lane for minor roads.

2030 Background Eastbound Right Turn Lane: **Does Not Warrant**

AM Eastbound Minor Road Volume = 39 vph

AM Major Road Volume = 93 vph

PM Eastbound Minor Road Volume = 23 vph

PM Major Road Volume = 125 vph

Hamlin Avenue and Single-Family Access:

2030 Background with Project Northbound Left Turn Lane: **Does Not Warrant**

AM Northbound Advancing Volume = 10 vph (100% left turns)

AM Southbound Opposing Volumes = 0 vph

PM Northbound Advancing Volumes = 34 vph (100% left turns)

PM Southbound Opposing Volumes = 0 vph

2030 Background with Project Westbound Left Turn Lane: **Does Not Warrant as "0" vehicles are planned to make this movement**

2030 Background with Project Southbound Right Turn Lane: **Does Not Warrant as "0" vehicles are proposed to make this turning moment.**

The following analysis was performed using the NCHRP Report 457 for evaluation of a second lane for minor roads.

2030 Background Eastbound Right Turn Lane: **Does Not Warrant**

AM Eastbound Minor Road Volume = 31 vph

AM Major Road Volume = 10 vph

PM Eastbound Minor Road Volume = 20 vph

PM Major Road Volume = 34 vph

Based on the above analysis for the needs of right and left turn lanes along Hamlin Avenue and the roadway intersecting from the Northern Star Development, no turn lanes are warranted.

10.0 Queuing Analysis

Sim Traffic Queueing Analysis

Using the 95th percentile queue lengths from Sim Traffic for the study scenarios, the following table illustrates the existing measured queue lengths, the calculated queue length from Sim Traffic and the rounded recommended queue lengths at the study area intersections. Note the queue lengths for proposed intersections along Hamlin Ave are not recorded as no separate left or right turn lanes are necessary under the turn lane warrant analysis.

Table 23 – 2023 Background w Project Sim Traffic Queuing Analysis Summary

Intersection		Lane Group	AM Peak Hour			PM Peak Hour	
			Existing Storage Length	Sim Traffic 95th % Queue	Rec Queue	Sim Traffic 95th % Queue	Rec Queue
1	Hamlin Ave & SH 44	SBR	Single Lane	50	100	50	100
2	Short Rd & SH 44	EBL	TWLTL - 750	34	100	54	100
		EBR	150	6	100	-	-
		WBL	TWLTL - 1920	34	100	12	100
		WBR	375			8	100
		NBL	100	33	100	53	100
		SBL	Single Lane	125	125	118	120

Table 24 – 2024 Background w Project Sim Traffic Queuing Analysis Summary

Intersection		Lane Group	AM Peak Hour			PM Peak Hour	
			Existing Storage Length	Sim Traffic 95th % Queue	Rec Queue	Sim Traffic 95th % Queue	Rec Queue
1	Hamlin Ave & SH 44	SBR	Single Lane	55	100	54	100
2	Short Rd & SH 44	EBL	TWLTL - 750	37	100	80	100
		EBR	150	5	100	3	-
		WBL	TWLTL - 1920	40	100	15	100
		WBR	375			9	100
		NBL	100	33	100	112	115
		SBL	Single Lane	251	255	241	245

Table 25 – 2030 Background w Project Sim Traffic Queuing Analysis Summary

Intersection		Lane Group	AM Peak Hour			PM Peak Hour	
			Existing Storage Length	Sim Traffic 95th % Queue	Rec Queue	Sim Traffic 95th % Queue	Rec Queue
1	Hamlin Ave & SH 44	SBR	Single Lane	85	100	120	120
2	Short Rd & SH 44	EBL	TWLTL - 750	107	150	266	270
		EBR	150	14	100	-	-
		WBL	TWLTL - 1920	70	150	16	150
		WBR	375	16	100	15	100
		NBL	100	237	240	232	240
		SBL	Single Lane	205	205	195	200

The following table illustrates the queue lengths under the 2030 Background with Project scenario with the proposed mitigations as outlined above to make the northbound and southbound movements along Short Road a RIROLI intersection.

Table 26 – 2030 Background w Project -Mit Sim Traffic Queuing Analysis Summary

Intersection		Lane Group	AM Peak Hour			PM Peak Hour	
			Existing Storage Length	Sim Traffic 95th % Queue	Rec Queue	Sim Traffic 95th % Queue	Rec Queue
1	Hamlin Ave & SH 44	SBR	Single Lane	75	100	273	275
2	Short Rd & SH 44	EBL	TWLTL - 750	100	150	209	210
		EBR	150	9	100	3	100
		WBL	TWLTL - 1920	72	150	21	100
		WBR	375	11	100	23	100
		NBR	-	56	100	61	100
		SBR	-	119	120	515	515
		EB		55	100	49	100
		SB		-	-	-	-

In the above table, at the Hamlin Ave and SH 44 intersection, the southbound leg of this intersection is a right turn only. This lane is a single lane that extends north to the next

intersection which is 700 feet. Therefore, there is plenty of distance between SH 44 and Amazon Drive to hold the queuing distance for the southbound right turn movement.

The Short Road and SH 44 eastbound leg is planned for a two way left turn lane. Therefore, there is roughly 750 feet between Short Road and Hamlin Ave to the west, which provides adequate queuing for the eastbound left and right turn lanes. The westbound approach is similar as there is planned to be constructed a two way left turn lane and there is over 1900 feet to Palmer Lane, which is the next intersection to the east. Therefore, there is adequate distance for the westbound left and right turn lane at this intersection. The northbound approach is currently striped with roughly 100 feet of storage. This leg of the intersection does not consist of a two way left turn lane. Therefore, this storage length would need to be lengthened to 240 feet in order to meet the demands of the future growth in this area. Since there are no trips associated to this turning movements from the Northern Star Development, this storage length would need to be extended even without this development and is recommended to occur under the 2030 Background Year conditions. The southbound left turn movement at this intersection at the time of this study, was not striped. However, it has been required that a southbound left turn lane be constructed according to the Amazon Falls 2 requirements from ACHD. This storage length is planned to be constructed with a two way left turn lane that will extend to the next intersection to the north, which is over 300 feet. Therefore, the recommended storage length from this report of 205 feet should be adequate.

Synchro Queuing Analysis

Using the 95th percentile queue lengths provided in the Synchro Reports in the appendix of this study, the following tables reflect the queue lengths per Synchro under the different study scenarios. Note, Synchro provides a 95th percentile queue in number of vehicles. In order to convert this value to a queuing distance, the value was multiplied by 25 ft which represents the average length of a vehicle.

Note, since left and right turn lanes along Hamlin Avenue and at the proposed project accesses are not warranted, these intersections were not included in these tables.

Table 27 – 2023 Background w/ Project Synchro Queuing Analysis Summary

Intersection		Lane Group	Exist Storage Length	AM Peak Hour			PM Peak Hour		
				Synchro 95th % Queue (VEH)	Calc Queue	Rec Queue	Synchro 95th % Queue (VEH)	Calc Queue	Rec Queue
1	Hamlin Ave & SH 44	SBR	Single Lane	0.3	7.5	100	0.3	7.5	100
2	Short Rd & SH 44	EBL	TWLTL - 750	0.1	2.5	100	0.6	15	100
		EBR	150	0	0	150	0	0	150
		WBL	TWLTL - 1920	0.2	5	100	0	0	100
		WBR	375	0	0	375	0	0	375
		NBL	100	1.1	27.5	100	1.6	40	100
		SBL	Single Lane	7.3	182.5	185	7	175	175

Table 28 – 2024 Background w/ Project Synchro Queuing Analysis Summary

Intersection		Lane Group	Exist Storage Length	AM Peak Hour			PM Peak Hour		
				Synchro 95th % Queue (VEH)	Calc Queue	Rec Queue	Synchro 95th % Queue (VEH)	Calc Queue	Rec Queue
1	Hamlin Ave & SH 44	SBR	Single Lane	0.5	12.5	100	0.6	15	100
2	Short Rd & SH 44	EBL	TWLTL - 750	0.2	5	100	1.2	30	100
		EBR	150	0	0	150	0	0	150
		WBL	TWLTL - 1920	0.2	5	100	0	0	100
		WBR	375	0	0	375	0	0	375
		NBL	100	1.6	40	100	3	75	100
		SBL	Single Lane	13.7	342.5	345	11.4	285	285

Table 29 – 2030 Background w/ Project Synchro Queuing Analysis Summary

Intersection		Lane Group		AM Peak Hour			PM Peak Hour		
			Exist Storage Length	Synchro 95th % Queue (VEH)	Calc Queue	Rec Queue	Synchro 95th % Queue (VEH)	Calc Queue	Rec Queue
1	Hamlin Ave & SH 44	SBR	Single Lane	1.4	35	100	7.5	187.5	190
2	Short Rd & SH 44	EBL	TWLTL - 750	1.8	45	100	16.4	410	410
		EBR	150	0	0	150	0	0	150
		WBL	TWLTL - 1920	0.7	17.5	100	0	0	100
		WBR	375	0	0	375	0	0	375
		NBL	100	4.4	110	110	0	0	100
		SBL	Single Lane	26.9	672.5	675	0	0	100

The following table illustrates the Synchro queuing recommendations with the proposed mitigations.

Table 30 – 2030 Background w/ Project - Mit Synchro Queuing Analysis Summary

Intersection		Lane Group		AM Peak Hour			PM Peak Hour		
			Exist Storage Length	Synchro 95th % Queue (VEH)	Calc Queue	Rec Queue	Synchro 95th % Queue (VEH)	Calc Queue	Rec Queue
1	Hamlin Ave & SH 44	SBR	Single Lane	4.2	105	105	23.6	590	590
2	Short Rd & SH 44	EBL	TWLTL - 750	1.8	45	100	16.4	410	410
		EBR	150	0	0	150	0	0	150
		WBL	TWLTL - 1920	0.7	17.5	100	0	0	100
		WBR	375	0	0	375	0	0	375
		NBR	100	0.9	22.5	100	0.5	12.5	100
		SBR	Single Lane	2.2	55	100	19.3	482.5	485

All lane configurations with no recommended queue length are proposed to share left, through and right turn lanes and therefore no additional queuing analysis was performed on the intersections presented in these tables.

Comparing the two different methods, the Sim Traffic calculations illustrate less queuing is likely to occur at the intersections. In particular the southbound left turning lane at Short Road and SH 44. This is likely caused because Sim Traffic runs different simulations of the traffic and the average over those runs is used in this analysis. We ran 5 different simulations to compile the average. The Synchro analysis is based on a specific number. Using the Sim Traffic method, the intersection of Short Road and SH 44 illustrates no significant queuing will occur if the intersection were to remain with full left and right turning movements and the need to convert this intersection to a RIROLI would not be necessary. Converting this intersection to RIROLI, the southbound queuing under the 2030 Background with Project scenario will experience heavy queuing in the PM peak hour. The queuing reports for both Synchro and Sim Traffic can be found in the appendix of this report.

11.0 Recommendations

Based on the information and findings presented in this report, the following recommendations are to improve the overall flow of traffic.

- The Hamlin Avenue and SH 44 intersection will remain a right in/right out intersection as per Idaho Department of Transportation. With the addition of a full interchange at SH 16 and SH 44, the close proximity of Hamlin Ave will require this roadway to remain right in and right out.

- SH 44 is planned to be widened to two lanes in each direction and a center two-way left turn lane by the end of 2023.

- As outlined in the Amazon Phase 2 traffic impact study, the recommendations to reconstruct the Short Road and SH 44 intersection to a right-in/right-out with left-in movements is planned to occur by 2025.

- The intersection of Short Road and SH 44 does not meet the intersection spacing for a traffic signal as outlined in the ITIP. However, a signal at this intersection would sufficiently improve the flow of traffic and allow vehicles entering and exiting onto SH 44 from the multiple developments planned for this area a safe connection.

- It should also be noted that as future developments occur to the east, there should be planned connections to allow vehicles to access Palmer and other surrounding roadways a way to travel east along SH 44.

- With the addition of the Northern Star Development, the intersection of Hamlin Avenue and Amazon Drive will be constructed. It is recommended this intersection be constructed with to meet city standards with one lane in each direction. Adequate sight distance at this intersection will be required as per District Policy 5104.3. It is recommended at a speed limit of 35 mph; 390 feet of sight distance should be accounted for in the design of this intersection. No

obstructions within the sight distance triangles as outlined in Figure 2 of the District Policy 5104.3.

- It is recommended Hamlin Avenue be widened to meet the city standards for a Collector roadway with one lane in each direction at each access to the Northern Star Development.

- Shultz Street and Hamlin Ave should also be constructed to meet city standards. If Shultz Street is planned to remain as a city owned and maintained roadway. The roadway will need to terminate with a cul-de-sac prior to connecting to a private road. Shultz Street should be constructed with one lane in each direction as the projected volumes do not warrant the need for additional turn lanes. Shultz Street will be stop controlled with free-flowing traffic along Hamlin Ave.

- The single-family access and Hamlin Ave intersection should be constructed with one lane in each direction as the projected traffic volumes do not meet the turn lane warrants. The single-family access will be stop controlled with free-flowing traffic along Hamlin Ave.

- The townhomes access and Hamlin Ave intersection should be constructed with one lane in each direction as the projected traffic volumes do not meet the turn lane warrants. The townhomes access will be stop controlled with free-flowing traffic along Hamlin Ave.

- The apartment access and Hamlin Ave intersection should be constructed with one lane in each direction as the projected traffic volumes do not meet the turn lane warrants. The apartment access will be stop controlled with free-flowing traffic along Hamlin Ave.

- Hamlin Avenue and Amazon Drive should be constructed with one lane in each direction and stop controlled along Amazon Drive.

12.0 Appendix

Scoping Memo

MEMORANDUM - REVISED

Date:	January 20, 2022
To:	Paige Bankhead – Ada County Highway District (ACHD)
From:	Jason Watson, PE, PTOE
Project:	Northern Star Development – Star City, Idaho
Subject:	Proposed Scope of Work for the Transportation Impact Analysis

FOCUS Engineering and Surveying, LLC (FOCUS) has been retained to complete a Traffic Impact Study for the proposed Northern Star Development. This memorandum summarizes the assumptions and discussions that have been held between FOCUS, ACHD, Community Planning Association (COMPASS) and Idaho Transportation Department (ITD) to determine the overall scope for this study. The Northern Star Development is located north of SH 44 and east of SH 16 within Star City. Figure 1 illustrates the vicinity map and project area.

Conversations that were held with ACHD, COMPASS and ITD staff, along with the project Developer and Star City staff developed the outline for this project and the needs for the traffic impact study. This memorandum addresses the following items:

- Project Description
- Estimated Trip Generation and Distribution
- Analysis Scenarios and Study Assumptions
- Analysis Tools

PROJECT DESCRIPTION

The Northern Star Development is located along SH 44, between SH 16 and Hamlin Avenue. The proposed site is currently vacant land used for agricultural purposes. The proposed development will consist of 55 single-family lots, 110 townhome lots, 310 apartment units and roughly 18 acres of commercial land that could consist of office space, retail shops, etc. Figure 2 illustrates the proposed Northern Star Development site plan.

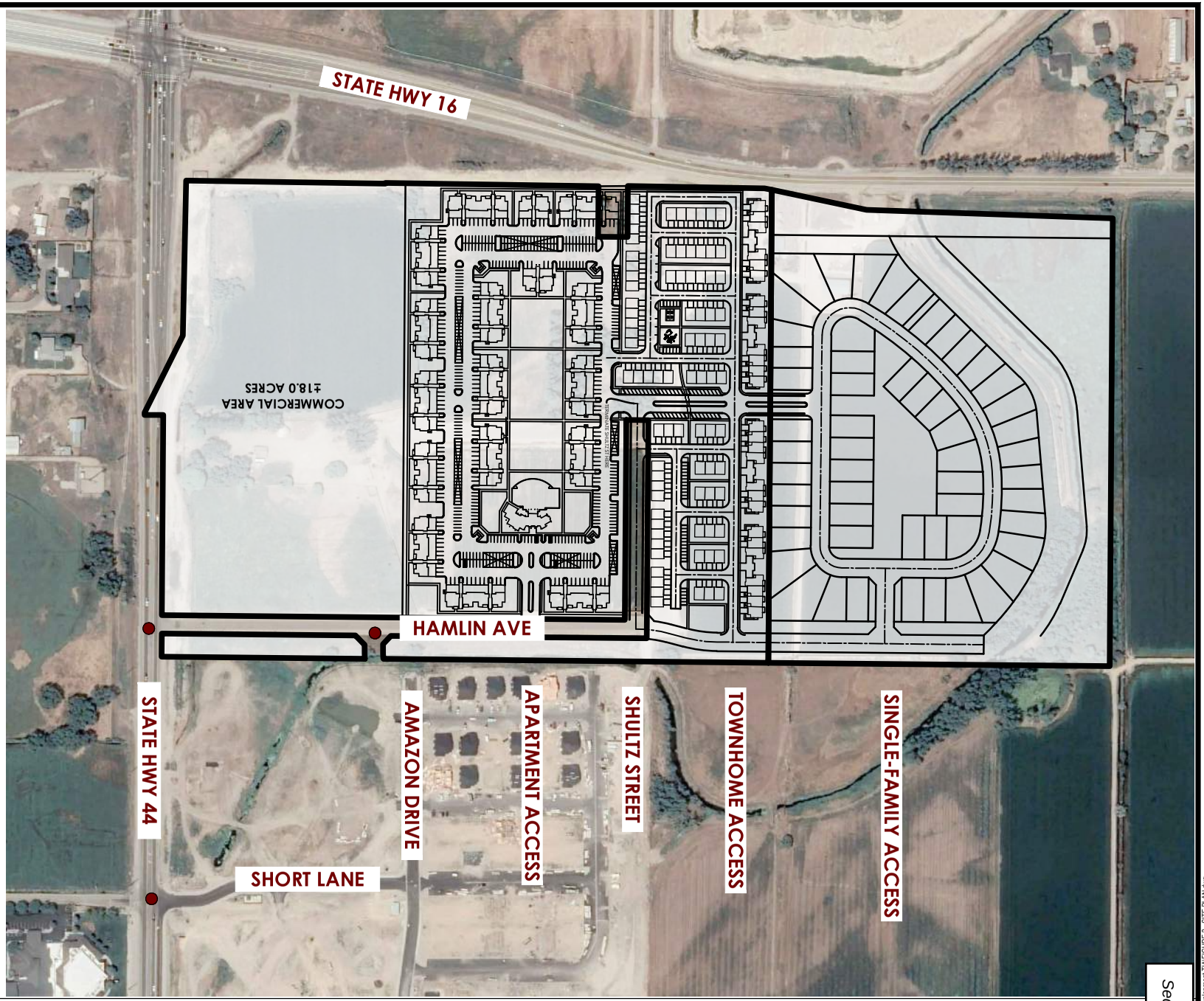
Access to the Northern Star Development will be provided from the following intersections:

- State Highway 44 & Hamlin Avenue – Right-in & Right-out
  - Existing Access
- Hamlin Avenue & Amazon Drive
  - Approximately 725 feet from SH 44
- Hamlin Avenue & Apartment Access
  - Approximately 250 north of Amazon Drive
- Hamlin Avenue & Shultz Street
  - Approximately 525 feet north of Amazon Drive
- Hamlin Avenue & Private Road Access to Townhomes
  - Approximately 300 feet north of Shultz
- Hamlin Avenue & Single-Family Access
  - Approximately 300 feet north of Townhomes Access

NORTHERN STAR DEVELOPMENT

FIGURE 1 - VICINITY MAP

FOCUS
ENGINEERING AND SURVEYING, LLC
9 S. HIGH TECH DRIVE SUITE 200
ALE, UTAH 84047 PH: (801) 352-0075
www.focusutah.com



NORTHERN STAR DEVELOPMENT

FIGURE 2 - SITE PLAN

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ALE, UTAH 84047 PH: (801) 352-0075
www.focusutah.com

ESTIMATED TRIP GENERATION AND DISTRIBUTION

Trip Generation

To generate the anticipated number of vehicles entering and exiting the proposed site during a typical weekday a.m. and p.m. peak hour, the *Institute of Transportation Engineer's (ITE) Trip Generation Manual* is used. For single-family residential lots, the land use codes 210 – Single-Family Detached Housing, 220 – Multifamily Housing (Low-Rise), and 221 – Multifamily Housing (Mid-Rise) were used to generate the number of trips entering and exiting the development. The Mid-Rise land use was used for the apartments as they are planned for three story apartment buildings. Since the specific land use for the 18 acres of commercial is unknown at this time, land use code 710 for General Office Building was used. It was assumed 20% of the overall acreage would be used as the actual building size. Using these assumptions, roughly 156,000 square foot office building was used to calculate the trip generation. Table 1 illustrates the number of trips the Northern Star Development is anticipated to generate based on the adjacent street traffic.

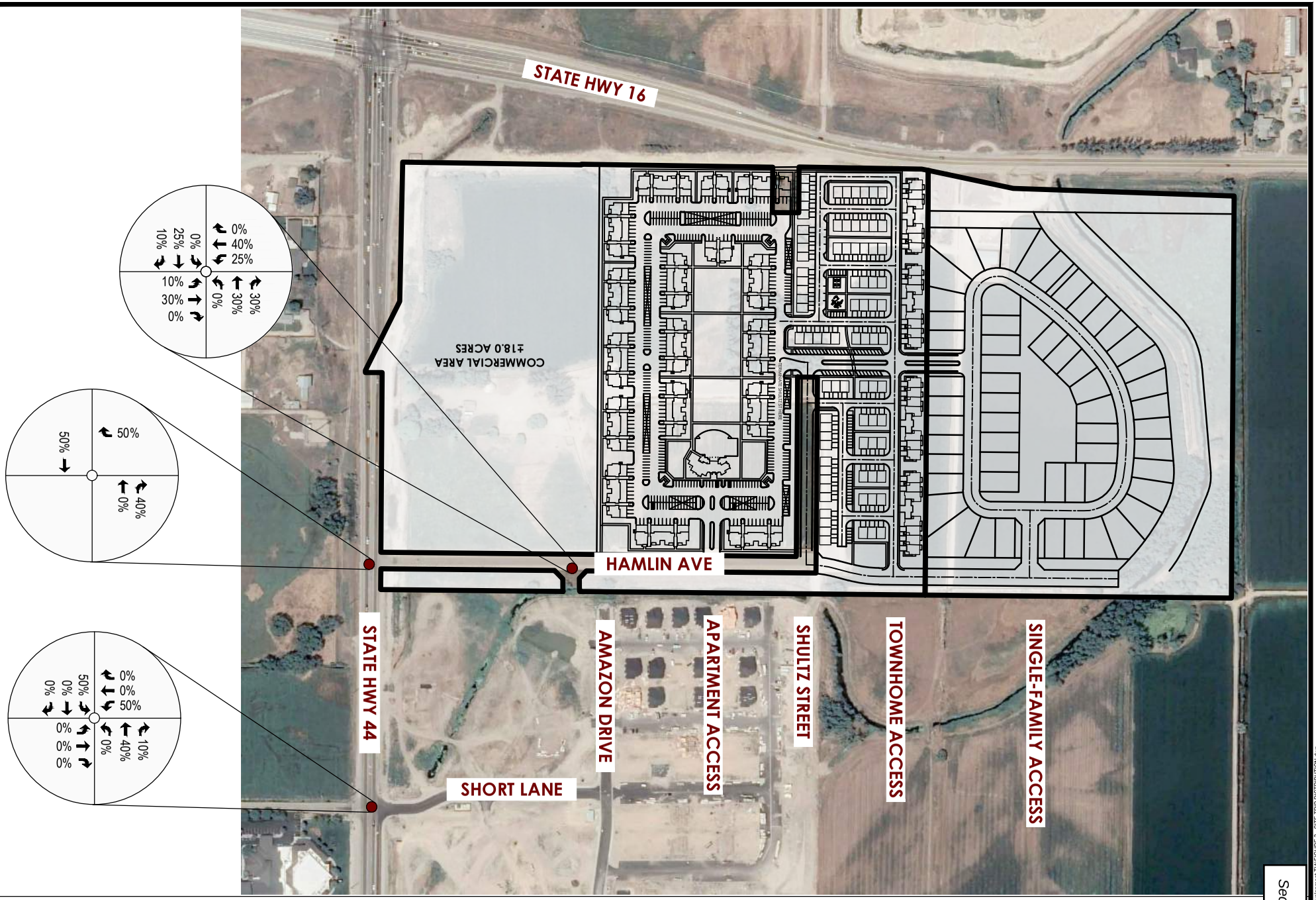
Table 1 – Trip Generation for Northern Star

ITE Land Use Code	Land Use Description	Size	Daily (AADT)	Trip Generation (AM)		Trip Generation (PM)	
				Enter	Exit	Enter	Exit
210	Single-Family	55 DU	519	10	31	34	20
220	Low-Rise	110 DU	805	12	39	39	23
221	Mid-Rise	310 DU	1686	29	83	83	53
710	Gen Office	1,000 GFA	1519	156	25	29	150

As can be seen in Table 1, the Northern Star Development will generate approximately 4,529 daily trips, with 385 trips occurring in the AM peak hour (207 entering, 178 exiting) and 431 trips occurring in the PM peak hour (185 entering, 246 exiting). It is assumed with the combination of residential and office within the development, there is potential for internal capture trips. With the internal capture trips, this development will generate 379 total AM peak hour trips (204 entering, 175 exiting) and 417 PM peak hour trips (178 entering, 239 exiting).

Trip Distribution

The project trip distribution onto the existing and proposed roadways at each project site access is based on the area of impact model runs by COMPASS, review of the roadway system by ACHD and ITD, as well as knowledge of travel patterns in this study area. The proposed distribution percentages are illustrated in Figure 3.



NORTHERN STAR DEVELOPMENT

FIGURE 3 - PROJECT TRIP DISTRIBUTION PERCENTAGES

XX% = DISTRIBUTION PERCENTAGES

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ANALYSIS SCENARIOS & STUDY ASSUMPTIONS

The proposed traffic impact analysis assumptions are as follows:

- Study Years:
  - Existing traffic conditions (2022)
  - Buildout year background traffic conditions (2023). Includes growth and in-process developments without the proposed Northern Star Development.
  - Buildout year total traffic conditions (2023). Included background traffic plus the build-out of the first phase (310 apartment units).
  - Buildout year background traffic conditions (2024). Includes growth and in-process developments without the remaining phases of the proposed development.
  - Buildout year total traffic conditions (2024). Includes background traffic plus the build-out of the second phase (110 townhome units and 55 single-family units).
  - Buildout year background traffic conditions (2030). Includes growth and in-process developments without the remaining phases of the proposed development.
  - Buildout year total traffic conditions (2030). Includes background traffic plus the build-out of the third phase (commercial).
- Time Periods:
  - Weekday AM peak hour (7-9 AM)
  - Weekday PM peak hour (4-6 PM)
- Study Intersections:
  - Amazon Drive/Hamlin Avenue
  - Amazon Drive/Short Lane
  - Shultz Street/Hamlin Avenue
  - Hamlin Avenue/SH-44
  - Short Lane/SH-44
- Roadway Segments:
  - Hamlin Avenue – from Schultz Street to SH-44
  - Amazon Drive – from Hamlin Avenue to Short Lane
  - Short Lane
- Data Collection:
  - Turning movement counts will be collected during the typical midweek (Tuesday -Thursday) AM peak period (7:00 AM to 9:00 AM) and also the PM peak period (4:00 PM to 6:00 PM).
- Background Growth Rate and In-Process Developments:
  - Growth rates obtained from COMPASS illustrate a 9.9% growth along SH 44 until 2025. After 2025 the growth rate is anticipated to adjust to 4.9%.

- Trip Assignment from recently approved development within this study are will also be included in the background scenarios of this study. We will work with ACHD to obtain the studies on these developments. These developments include:
  - Amazon Falls 2
  - Fountain Park

- Access Spacing & Needs:
  - Access locations will be evaluated with respect to ACHD policy and spacing requirements.
  - The need for traffic control and turn lanes will also be evaluated at each site access.
- Planned Transportation Improvements:
  - Planned widening of SH 44 between SH 16 and Linder Road from 3 lanes to 5 lanes by 2023.
  - Planned future improvements to SH 44 and Palmer Lane call for a signalized intersection by FY 2027.
  - Hamlin Avenue is also planned to extend north to connect Floating Feather Road and SH 44.
  - All of these planned improvements are based on future developments to construct these improvements. The analysis shown in this study will account for these improvements to be completed in the background years of this study.

ANALYSIS TOOLS AND OPERATING STANDARDS

The study area intersections operational analysis will be evaluated using the *Highway Capacity Manual (HCM) 6th Edition* analysis procedures. The intersections will be evaluated with the appropriate calculation of level of service using Synchro 11 and SimTraffic software. Signalized intersections within the study area will be evaluated using the HCM 6th Edition procedure as provided in the Synchro Software to provide the overall intersection control delay and level of service along with each individual approaches delay in seconds per vehicle and level of service. Unsignalized intersections will be evaluated using the HCM 6th Edition procedures and will provide the individual approach delay in seconds per vehicle as well as approach level of service.

Traffic Impact Analysis will be performed in accordance with methodologies outlined in Section 7106.6 of the *ACHD Policy Manual*. Queue lengths, needs for left and right turn lanes will be included in the analysis. Intersection and roadway segments analysis will be determined using the ACHD thresholds outlined in the Policy Manual.

ACHD requires signalized intersections operate at a minimum LOS E for Principal Arterials and Minor Arterials and a LOS D for Collectors. All unsignalized intersections that have a projected LOS D or worse, shall perform a traffic signal warrant analysis or roundabout analysis. The acceptable volume -to-capacity ratio for signalized intersection is 0.90 for the overall intersection and 1.00 for each lane group. The acceptable volume-to-capacity ratio is 0.90 for the critical lane group at unsignalized intersections.

NEXT STEPS

FOCUS asks ACHD to review this scope of work for the traffic impact analysis for the Northern Start Development. We ask for any comments or response to the assumptions we have made in this scoping document so we may move forward with the traffic impact study. Please feel free to reach out to Jason Watson (801) 352-0075 or email at jwatson@focusutah.com with any questions or comments on the information we have presented in this scoping document.

Existing Traffic Counts

L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 413-2993

Study: FOCU0006
Intersection: Short Rd / SH-44
City, State: Canyon County, Idaho
Control: Stop Sign

File Name : SH-44 (State St) & Short Rd - revised
Site Code : 00000000
Start Date : 1/20/2022
Page No : 1

Groups Printed- General Traffic

	Short Road From North					SH-44 From East					Short Road From South					SH-44 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	1	0	1	0	113	6	0	119	2	0	3	0	5	10	268	1	0	279	404
07:15 AM	1	0	2	0	3	0	134	2	0	136	8	0	2	0	10	17	289	2	0	308	457
07:30 AM	5	0	1	0	6	0	148	5	0	153	3	0	1	0	4	13	256	4	0	273	436
07:45 AM	0	0	0	0	0	3	133	7	0	143	4	0	7	0	11	22	296	1	0	319	473
Total	6	0	4	0	10	3	528	20	0	551	17	0	13	0	30	62	1109	8	0	1179	1770
08:00 AM	0	0	0	0	0	0	130	9	0	139	2	0	2	0	4	16	268	3	0	287	430
08:15 AM	0	0	1	0	1	1	144	9	0	154	4	0	3	0	7	18	263	4	0	285	447
08:30 AM	1	0	2	0	3	0	105	6	0	111	6	0	5	0	11	8	297	3	0	308	433
08:45 AM	2	0	6	0	8	2	119	4	0	125	2	0	3	0	5	11	251	1	0	263	401
Total	3	0	9	0	12	3	498	28	0	529	14	0	13	0	27	53	1079	11	0	1143	1711

04:00 PM	1	0	2	0	3	0	243	2	0	245	10	0	5	0	15	5	187	0	0	192	455
04:15 PM	0	0	1	0	1	1	258	0	0	259	4	0	6	0	10	2	120	1	0	123	393
04:30 PM	1	0	0	0	1	2	255	4	0	261	4	0	7	0	11	4	134	1	0	139	412
04:45 PM	4	0	0	0	4	0	293	0	0	293	7	0	2	0	9	4	142	0	0	146	452
Total	6	0	3	0	9	3	1049	6	0	1058	25	0	20	0	45	15	583	2	0	600	1712
05:00 PM	0	0	1	0	1	1	279	1	0	281	1	0	7	0	8	5	132	3	0	140	430
05:15 PM	0	0	0	0	0	0	289	1	0	290	5	0	10	0	15	2	136	2	0	140	445
05:30 PM	0	0	0	0	0	2	295	2	0	299	3	0	3	0	6	3	167	0	0	170	475
05:45 PM	1	0	1	0	2	1	233	0	0	234	5	0	1	0	6	5	134	2	0	141	383
Total	1	0	2	0	3	4	1096	4	0	1104	14	0	21	0	35	15	569	7	0	591	1733
Grand Total	16	0	18	0	34	13	3171	58	0	3242	70	0	67	0	137	145	3340	28	0	3513	6926
Apprch %	47.1	0	52.9	0		0.4	97.8	1.8	0		51.1	0	48.9	0		4.1	95.1	0.8	0		
Total %	0.2	0	0.3	0	0.5	0.2	45.8	0.8	0	46.8	1	0	1	0	2	2.1	48.2	0.4	0	50.7	

L2 Data Collection

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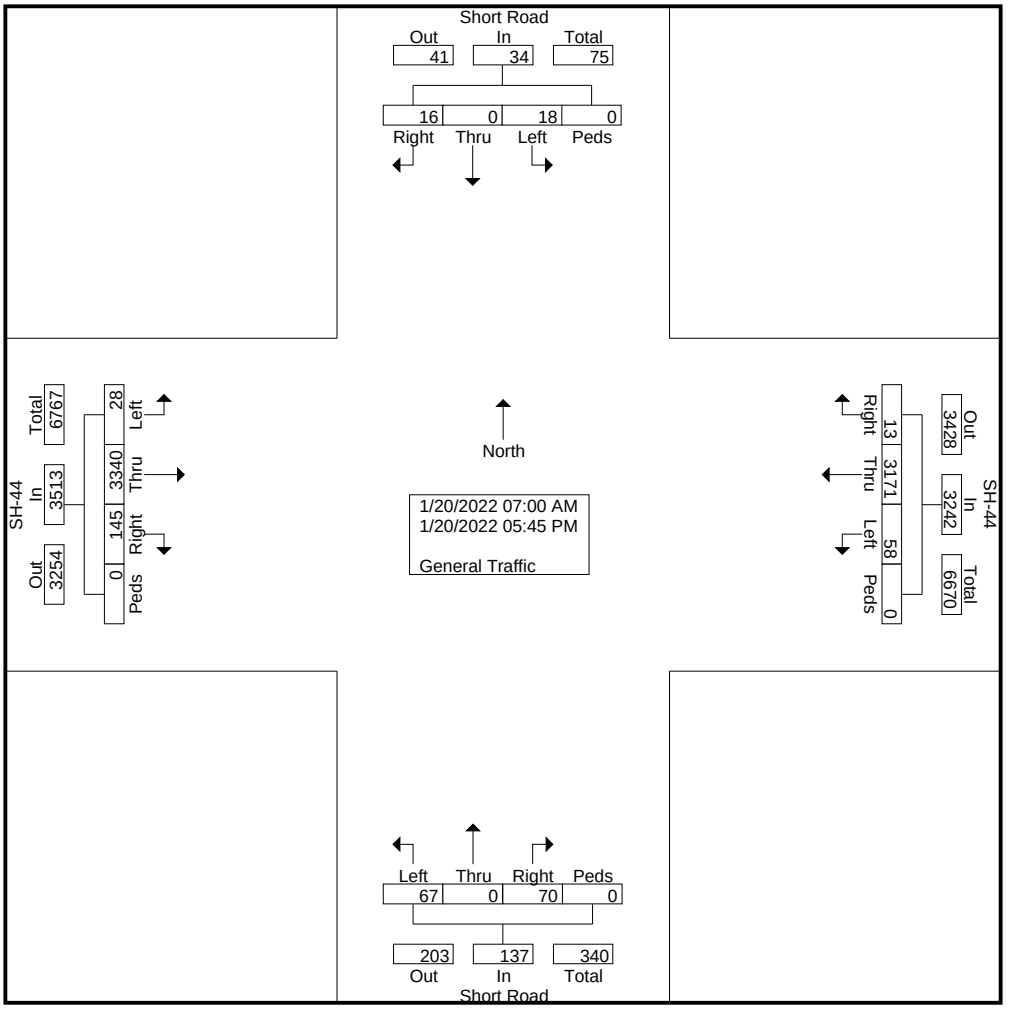
Page No : 2



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File Name : SH-44 (State St) & Short Rd - revised
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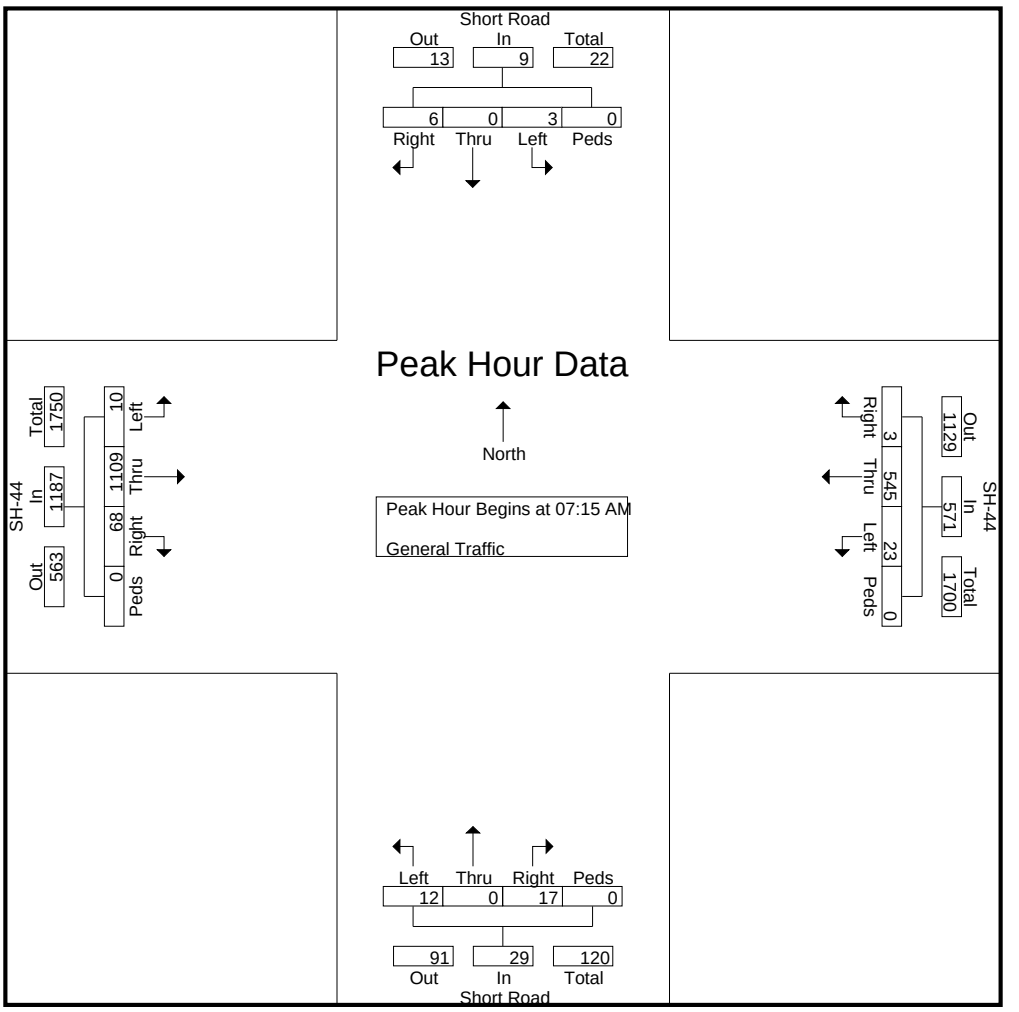
Start Date : 1/20/2022
Page No : 3

	Short Road From North					SH-44 From East					Short Road From South					SH-44 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	1	0	**2**	0	3	0	134	2	0	136	**8**	0	2	0	10	17	289	2	0	308	457
07:30 AM	**5**	0	1	0	**6**	0	**148**	5	0	**153**	3	0	1	0	4	13	256	**4**	0	273	436
07:45 AM	0	0	0	0	0	**3**	133	7	0	143	4	0	**7**	0	**11**	**22**	**296**	1	0	**319**	**473**
08:00 AM	0	0	0	0	0	0	130	**9**	0	139	2	0	2	0	4	16	268	3	0	287	430
Total Volume	6	0	3	0	9	3	545	23	0	571	17	0	12	0	29	68	1109	10	0	1187	1796
% App. Total	66.7	0	33.3	0		0.5	95.4	4	0		58.6	0	41.4	0		5.7	93.4	0.8	0		
PHF	.300	.000	.375	.000	.375	.250	.921	.639	.000	.933	.531	.000	.429	.000	.659	.773	.937	.625	.000	.930	.949



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Study: FOCU0006
Intersection: Short Rd / SH-44
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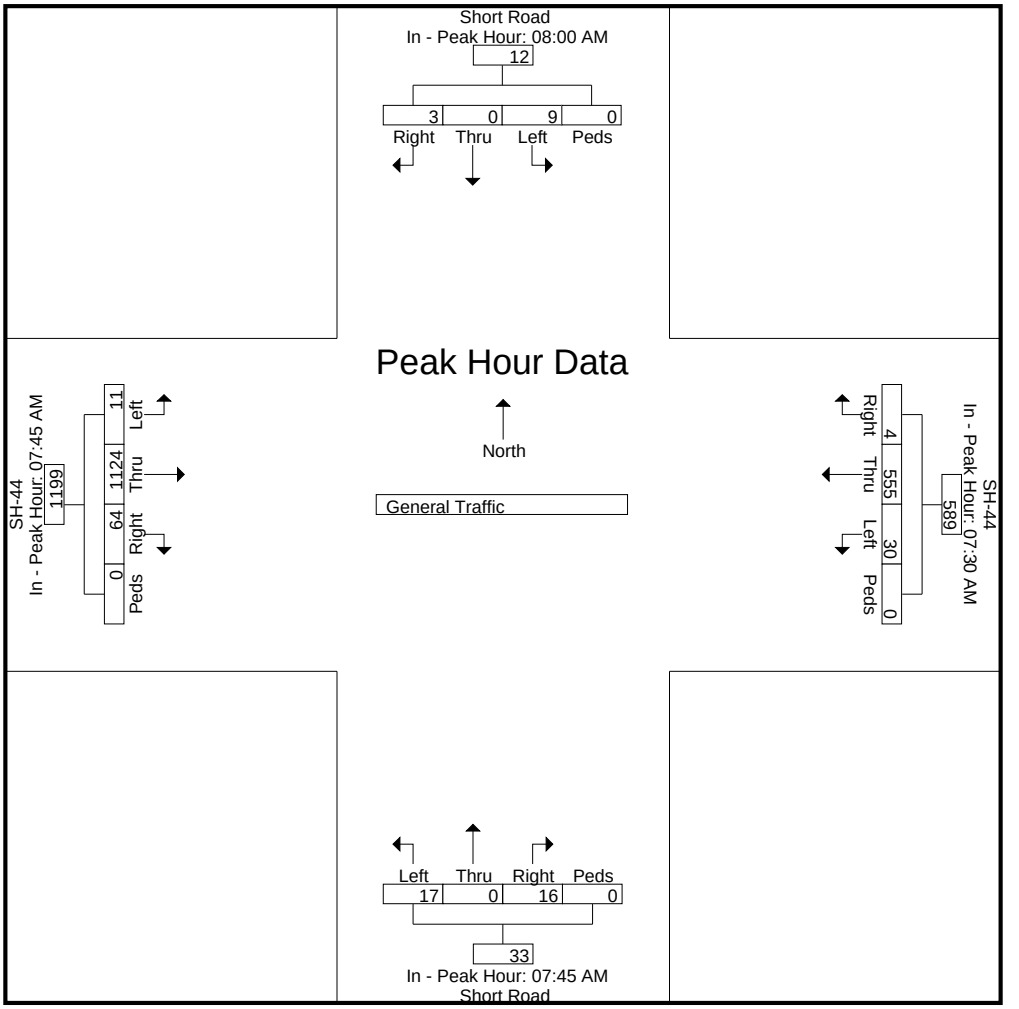
File Name : SH-44 (State St) & Short Rd - revised
Site Code : 00000000
Start Date : 1/20/2022
Page No : 4

	Short Road From North					SH-44 From East					Short Road From South					SH-44 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	08:00 AM					07:30 AM					07:45 AM					07:45 AM					
+0 mins.	0	0	0	0	0	0	**148**	5	0	153	4	0	**7**	0	**11**	**22**	296	1	0	**319**	
+15 mins.	0	0	1	0	1	**3**	133	7	0	143	2	0	2	0	4	16	268	3	0	287	
+30 mins.	1	0	2	0	3	0	130	**9**	0	139	4	0	3	0	7	18	263	**4**	0	285	
+45 mins.	**2**	0	**6**	0	**8**	1	144	9	0	**154**	**6**	0	5	0	11	8	**297**	3	0	308	
Total Volume	3	0	9	0	12	4	555	30	0	589	16	0	17	0	33	64	1124	11	0	1199	
% App. Total	25	0	75	0		0.7	94.2	5.1	0		48.5	0	51.5	0		5.3	93.7	0.9	0		
PHF	.375	.000	.375	.000	.375	.333	.938	.833	.000	.956	.667	.000	.607	.000	.750	.727	.946	.688	.000	.940	



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Study: FOCU0006
Intersection: Short Rd / SH-44
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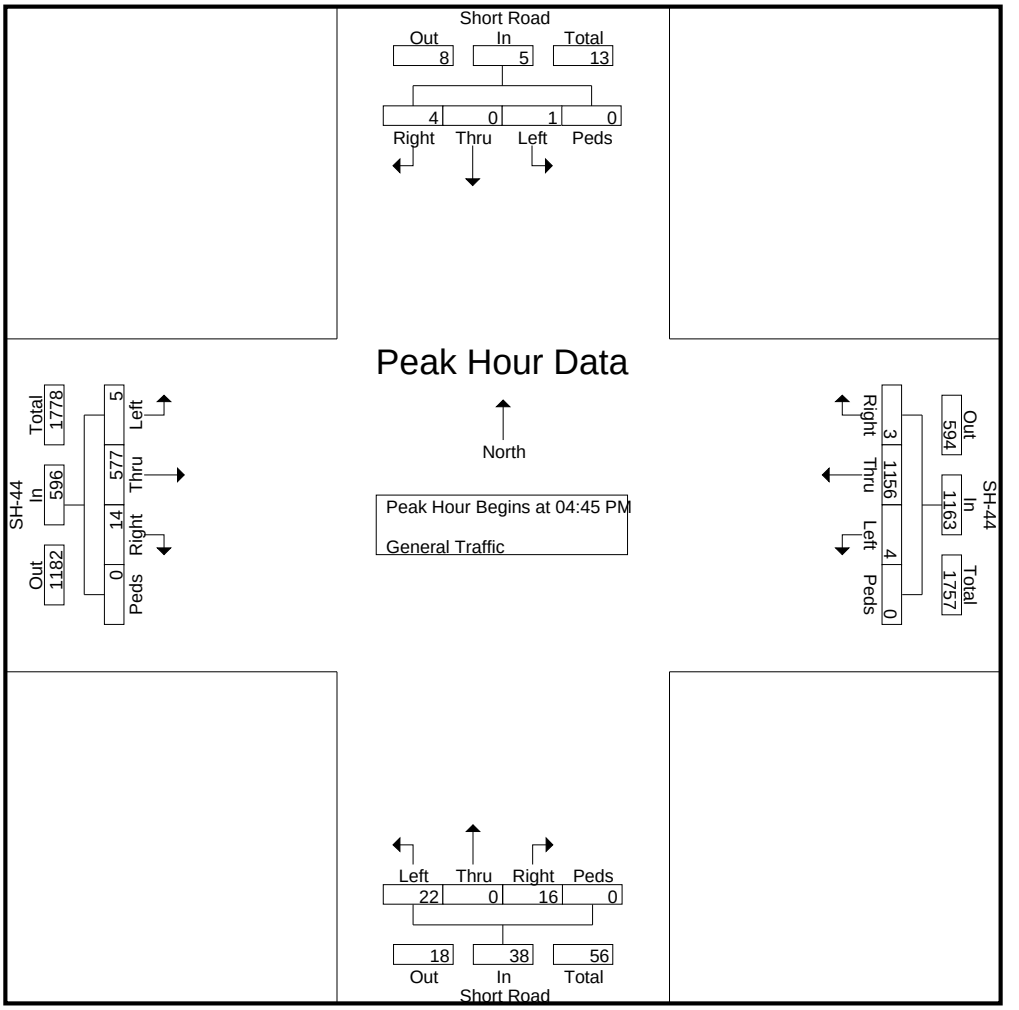
Site Code : 00000000
Start Date : 1/20/2022
Page No : 5

	Short Road From North					SH-44 From East					Short Road From South					SH-44 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	**4**	0	0	0	**4**	0	293	0	0	293	**7**	0	2	0	9	4	142	0	0	146	452
05:00 PM	0	0	**1**	0	1	1	279	1	0	281	1	0	7	0	8	**5**	132	**3**	0	140	430
05:15 PM	0	0	0	0	0	0	289	1	0	290	5	0	**10**	0	**15**	2	136	2	0	140	445
05:30 PM	0	0	0	0	0	**2**	**295**	**2**	0	**299**	3	0	3	0	6	3	**167**	0	0	**170**	**475**
Total Volume	4	0	1	0	5	3	1156	4	0	1163	16	0	22	0	38	14	577	5	0	596	1802
% App. Total	80	0	20	0		0.3	99.4	0.3	0		42.1	0	57.9	0		2.3	96.8	0.8	0		
PHF	.250	.000	.250	.000	.313	.375	.980	.500	.000	.972	.571	.000	.550	.000	.633	.700	.864	.417	.000	.876	.948



L2 Data Collection

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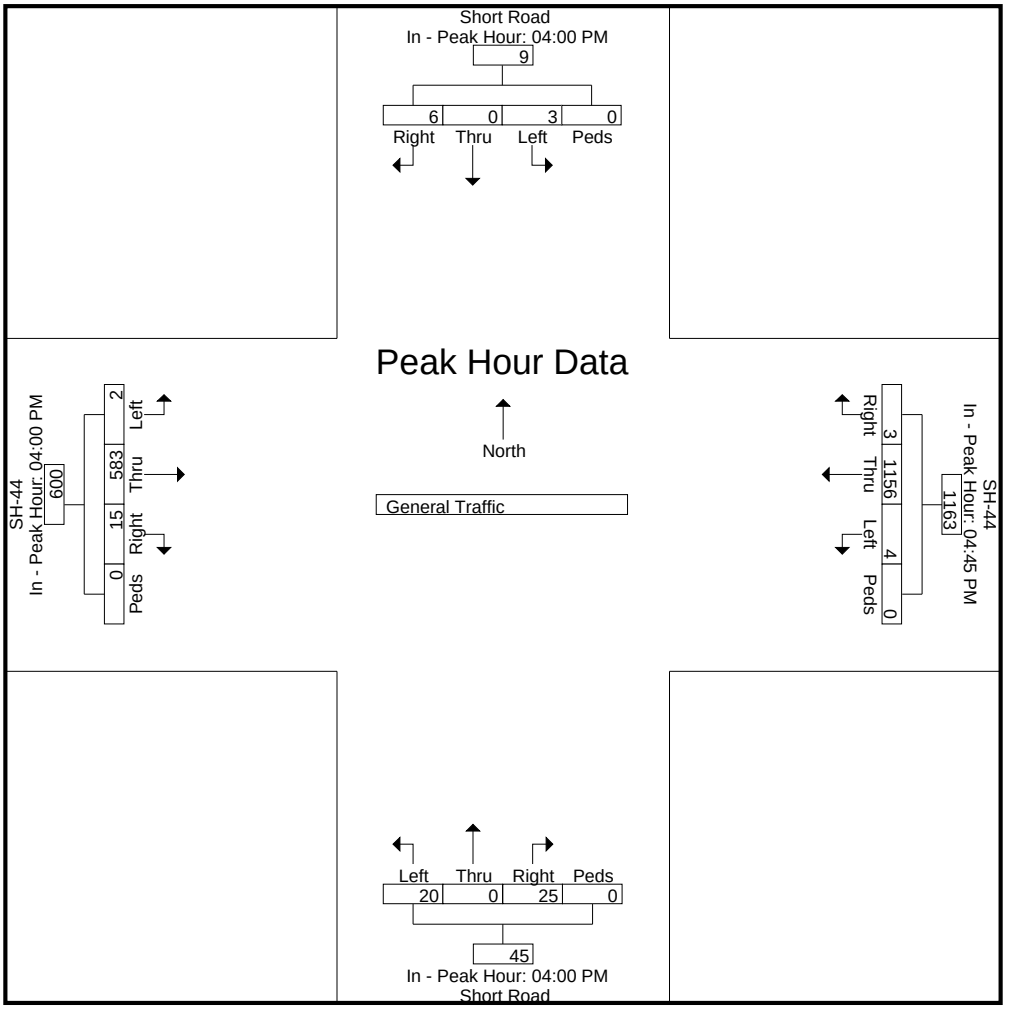
Study: FOCU0006
Intersection: Short Rd / SH-44
City, State: Canyon County, Idaho
Control: Stop Sign

File Name : SH-44 (State St) & Short Rd - revised
Site Code : 00000000
Start Date : 1/20/2022
Page No : 6

	Short Road From North					SH-44 From East					Short Road From South					SH-44 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	04:00 PM					04:45 PM					04:00 PM					04:00 PM					
+0 mins.	1	0	**2**	0	3	0	293	0	0	293	**10**	0	5	0	**15**	**5**	**187**	0	0	**192**	
+15 mins.	0	0	1	0	1	1	279	1	0	281	4	0	6	0	10	2	120	**1**	0	123	
+30 mins.	1	0	0	0	1	0	289	1	0	290	4	0	**7**	0	11	4	134	1	0	139	
+45 mins.	**4**	0	0	0	**4**	**2**	**295**	**2**	0	**299**	7	0	2	0	9	4	142	0	0	146	
Total Volume	6	0	3	0	9	3	1156	4	0	1163	25	0	20	0	45	15	583	2	0	600	
% App. Total	66.7	0	33.3	0		0.3	99.4	0.3	0		55.6	0	44.4	0		2.5	97.2	0.3	0		
PHF	.375	.000	.375	.000	.563	.375	.980	.500	.000	.972	.625	.000	.714	.000	.750	.750	.779	.500	.000	.781	



L2 Data Collection

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Idaho (208) 860-7554 Utah (801) 413-2993

Study: FOCU0006
Intersection: Short Rd / SH-44
City, State: Canyon County, Idaho
Control: Stop Sign

File Name : SH-44 (State St) & Short Rd - revised
Site Code : 00000000
Start Date : 1/20/2022
Page No : 7

Image 1

L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 413-2993

Study: FOCU0006
Intersection: SH-44 / Hamblin Road
City, State: Canyon, County, Idaho
Control: Stop Sign

File Name : SH-44 (State St) & Hamblin Rd
Site Code : TURNS
Start Date : 1/20/2022
Page No : 1

Groups Printed- General Traffic

	Hamblin Road From North				SH-44 (State Street) From East				SH-44 (State Street) From West				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	1	0	1	0	113	0	113	268	1	0	269	383
07:15 AM	1	2	0	3	0	134	0	134	289	2	0	291	428
07:30 AM	5	1	0	6	0	148	0	148	256	4	0	260	414
07:45 AM	0	0	0	0	3	133	0	136	296	1	0	297	433
Total	6	4	0	10	3	528	0	531	1109	8	0	1117	1658
08:00 AM	0	0	0	0	0	130	0	130	268	3	0	271	401
08:15 AM	0	1	0	1	1	144	0	145	263	4	0	267	413
08:30 AM	1	2	0	3	0	105	0	105	297	3	0	300	408
08:45 AM	2	6	0	8	2	119	0	121	251	1	0	252	381
Total	3	9	0	12	3	498	0	501	1079	11	0	1090	1603

04:00 PM	1	2	0	3	0	243	0	243	187	0	0	187	433
04:15 PM	0	1	0	1	1	258	0	259	120	1	0	121	381
04:30 PM	1	0	0	1	2	255	0	257	134	1	0	135	393
04:45 PM	4	0	0	4	0	293	0	293	142	0	0	142	439
Total	6	3	0	9	3	1049	0	1052	583	2	0	585	1646
05:00 PM	0	1	0	1	1	279	0	280	132	3	0	135	416
05:15 PM	0	0	0	0	0	289	0	289	136	2	0	138	427
05:30 PM	0	0	0	0	2	295	0	297	167	0	0	167	464
05:45 PM	1	1	0	2	1	233	0	234	134	2	0	136	372
Total	1	2	0	3	4	1096	0	1100	569	7	0	576	1679
Grand Total	16	18	0	34	13	3171	0	3184	3340	28	0	3368	6586
Apprch %	47.1	52.9	0		0.4	99.6	0		99.2	0.8	0		
Total %	0.2	0.3	0	0.5	0.2	48.1	0	48.3	50.7	0.4	0	51.1	

L2 Data Collection

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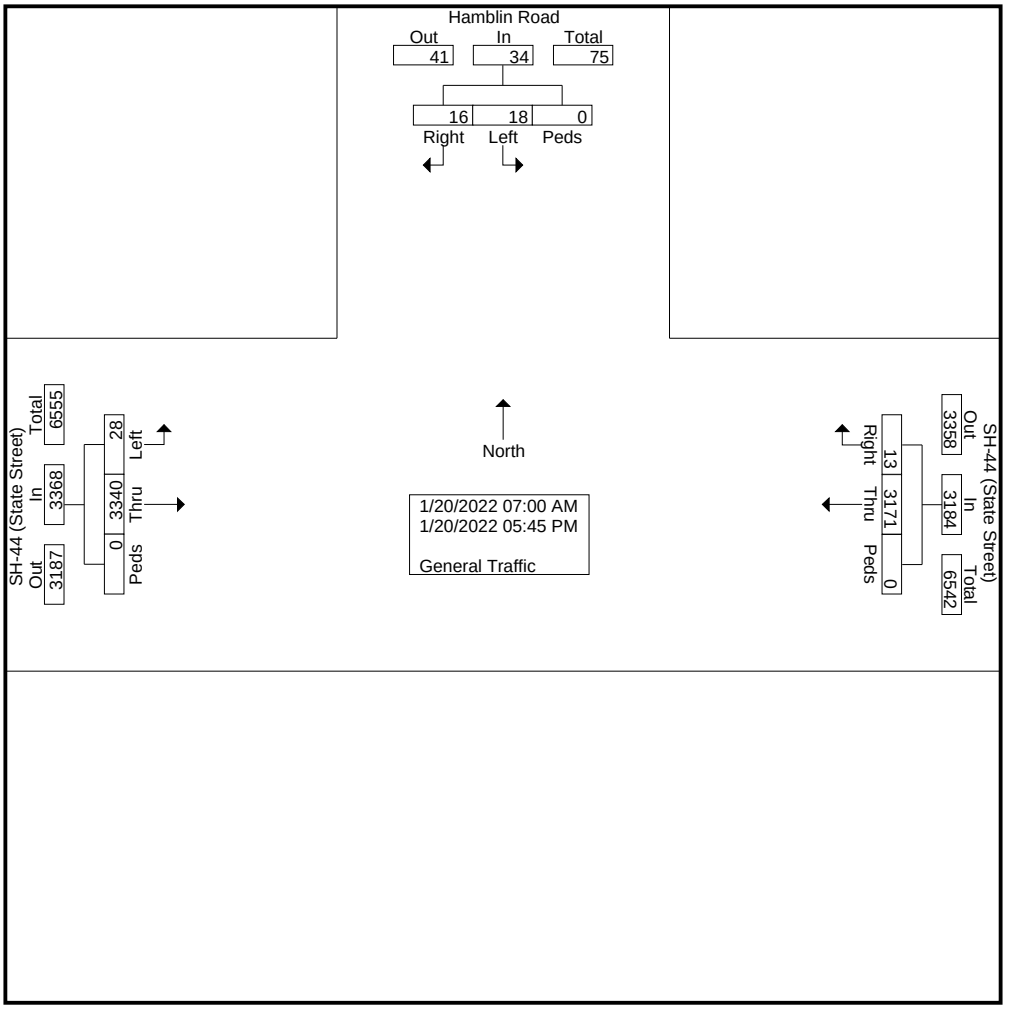
Idaho (208) 860-7554 Utah (801) 413-2993

Study: FOCU0006
Intersection: SH-44 / Hamblin Road
City, State: Canyon, County, Idaho
Control: Stop Sign

File Name : SH-44 (State St) & Hamblin Rd
Site Code : TURNS
Start Date : 1/20/2022
Page No : 2



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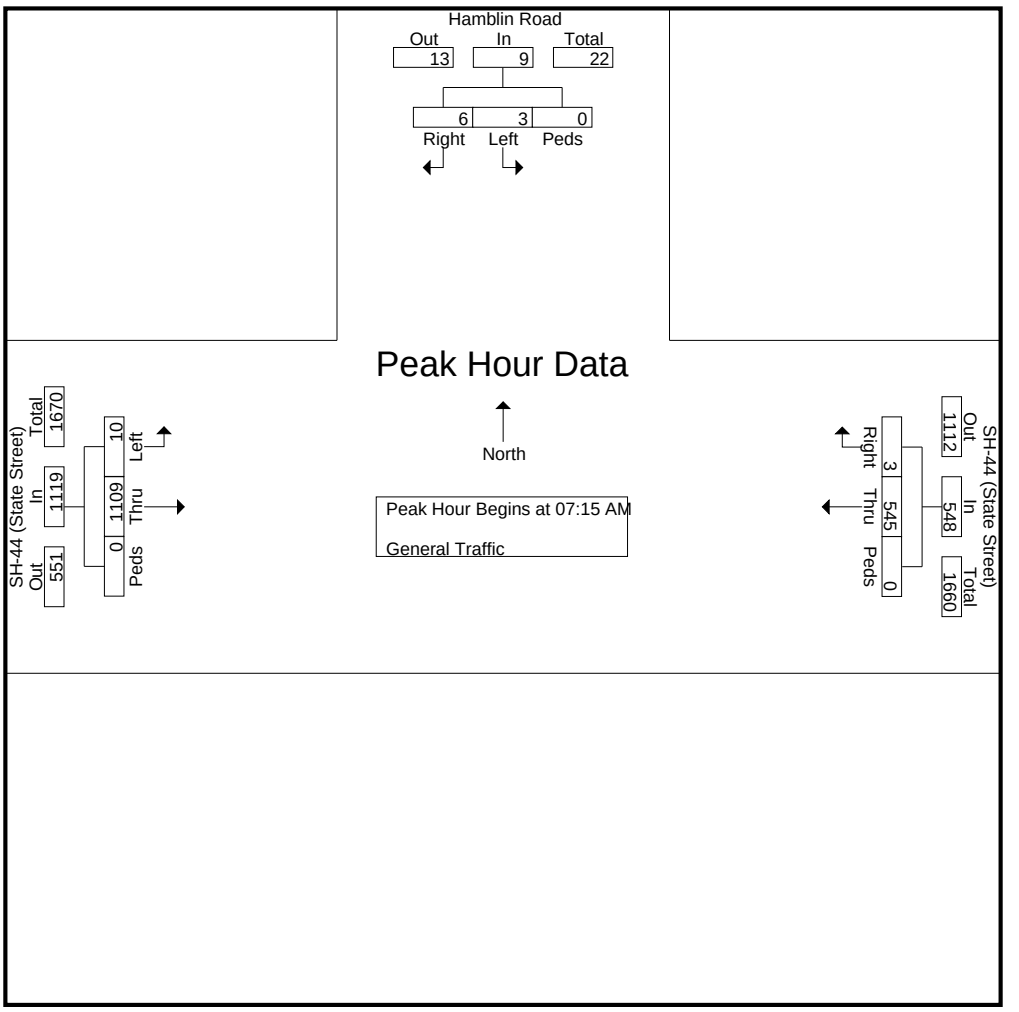
Study: FOCU0006
Intersection: SH-44 / Hamblin Road
City, State: Canyon, County, Idaho
Control: Stop Sign

File Name : SH-44 (State St) & Hamblin Rd
Site Code : TURNS
Start Date : 1/20/2022
Page No : 3

	Hamblin Road From North				SH-44 (State Street) From East				SH-44 (State Street) From West				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:15 AM													
07:15 AM	1	**2**	0	3	0	134	0	134	289	2	0	291	428
07:30 AM	**5**	1	0	**6**	0	**148**	0	**148**	256	**4**	0	260	414
07:45 AM	0	0	0	0	**3**	133	0	136	**296**	1	0	**297**	**433**
08:00 AM	0	0	0	0	0	130	0	130	268	3	0	271	401
Total Volume	6	3	0	9	3	545	0	548	1109	10	0	1119	1676
% App. Total	66.7	33.3	0		0.5	99.5	0		99.1	0.9	0		
PHF	.300	.375	.000	.375	.250	.921	.000	.926	.937	.625	.000	.942	.968



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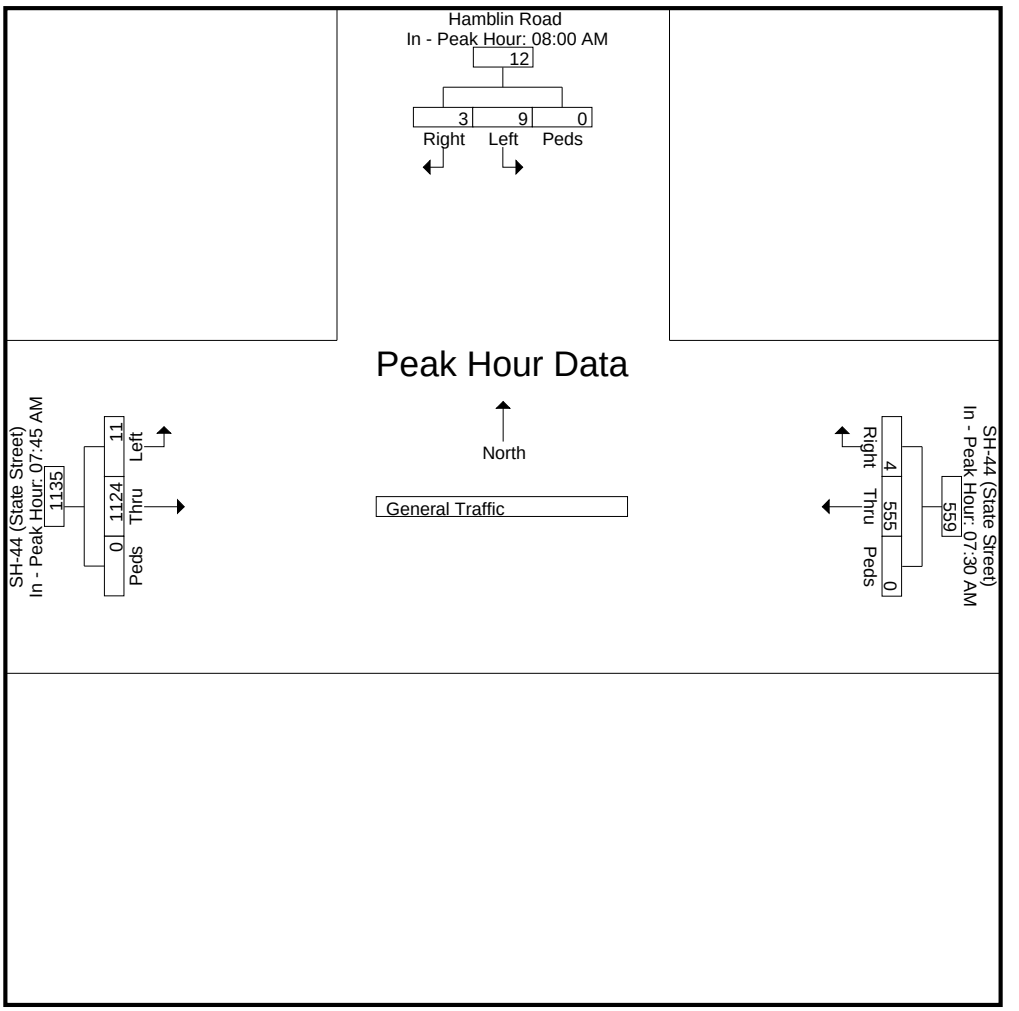
Study: FOCU0006
Intersection: SH-44 / Hamblin Road
City, State: Canyon, County, Idaho
Control: Stop Sign

File Name : SH-44 (State St) & Hamblin Rd
Site Code : TURNS
Start Date : 1/20/2022
Page No : 4

	Hamblin Road From North				SH-44 (State Street) From East				SH-44 (State Street) From West				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1													
Peak Hour for Each Approach Begins at:													
	08:00 AM				07:30 AM				07:45 AM				
+0 mins.	0	0	0	0	0	**148**	0	**148**	296	1	0	297	
+15 mins.	0	1	0	1	**3**	133	0	136	268	3	0	271	
+30 mins.	1	2	0	3	0	130	0	130	263	**4**	0	267	
+45 mins.	**2**	**6**	0	**8**	1	144	0	145	**297**	3	0	**300**	
Total Volume	3	9	0	12	4	555	0	559	1124	11	0	1135	
% App. Total	25	75	0		0.7	99.3	0		99	1	0		
PHF	.375	.375	.000	.375	.333	.938	.000	.944	.946	.688	.000	.946	



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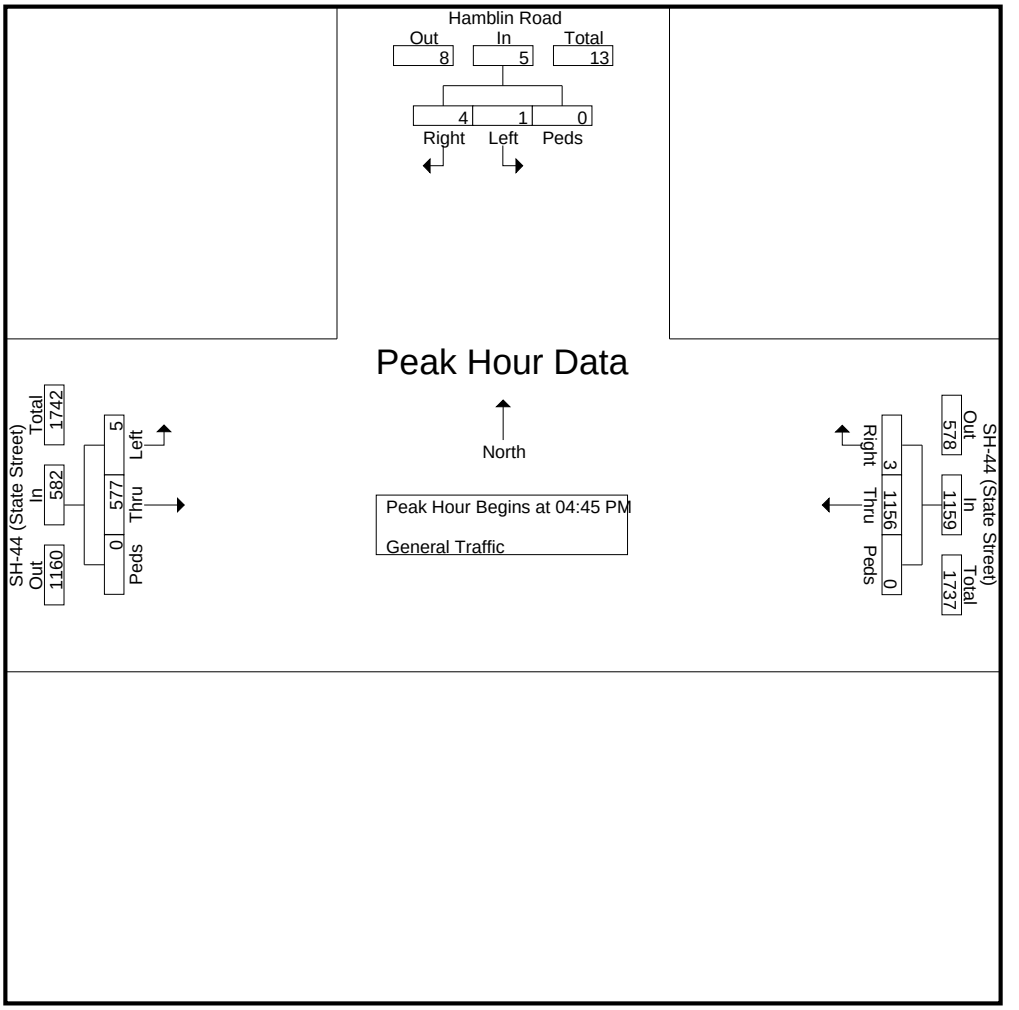
	Hamblin Road From North				SH-44 (State Street) From East				SH-44 (State Street) From West				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:45 PM													
04:45 PM	**4**	0	0	**4**	0	293	0	293	142	0	0	142	439
05:00 PM	0	**1**	0	1	1	279	0	280	132	**3**	0	135	416
05:15 PM	0	0	0	0	0	289	0	289	136	2	0	138	427
05:30 PM	0	0	0	0	**2**	**295**	0	**297**	**167**	0	0	**167**	**464**
Total Volume	4	1	0	5	3	1156	0	1159	577	5	0	582	1746
% App. Total	80	20	0		0.3	99.7	0		99.1	0.9	0		
PHF	.250	.250	.000	.313	.375	.980	.000	.976	.864	.417	.000	.871	.941



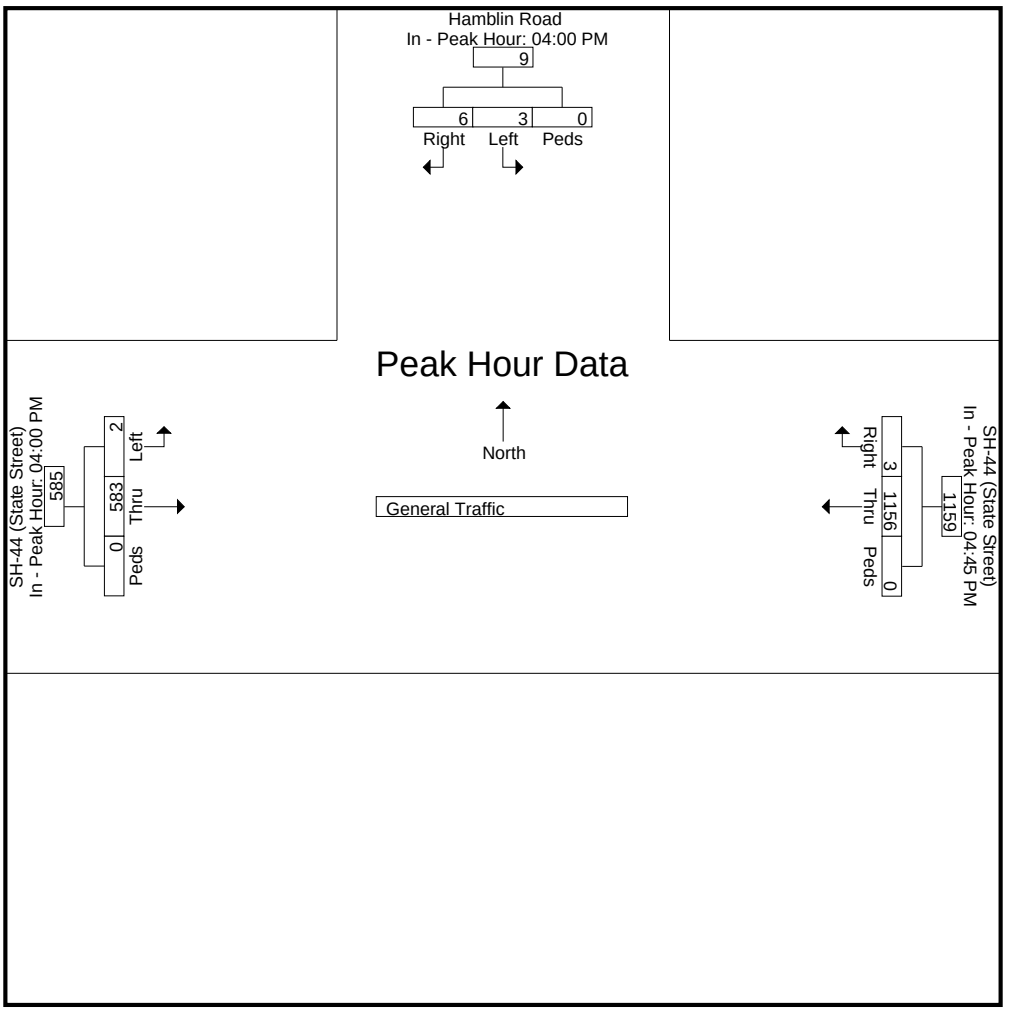
L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 413-2993

Study: FOCU0006
Intersection: SH-44 / Hamblin Road
City, State: Canyon, County, Idaho
Control: Stop Sign

File Name : SH-44 (State St) & Hamblin Rd
Site Code : TURNS
Start Date : 1/20/2022
Page No : 6

	Hamblin Road From North				SH-44 (State Street) From East				SH-44 (State Street) From West				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Each Approach Begins at:													
	04:00 PM				04:45 PM				04:00 PM				
+0 mins.	1	**2**	0	3	0	293	0	293	**187**	0	0	**187**	
+15 mins.	0	1	0	1	1	279	0	280	120	**1**	0	121	
+30 mins.	1	0	0	1	0	289	0	289	134	1	0	135	
+45 mins.	**4**	0	0	**4**	**2**	**295**	0	**297**	142	0	0	142	
Total Volume	6	3	0	9	3	1156	0	1159	583	2	0	585	
% App. Total	66.7	33.3	0		0.3	99.7	0		99.7	0.3	0		
PHF	.375	.375	.000	.563	.375	.980	.000	.976	.779	.500	.000	.782	



L2 Data Collection

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Idaho (208) 860-7554 Utah (801) 413-2993

Study: FOCU0006
Intersection: SH-44 / Hamblin Road
City, State: Canyon, County, Idaho
Control: Stop Sign

File Name : SH-44 (State St) & Hamblin Rd
Site Code : TURNS
Start Date : 1/20/2022
Page No : 7

Image 1

Trip Generation Report

Trip Generation Summary

Alternative: Alternative 1
Phase:
Project: Northern Star

Open Date: 1/14/2022
Analysis Date: 1/14/2022

ITE	Land Use		Weekday Average Daily Trips *	Enter	Exit	Total	Weekday AM Peak Hour of Adjacent Street Traffic *	Enter	Exit	Total	Weekday PM Peak Hour of Adjacent Street Traffic *	Enter	Exit	Total
210	SFHOUSE 1			260	259	519		10	31	41		34	20	54
	55	Dwelling Units												
220	LOW-RISE 1			403	402	805		12	39	51		39	23	62
	110	Dwelling Units												
221	MID-RISE 1			843	843	1686		29	83	112		83	53	136
	310	Dwelling Units												
710	OFFICEGENERAL 1			760	759	1519		156	25	181		29	150	179
	156	1000 Sq. Ft. GFA												
Unadjusted Volume				2266	2263	4529		207	178	385		185	246	431
Internal Capture Trips				0	0	0		3	3	6		7	7	14
Pass-By Trips				0	0	0		0	0	0		0	0	0
Volume Added to Adjacent Streets				2266	2263	4529		204	175	379		178	239	417

Total Weekday Average Daily Trips Internal Capture = 0 Percent
Total Weekday AM Peak Hour of Adjacent Street Traffic Internal Capture = 2 Percent
Total Weekday PM Peak Hour of Adjacent Street Traffic Internal Capture = 3 Percent

* - Custom rate used for selected time period.

Source: Institute of Transportation Engineers, Trip Generation Manual 10th Edition
TRIP GENERATION 10, TRAFFICWARE, LLC

Build-out Year Traffic Volumes from Surrounding Developments

Figure 5 – Site Traffic Distribution Patterns

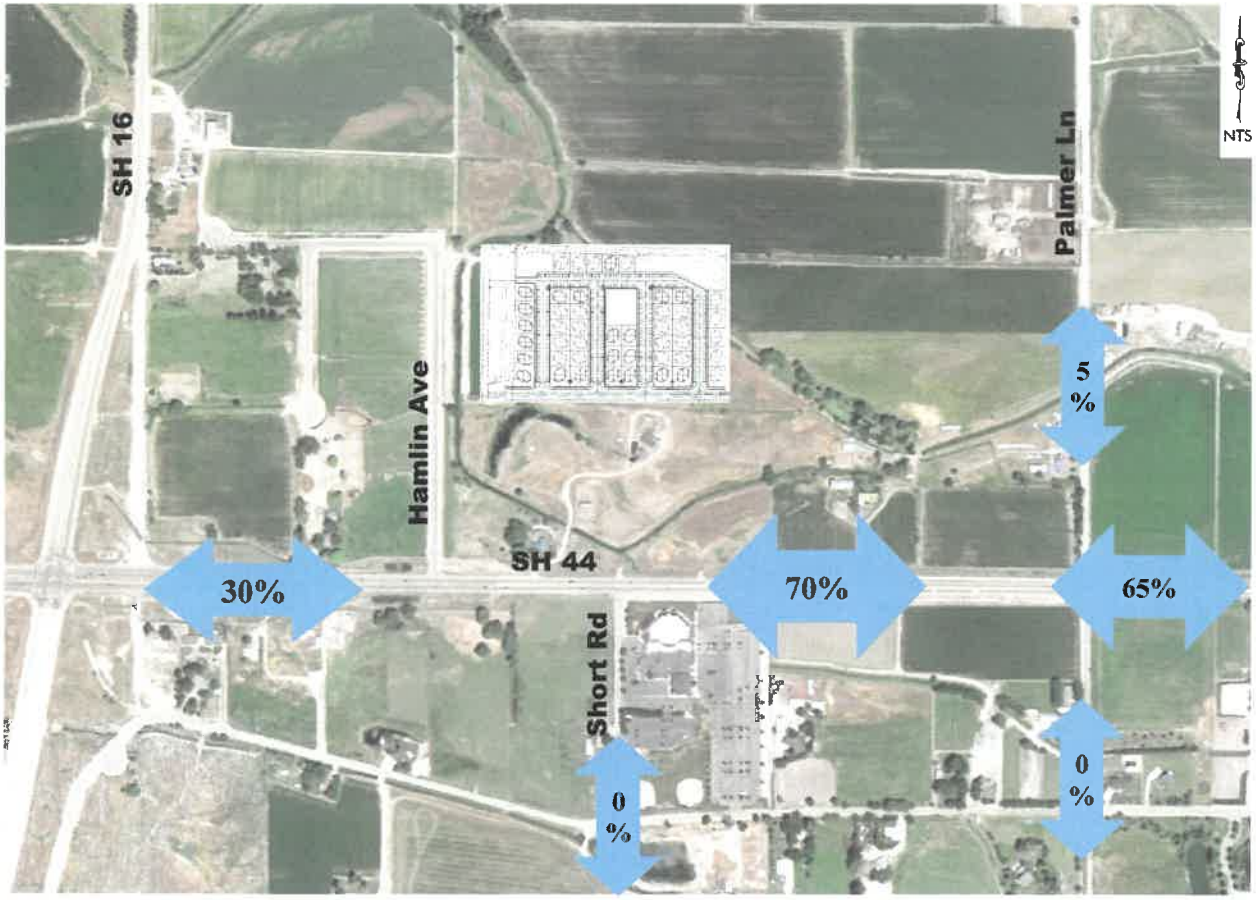


Figure 6 – AM Peak Hour Site Traffic

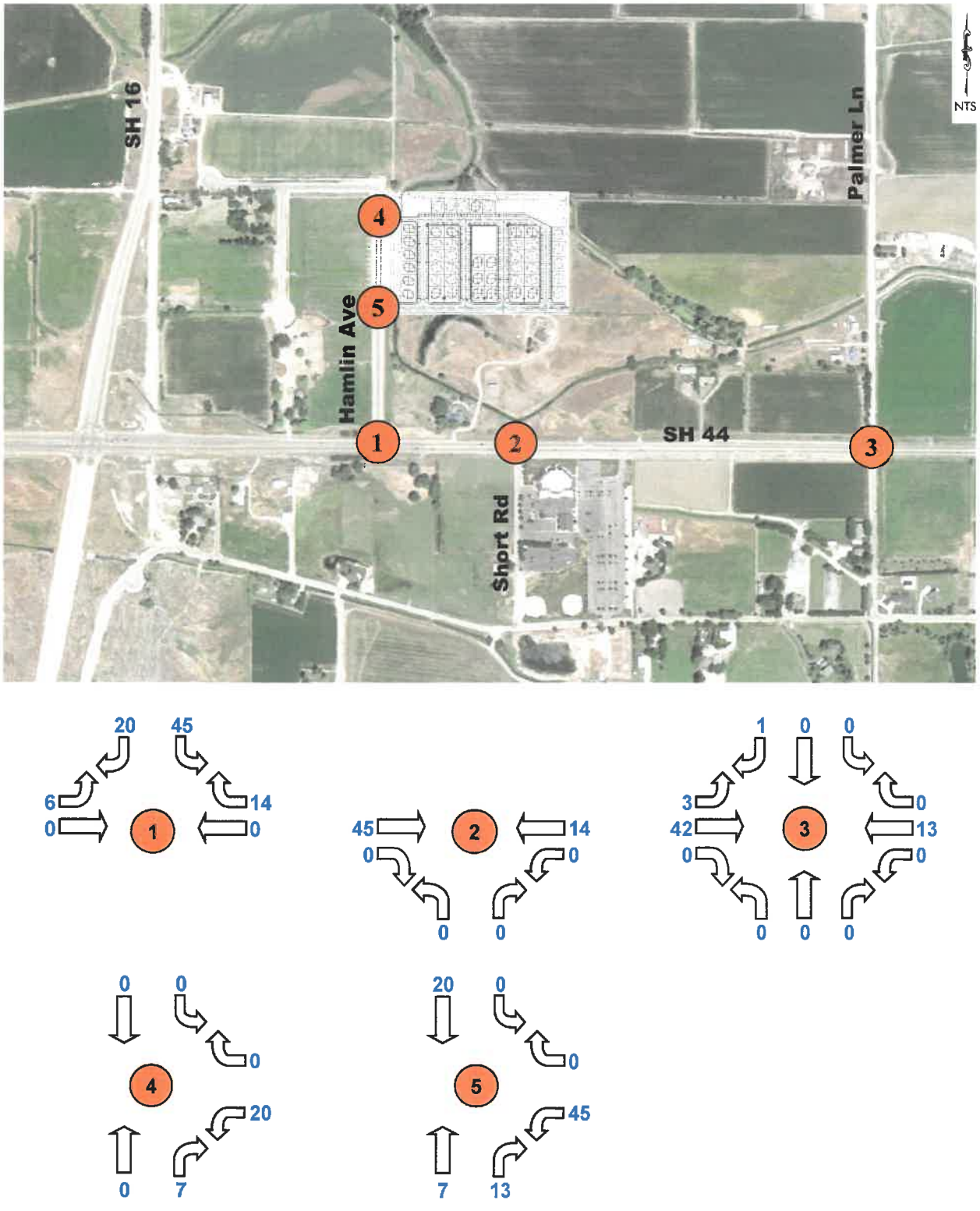
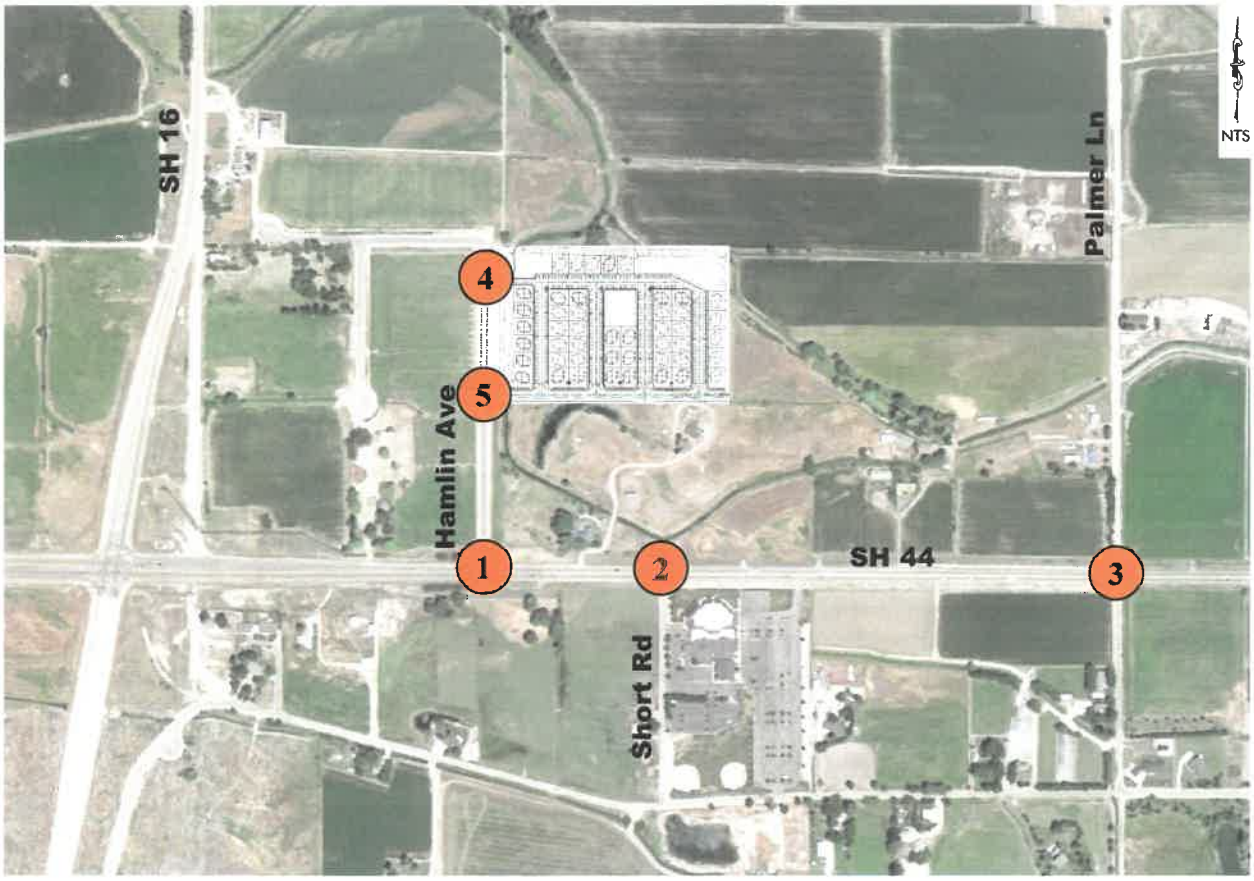


Figure 7 – PM Peak Hour Site Traffic



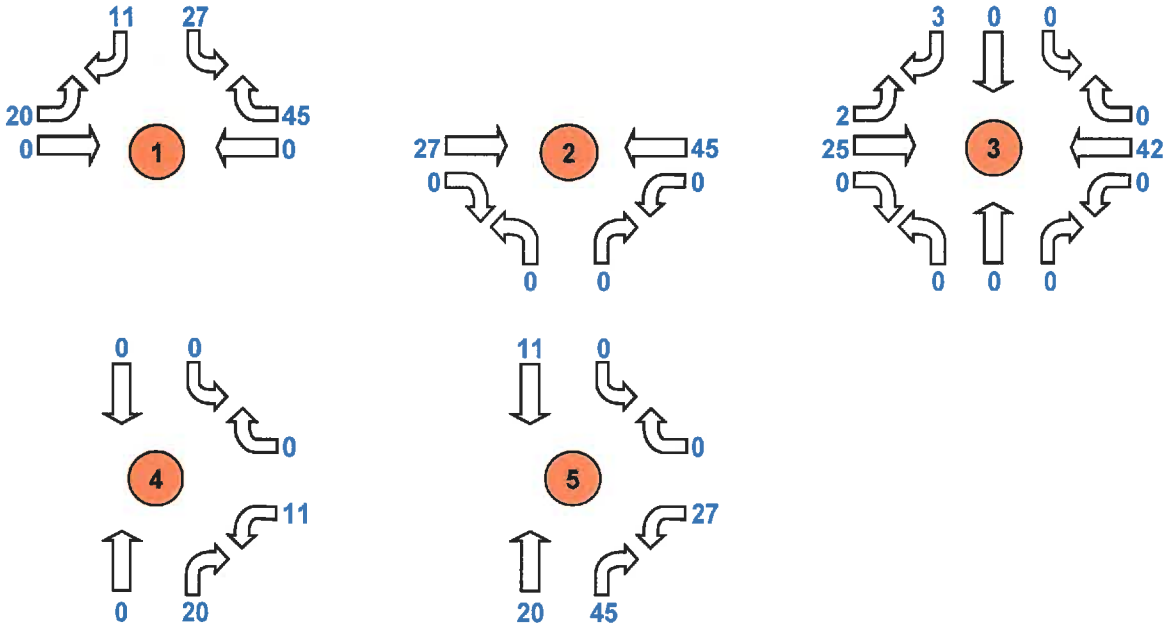


Figure 8 – 2022 AM Peak Hour Total Traffic

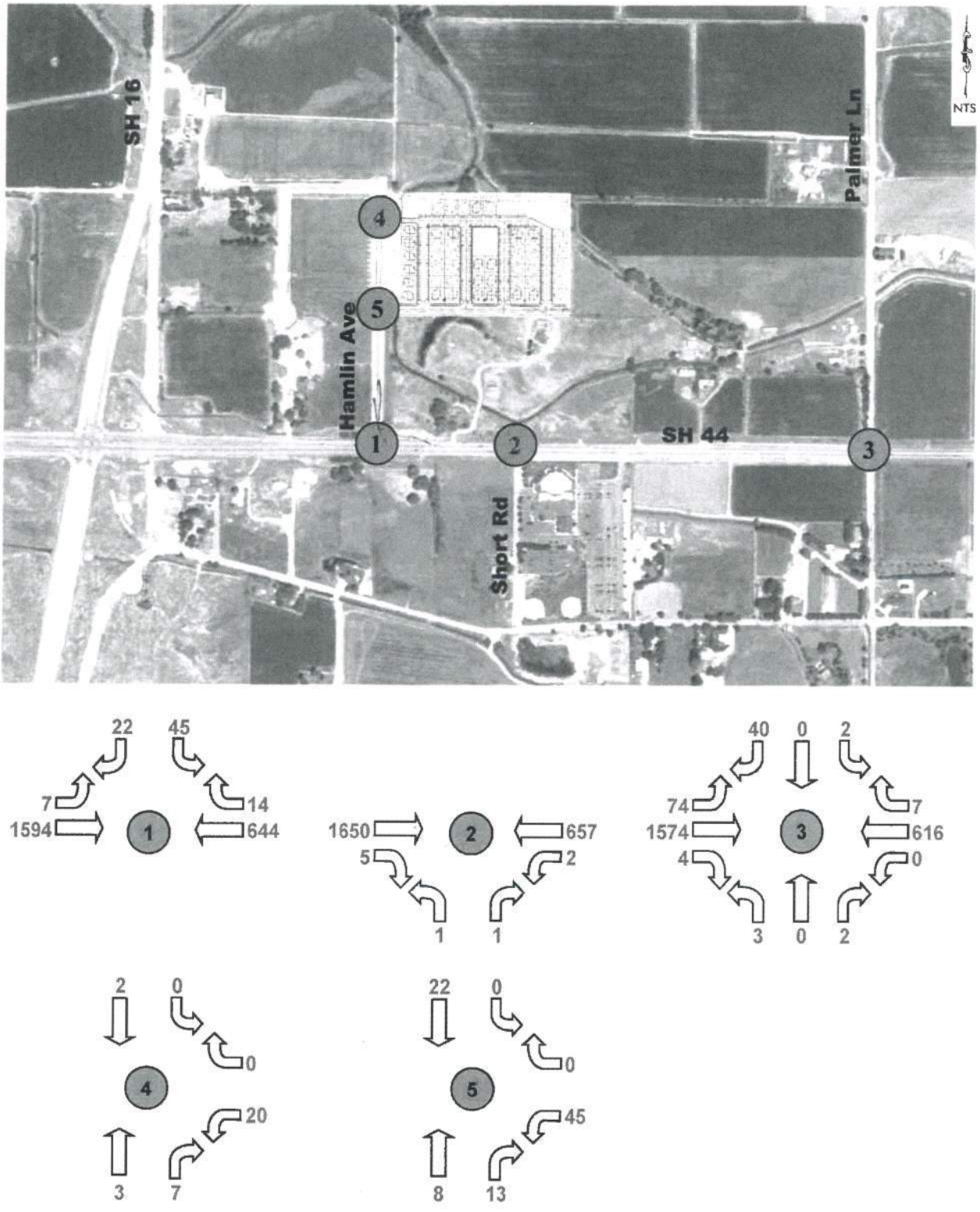
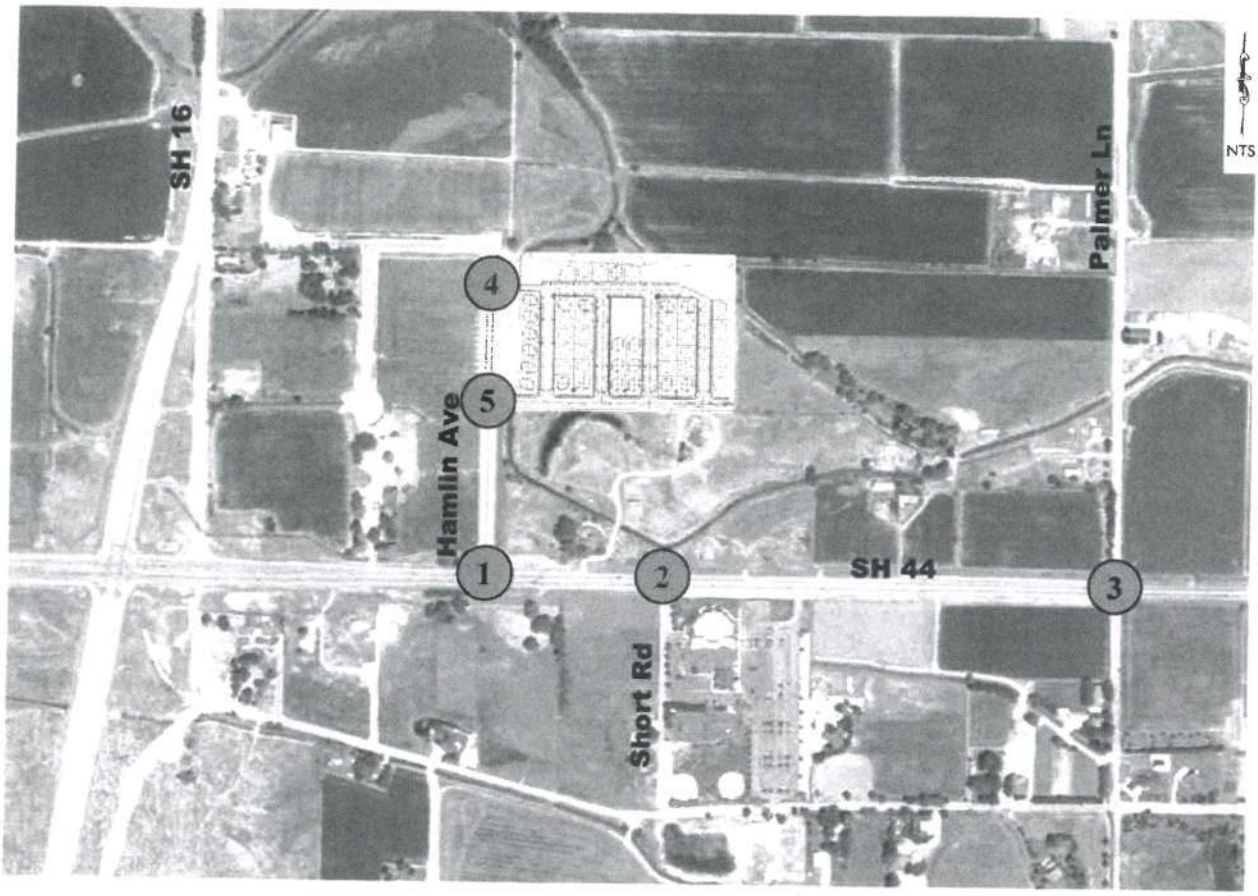


Figure 9 – 2022 PM Peak Hour Total Traffic



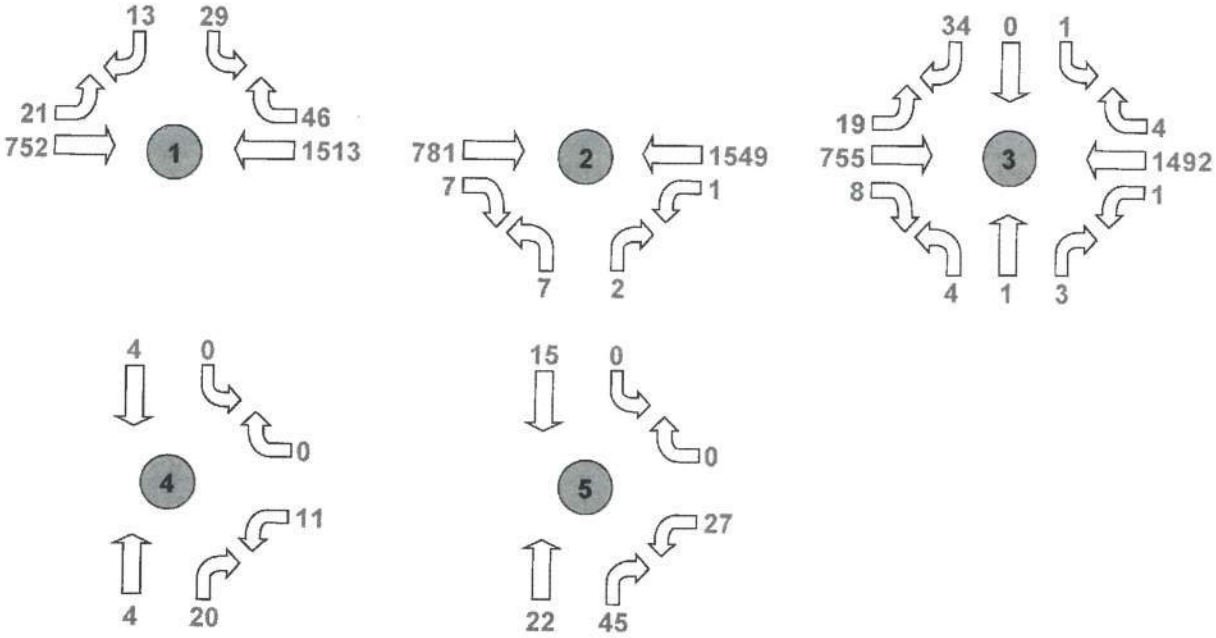


Figure 4.1 – Estimated Site Traffic Distribution Patterns

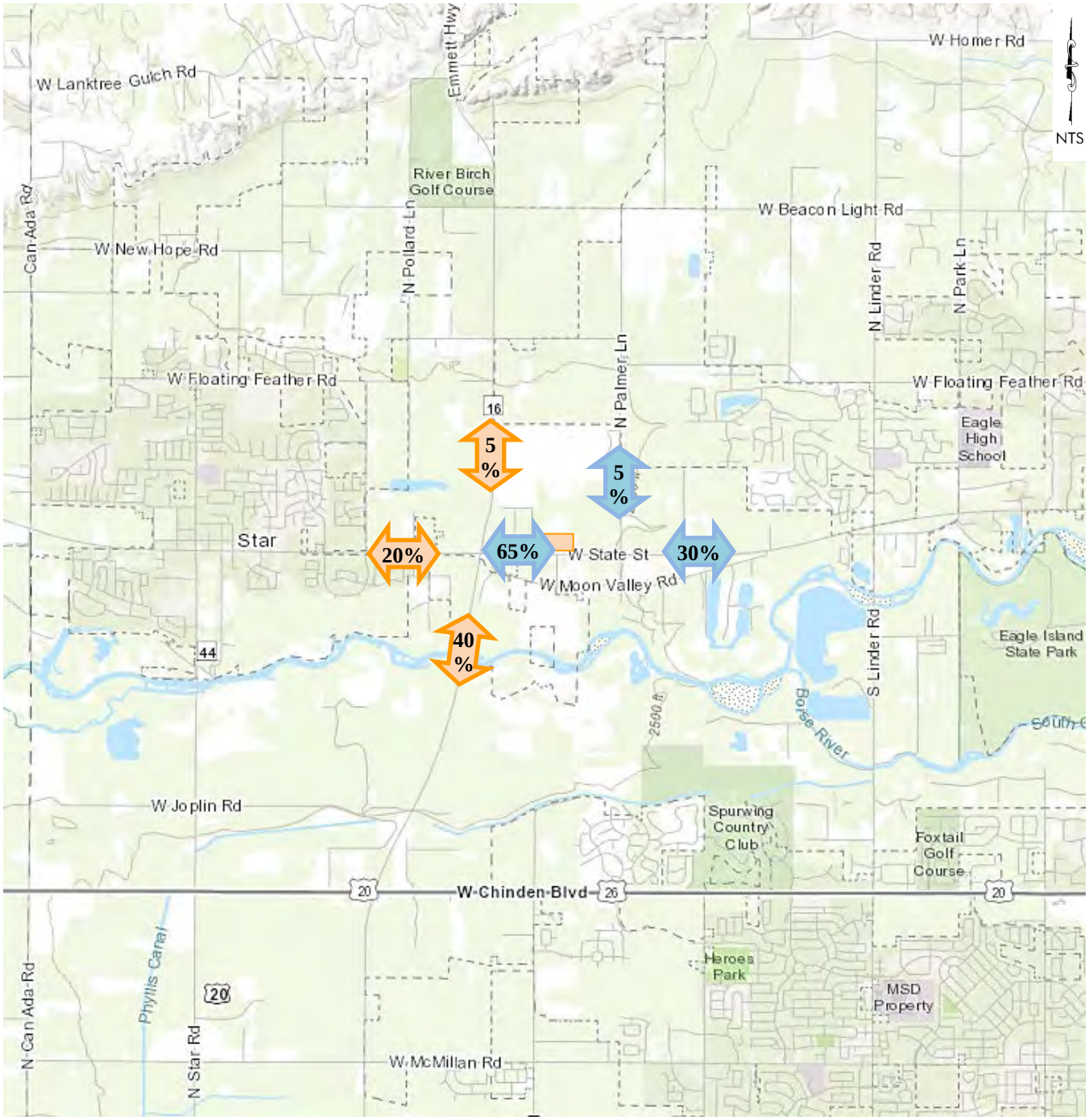
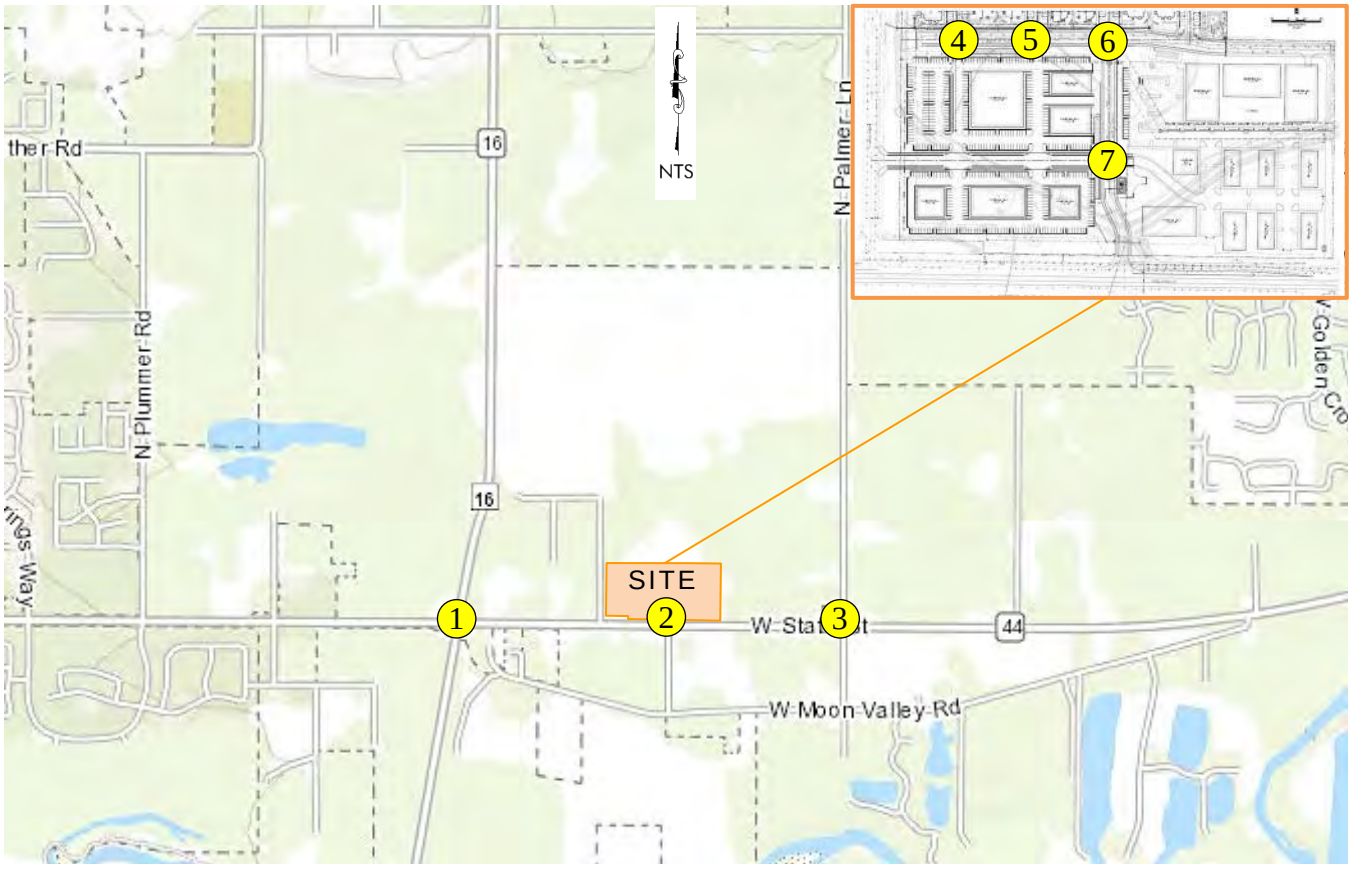
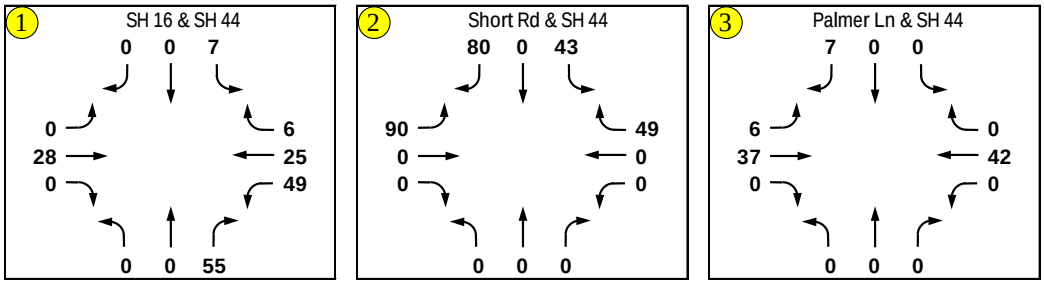


Figure 4.2 – Build-Out Year AM Peak Hour Site Traffic





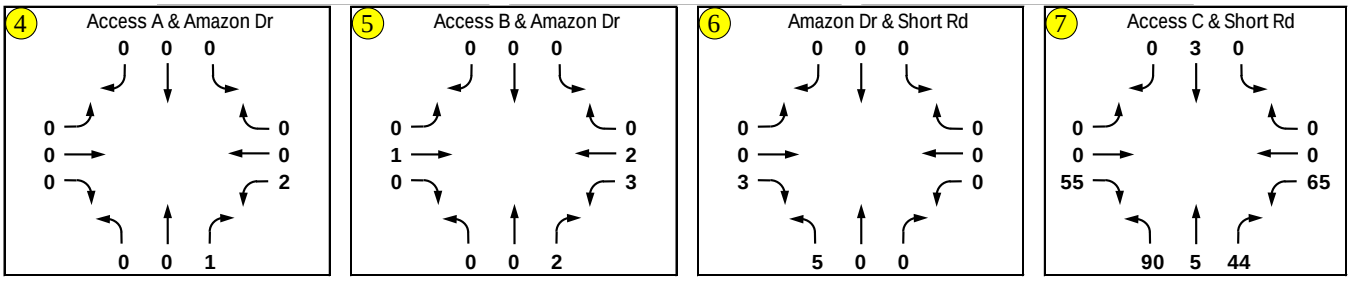
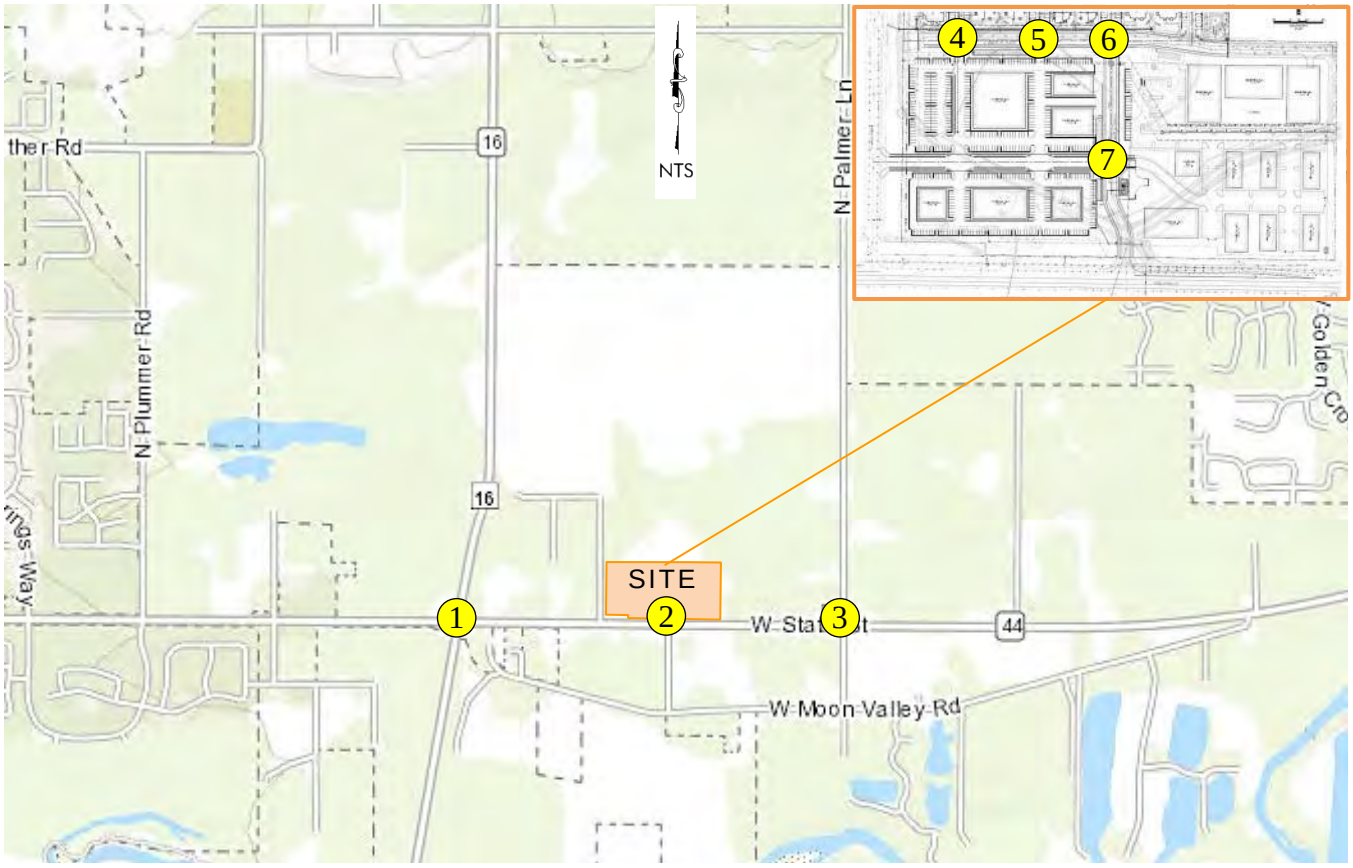
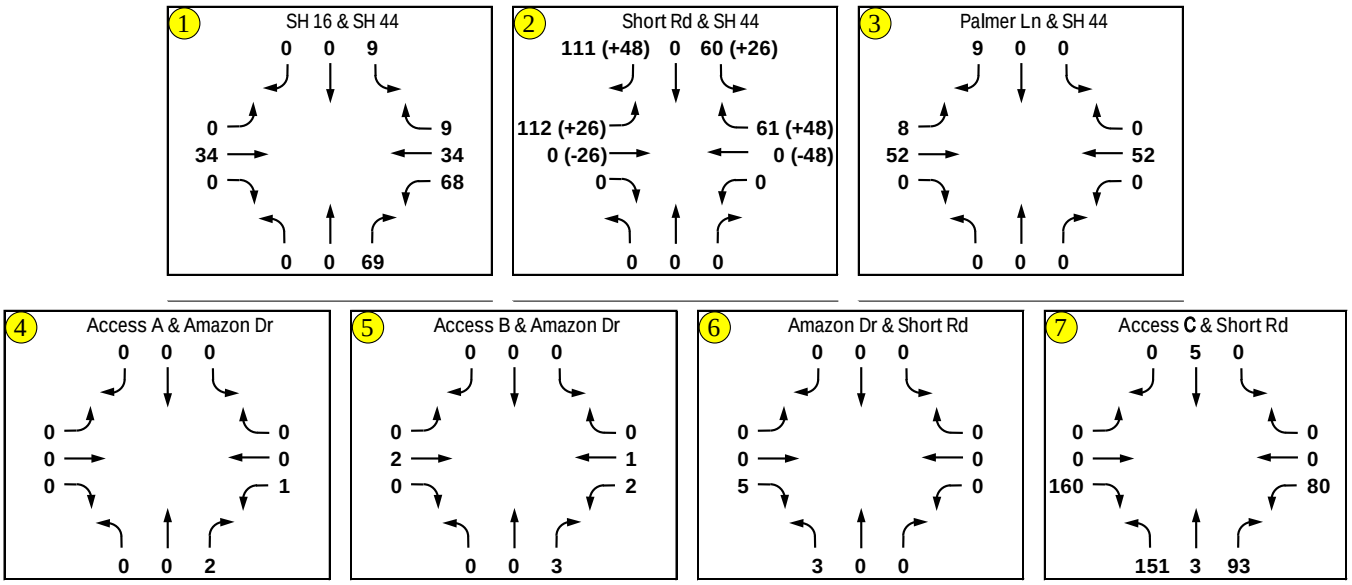


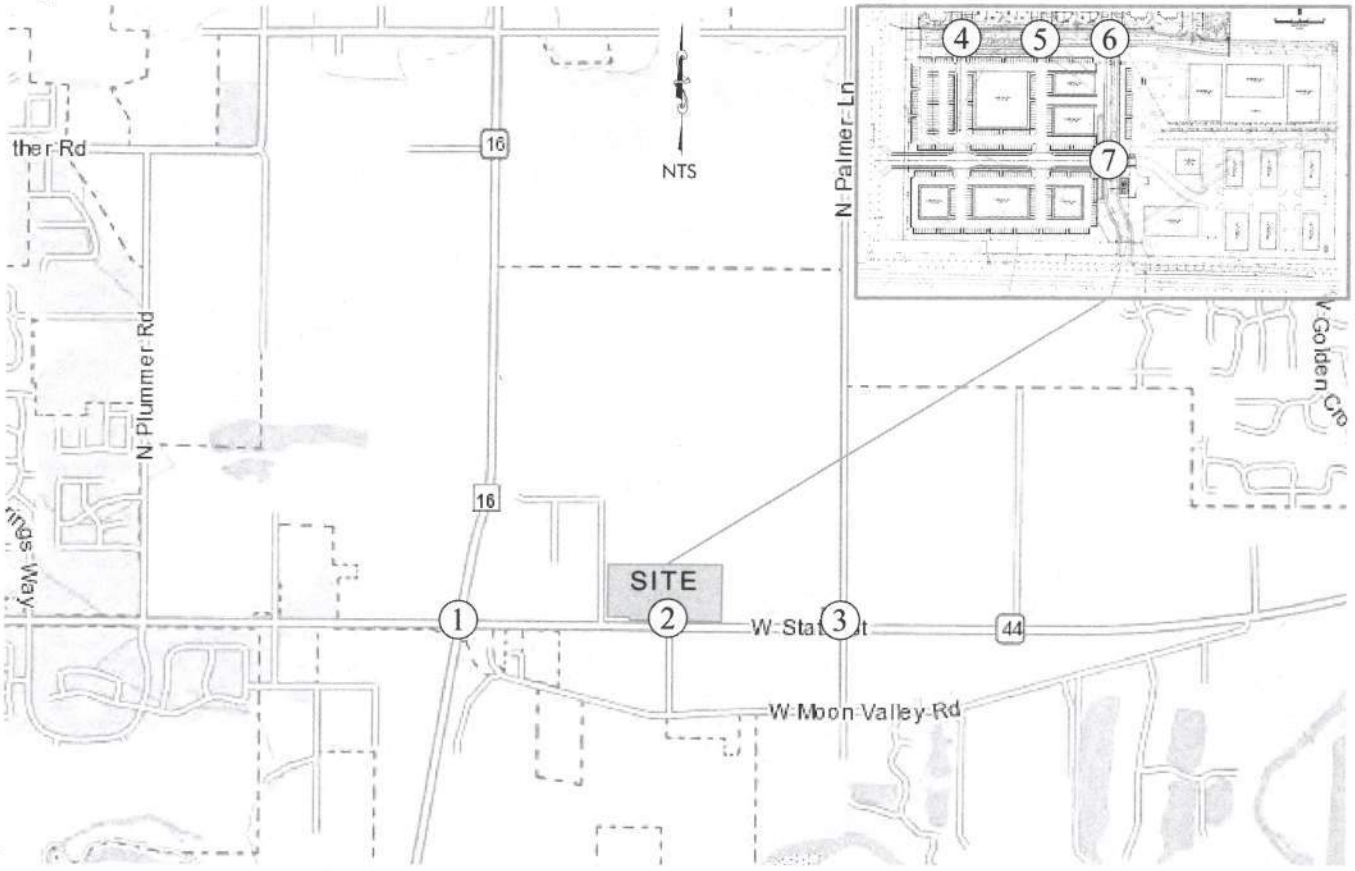
Figure 4.3 – Build-Out Year PM Peak Hour Site Traffic

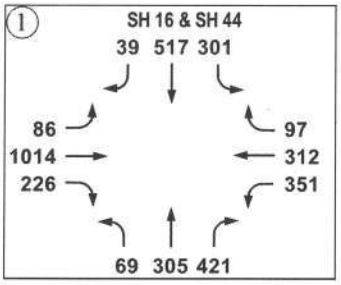


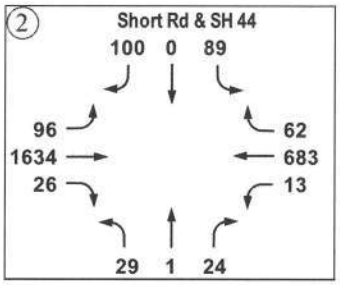


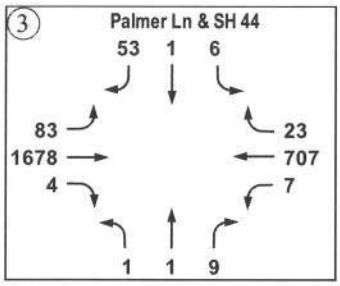
Note: Numbers in parentheses are pass-by trips

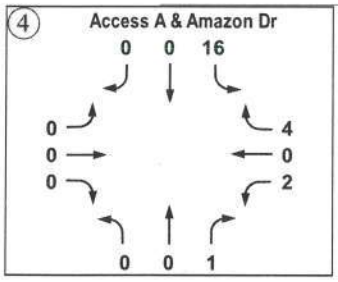
Figure 4.4 – 2025 Build-Out Year AM Peak Hour Total Traffic

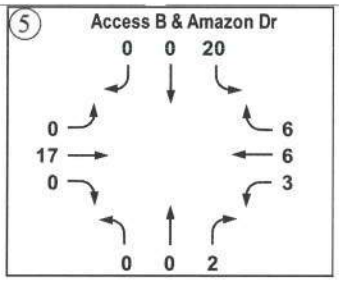


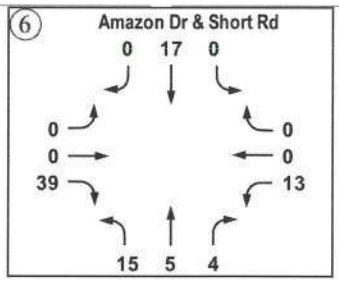












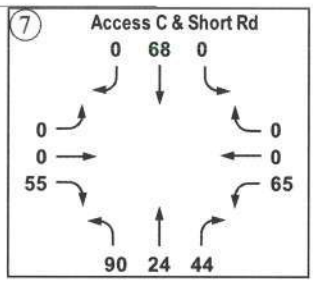
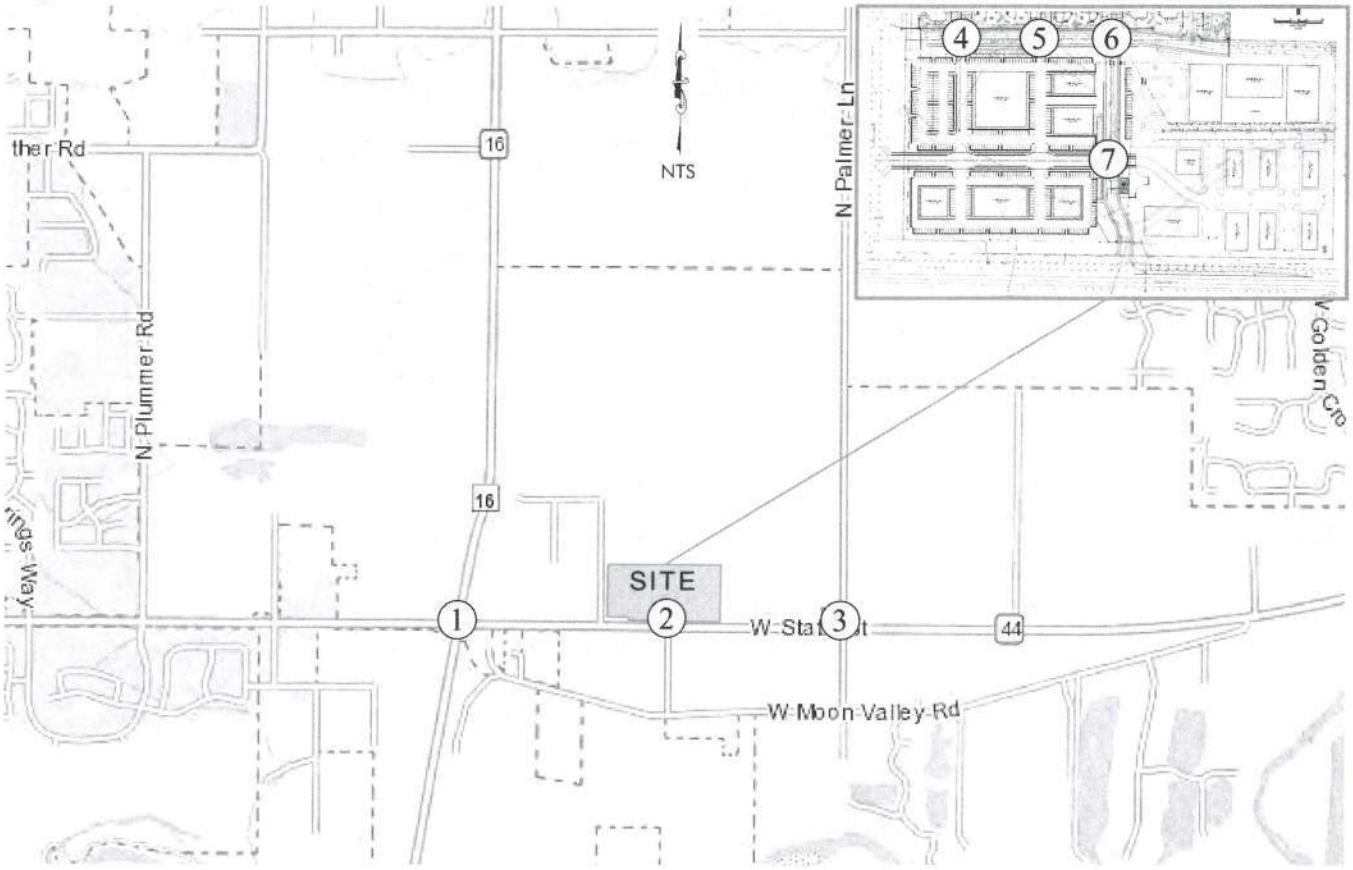
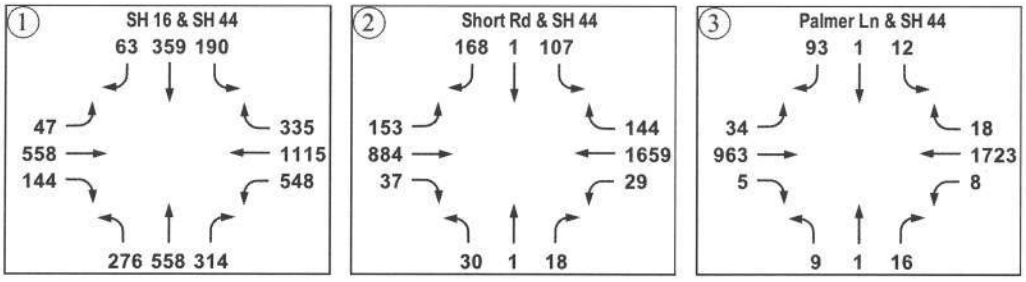


Figure 4.5 – 2025 Build-Out Year PM Peak Hour Total Traffic





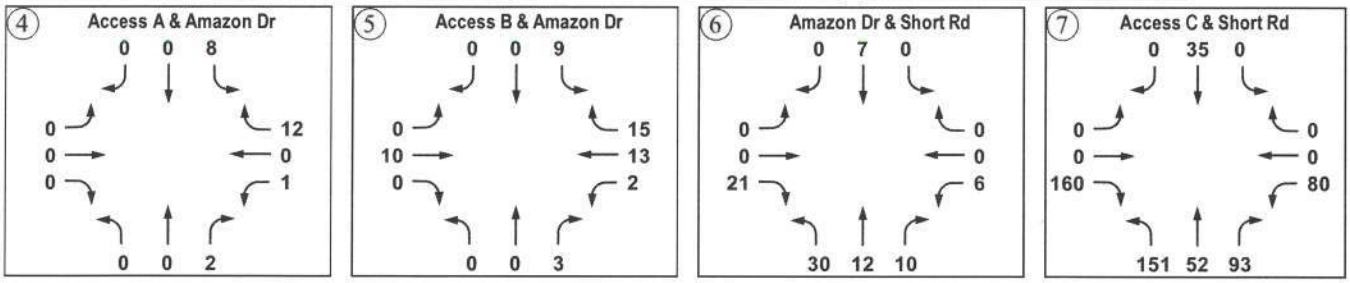


Figure 4.1 – Estimated Site Traffic Distribution Patterns

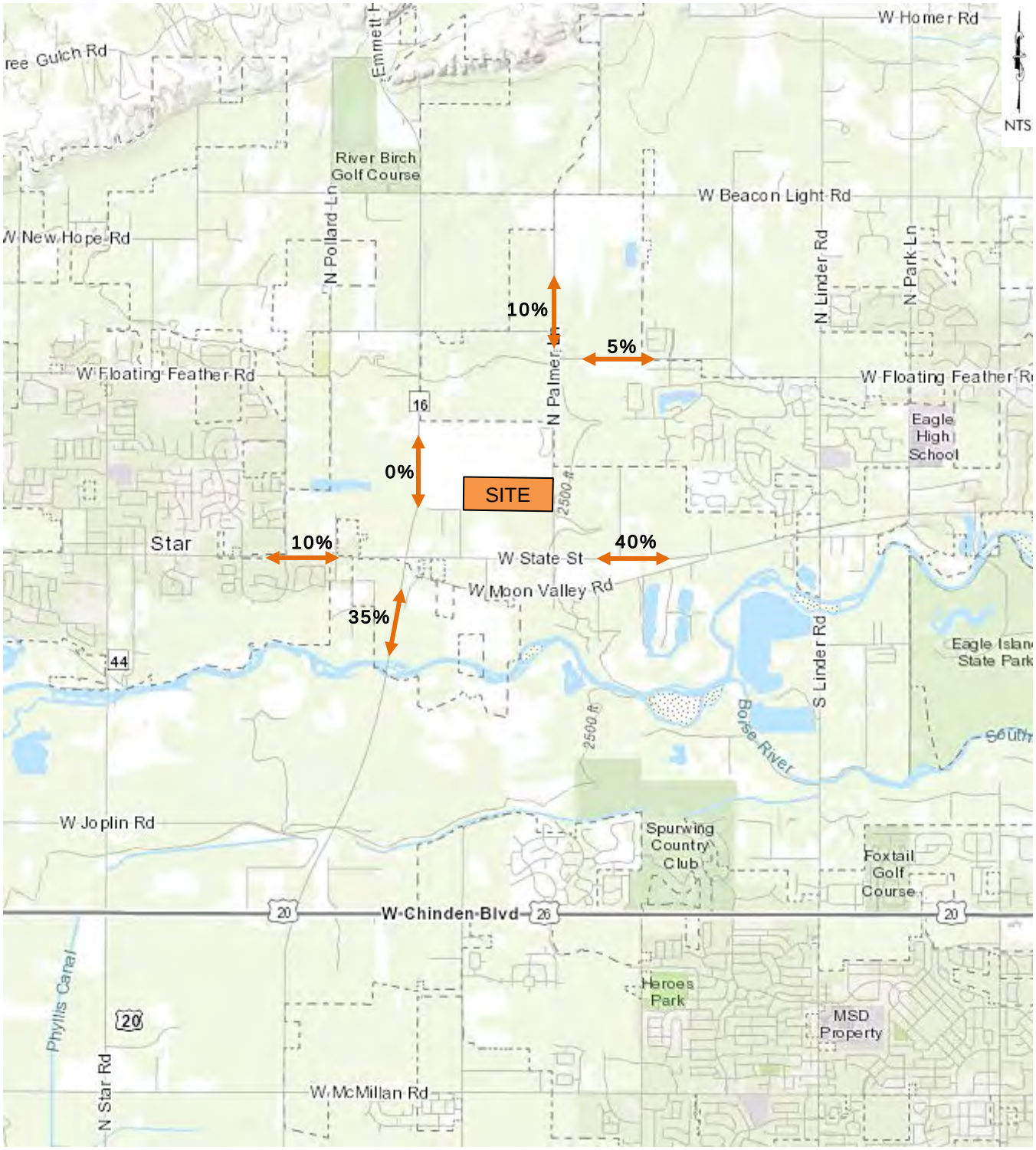
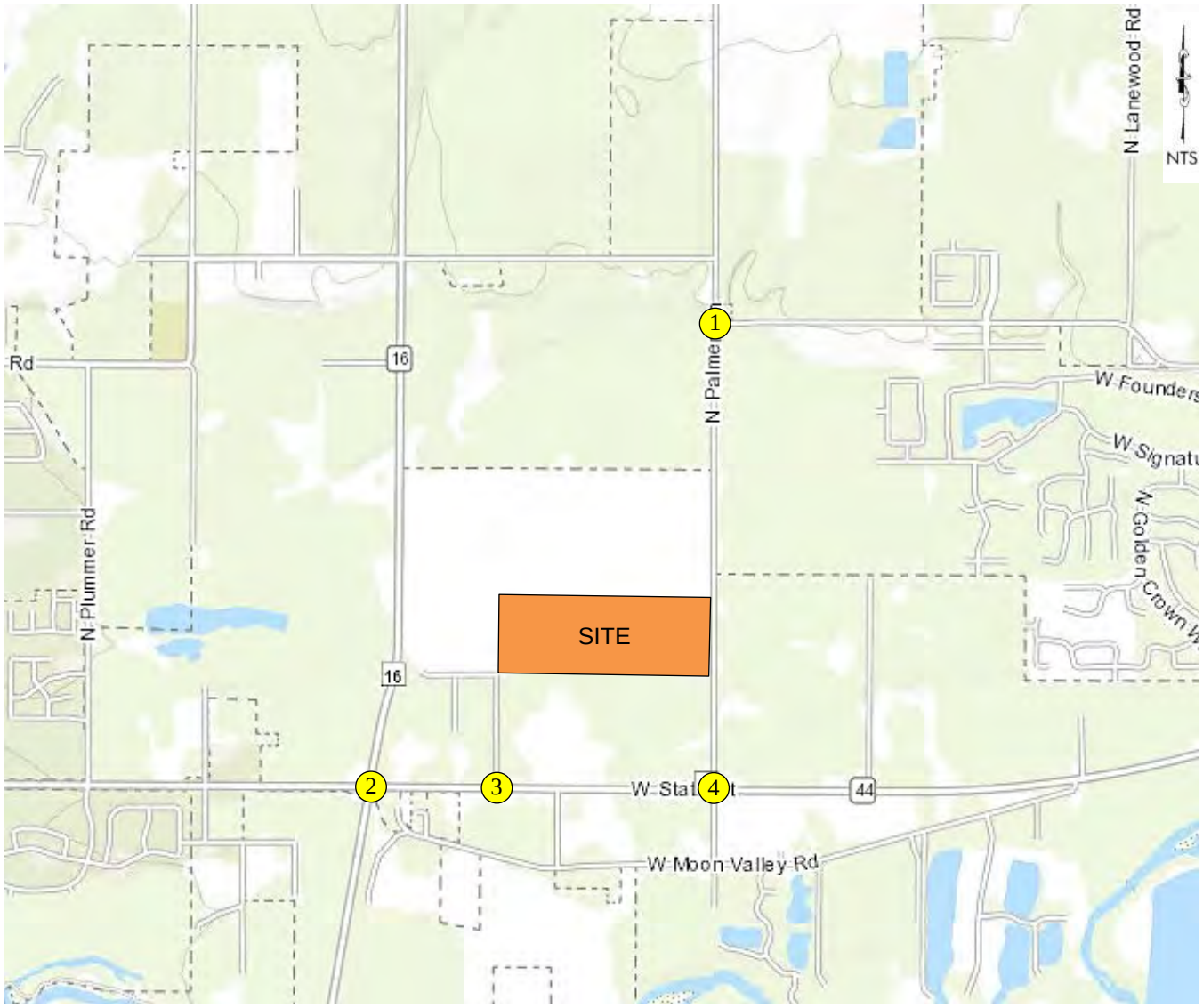


Figure 4.2 – Build-Out Year AM Peak Hour Site Traffic



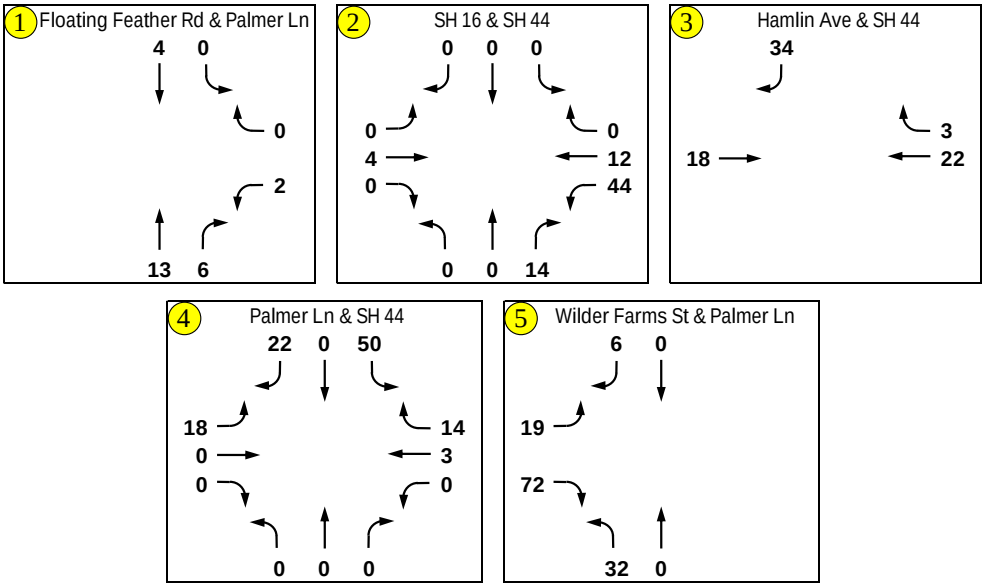
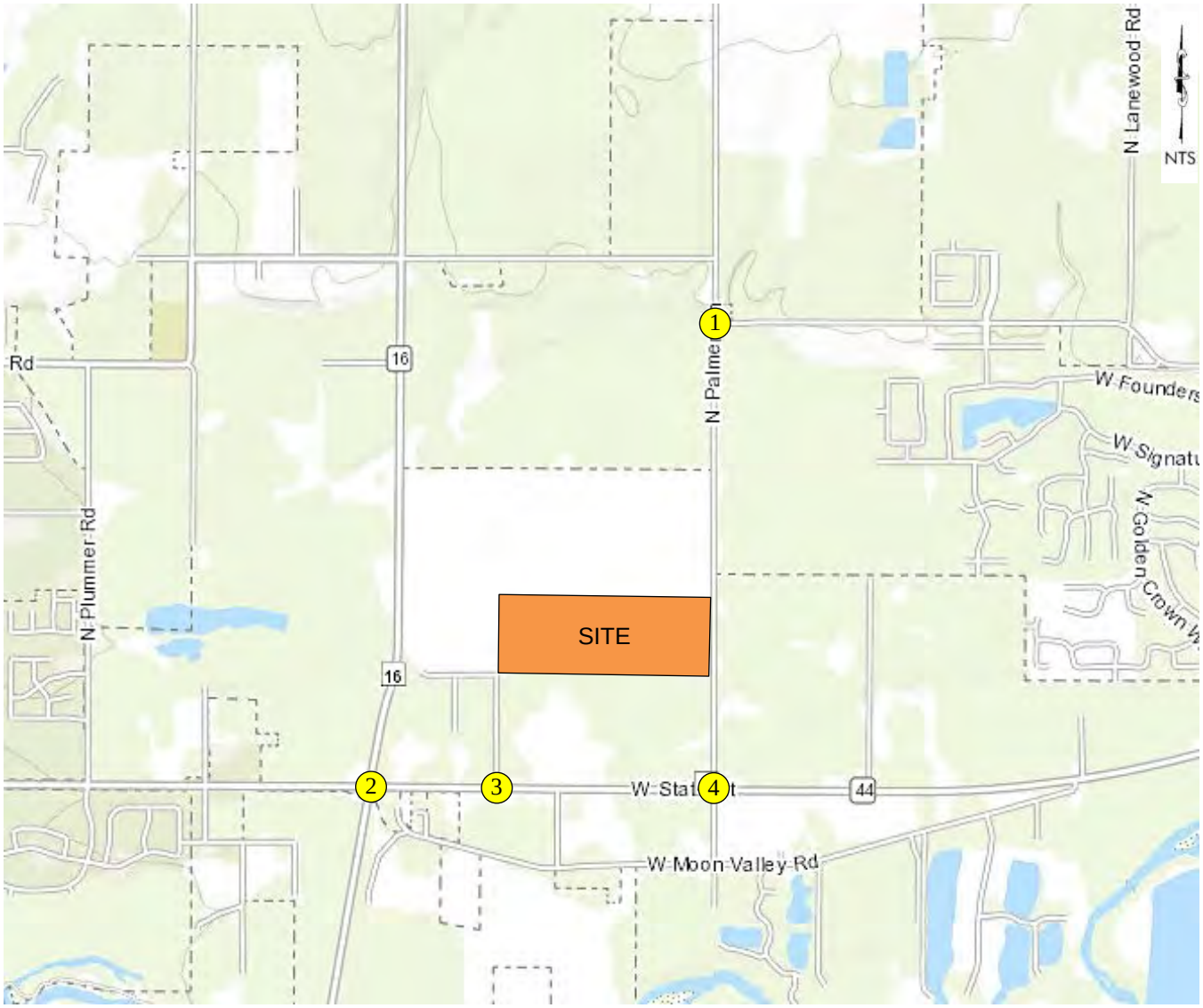


Figure 4.3 – Build-Out Year PM Peak Hour Site Traffic



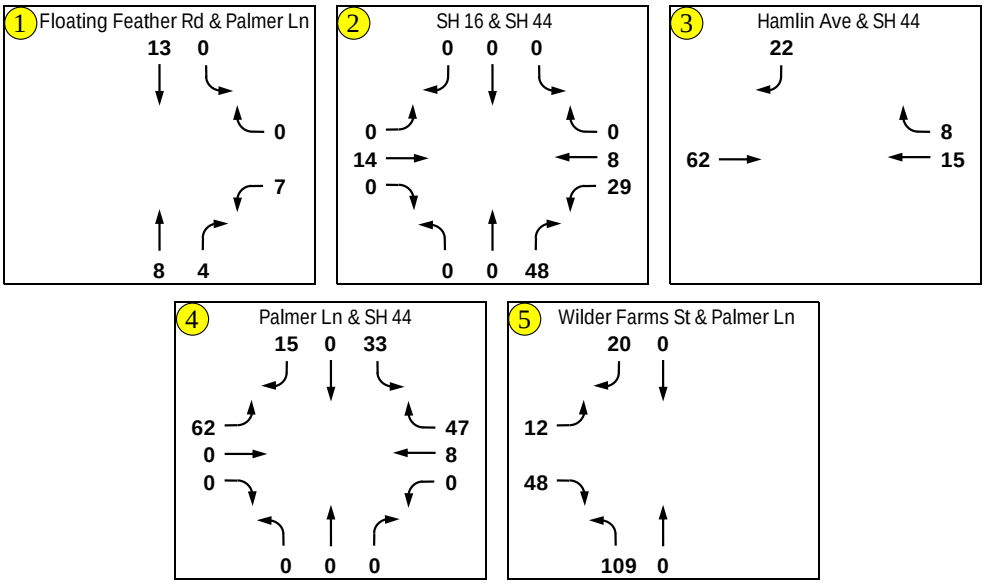


Figure 4.4 – 2025 Build-Out Year AM Peak Hour Total Traffic

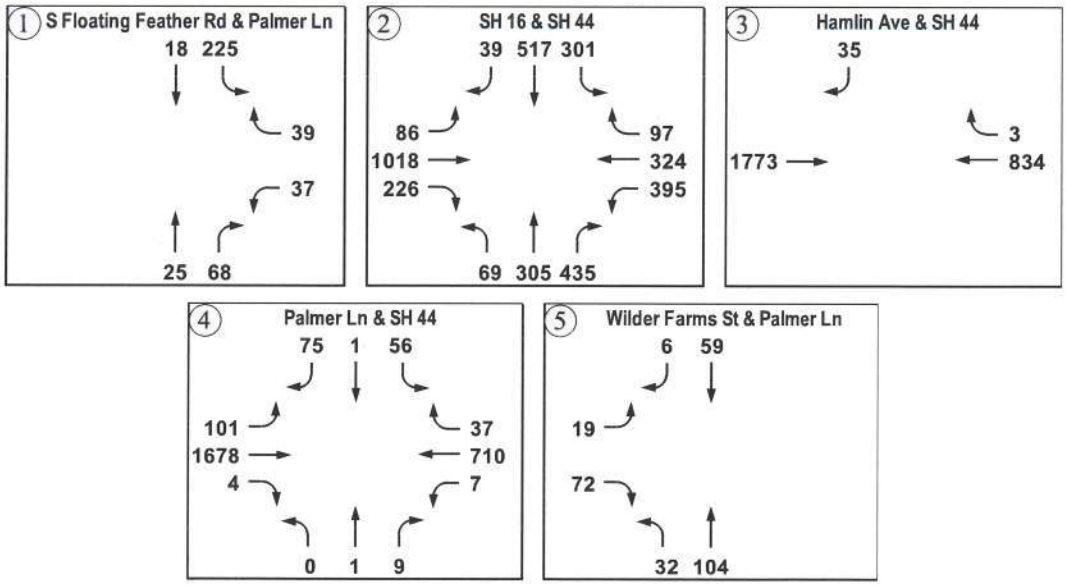
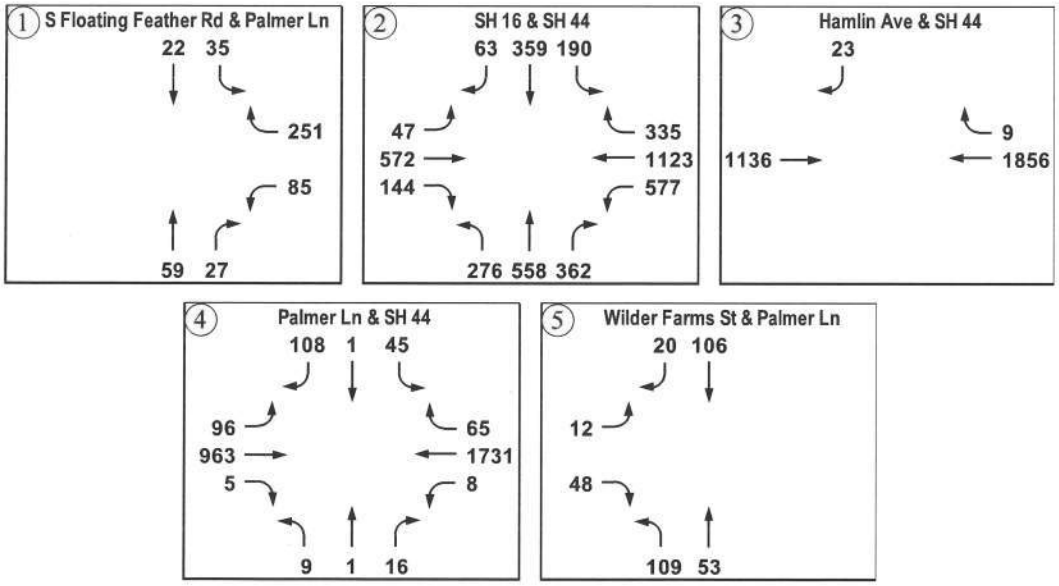


Figure 4.5 – 2025 Build-Out Year PM Peak Hour Total Traffic



COMPASS Population Growth Rates

Northern Star Proposed Development

The following summarizes the results of an area of influence model run for a proposed development located northeast of SH-16 and SH-44. The proposed development shown in Figure 1 will consist of 55 single family units, 81 townhomes, 320 apartment units, and 10.34 acres for possible commercial use with an anticipated build out by 2024. Year 2025 was used for this analysis.

Figure 1

Table 1 provides the existing demographics for TAZs 875 and 876 and the proposed development's demographics used for the area of influence model run. Temporary TAZs were used to isolate the impact of this development.

Table 1

	2021		2025 (Proposed)		2050	
	HH	Jobs	HH	Jobs	HH	Jobs
TAZs 875 and 876	*6*	70	*98*	337	417	1,175
Temp TAZs 1552,1553 and 1554	*0*	*0*	*456*	*185*	*0*	*0*
Surrounding TAZs	185	207	319	606	1,018	1,270
Total	191	277	873	1,128	1,435	2,445

Figure 2: Area of Influence (percent contribution to the total peak hour demand)
Figure 3: Peak Hour Demand with Proposed Development
Figure 4: Peak Hour Demand without Proposed Development
Figure 5: Surrounding Area TAZs
Figure 6, Figure 7, Figure 8, Figure 9, Figure 10, and Figure 11: Compounded Annual Growth Rates

Note to Reviewers: *The primary purpose of this report is to help agencies determine the scope of a Traffic Impact Study (TIS) and to assist TIS preparers in establishing trip distributions. New demand forecasted by the regional model for a proposed development may not match ITE Trip Generation estimates and they are not intended to replace the trip generation process of the TIS.*

Disclaimer Regarding Updated Model: *The results documented in this report are based on the latest regional model, maintained by COMPASS, released in October of 2021, and based on the COMPASS 2050 Vision adopted in August 2021. Due to changes in demographics, TAZs, model network and model parameters, results should not be compared to those provided prior to October of 2021.*

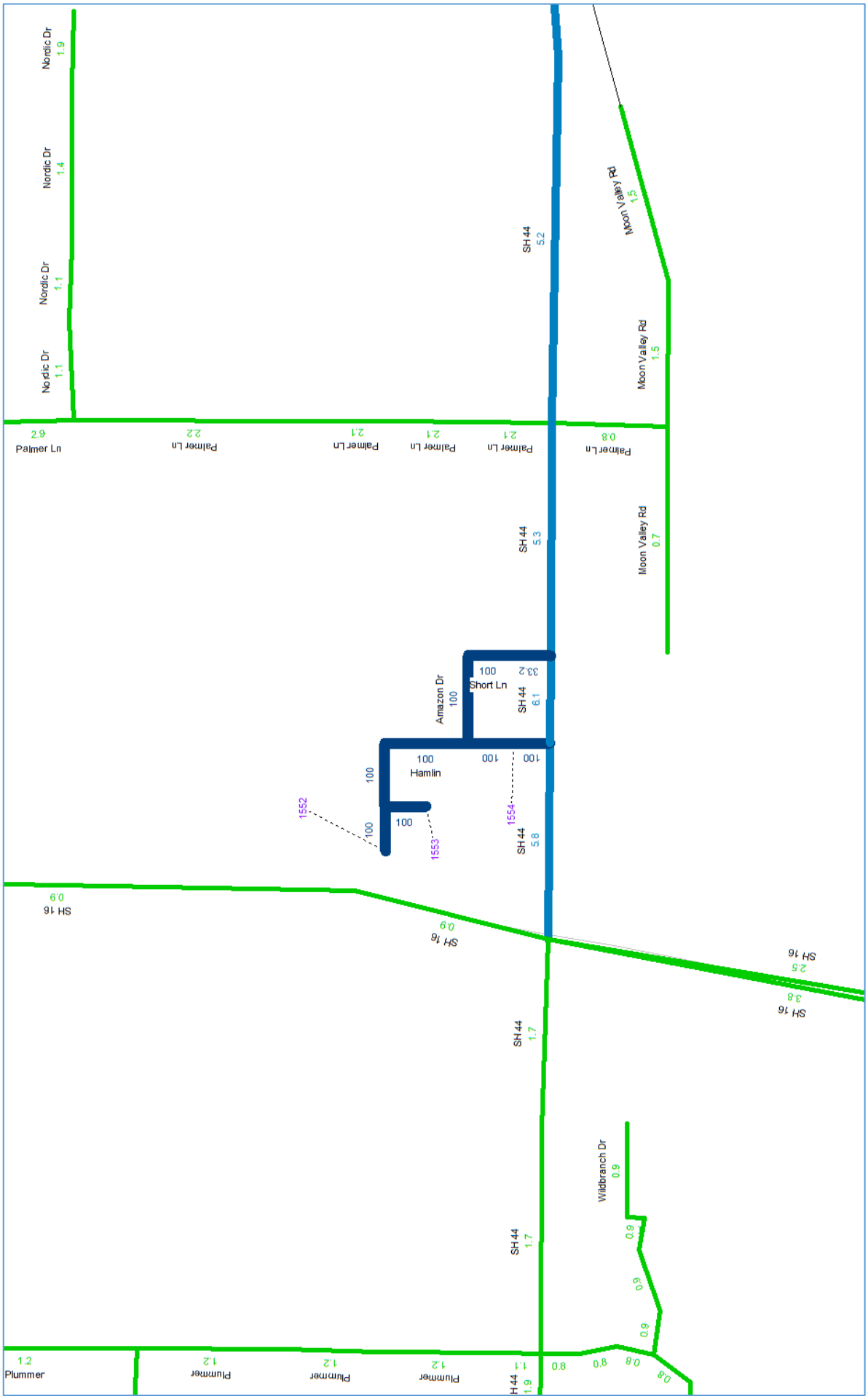


Figure 2: Area of Influence (percent contribution to the total peak hour demand)

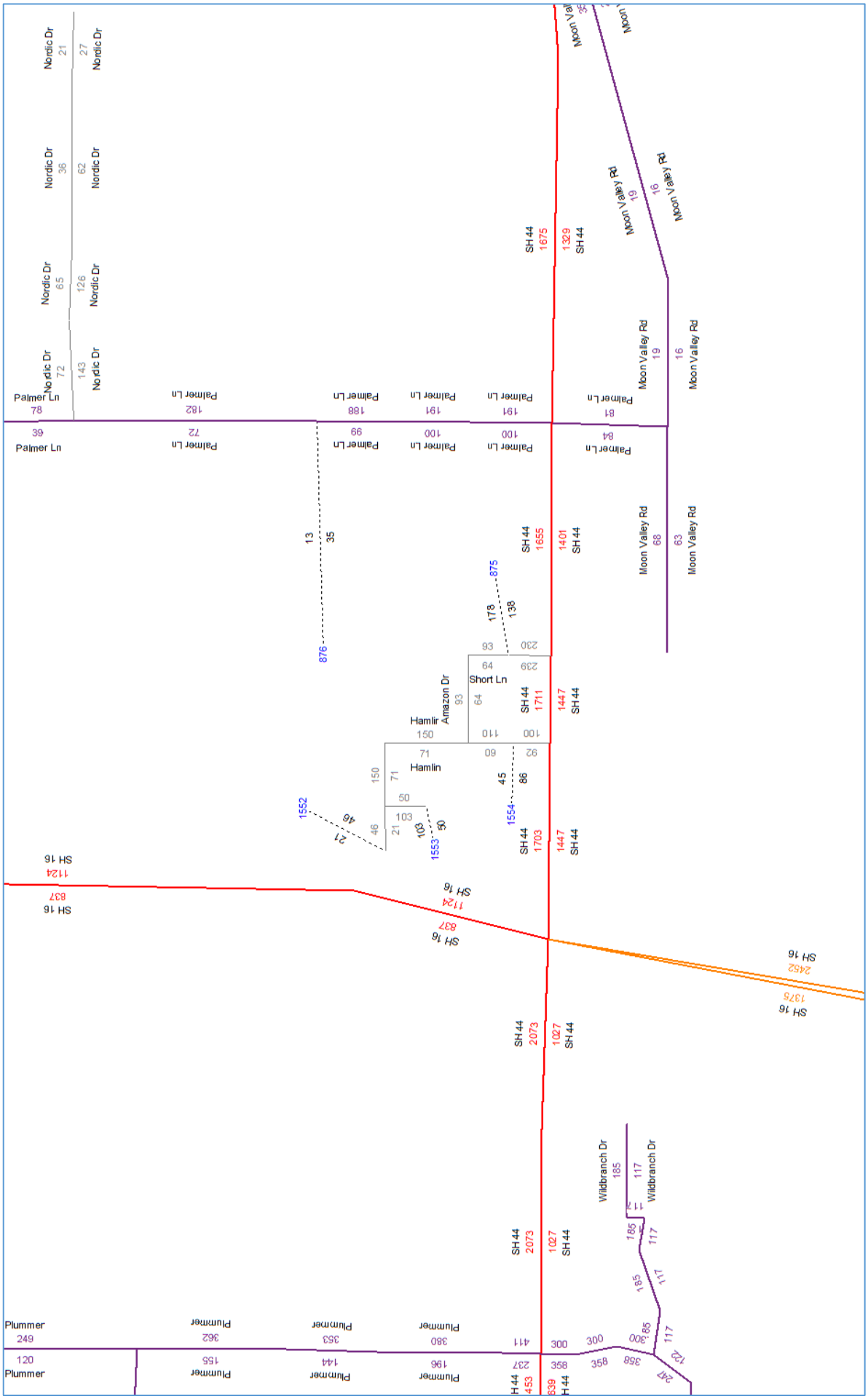


Figure 3: Peak Hour Demand with Proposed Development (Hamlin RI/RO)

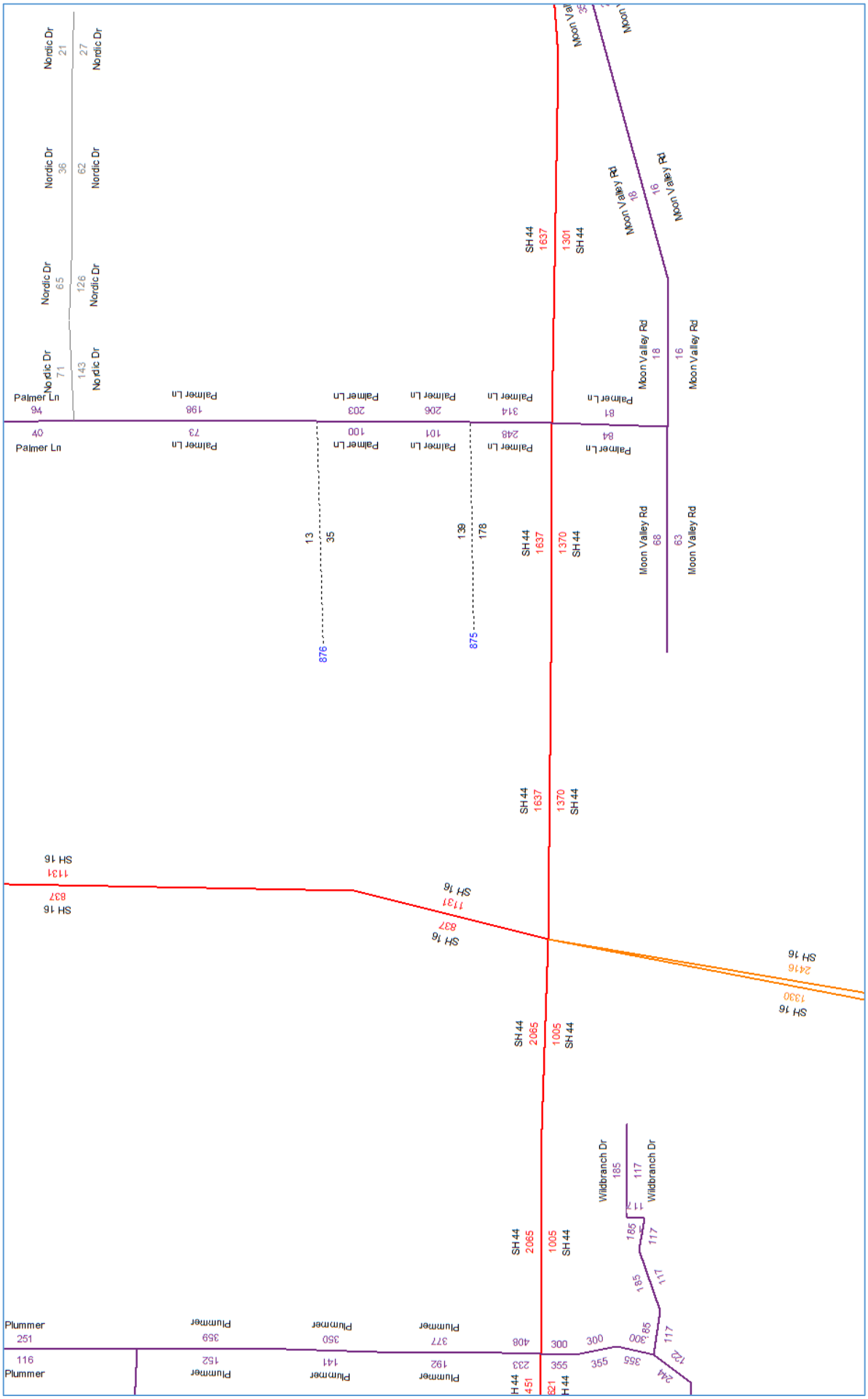
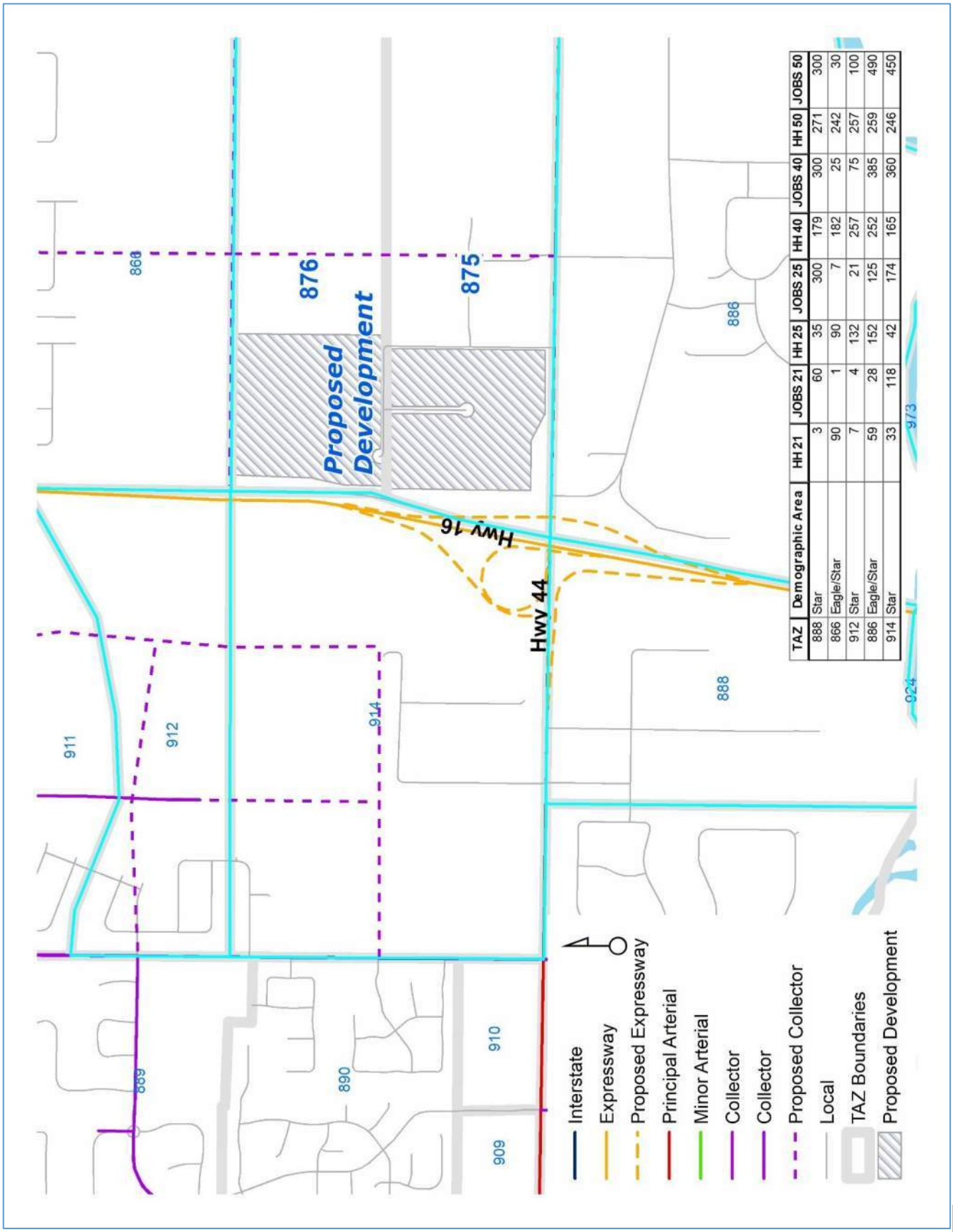


Figure 4: Peak Hour Demand without Proposed Development



TAZ	Demographic Area	HH 21	JOBS 21	HH 25	JOBS 25	HH 40	JOBS 40	HH 50	JOBS 50
888	Star	3	60	35	300	179	300	271	300
866	Eagle/Star	90	1	90	7	182	25	242	30
912	Star	7	4	132	21	257	75	257	100
886	Eagle/Star	59	28	152	125	252	385	259	490
914	Star	33	118	42	174	165	360	246	450

Figure 5: Surrounding Area TAZs

Figure 6: 2021 to 2025 Compounded Annual Growth Rates

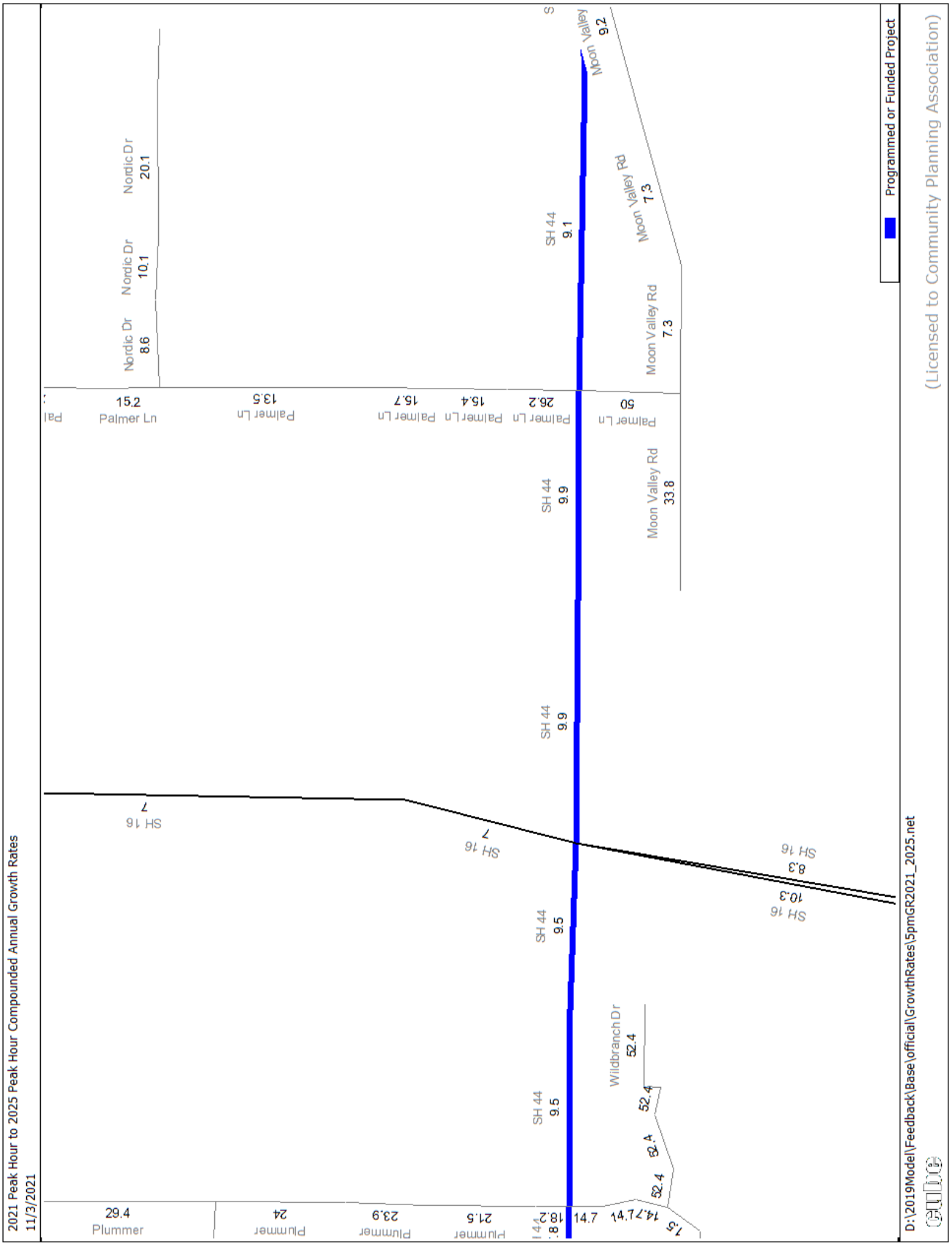


Figure 7: 2025 to 2030 Compounded Annual Growth Rates

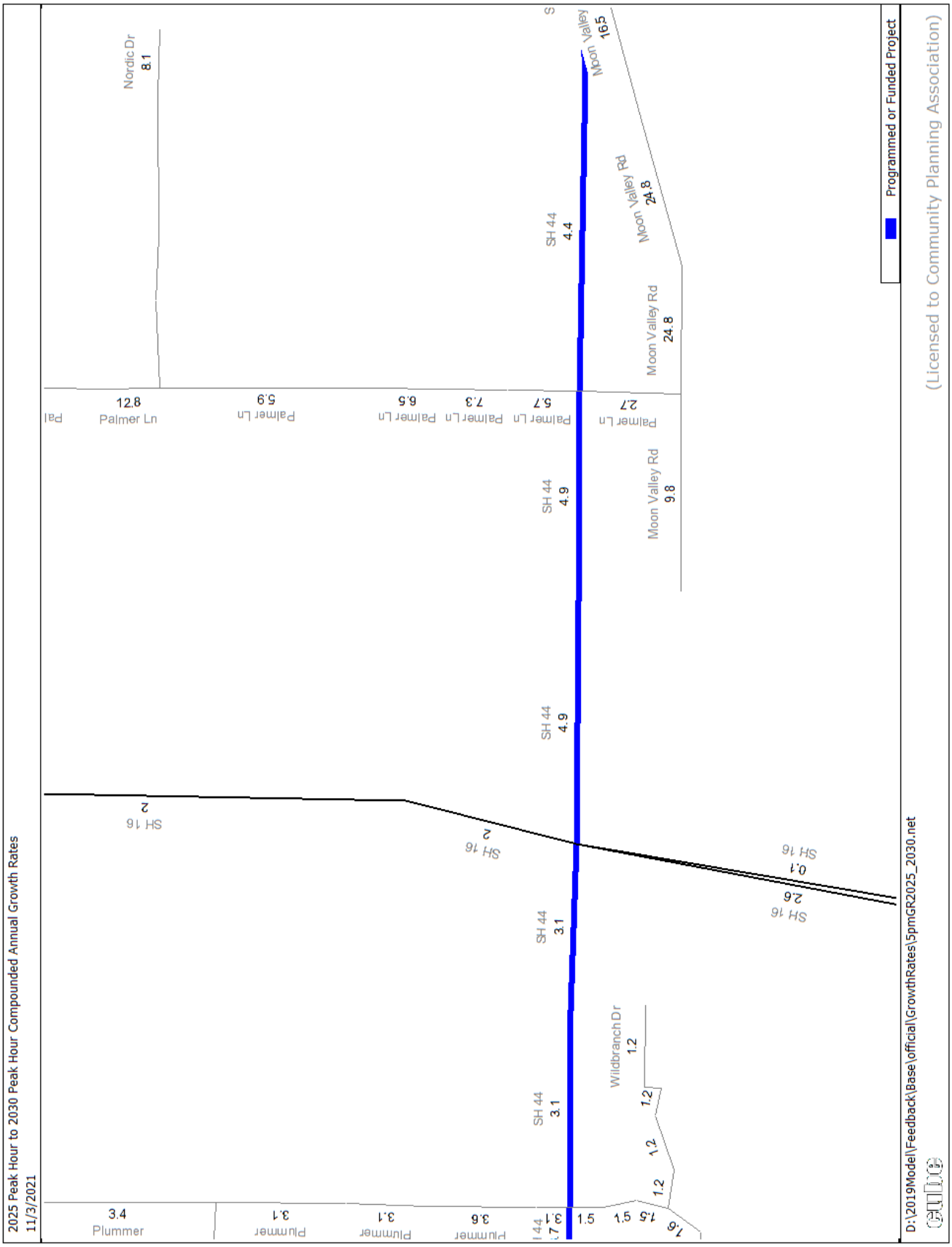


Figure 8: 2030 to 2035 Compounded Annual Growth Rates

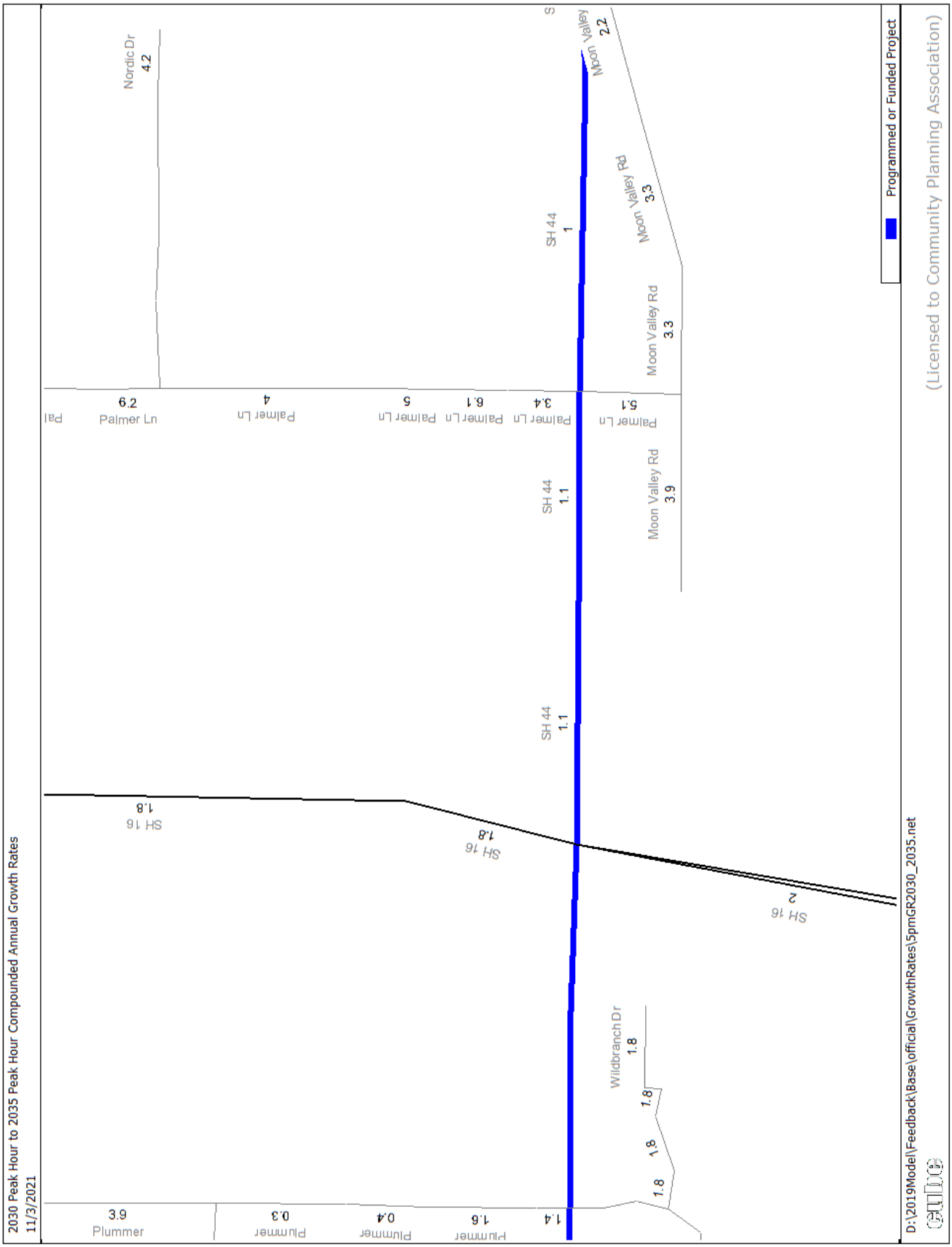


Figure 9: 2035 to 2040 Compounded Annual Growth Rates

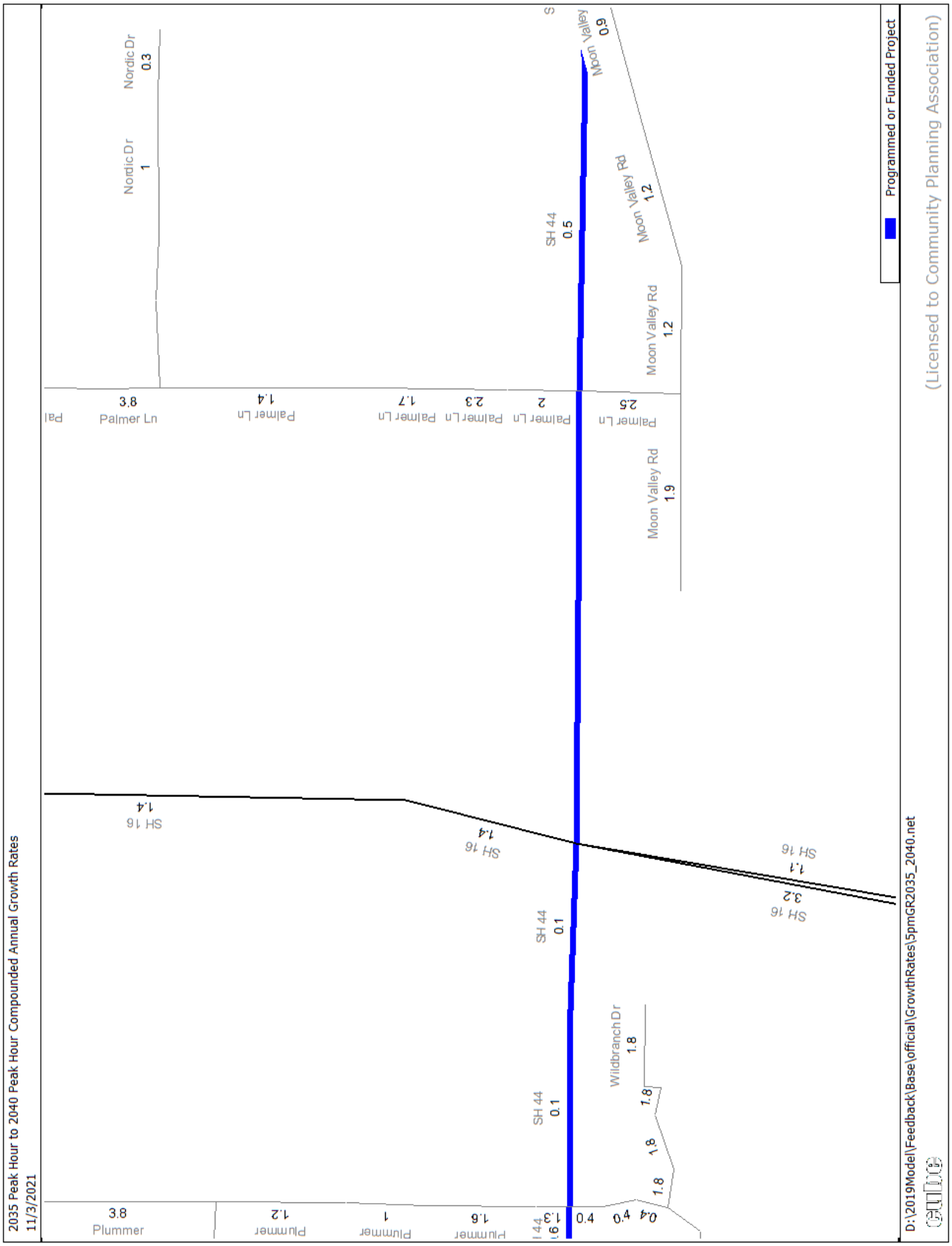


Figure 10: 2040 to 2045 Compounded Annual Growth Rates

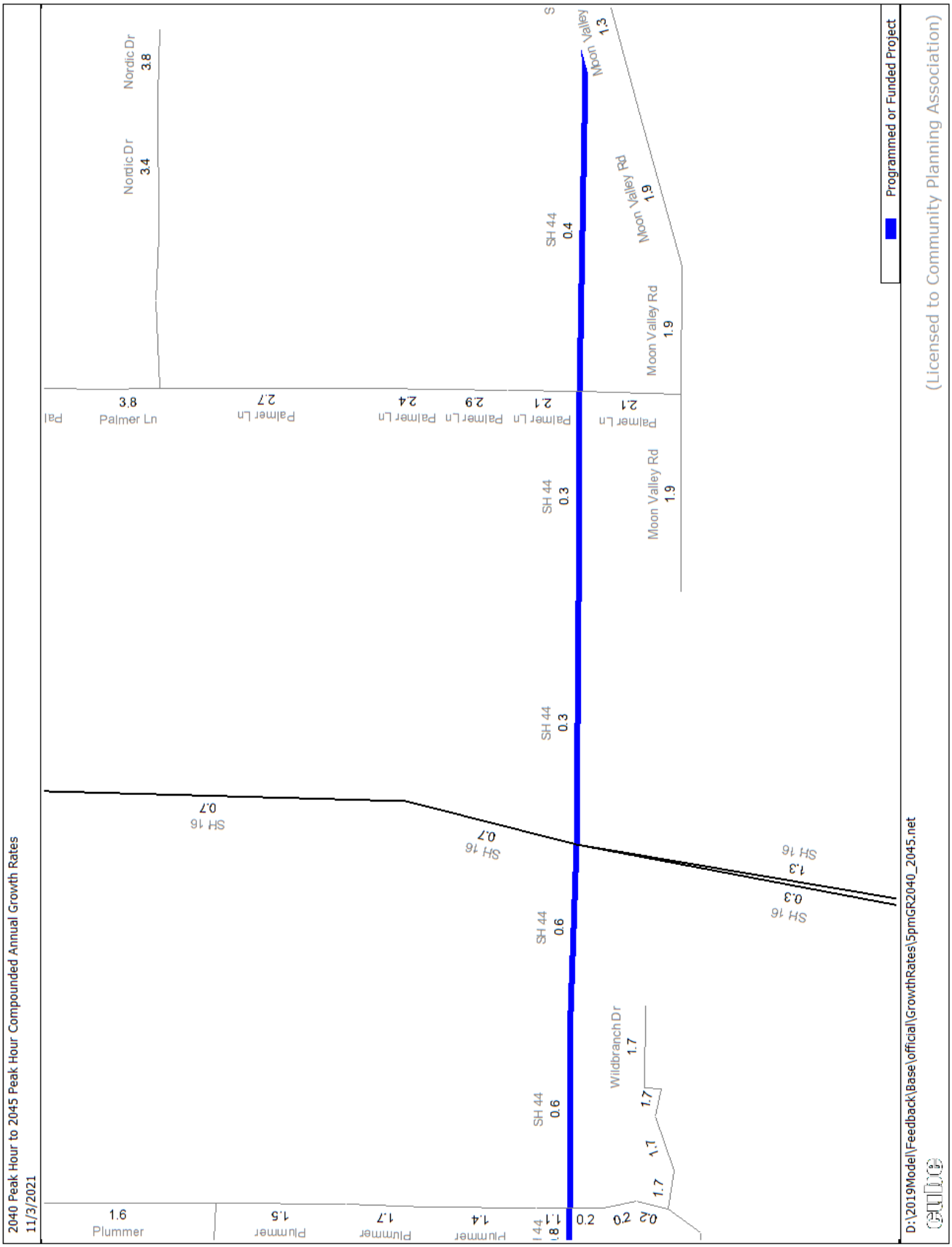
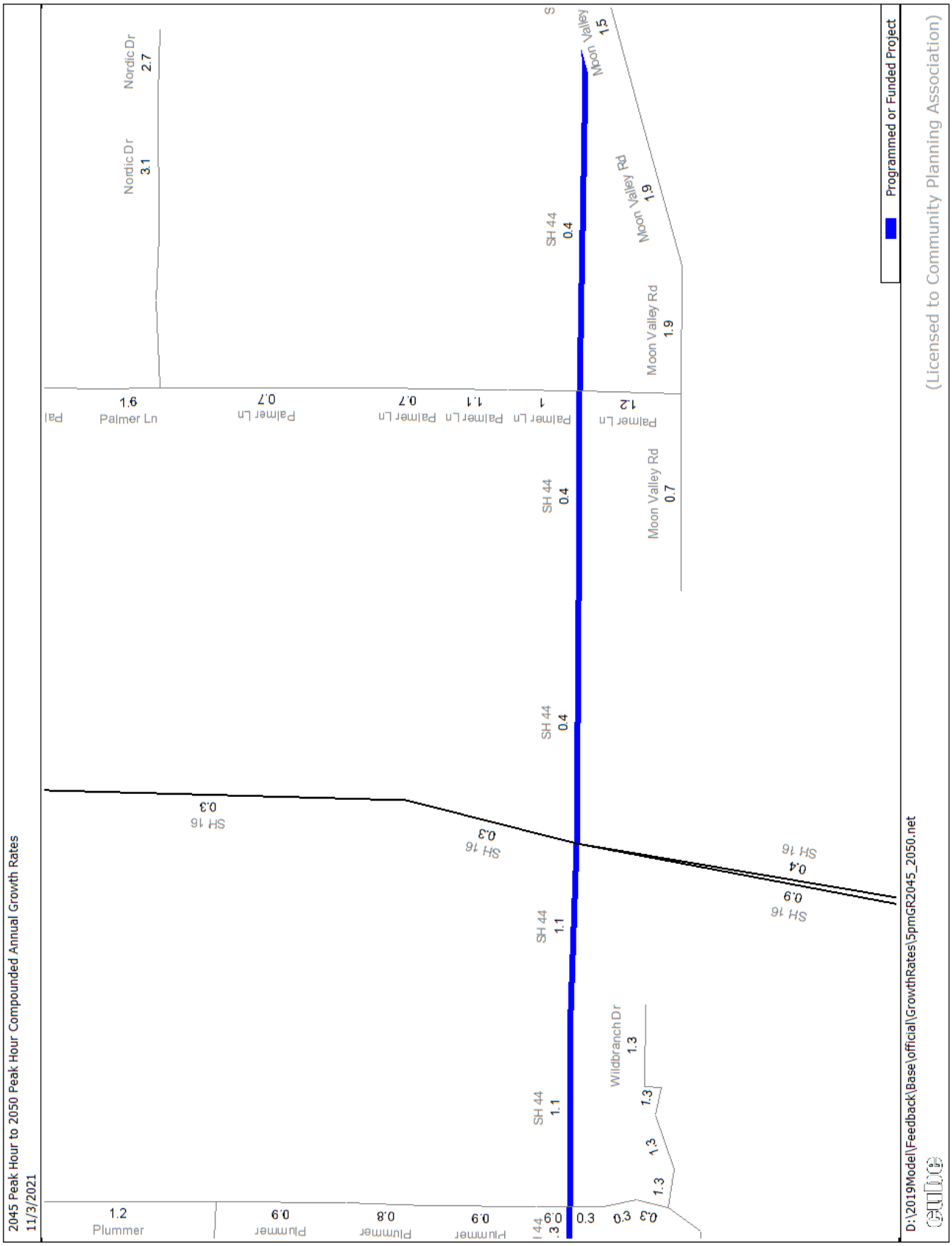


Figure 11: 2045 to 2050 Compounded Annual Growth Rates



Traffic Analysis Reports

2022 Existing Traffic Analysis

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↱			↱
Traffic Vol, veh/h	0	1187	560	3	0	6
Future Vol, veh/h	0	1187	560	3	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	93	93	38	38
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1263	602	3	0	16

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	604
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	498
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	498
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	12.5
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	498
HCM Lane V/C Ratio	-	-	-	0.032
HCM Control Delay (s)	-	-	-	12.5
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	1109	68	23	545	3	12	0	17	3	0	6
Future Vol, veh/h	10	1109	68	23	545	3	12	0	17	3	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	375	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	66	66	66	38	38	38
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	1192	73	25	586	3	18	0	26	8	0	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	589	0	0	1265	0	0	1897	1890	1229	1900	1923	586
Stage 1	-	-	-	-	-	-	1251	1251	-	636	636	-
Stage 2	-	-	-	-	-	-	646	639	-	1264	1287	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	986	-	-	549	-	-	53	70	217	53	67	510
Stage 1	-	-	-	-	-	-	211	244	-	466	472	-
Stage 2	-	-	-	-	-	-	460	470	-	208	235	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	986	-	-	549	-	-	49	66	217	45	63	510
Mov Cap-2 Maneuver	-	-	-	-	-	-	49	66	-	45	63	-
Stage 1	-	-	-	-	-	-	209	241	-	461	450	-
Stage 2	-	-	-	-	-	-	425	448	-	181	232	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.5	62.2	42
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	49	217	986	-	-	549	-	-	45	510
HCM Lane V/C Ratio	0.371	0.119	0.011	-	-	0.045	-	-	0.175	0.031
HCM Control Delay (s)	116.7	23.8	8.7	-	-	11.9	-	-	101.3	12.3
HCM Lane LOS	F	C	A	-	-	B	-	-	F	B
HCM 95th %tile Q(veh)	1.3	0.4	0	-	-	0.1	-	-	0.6	0.1

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	6	1	0	0	8	3	2	0	2	0
Future Vol, veh/h	0	0	6	1	0	0	8	3	2	0	2	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	7	1	0	0	9	3	2	0	2	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	0	0	0	7	0	0	7	6	4	8	9	0
Stage 1	-	-	-	-	-	-	4	4	-	2	2	-
Stage 2	-	-	-	-	-	-	3	2	-	6	7	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	-	-	-	1614	-	-	1013	889	1080	1011	886	-
Stage 1	-	-	-	-	-	-	1018	892	-	1021	894	-
Stage 2	-	-	-	-	-	-	1020	894	-	1016	890	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	1614	-	-	-	888	1080	1005	885	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	888	-	1005	885	-
Stage 1	-	-	-	-	-	-	1018	892	-	1021	893	-
Stage 2	-	-	-	-	-	-	1016	893	-	1010	890	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	7.2		
HCM LOS			-	-

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-	1614	-	-	-
HCM Lane V/C Ratio	-	-	-	-	0.001	-	-	-
HCM Control Delay (s)	-	0	-	-	7.2	0	-	-
HCM Lane LOS	-	A	-	-	A	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	2.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	6	0	0	3	0
Future Vol, veh/h	0	6	0	0	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	7	0	0	3	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	7	0	5	4
Stage 1	-	-	-	-	4	-
Stage 2	-	-	-	-	1	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1614	-	1017	1080
Stage 1	-	-	-	-	1019	-
Stage 2	-	-	-	-	1022	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1614	-	1017	1080
Mov Cap-2 Maneuver	-	-	-	-	1017	-
Stage 1	-	-	-	-	1019	-
Stage 2	-	-	-	-	1022	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1017	-	-	1614	-
HCM Lane V/C Ratio	0.003	-	-	-	-
HCM Control Delay (s)	8.6	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↱			↱
Traffic Vol, veh/h	0	596	1179	3	0	4
Future Vol, veh/h	0	596	1179	3	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	98	98	31	31
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	685	1203	3	0	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	1205
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	224
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	224
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	22.1
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	224
HCM Lane V/C Ratio	-	-	-	0.058
HCM Control Delay (s)	-	-	-	22.1
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0.2

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	577	14	4	1156	3	22	0	16	1	0	4
Future Vol, veh/h	5	577	14	4	1156	3	22	0	16	1	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	375	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	97	97	97	63	63	63	31	31	31
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	656	16	4	1192	3	35	0	25	3	0	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1195	0	0	672	0	0	1884	1879	664	1889	1884	1192
Stage 1	-	-	-	-	-	-	676	676	-	1200	1200	-
Stage 2	-	-	-	-	-	-	1208	1203	-	689	684	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	584	-	-	919	-	-	54	71	461	53	71	228
Stage 1	-	-	-	-	-	-	443	453	-	226	258	-
Stage 2	-	-	-	-	-	-	224	257	-	436	449	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	584	-	-	919	-	-	50	70	461	50	70	228
Mov Cap-2 Maneuver	-	-	-	-	-	-	50	70	-	50	70	-
Stage 1	-	-	-	-	-	-	439	448	-	224	257	-
Stage 2	-	-	-	-	-	-	210	256	-	408	445	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0	106.5	33.7
HCM LOS			F	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	50	461	584	-	-	919	-	-	50	228
HCM Lane V/C Ratio	0.698	0.055	0.01	-	-	0.004	-	-	0.065	0.057
HCM Control Delay (s)	174.2	13.3	11.2	-	-	8.9	-	-	81.9	21.7
HCM Lane LOS	F	B	B	-	-	A	-	-	F	C
HCM 95th %tile Q(veh)	2.8	0.2	0	-	-	0	-	-	0.2	0.2

Intersection	
Int Delay, s/veh	5.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	4	0	0	0	5	2	1	0	1	0
Future Vol, veh/h	0	0	4	0	0	0	5	2	1	0	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	4	0	0	0	5	2	1	0	1	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1	0	0	4	0	0	4	3	2	5	5	1
Stage 1	-	-	-	-	-	-	2	2	-	1	1	-
Stage 2	-	-	-	-	-	-	2	1	-	4	4	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1622	-	-	1618	-	-	1017	893	1082	1016	890	1084
Stage 1	-	-	-	-	-	-	1021	894	-	1022	895	-
Stage 2	-	-	-	-	-	-	1021	895	-	1018	892	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1622	-	-	1618	-	-	1016	893	1082	1013	890	1084
Mov Cap-2 Maneuver	-	-	-	-	-	-	1016	893	-	1013	890	-
Stage 1	-	-	-	-	-	-	1021	894	-	1022	895	-
Stage 2	-	-	-	-	-	-	1020	895	-	1015	892	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	8.7	9.1
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	989	1622	-	-	1618	-	-	890
HCM Lane V/C Ratio	0.009	-	-	-	-	-	-	0.001
HCM Control Delay (s)	8.7	0	-	-	0	-	-	9.1
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	3.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	4	0	0	3	0
Future Vol, veh/h	0	4	0	0	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	0	0	3	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	4	0	3	2
Stage 1	-	-	-	-	2	-
Stage 2	-	-	-	-	1	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1618	-	1019	1082
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	1022	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1618	-	1019	1082
Mov Cap-2 Maneuver	-	-	-	-	1019	-
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	1022	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.5
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1019	-	-	1618	-
HCM Lane V/C Ratio	0.003	-	-	-	-
HCM Control Delay (s)	8.5	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

2023 Background Year Traffic Analysis

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↱			↱
Traffic Vol, veh/h	0	1306	631	3	0	7
Future Vol, veh/h	0	1306	631	3	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1451	701	3	0	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	352
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	644
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	644
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.7
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	644
HCM Lane V/C Ratio	-	-	-	0.012
HCM Control Delay (s)	-	-	-	10.7
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	1219	75	25	599	9	13	0	19	45	0	22
Future Vol, veh/h	12	1219	75	25	599	9	13	0	19	45	0	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	100	100	-	375	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	1354	83	28	666	10	14	0	21	50	0	24

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	676	0	0	1437	0	0	1769	2112	677	1425	2185	333
Stage 1	-	-	-	-	-	-	1380	1380	-	722	722	-
Stage 2	-	-	-	-	-	-	389	732	-	703	1463	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	911	-	-	468	-	-	53	50	395	96	45	663
Stage 1	-	-	-	-	-	-	152	210	-	384	429	-
Stage 2	-	-	-	-	-	-	606	425	-	394	191	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	911	-	-	468	-	-	48	46	395	86	42	663
Mov Cap-2 Maneuver	-	-	-	-	-	-	48	46	-	86	42	-
Stage 1	-	-	-	-	-	-	150	207	-	379	403	-
Stage 2	-	-	-	-	-	-	549	400	-	368	188	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.5	53.2	66.3
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	48	395	911	-	-	468	-	-	86	663
HCM Lane V/C Ratio	0.301	0.053	0.015	-	-	0.059	-	-	0.581	0.037
HCM Control Delay (s)	109.5	14.6	9	-	-	13.2	-	-	93.5	10.6
HCM Lane LOS	F	B	A	-	-	B	-	-	F	B
HCM 95th %tile Q(veh)	1	0.2	0	-	-	0.2	-	-	2.6	0.1

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	33	17	0	0	11	5	5	0	17	0
Future Vol, veh/h	0	0	33	17	0	0	11	5	5	0	17	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	37	19	0	0	12	6	6	0	19	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	0	0	0	37	0	0	67	57	19	63	75	0
Stage 1	-	-	-	-	-	-	19	19	-	38	38	-
Stage 2	-	-	-	-	-	-	48	38	-	25	37	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	-	-	-	1574	-	-	926	834	1059	932	815	-
Stage 1	-	-	-	-	-	-	1000	880	-	977	863	-
Stage 2	-	-	-	-	-	-	965	863	-	993	864	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	1574	-	-	-	824	1059	914	805	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	824	-	914	805	-
Stage 1	-	-	-	-	-	-	1000	880	-	977	853	-
Stage 2	-	-	-	-	-	-	932	853	-	982	864	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	7.3		
HCM LOS			-	-

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-	1574	-	-	-
HCM Lane V/C Ratio	-	-	-	-	0.012	-	-	-
HCM Control Delay (s)	-	0	-	-	7.3	0	-	-
HCM Lane LOS	-	A	-	-	A	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	7	0	0	3	0
Future Vol, veh/h	0	7	0	0	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	8	0	0	3	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	8	0	5	4
Stage 1	-	-	-	-	4	-
Stage 2	-	-	-	-	1	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1612	-	1017	1080
Stage 1	-	-	-	-	1019	-
Stage 2	-	-	-	-	1022	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1612	-	1017	1080
Mov Cap-2 Maneuver	-	-	-	-	1017	-
Stage 1	-	-	-	-	1019	-
Stage 2	-	-	-	-	1022	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1017	-	-	1612	-
HCM Lane V/C Ratio	0.003	-	-	-	-
HCM Control Delay (s)	8.6	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↱
Traffic Vol, veh/h	0	669	1304	3	0	4
Future Vol, veh/h	0	669	1304	3	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	743	1449	3	0	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	726
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	367
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	367
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	14.9
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	367
HCM Lane V/C Ratio	-	-	-	0.012
HCM Control Delay (s)	-	-	-	14.9
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	634	15	4	1270	47	24	0	18	29	0	13
Future Vol, veh/h	20	634	15	4	1270	47	24	0	18	29	0	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	100	100	-	375	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	704	17	4	1411	52	27	0	20	32	0	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1463	0	0	721	0	0	1462	2219	352	1815	2184	706
Stage 1	-	-	-	-	-	-	748	748	-	1419	1419	-
Stage 2	-	-	-	-	-	-	714	1471	-	396	765	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	458	-	-	877	-	-	90	43	644	49	45	378
Stage 1	-	-	-	-	-	-	371	418	-	144	201	-
Stage 2	-	-	-	-	-	-	388	190	-	601	410	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	458	-	-	877	-	-	83	41	644	46	43	378
Mov Cap-2 Maneuver	-	-	-	-	-	-	83	41	-	46	43	-
Stage 1	-	-	-	-	-	-	353	398	-	137	200	-
Stage 2	-	-	-	-	-	-	371	189	-	554	390	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0	43.3	133.6
HCM LOS			E	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	83	644	458	-	-	877	-	-	46	378
HCM Lane V/C Ratio	0.321	0.031	0.049	-	-	0.005	-	-	0.7	0.038
HCM Control Delay (s)	67.7	10.8	13.3	-	-	9.1	-	-	186.8	14.9
HCM Lane LOS	F	B	B	-	-	A	-	-	F	B
HCM 95th %tile Q(veh)	1.2	0.1	0.2	-	-	0	-	-	2.7	0.1

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	20	11	0	0	33	17	17	0	11	0
Future Vol, veh/h	0	0	20	11	0	0	33	17	17	0	11	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	22	12	0	0	37	19	19	0	12	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	0	0	0	22	0	0	41	35	11	54	46	0
Stage 1	-	-	-	-	-	-	11	11	-	24	24	-
Stage 2	-	-	-	-	-	-	30	24	-	30	22	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	-	-	-	1593	-	-	963	857	1070	944	846	-
Stage 1	-	-	-	-	-	-	1010	886	-	994	875	-
Stage 2	-	-	-	-	-	-	987	875	-	987	877	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	1593	-	-	-	850	1070	906	839	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	850	-	906	839	-
Stage 1	-	-	-	-	-	-	1010	886	-	994	868	-
Stage 2	-	-	-	-	-	-	965	868	-	949	877	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	7.3		
HCM LOS			-	-

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-	1593	-	-	-
HCM Lane V/C Ratio	-	-	-	-	0.008	-	-	-
HCM Control Delay (s)	-	0	-	-	7.3	0	-	-
HCM Lane LOS	-	A	-	-	A	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	4	0	0	3	0
Future Vol, veh/h	0	4	0	0	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	0	0	3	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	4	0	3	2
Stage 1	-	-	-	-	2	-
Stage 2	-	-	-	-	1	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1618	-	1019	1082
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	1022	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1618	-	1019	1082
Mov Cap-2 Maneuver	-	-	-	-	1019	-
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	1022	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.5
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1019	-	-	1618	-
HCM Lane V/C Ratio	0.003	-	-	-	-
HCM Control Delay (s)	8.5	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

2024 Background Year Traffic Analysis

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↱			↱
Traffic Vol, veh/h	0	1434	690	4	0	7
Future Vol, veh/h	0	1434	690	4	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1593	767	4	0	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	386
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	612
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	612
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	612
HCM Lane V/C Ratio	-	-	-	0.013
HCM Control Delay (s)	-	-	-	11
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	1339	82	28	658	9	14	0	21	45	0	22
Future Vol, veh/h	12	1339	82	28	658	9	14	0	21	45	0	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	100	100	-	375	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	1488	91	31	731	10	16	0	23	50	0	24

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	741	0	0	1579	0	0	1942	2317	744	1563	2398	366
Stage 1	-	-	-	-	-	-	1514	1514	-	793	793	-
Stage 2	-	-	-	-	-	-	428	803	-	770	1605	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	862	-	-	413	-	-	39	37	357	76	33	631
Stage 1	-	-	-	-	-	-	125	181	-	348	398	-
Stage 2	-	-	-	-	-	-	575	394	-	359	163	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	862	-	-	413	-	-	35	34	357	66	30	631
Mov Cap-2 Maneuver	-	-	-	-	-	-	35	34	-	66	30	-
Stage 1	-	-	-	-	-	-	123	178	-	343	368	-
Stage 2	-	-	-	-	-	-	511	364	-	330	161	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.6	78.7	105.6
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	35	357	862	-	-	413	-	-	66	631
HCM Lane V/C Ratio	0.444	0.065	0.015	-	-	0.075	-	-	0.758	0.039
HCM Control Delay (s)	173.1	15.8	9.2	-	-	14.4	-	-	151.9	10.9
HCM Lane LOS	F	C	A	-	-	B	-	-	F	B
HCM 95th %tile Q(veh)	1.5	0.2	0	-	-	0.2	-	-	3.4	0.1

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	33	17	0	0	11	5	5	0	17	0
Future Vol, veh/h	0	0	33	17	0	0	11	5	5	0	17	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	37	19	0	0	12	6	6	0	19	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	0	0	0	37	0	0	67	57	19	63	75	0
Stage 1	-	-	-	-	-	-	19	19	-	38	38	-
Stage 2	-	-	-	-	-	-	48	38	-	25	37	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	-	-	-	1574	-	-	926	834	1059	932	815	-
Stage 1	-	-	-	-	-	-	1000	880	-	977	863	-
Stage 2	-	-	-	-	-	-	965	863	-	993	864	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	1574	-	-	-	824	1059	914	805	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	824	-	914	805	-
Stage 1	-	-	-	-	-	-	1000	880	-	977	853	-
Stage 2	-	-	-	-	-	-	932	853	-	982	864	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	7.3		
HCM LOS			-	-

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-	1574	-	-	-
HCM Lane V/C Ratio	-	-	-	-	0.012	-	-	-
HCM Control Delay (s)	-	0	-	-	7.3	0	-	-
HCM Lane LOS	-	A	-	-	A	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	2.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	7	0	0	4	0
Future Vol, veh/h	0	7	0	0	4	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	8	0	0	4	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	8	0	5	4
Stage 1	-	-	-	-	4	-
Stage 2	-	-	-	-	1	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1612	-	1017	1080
Stage 1	-	-	-	-	1019	-
Stage 2	-	-	-	-	1022	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1612	-	1017	1080
Mov Cap-2 Maneuver	-	-	-	-	1017	-
Stage 1	-	-	-	-	1019	-
Stage 2	-	-	-	-	1022	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1017	-	-	1612	-
HCM Lane V/C Ratio	0.004	-	-	-	-
HCM Control Delay (s)	8.6	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	734	1432	4	0	5
Future Vol, veh/h	0	734	1432	4	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	816	1591	4	0	6

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	798
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	329
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	329
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	16.1
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	329
HCM Lane V/C Ratio	-	-	-	0.017
HCM Control Delay (s)	-	-	-	16.1
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	697	17	5	1396	47	27	0	19	29	0	13
Future Vol, veh/h	20	697	17	5	1396	47	27	0	19	29	0	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	100	100	-	375	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	774	19	6	1551	52	30	0	21	32	0	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1603	0	0	793	0	0	1606	2433	387	1994	2400	776
Stage 1	-	-	-	-	-	-	818	818	-	1563	1563	-
Stage 2	-	-	-	-	-	-	788	1615	-	431	837	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	404	-	-	824	-	-	70	31	611	36	33	340
Stage 1	-	-	-	-	-	-	336	388	-	117	171	-
Stage 2	-	-	-	-	-	-	350	161	-	573	380	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	404	-	-	824	-	-	64	29	611	33	31	340
Mov Cap-2 Maneuver	-	-	-	-	-	-	64	29	-	33	31	-
Stage 1	-	-	-	-	-	-	318	367	-	111	170	-
Stage 2	-	-	-	-	-	-	333	160	-	523	359	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0	65.3	231.3
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	64	611	404	-	-	824	-	-	33	340
HCM Lane V/C Ratio	0.469	0.035	0.055	-	-	0.007	-	-	0.976	0.042
HCM Control Delay (s)	103.4	11.1	14.4	-	-	9.4	-	-	$ 327.8	16.1
HCM Lane LOS	F	B	B	-	-	A	-	-	F	C
HCM 95th %tile Q(veh)	1.8	0.1	0.2	-	-	0	-	-	3.4	0.1

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	20	11	0	0	33	17	17	0	11	0
Future Vol, veh/h	0	0	20	11	0	0	33	17	17	0	11	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	22	12	0	0	37	19	19	0	12	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	0	0	0	22	0	0	41	35	11	54	46	0
Stage 1	-	-	-	-	-	-	11	11	-	24	24	-
Stage 2	-	-	-	-	-	-	30	24	-	30	22	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	-	-	-	1593	-	-	963	857	1070	944	846	-
Stage 1	-	-	-	-	-	-	1010	886	-	994	875	-
Stage 2	-	-	-	-	-	-	987	875	-	987	877	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	1593	-	-	-	850	1070	906	839	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	850	-	906	839	-
Stage 1	-	-	-	-	-	-	1010	886	-	994	868	-
Stage 2	-	-	-	-	-	-	965	868	-	949	877	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	7.3		
HCM LOS			-	-

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-	1593	-	-	-
HCM Lane V/C Ratio	-	-	-	-	0.008	-	-	-
HCM Control Delay (s)	-	0	-	-	7.3	0	-	-
HCM Lane LOS	-	A	-	-	A	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	3.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	5	0	0	4	0
Future Vol, veh/h	0	5	0	0	4	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	6	0	0	4	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	6	0	4	3
Stage 1	-	-	-	-	3	-
Stage 2	-	-	-	-	1	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1615	-	1018	1081
Stage 1	-	-	-	-	1020	-
Stage 2	-	-	-	-	1022	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1615	-	1018	1081
Mov Cap-2 Maneuver	-	-	-	-	1018	-
Stage 1	-	-	-	-	1020	-
Stage 2	-	-	-	-	1022	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1018	-	-	1615	-
HCM Lane V/C Ratio	0.004	-	-	-	-
HCM Control Delay (s)	8.6	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

2030 Background Year Traffic Analysis

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↱
Traffic Vol, veh/h	0	2081	1031	8	0	42
Future Vol, veh/h	0	2081	1031	8	0	42
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	2312	1146	9	0	47

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	578
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	459
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	459
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	13.7
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	459
HCM Lane V/C Ratio	-	-	-	0.102
HCM Control Delay (s)	-	-	-	13.7
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.3

Intersection	
Int Delay, s/veh	126.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	96	1870	115	39	919	62	20	0	29	89	0	100
Future Vol, veh/h	96	1870	115	39	919	62	20	0	29	89	0	100
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	100	100	-	375	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	107	2078	128	43	1021	69	22	0	32	99	0	111

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1090	0	0	2206	0	0	2889	3468	1039	2360	3527	511
Stage 1	-	-	-	-	-	-	2292	2292	-	1107	1107	-
Stage 2	-	-	-	-	-	-	597	1176	-	1253	2420	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	636	-	-	235	-	-	~ 7	7	227	~ 19	6	508
Stage 1	-	-	-	-	-	-	40	73	-	224	284	-
Stage 2	-	-	-	-	-	-	456	263	-	182	63	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	636	-	-	235	-	-	~ 4	5	227	~ 12	4	508
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 4	5	-	~ 12	4	-
Stage 1	-	-	-	-	-	-	33	61	-	186	232	-
Stage 2	-	-	-	-	-	-	291	215	-	130	52	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.9	$ 1543.2	$ 1832.2
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	4	227	636	-	-	235	-	-	12	508
HCM Lane V/C Ratio	5.556	0.142	0.168	-	-	0.184	-	-	8.241	0.219
HCM Control Delay (s)	$ 3746.8	23.5	11.8	-	-	23.8	-	-	$ 3875	14.1
HCM Lane LOS	F	C	B	-	-	C	-	-	F	B
HCM 95th %tile Q(veh)	4.2	0.5	0.6	-	-	0.7	-	-	13.6	0.8

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	39	13	0	0	15	5	5	0	17	0
Future Vol, veh/h	0	0	39	13	0	0	15	5	5	0	17	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	43	14	0	0	17	6	6	0	19	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	0	0	0	43	0	0	60	50	22	56	71	0
Stage 1	-	-	-	-	-	-	22	22	-	28	28	-
Stage 2	-	-	-	-	-	-	38	28	-	28	43	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	-	-	-	1566	-	-	936	841	1055	941	819	-
Stage 1	-	-	-	-	-	-	996	877	-	989	872	-
Stage 2	-	-	-	-	-	-	977	872	-	989	859	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	1566	-	-	-	833	1055	925	812	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	833	-	925	812	-
Stage 1	-	-	-	-	-	-	996	877	-	989	864	-
Stage 2	-	-	-	-	-	-	947	864	-	978	859	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	7.3		
HCM LOS			-	-

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-	1566	-	-	-
HCM Lane V/C Ratio	-	-	-	-	0.009	-	-	-
HCM Control Delay (s)	-	0	-	-	7.3	0	-	-
HCM Lane LOS	-	A	-	-	A	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	7	5	3	35	0
Future Vol, veh/h	0	7	5	3	35	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	8	6	3	39	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	54	39	39	0	-	0
Stage 1	39	-	-	-	-	-
Stage 2	15	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	954	1033	1571	-	-	-
Stage 1	983	-	-	-	-	-
Stage 2	1008	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	950	1033	1571	-	-	-
Mov Cap-2 Maneuver	885	-	-	-	-	-
Stage 1	979	-	-	-	-	-
Stage 2	1008	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.5	4.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1571	-	1033	-	-
HCM Lane V/C Ratio	0.004	-	0.008	-	-
HCM Control Delay (s)	7.3	-	8.5	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↱
Traffic Vol, veh/h	0	1150	2145	12	0	27
Future Vol, veh/h	0	1150	2145	12	0	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1278	2383	13	0	30

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	1198
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	178
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	178
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	29.3
HCM LOS			D

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	178
HCM Lane V/C Ratio	-	-	-	0.169
HCM Control Delay (s)	-	-	-	29.3
HCM Lane LOS	-	-	-	D
HCM 95th %tile Q(veh)	-	-	-	0.6

Intersection	
Int Delay, s/veh	1151.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	153	973	24	7	1949	144	37	0	27	107	0	168
Future Vol, veh/h	153	973	24	7	1949	144	37	0	27	107	0	168
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	100	100	-	375	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	170	1081	27	8	2166	160	41	0	30	119	0	187

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2326	0	0	1108	0	0	2520	3763	541	3063	3630	1083
Stage 1	-	-	-	-	-	-	1421	1421	-	2182	2182	-
Stage 2	-	-	-	-	-	-	1099	2342	-	881	1448	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	210	-	-	626	-	-	~ 14	4	485	~ 5	5	213
Stage 1	-	-	-	-	-	-	143	201	-	~ 47	83	-
Stage 2	-	-	-	-	-	-	227	69	-	308	195	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	210	-	-	626	-	-	~ 1	1	485	~ 2	1	213
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 1	1	-	~ 2	1	-
Stage 1	-	-	-	-	-	-	~ 27	38	-	~ 9	82	-
Stage 2	-	-	-	-	-	-	~ 28	68	-	~ 55	37	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.2	0	$ 14341.6	$ 11653.1
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1	485	210	-	-	626	-	-	2	213
HCM Lane V/C Ratio	41.111	0.062	0.81	-	-	0.012	-	-	59.444	0.876
HCM Control Delay (s)	$ 24797.6	12.9	69.2	-	-	10.8	-	-	$ 29823.5	80.3
HCM Lane LOS	F	B	F	-	-	B	-	-	F	F
HCM 95th %tile Q(veh)	7.2	0.2	5.9	-	-	0	-	-	17.2	6.9

Notes
~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	20	11	0	0	33	17	17	0	11	0
Future Vol, veh/h	0	0	20	11	0	0	33	17	17	0	11	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	22	12	0	0	37	19	19	0	12	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	0	0	0	22	0	0	41	35	11	54	46	0
Stage 1	-	-	-	-	-	-	11	11	-	24	24	-
Stage 2	-	-	-	-	-	-	30	24	-	30	22	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	-	-	-	1593	-	-	963	857	1070	944	846	-
Stage 1	-	-	-	-	-	-	1010	886	-	994	875	-
Stage 2	-	-	-	-	-	-	987	875	-	987	877	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	1593	-	-	-	850	1070	906	839	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	850	-	906	839	-
Stage 1	-	-	-	-	-	-	1010	886	-	994	868	-
Stage 2	-	-	-	-	-	-	965	868	-	949	877	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	7.3		
HCM LOS			-	-

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-	1593	-	-	-
HCM Lane V/C Ratio	-	-	-	-	0.008	-	-	-
HCM Control Delay (s)	-	0	-	-	7.3	0	-	-
HCM Lane LOS	-	A	-	-	A	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	4	3	9	23	0
Future Vol, veh/h	0	4	3	9	23	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	3	10	26	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	42	26	26	0	-	0
Stage 1	26	-	-	-	-	-
Stage 2	16	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	969	1050	1588	-	-	-
Stage 1	997	-	-	-	-	-
Stage 2	1007	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	967	1050	1588	-	-	-
Mov Cap-2 Maneuver	898	-	-	-	-	-
Stage 1	995	-	-	-	-	-
Stage 2	1007	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.4	1.8	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1588	-	1050	-	-
HCM Lane V/C Ratio	0.002	-	0.004	-	-
HCM Control Delay (s)	7.3	-	8.4	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

2030 Background Year Traffic Analysis - Mitigations

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	2081	1100	8	0	42
Future Vol, veh/h	0	2081	1100	8	0	42
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	2312	1222	9	0	47

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	616
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	433
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	433
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	14.3
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	433
HCM Lane V/C Ratio	-	-	-	0.108
HCM Control Delay (s)	-	-	-	14.3
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.4

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	96	1870	115	39	919	62	0	0	49	0	0	189
Future Vol, veh/h	96	1870	115	39	919	62	0	0	49	0	0	189
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	100	100	-	375	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	107	2078	128	43	1021	69	0	0	54	0	0	210

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1090	0	0	2206	0	0	-	-	1039	-	-	511
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	636	-	-	235	-	-	0	0	227	0	0	508
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	636	-	-	235	-	-	-	-	227	-	-	508
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.9	25.8	17
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	227	636	-	-	235	-	-	508
HCM Lane V/C Ratio	0.24	0.168	-	-	0.184	-	-	0.413
HCM Control Delay (s)	25.8	11.8	-	-	23.8	-	-	17
HCM Lane LOS	D	B	-	-	C	-	-	C
HCM 95th %tile Q(veh)	0.9	0.6	-	-	0.7	-	-	2

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	39	13	0	0	15	5	5	0	17	0
Future Vol, veh/h	0	0	39	13	0	0	15	5	5	0	17	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	43	14	0	0	17	6	6	0	19	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	0	0	0	43	0	0	60	50	22	56	71	0
Stage 1	-	-	-	-	-	-	22	22	-	28	28	-
Stage 2	-	-	-	-	-	-	38	28	-	28	43	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	-	-	-	1566	-	-	936	841	1055	941	819	-
Stage 1	-	-	-	-	-	-	996	877	-	989	872	-
Stage 2	-	-	-	-	-	-	977	872	-	989	859	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	1566	-	-	-	833	1055	925	812	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	833	-	925	812	-
Stage 1	-	-	-	-	-	-	996	877	-	989	864	-
Stage 2	-	-	-	-	-	-	947	864	-	978	859	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	7.3		
HCM LOS			-	-

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-	1566	-	-	-
HCM Lane V/C Ratio	-	-	-	-	0.009	-	-	-
HCM Control Delay (s)	-	0	-	-	7.3	0	-	-
HCM Lane LOS	-	A	-	-	A	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	7	5	3	35	0
Future Vol, veh/h	0	7	5	3	35	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	8	6	3	39	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	54	39	39	0	-	0
Stage 1	39	-	-	-	-	-
Stage 2	15	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	954	1033	1571	-	-	-
Stage 1	983	-	-	-	-	-
Stage 2	1008	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	950	1033	1571	-	-	-
Mov Cap-2 Maneuver	885	-	-	-	-	-
Stage 1	979	-	-	-	-	-
Stage 2	1008	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.5	4.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1571	-	1033	-	-
HCM Lane V/C Ratio	0.004	-	0.008	-	-
HCM Control Delay (s)	7.3	-	8.5	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1150	2212	12	0	27
Future Vol, veh/h	0	1150	2212	12	0	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1278	2458	13	0	30

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	1236
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	168
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	168
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	31
HCM LOS			D

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	168
HCM Lane V/C Ratio	-	-	-	0.179
HCM Control Delay (s)	-	-	-	31
HCM Lane LOS	-	-	-	D
HCM 95th %tile Q(veh)	-	-	-	0.6

Intersection	
Int Delay, s/veh	23.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	153	973	24	7	1949	144	0	0	64	0	0	275
Future Vol, veh/h	153	973	24	7	1949	144	0	0	64	0	0	275
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	100	100	-	375	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	170	1081	27	8	2166	160	0	0	71	0	0	306

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2326	0	0	1108	0	0	-	-	541	-	-	1083
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	210	-	-	626	-	-	0	0	485	0	0	~ 213
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	210	-	-	626	-	-	-	-	485	-	-	~ 213
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.2	0	13.7	262.7
HCM LOS			B	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	485	210	-	-	626	-	-	213
HCM Lane V/C Ratio	0.147	0.81	-	-	0.012	-	-	1.435
HCM Control Delay (s)	13.7	69.2	-	-	10.8	-	-	262.7
HCM Lane LOS	B	F	-	-	B	-	-	F
HCM 95th %tile Q(veh)	0.5	5.9	-	-	0	-	-	18

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	20	11	0	0	33	17	17	0	11	0
Future Vol, veh/h	0	0	20	11	0	0	33	17	17	0	11	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	22	12	0	0	37	19	19	0	12	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	0	0	0	22	0	0	41	35	11	54	46	0
Stage 1	-	-	-	-	-	-	11	11	-	24	24	-
Stage 2	-	-	-	-	-	-	30	24	-	30	22	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	-	-	-	1593	-	-	963	857	1070	944	846	-
Stage 1	-	-	-	-	-	-	1010	886	-	994	875	-
Stage 2	-	-	-	-	-	-	987	875	-	987	877	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	1593	-	-	-	850	1070	906	839	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	850	-	906	839	-
Stage 1	-	-	-	-	-	-	1010	886	-	994	868	-
Stage 2	-	-	-	-	-	-	965	868	-	949	877	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	7.3		
HCM LOS			-	-

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-	1593	-	-	-
HCM Lane V/C Ratio	-	-	-	-	0.008	-	-	-
HCM Control Delay (s)	-	0	-	-	7.3	0	-	-
HCM Lane LOS	-	A	-	-	A	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	4	3	9	23	0
Future Vol, veh/h	0	4	3	9	23	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	3	10	26	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	42	26	26	0	-	0
Stage 1	26	-	-	-	-	-
Stage 2	16	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	969	1050	1588	-	-	-
Stage 1	997	-	-	-	-	-
Stage 2	1007	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	967	1050	1588	-	-	-
Mov Cap-2 Maneuver	898	-	-	-	-	-
Stage 1	995	-	-	-	-	-
Stage 2	1007	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.4	1.8	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1588	-	1050	-	-
HCM Lane V/C Ratio	0.002	-	0.004	-	-
HCM Control Delay (s)	7.3	-	8.4	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

2023 Background Year with Project Traffic Analysis

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1320	631	15	0	49
Future Vol, veh/h	0	1320	631	15	0	49
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1467	701	17	0	54

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	359
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	638
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	638
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.2
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	638
HCM Lane V/C Ratio	-	-	-	0.085
HCM Control Delay (s)	-	-	-	11.2
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.3

Intersection	
Int Delay, s/veh	12.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	26	1219	75	25	611	12	13	0	19	87	0	22
Future Vol, veh/h	26	1219	75	25	611	12	13	0	19	87	0	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	100	100	-	375	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	29	1354	83	28	679	13	14	0	21	97	0	24

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	692	0	0	1437	0	0	1808	2160	677	1470	2230	340
Stage 1	-	-	-	-	-	-	1412	1412	-	735	735	-
Stage 2	-	-	-	-	-	-	396	748	-	735	1495	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	899	-	-	468	-	-	49	47	395	~ 89	42	656
Stage 1	-	-	-	-	-	-	145	203	-	377	424	-
Stage 2	-	-	-	-	-	-	601	418	-	377	185	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	899	-	-	468	-	-	44	43	395	~ 78	38	656
Mov Cap-2 Maneuver	-	-	-	-	-	-	44	43	-	~ 78	38	-
Stage 1	-	-	-	-	-	-	140	197	-	365	399	-
Stage 2	-	-	-	-	-	-	544	393	-	345	179	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.5	58.5	221
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	44	395	899	-	-	468	-	-	78	656
HCM Lane V/C Ratio	0.328	0.053	0.032	-	-	0.059	-	-	1.239	0.037
HCM Control Delay (s)	122.6	14.6	9.1	-	-	13.2	-	-	274.2	10.7
HCM Lane LOS	F	B	A	-	-	B	-	-	F	B
HCM 95th %tile Q(veh)	1.1	0.2	0.1	-	-	0.2	-	-	7.3	0.1

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	75	17	0	0	28	5	5	0	17	0
Future Vol, veh/h	0	0	75	17	0	0	28	5	5	0	17	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	83	19	0	0	31	6	6	0	19	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	0	0	0	83	0	0	90	80	42	86	121	0
Stage 1	-	-	-	-	-	-	42	42	-	38	38	-
Stage 2	-	-	-	-	-	-	48	38	-	48	83	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	-	-	-	1514	-	-	895	810	1029	900	769	-
Stage 1	-	-	-	-	-	-	972	860	-	977	863	-
Stage 2	-	-	-	-	-	-	965	863	-	965	826	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	1514	-	-	-	799	1029	882	759	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	799	-	882	759	-
Stage 1	-	-	-	-	-	-	972	860	-	977	852	-
Stage 2	-	-	-	-	-	-	931	852	-	954	826	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	7.4		
HCM LOS			-	-

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-	1514	-	-	-
HCM Lane V/C Ratio	-	-	-	-	0.012	-	-	-
HCM Control Delay (s)	-	0	-	-	7.4	0	-	-
HCM Lane LOS	-	A	-	-	A	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	7	0	0	3	0
Future Vol, veh/h	0	7	0	0	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	8	0	0	3	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	8	0	5	4
Stage 1	-	-	-	-	4	-
Stage 2	-	-	-	-	1	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1612	-	1017	1080
Stage 1	-	-	-	-	1019	-
Stage 2	-	-	-	-	1022	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1612	-	1017	1080
Mov Cap-2 Maneuver	-	-	-	-	1017	-
Stage 1	-	-	-	-	1019	-
Stage 2	-	-	-	-	1022	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1017	-	-	1612	-
HCM Lane V/C Ratio	0.003	-	-	-	-
HCM Control Delay (s)	8.6	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	3.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	17	15	0	42	49
Future Vol, veh/h	0	17	15	0	42	49
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	19	17	0	47	54

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	165	17	0	0	17	0
Stage 1	17	-	-	-	-	-
Stage 2	148	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	826	1062	-	-	1600	-
Stage 1	1006	-	-	-	-	-
Stage 2	880	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	801	1062	-	-	1600	-
Mov Cap-2 Maneuver	801	-	-	-	-	-
Stage 1	1006	-	-	-	-	-
Stage 2	854	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.5	0	3.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1062	1600	-
HCM Lane V/C Ratio	-	-	0.018	0.029	-
HCM Control Delay (s)	-	-	8.5	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0.1	-

Intersection	
Int Delay, s/veh	7.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	84	29	3	7	0
Future Vol, veh/h	0	84	29	3	7	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	93	32	3	8	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	75	8	8	0	-	0
Stage 1	8	-	-	-	-	-
Stage 2	67	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	928	1074	1612	-	-	-
Stage 1	1015	-	-	-	-	-
Stage 2	956	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	909	1074	1612	-	-	-
Mov Cap-2 Maneuver	909	-	-	-	-	-
Stage 1	995	-	-	-	-	-
Stage 2	956	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	6.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1612	-	1074	-	-
HCM Lane V/C Ratio	0.02	-	0.087	-	-
HCM Control Delay (s)	7.3	0	8.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	711	1304	36	0	31
Future Vol, veh/h	0	711	1304	36	0	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	790	1449	40	0	34

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	745
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	357
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	357
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	16.2
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	357
HCM Lane V/C Ratio	-	-	-	0.096
HCM Control Delay (s)	-	-	-	16.2
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0.3

Intersection	
Int Delay, s/veh	19.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	62	634	15	4	1303	55	24	0	18	56	0	13
Future Vol, veh/h	62	634	15	4	1303	55	24	0	18	56	0	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	100	100	-	375	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	69	704	17	4	1448	61	27	0	20	62	0	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1509	0	0	721	0	0	1574	2359	352	1946	2315	724
Stage 1	-	-	-	-	-	-	842	842	-	1456	1456	-
Stage 2	-	-	-	-	-	-	732	1517	-	490	859	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	439	-	-	877	-	-	74	35	644	~ 39	37	368
Stage 1	-	-	-	-	-	-	325	378	-	136	193	-
Stage 2	-	-	-	-	-	-	379	180	-	529	371	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	439	-	-	877	-	-	62	29	644	~ 33	31	368
Mov Cap-2 Maneuver	-	-	-	-	-	-	62	29	-	~ 33	31	-
Stage 1	-	-	-	-	-	-	274	319	-	115	192	-
Stage 2	-	-	-	-	-	-	362	179	-	432	313	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.3	0	62.5	$ 552.3
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	62	644	439	-	-	877	-	-	33	368
HCM Lane V/C Ratio	0.43	0.031	0.157	-	-	0.005	-	-	1.886	0.039
HCM Control Delay (s)	101.2	10.8	14.7	-	-	9.1	-	-	$ 677	15.2
HCM Lane LOS	F	B	B	-	-	A	-	-	F	C
HCM 95th %tile Q(veh)	1.6	0.1	0.6	-	-	0	-	-	7	0.1

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	47	11	0	0	83	17	17	0	11	0
Future Vol, veh/h	0	0	47	11	0	0	83	17	17	0	11	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	52	12	0	0	92	19	19	0	12	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	0	0	0	52	0	0	56	50	26	69	76	0
Stage 1	-	-	-	-	-	-	26	26	-	24	24	-
Stage 2	-	-	-	-	-	-	30	24	-	45	52	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	-	-	-	1554	-	-	941	841	1050	923	814	-
Stage 1	-	-	-	-	-	-	992	874	-	994	875	-
Stage 2	-	-	-	-	-	-	987	875	-	969	852	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	1554	-	-	-	834	1050	885	807	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	834	-	885	807	-
Stage 1	-	-	-	-	-	-	992	874	-	994	868	-
Stage 2	-	-	-	-	-	-	965	868	-	931	852	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	7.3		
HCM LOS			-	-

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-	1554	-	-	-
HCM Lane V/C Ratio	-	-	-	-	0.008	-	-	-
HCM Control Delay (s)	-	0	-	-	7.3	0	-	-
HCM Lane LOS	-	A	-	-	A	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	4	0	0	3	0
Future Vol, veh/h	0	4	0	0	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	0	0	3	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	4	0	3	2
Stage 1	-	-	-	-	2	-
Stage 2	-	-	-	-	1	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1618	-	1019	1082
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	1022	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1618	-	1019	1082
Mov Cap-2 Maneuver	-	-	-	-	1019	-
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	1022	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.5
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1019	-	-	1618	-
HCM Lane V/C Ratio	0.003	-	-	-	-
HCM Control Delay (s)	8.5	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	4.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	50	36	0	27	31
Future Vol, veh/h	0	50	36	0	27	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	56	40	0	30	34

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	134	40	0	0	40	0
Stage 1	40	-	-	-	-	-
Stage 2	94	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	860	1031	-	-	1570	-
Stage 1	982	-	-	-	-	-
Stage 2	930	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	844	1031	-	-	1570	-
Mov Cap-2 Maneuver	844	-	-	-	-	-
Stage 1	982	-	-	-	-	-
Stage 2	912	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.7	0	3.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1031	1570	-
HCM Lane V/C Ratio	-	-	0.054	0.019	-
HCM Control Delay (s)	-	-	8.7	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-

Intersection	
Int Delay, s/veh	7.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	54	83	3	4	0
Future Vol, veh/h	0	54	83	3	4	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	60	92	3	4	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	191	4	4	0	-	0
Stage 1	4	-	-	-	-	-
Stage 2	187	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	798	1080	1618	-	-	-
Stage 1	1019	-	-	-	-	-
Stage 2	845	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	753	1080	1618	-	-	-
Mov Cap-2 Maneuver	753	-	-	-	-	-
Stage 1	961	-	-	-	-	-
Stage 2	845	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.5	7.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1618	-	1080	-	-
HCM Lane V/C Ratio	0.057	-	0.056	-	-
HCM Control Delay (s)	7.4	0	8.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.2	-	0.2	-	-

2023 Background Year with Project Traffic Analysis - Mitigations

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1320	663	15	0	91
Future Vol, veh/h	0	1320	663	15	0	91
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1467	737	17	0	101

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	377
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	621
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	621
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.9
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	621
HCM Lane V/C Ratio	-	-	-	0.163
HCM Control Delay (s)	-	-	-	11.9
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.6

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	26	1219	75	25	611	12	0	0	32	0	0	67
Future Vol, veh/h	26	1219	75	25	611	12	0	0	32	0	0	67
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	100	100	-	375	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	29	1354	83	28	679	13	0	0	36	0	0	74

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	692	0	0	1437	0	0	-	-	677	-	-	340
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	899	-	-	468	-	-	0	0	395	0	0	656
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	899	-	-	468	-	-	-	-	395	-	-	656
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.5	15	11.2
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	395	899	-	-	468	-	-	656
HCM Lane V/C Ratio	0.09	0.032	-	-	0.059	-	-	0.113
HCM Control Delay (s)	15	9.1	-	-	13.2	-	-	11.2
HCM Lane LOS	C	A	-	-	B	-	-	B
HCM 95th %tile Q(veh)	0.3	0.1	-	-	0.2	-	-	0.4

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	33	17	0	0	28	5	5	0	17	0
Future Vol, veh/h	0	0	33	17	0	0	28	5	5	0	17	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	37	19	0	0	31	6	6	0	19	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	0	0	0	37	0	0	67	57	19	63	75	0
Stage 1	-	-	-	-	-	-	19	19	-	38	38	-
Stage 2	-	-	-	-	-	-	48	38	-	25	37	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	-	-	-	1574	-	-	926	834	1059	932	815	-
Stage 1	-	-	-	-	-	-	1000	880	-	977	863	-
Stage 2	-	-	-	-	-	-	965	863	-	993	864	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	1574	-	-	-	824	1059	914	805	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	824	-	914	805	-
Stage 1	-	-	-	-	-	-	1000	880	-	977	853	-
Stage 2	-	-	-	-	-	-	932	853	-	982	864	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	7.3		
HCM LOS			-	-

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-	1574	-	-	-
HCM Lane V/C Ratio	-	-	-	-	0.012	-	-	-
HCM Control Delay (s)	-	0	-	-	7.3	0	-	-
HCM Lane LOS	-	A	-	-	A	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	7	0	0	3	0
Future Vol, veh/h	0	7	0	0	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	8	0	0	3	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	8	0	5	4
Stage 1	-	-	-	-	4	-
Stage 2	-	-	-	-	1	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1612	-	1017	1080
Stage 1	-	-	-	-	1019	-
Stage 2	-	-	-	-	1022	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1612	-	1017	1080
Mov Cap-2 Maneuver	-	-	-	-	1017	-
Stage 1	-	-	-	-	1019	-
Stage 2	-	-	-	-	1022	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1017	-	-	1612	-
HCM Lane V/C Ratio	0.003	-	-	-	-
HCM Control Delay (s)	8.6	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	1.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	17	15	0	0	91
Future Vol, veh/h	0	17	15	0	0	91
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	19	17	0	0	101

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	118	17	0	0	17	0
Stage 1	17	-	-	-	-	-
Stage 2	101	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	878	1062	-	-	1600	-
Stage 1	1006	-	-	-	-	-
Stage 2	923	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	878	1062	-	-	1600	-
Mov Cap-2 Maneuver	878	-	-	-	-	-
Stage 1	1006	-	-	-	-	-
Stage 2	923	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.5	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1062	1600	-
HCM Lane V/C Ratio	-	-	0.018	-	-
HCM Control Delay (s)	-	-	8.5	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	7.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	84	29	3	7	0
Future Vol, veh/h	0	84	29	3	7	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	93	32	3	8	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	75	8	8	0	-	0
Stage 1	8	-	-	-	-	-
Stage 2	67	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	928	1074	1612	-	-	-
Stage 1	1015	-	-	-	-	-
Stage 2	956	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	909	1074	1612	-	-	-
Mov Cap-2 Maneuver	909	-	-	-	-	-
Stage 1	995	-	-	-	-	-
Stage 2	956	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	6.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1612	-	1074	-	-
HCM Lane V/C Ratio	0.02	-	0.087	-	-
HCM Control Delay (s)	7.3	0	8.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	711	1309	36	0	58
Future Vol, veh/h	0	711	1309	36	0	58
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	790	1454	40	0	64

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	747
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	355
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	355
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	17.4
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	355
HCM Lane V/C Ratio	-	-	-	0.182
HCM Control Delay (s)	-	-	-	17.4
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0.7

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	62	634	15	4	1303	55	0	0	42	0	0	42
Future Vol, veh/h	62	634	15	4	1303	55	0	0	42	0	0	42
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	100	100	-	375	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	69	704	17	4	1448	61	0	0	47	0	0	47

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1509	0	0	721	0	0	-	-	352	-	-	724
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	439	-	-	877	-	-	0	0	644	0	0	368
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	439	-	-	877	-	-	-	-	644	-	-	368
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.3	0	11	16.2
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	644	439	-	-	877	-	-	368
HCM Lane V/C Ratio	0.072	0.157	-	-	0.005	-	-	0.127
HCM Control Delay (s)	11	14.7	-	-	9.1	-	-	16.2
HCM Lane LOS	B	B	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.2	0.6	-	-	0	-	-	0.4

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	20	11	0	0	83	17	17	0	11	0
Future Vol, veh/h	0	0	20	11	0	0	83	17	17	0	11	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	22	12	0	0	92	19	19	0	12	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	0	0	0	22	0	0	41	35	11	54	46	0
Stage 1	-	-	-	-	-	-	11	11	-	24	24	-
Stage 2	-	-	-	-	-	-	30	24	-	30	22	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	-	-	-	1593	-	-	963	857	1070	944	846	-
Stage 1	-	-	-	-	-	-	1010	886	-	994	875	-
Stage 2	-	-	-	-	-	-	987	875	-	987	877	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	1593	-	-	-	850	1070	906	839	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	850	-	906	839	-
Stage 1	-	-	-	-	-	-	1010	886	-	994	868	-
Stage 2	-	-	-	-	-	-	965	868	-	949	877	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	7.3		
HCM LOS			-	-

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-	1593	-	-	-
HCM Lane V/C Ratio	-	-	-	-	0.008	-	-	-
HCM Control Delay (s)	-	0	-	-	7.3	0	-	-
HCM Lane LOS	-	A	-	-	A	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	4	0	0	3	0
Future Vol, veh/h	0	4	0	0	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	0	0	3	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	4	0	3	2
Stage 1	-	-	-	-	2	-
Stage 2	-	-	-	-	1	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1618	-	1019	1082
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	1022	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1618	-	1019	1082
Mov Cap-2 Maneuver	-	-	-	-	1019	-
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	1022	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.5
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1019	-	-	1618	-
HCM Lane V/C Ratio	0.003	-	-	-	-
HCM Control Delay (s)	8.5	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	50	36	0	0	58
Future Vol, veh/h	0	50	36	0	0	58
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	56	40	0	0	64

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	104	40	0	0	40	0
Stage 1	40	-	-	-	-	-
Stage 2	64	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	894	1031	-	-	1570	-
Stage 1	982	-	-	-	-	-
Stage 2	959	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	894	1031	-	-	1570	-
Mov Cap-2 Maneuver	894	-	-	-	-	-
Stage 1	982	-	-	-	-	-
Stage 2	959	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.7	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1031	1570	-
HCM Lane V/C Ratio	-	-	0.054	-	-
HCM Control Delay (s)	-	-	8.7	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	7.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	54	83	3	4	0
Future Vol, veh/h	0	54	83	3	4	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	60	92	3	4	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	191	4	4	0	-	0
Stage 1	4	-	-	-	-	-
Stage 2	187	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	798	1080	1618	-	-	-
Stage 1	1019	-	-	-	-	-
Stage 2	845	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	753	1080	1618	-	-	-
Mov Cap-2 Maneuver	753	-	-	-	-	-
Stage 1	961	-	-	-	-	-
Stage 2	845	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.5	7.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1618	-	1080	-	-
HCM Lane V/C Ratio	0.057	-	0.056	-	-
HCM Control Delay (s)	7.4	0	8.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.2	-	0.2	-	-

2024 Background Year with Project Traffic Analysis

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1460	690	20	0	77
Future Vol, veh/h	0	1460	690	20	0	77
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1622	767	22	0	86

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	395
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	604
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	604
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.9
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	604
HCM Lane V/C Ratio	-	-	-	0.142
HCM Control Delay (s)	-	-	-	11.9
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.5

Intersection	
Int Delay, s/veh	43.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	38	1339	82	28	674	14	14	0	21	122	0	22
Future Vol, veh/h	38	1339	82	28	674	14	14	0	21	122	0	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	100	100	-	375	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	42	1488	91	31	749	16	16	0	23	136	0	24

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	765	0	0	1579	0	0	2009	2399	744	1639	2474	375
Stage 1	-	-	-	-	-	-	1572	1572	-	811	811	-
Stage 2	-	-	-	-	-	-	437	827	-	828	1663	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	844	-	-	413	-	-	35	33	357	~ 66	29	623
Stage 1	-	-	-	-	-	-	115	169	-	339	391	-
Stage 2	-	-	-	-	-	-	568	384	-	332	152	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	844	-	-	413	-	-	31	29	357	~ 56	25	623
Mov Cap-2 Maneuver	-	-	-	-	-	-	31	29	-	~ 56	25	-
Stage 1	-	-	-	-	-	-	109	161	-	322	362	-
Stage 2	-	-	-	-	-	-	505	355	-	295	144	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.6	91.9	$ 682.8
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	31	357	844	-	-	413	-	-	56	623
HCM Lane V/C Ratio	0.502	0.065	0.05	-	-	0.075	-	-	2.421	0.039
HCM Control Delay (s)	206	15.8	9.5	-	-	14.4	-	-	$ 803.9	11
HCM Lane LOS	F	C	A	-	-	B	-	-	F	B
HCM 95th %tile Q(veh)	1.6	0.2	0.2	-	-	0.2	-	-	13.7	0.1

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	110	17	0	0	42	5	5	0	17	0
Future Vol, veh/h	0	0	110	17	0	0	42	5	5	0	17	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	122	19	0	0	47	6	6	0	19	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	0	0	0	122	0	0	109	99	61	105	160	0
Stage 1	-	-	-	-	-	-	61	61	-	38	38	-
Stage 2	-	-	-	-	-	-	48	38	-	67	122	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	-	-	-	1465	-	-	870	791	1004	875	732	-
Stage 1	-	-	-	-	-	-	950	844	-	977	863	-
Stage 2	-	-	-	-	-	-	965	863	-	943	795	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	1465	-	-	-	781	1004	857	722	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	781	-	857	722	-
Stage 1	-	-	-	-	-	-	950	844	-	977	852	-
Stage 2	-	-	-	-	-	-	931	852	-	932	795	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	7.5		
HCM LOS			-	-

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-	1465	-	-	-
HCM Lane V/C Ratio	-	-	-	-	0.013	-	-	-
HCM Control Delay (s)	-	0	-	-	7.5	0	-	-
HCM Lane LOS	-	A	-	-	A	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	4.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	39	12	10	31	0
Future Vol, veh/h	0	39	12	10	31	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	43	13	11	34	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	71	34	34	0	-	0
Stage 1	34	-	-	-	-	-
Stage 2	37	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	933	1039	1578	-	-	-
Stage 1	988	-	-	-	-	-
Stage 2	985	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	926	1039	1578	-	-	-
Mov Cap-2 Maneuver	926	-	-	-	-	-
Stage 1	980	-	-	-	-	-
Stage 2	985	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1578	-	1039	-	-
HCM Lane V/C Ratio	0.008	-	0.042	-	-
HCM Control Delay (s)	7.3	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	4.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	31	20	0	77	77
Future Vol, veh/h	0	31	20	0	77	77
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	34	22	0	86	86

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	280	22	0	0	22	0
Stage 1	22	-	-	-	-	-
Stage 2	258	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	710	1055	-	-	1593	-
Stage 1	1001	-	-	-	-	-
Stage 2	785	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	670	1055	-	-	1593	-
Mov Cap-2 Maneuver	670	-	-	-	-	-
Stage 1	1001	-	-	-	-	-
Stage 2	740	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.5	0	3.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1055	1593	-
HCM Lane V/C Ratio	-	-	0.033	0.054	-
HCM Control Delay (s)	-	-	8.5	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0.2	-

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	84	29	22	70	0
Future Vol, veh/h	0	84	29	22	70	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	93	32	24	78	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	166	78	78	0	-	0
Stage 1	78	-	-	-	-	-
Stage 2	88	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	824	983	1520	-	-	-
Stage 1	945	-	-	-	-	-
Stage 2	935	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	807	983	1520	-	-	-
Mov Cap-2 Maneuver	807	-	-	-	-	-
Stage 1	925	-	-	-	-	-
Stage 2	935	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9	4.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1520	-	983	-	-
HCM Lane V/C Ratio	0.021	-	0.095	-	-
HCM Control Delay (s)	7.4	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-

Intersection	
Int Delay, s/veh	7.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	31	10	0	0	0
Future Vol, veh/h	0	31	10	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	34	11	0	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	23	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	22	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	993	1084	1622	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	1001	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	986	1084	1622	-	-	-
Mov Cap-2 Maneuver	986	-	-	-	-	-
Stage 1	1015	-	-	-	-	-
Stage 2	1001	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.4	7.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1622	-	1084	-	-
HCM Lane V/C Ratio	0.007	-	0.032	-	-
HCM Control Delay (s)	7.2	0	8.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	812	1432	63	0	48
Future Vol, veh/h	0	812	1432	63	0	48
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	902	1591	70	0	53

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	831
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	313
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	313
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	18.8
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	313
HCM Lane V/C Ratio	-	-	-	0.17
HCM Control Delay (s)	-	-	-	18.8
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0.6

Intersection	
Int Delay, s/veh	74.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	98	697	17	5	1455	62	27	0	19	77	0	13
Future Vol, veh/h	98	697	17	5	1455	62	27	0	19	77	0	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	100	100	-	375	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	109	774	19	6	1617	69	30	0	21	86	0	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1686	0	0	793	0	0	1813	2690	387	2234	2640	809
Stage 1	-	-	-	-	-	-	992	992	-	1629	1629	-
Stage 2	-	-	-	-	-	-	821	1698	-	605	1011	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	375	-	-	824	-	-	49	21	611	~ 23	23	323
Stage 1	-	-	-	-	-	-	264	322	-	106	159	-
Stage 2	-	-	-	-	-	-	335	146	-	451	315	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	375	-	-	824	-	-	36	15	611	~ 17	16	323
Mov Cap-2 Maneuver	-	-	-	-	-	-	36	15	-	~ 17	16	-
Stage 1	-	-	-	-	-	-	187	228	-	~ 75	158	-
Stage 2	-	-	-	-	-	-	318	145	-	309	223	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.2	0	160	$ 1940.8
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	36	611	375	-	-	824	-	-	17	323
HCM Lane V/C Ratio	0.833	0.035	0.29	-	-	0.007	-	-	5.033	0.045
HCM Control Delay (s)	264.7	11.1	18.5	-	-	9.4	-	-	$ 2265.6	16.7
HCM Lane LOS	F	B	C	-	-	A	-	-	F	C
HCM 95th %tile Q(veh)	3	0.1	1.2	-	-	0	-	-	11.4	0.1

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	68	11	0	0	126	17	17	0	11	0
Future Vol, veh/h	0	0	68	11	0	0	126	17	17	0	11	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	76	12	0	0	140	19	19	0	12	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	0	0	0	76	0	0	68	62	38	81	100	0
Stage 1	-	-	-	-	-	-	38	38	-	24	24	-
Stage 2	-	-	-	-	-	-	30	24	-	57	76	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	-	-	-	1523	-	-	925	829	1034	907	790	-
Stage 1	-	-	-	-	-	-	977	863	-	994	875	-
Stage 2	-	-	-	-	-	-	987	875	-	955	832	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	1523	-	-	-	822	1034	870	784	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	822	-	870	784	-
Stage 1	-	-	-	-	-	-	977	863	-	994	868	-
Stage 2	-	-	-	-	-	-	965	868	-	917	832	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	7.4		
HCM LOS			-	-

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-	1523	-	-	-
HCM Lane V/C Ratio	-	-	-	-	0.008	-	-	-
HCM Control Delay (s)	-	0	-	-	7.4	0	-	-
HCM Lane LOS	-	A	-	-	A	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	23	39	34	20	0
Future Vol, veh/h	0	23	39	34	20	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	26	43	38	22	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	146	22	22	0	-	0
Stage 1	22	-	-	-	-	-
Stage 2	124	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	846	1055	1593	-	-	-
Stage 1	1001	-	-	-	-	-
Stage 2	902	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	822	1055	1593	-	-	-
Mov Cap-2 Maneuver	822	-	-	-	-	-
Stage 1	973	-	-	-	-	-
Stage 2	902	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.5	3.9	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1593	-	1055	-	-
HCM Lane V/C Ratio	0.027	-	0.024	-	-
HCM Control Delay (s)	7.3	0	8.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection	
Int Delay, s/veh	4.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	93	63	0	48	48
Future Vol, veh/h	0	93	63	0	48	48
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	103	70	0	53	53

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	229	70	0	0	70	0
Stage 1	70	-	-	-	-	-
Stage 2	159	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	759	993	-	-	1531	-
Stage 1	953	-	-	-	-	-
Stage 2	870	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	732	993	-	-	1531	-
Mov Cap-2 Maneuver	732	-	-	-	-	-
Stage 1	953	-	-	-	-	-
Stage 2	839	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9	0	3.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	993	1531	-
HCM Lane V/C Ratio	-	-	0.104	0.035	-
HCM Control Delay (s)	-	-	9	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	53	83	73	43	0
Future Vol, veh/h	0	53	83	73	43	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	59	92	81	48	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	313	48	48	0	-	0
Stage 1	48	-	-	-	-	-
Stage 2	265	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	680	1021	1559	-	-	-
Stage 1	974	-	-	-	-	-
Stage 2	779	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	638	1021	1559	-	-	-
Mov Cap-2 Maneuver	638	-	-	-	-	-
Stage 1	914	-	-	-	-	-
Stage 2	779	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1559	-	1021	-	-
HCM Lane V/C Ratio	0.059	-	0.058	-	-
HCM Control Delay (s)	7.5	0	8.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.2	-	0.2	-	-

Intersection	
Int Delay, s/veh	7.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	20	34	0	0	0
Future Vol, veh/h	0	20	34	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	22	38	0	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	77	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	76	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	926	1084	1622	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	947	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	905	1084	1622	-	-	-
Mov Cap-2 Maneuver	905	-	-	-	-	-
Stage 1	998	-	-	-	-	-
Stage 2	947	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.4	7.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1622	-	1084	-	-
HCM Lane V/C Ratio	0.023	-	0.021	-	-
HCM Control Delay (s)	7.3	0	8.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

2024 Background Year with Project Traffic Analysis - Mitigations

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1460	721	20	0	154
Future Vol, veh/h	0	1460	721	20	0	154
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1622	801	22	0	171

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	412
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	589
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	589
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	13.6
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	589
HCM Lane V/C Ratio	-	-	-	0.291
HCM Control Delay (s)	-	-	-	13.6
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	1.2

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	38	1339	82	28	674	14	0	0	35	0	0	67
Future Vol, veh/h	38	1339	82	28	674	14	0	0	35	0	0	67
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	100	100	-	375	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	42	1488	91	31	749	16	0	0	39	0	0	74

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	765	0	0	1579	0	0	-	-	744	-	-	375
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	844	-	-	413	-	-	0	0	357	0	0	623
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	844	-	-	413	-	-	-	-	357	-	-	623
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.6	16.3	11.6
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	357	844	-	-	413	-	-	623
HCM Lane V/C Ratio	0.109	0.05	-	-	0.075	-	-	0.119
HCM Control Delay (s)	16.3	9.5	-	-	14.4	-	-	11.6
HCM Lane LOS	C	A	-	-	B	-	-	B
HCM 95th %tile Q(veh)	0.4	0.2	-	-	0.2	-	-	0.4

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	33	17	0	0	42	5	5	0	17	0
Future Vol, veh/h	0	0	33	17	0	0	42	5	5	0	17	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	37	19	0	0	47	6	6	0	19	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	0	0	0	37	0	0	67	57	19	63	75	0
Stage 1	-	-	-	-	-	-	19	19	-	38	38	-
Stage 2	-	-	-	-	-	-	48	38	-	25	37	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	-	-	-	1574	-	-	926	834	1059	932	815	-
Stage 1	-	-	-	-	-	-	1000	880	-	977	863	-
Stage 2	-	-	-	-	-	-	965	863	-	993	864	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	1574	-	-	-	824	1059	914	805	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	824	-	914	805	-
Stage 1	-	-	-	-	-	-	1000	880	-	977	853	-
Stage 2	-	-	-	-	-	-	932	853	-	982	864	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	7.3		
HCM LOS			-	-

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-	1574	-	-	-
HCM Lane V/C Ratio	-	-	-	-	0.012	-	-	-
HCM Control Delay (s)	-	0	-	-	7.3	0	-	-
HCM Lane LOS	-	A	-	-	A	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	4.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	39	12	10	31	0
Future Vol, veh/h	0	39	12	10	31	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	43	13	11	34	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	71	34	34	0	-	0
Stage 1	34	-	-	-	-	-
Stage 2	37	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	933	1039	1578	-	-	-
Stage 1	988	-	-	-	-	-
Stage 2	985	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	926	1039	1578	-	-	-
Mov Cap-2 Maneuver	926	-	-	-	-	-
Stage 1	980	-	-	-	-	-
Stage 2	985	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1578	-	1039	-	-
HCM Lane V/C Ratio	0.008	-	0.042	-	-
HCM Control Delay (s)	7.3	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	31	20	0	0	154
Future Vol, veh/h	0	31	20	0	0	154
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	34	22	0	0	171

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	193	22	0	0	22	0
Stage 1	22	-	-	-	-	-
Stage 2	171	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	796	1055	-	-	1593	-
Stage 1	1001	-	-	-	-	-
Stage 2	859	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	796	1055	-	-	1593	-
Mov Cap-2 Maneuver	796	-	-	-	-	-
Stage 1	1001	-	-	-	-	-
Stage 2	859	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.5	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1055	1593	-
HCM Lane V/C Ratio	-	-	0.033	-	-
HCM Control Delay (s)	-	-	8.5	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	84	29	22	70	0
Future Vol, veh/h	0	84	29	22	70	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	93	32	24	78	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	166	78	78	0	-	0
Stage 1	78	-	-	-	-	-
Stage 2	88	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	824	983	1520	-	-	-
Stage 1	945	-	-	-	-	-
Stage 2	935	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	807	983	1520	-	-	-
Mov Cap-2 Maneuver	807	-	-	-	-	-
Stage 1	925	-	-	-	-	-
Stage 2	935	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9	4.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1520	-	983	-	-
HCM Lane V/C Ratio	0.021	-	0.095	-	-
HCM Control Delay (s)	7.4	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-

Intersection	
Int Delay, s/veh	7.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	31	10	0	0	0
Future Vol, veh/h	0	31	10	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	34	11	0	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	23	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	22	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	993	1084	1622	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	1001	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	986	1084	1622	-	-	-
Mov Cap-2 Maneuver	986	-	-	-	-	-
Stage 1	1015	-	-	-	-	-
Stage 2	1001	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.4	7.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1622	-	1084	-	-
HCM Lane V/C Ratio	0.007	-	0.032	-	-
HCM Control Delay (s)	7.2	0	8.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	812	1434	63	0	96
Future Vol, veh/h	0	812	1434	63	0	96
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	902	1593	70	0	107

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	832
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	312
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	312
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	22.4
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	312
HCM Lane V/C Ratio	-	-	-	0.342
HCM Control Delay (s)	-	-	-	22.4
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	1.5

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	98	697	17	5	1455	62	0	0	46	0	0	42
Future Vol, veh/h	98	697	17	5	1455	62	0	0	46	0	0	42
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	100	100	-	375	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	109	774	19	6	1617	69	0	0	51	0	0	47

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1686	0	0	793	0	0	-	-	387	-	-	809
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	375	-	-	824	-	-	0	0	611	0	0	323
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	375	-	-	824	-	-	-	-	611	-	-	323
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.2	0	11.4	18
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	611	375	-	-	824	-	-	323
HCM Lane V/C Ratio	0.084	0.29	-	-	0.007	-	-	0.144
HCM Control Delay (s)	11.4	18.5	-	-	9.4	-	-	18
HCM Lane LOS	B	C	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.3	1.2	-	-	0	-	-	0.5

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	20	11	0	0	126	17	17	0	11	0
Future Vol, veh/h	0	0	20	11	0	0	126	17	17	0	11	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	22	12	0	0	140	19	19	0	12	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	0	0	0	22	0	0	41	35	11	54	46	0
Stage 1	-	-	-	-	-	-	11	11	-	24	24	-
Stage 2	-	-	-	-	-	-	30	24	-	30	22	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	-	-	-	1593	-	-	963	857	1070	944	846	-
Stage 1	-	-	-	-	-	-	1010	886	-	994	875	-
Stage 2	-	-	-	-	-	-	987	875	-	987	877	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	1593	-	-	-	850	1070	906	839	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	850	-	906	839	-
Stage 1	-	-	-	-	-	-	1010	886	-	994	868	-
Stage 2	-	-	-	-	-	-	965	868	-	949	877	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	7.3		
HCM LOS			-	-

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-	1593	-	-	-
HCM Lane V/C Ratio	-	-	-	-	0.008	-	-	-
HCM Control Delay (s)	-	0	-	-	7.3	0	-	-
HCM Lane LOS	-	A	-	-	A	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	23	39	34	20	0
Future Vol, veh/h	0	23	39	34	20	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	26	43	38	22	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	146	22	22	0	-	0
Stage 1	22	-	-	-	-	-
Stage 2	124	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	846	1055	1593	-	-	-
Stage 1	1001	-	-	-	-	-
Stage 2	902	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	822	1055	1593	-	-	-
Mov Cap-2 Maneuver	798	-	-	-	-	-
Stage 1	973	-	-	-	-	-
Stage 2	902	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.5	3.9	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1593	-	1055	-	-
HCM Lane V/C Ratio	0.027	-	0.024	-	-
HCM Control Delay (s)	7.3	0	8.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection	
Int Delay, s/veh	3.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	93	63	0	0	96
Future Vol, veh/h	0	93	63	0	0	96
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	103	70	0	0	107

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	177	70	0	0	70	0
Stage 1	70	-	-	-	-	-
Stage 2	107	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	813	993	-	-	1531	-
Stage 1	953	-	-	-	-	-
Stage 2	917	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	813	993	-	-	1531	-
Mov Cap-2 Maneuver	813	-	-	-	-	-
Stage 1	953	-	-	-	-	-
Stage 2	917	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	993	1531	-
HCM Lane V/C Ratio	-	-	0.104	-	-
HCM Control Delay (s)	-	-	9	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	53	83	73	43	0
Future Vol, veh/h	0	53	83	73	43	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	59	92	81	48	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	313	48	48	0	-	0
Stage 1	48	-	-	-	-	-
Stage 2	265	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	680	1021	1559	-	-	-
Stage 1	974	-	-	-	-	-
Stage 2	779	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	638	1021	1559	-	-	-
Mov Cap-2 Maneuver	638	-	-	-	-	-
Stage 1	914	-	-	-	-	-
Stage 2	779	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1559	-	1021	-	-
HCM Lane V/C Ratio	0.059	-	0.058	-	-
HCM Control Delay (s)	7.5	0	8.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.2	-	0.2	-	-

Intersection	
Int Delay, s/veh	7.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	20	34	0	0	0
Future Vol, veh/h	0	20	34	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	22	38	0	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	77	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	76	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	926	1084	1622	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	947	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	905	1084	1622	-	-	-
Mov Cap-2 Maneuver	852	-	-	-	-	-
Stage 1	998	-	-	-	-	-
Stage 2	947	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.4	7.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1622	-	1084	-	-
HCM Lane V/C Ratio	0.023	-	0.021	-	-
HCM Control Delay (s)	7.3	0	8.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

2030 Background Year with Project Traffic Analysis

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	2185	1034	87	0	125
Future Vol, veh/h	0	2185	1034	87	0	125
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	2428	1149	97	0	139

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	623
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	429
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	429
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	17.4
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	429
HCM Lane V/C Ratio	-	-	-	0.324
HCM Control Delay (s)	-	-	-	17.4
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	1.4

Intersection	
Int Delay, s/veh	816.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	200	1870	115	39	1001	83	20	0	29	179	0	100
Future Vol, veh/h	200	1870	115	39	1001	83	20	0	29	179	0	100
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	100	100	-	375	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	222	2078	128	43	1112	92	22	0	32	199	0	111

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1204	0	0	2206	0	0	3164	3812	1039	2681	3848	556
Stage 1	-	-	-	-	-	-	2522	2522	-	1198	1198	-
Stage 2	-	-	-	-	-	-	642	1290	-	1483	2650	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	575	-	-	235	-	-	~ 4	4	227	~ 11	4	475
Stage 1	-	-	-	-	-	-	28	55	-	~ 197	257	-
Stage 2	-	-	-	-	-	-	429	232	-	~ 131	47	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	575	-	-	235	-	-	~ 2	2	227	~ 6	2	475
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 2	2	-	~ 6	2	-
Stage 1	-	-	-	-	-	-	~ 17	34	-	~ 121	210	-
Stage 2	-	-	-	-	-	-	269	190	-	~ 69	29	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.4	0.8	$ 3216	$ 10056.2
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	2	227	575	-	-	235	-	-	6	475
HCM Lane V/C Ratio	11.111	0.142	0.386	-	-	0.184	-	-	33.148	0.234
HCM Control Delay (s)	$ 7845.1	23.5	15.2	-	-	23.8	-	-	$ 15665.9	14.9
HCM Lane LOS	F	C	C	-	-	C	-	-	F	B
HCM 95th %tile Q(veh)	4.4	0.5	1.8	-	-	0.7	-	-	26.9	0.9

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	129	13	0	0	140	5	5	0	17	0
Future Vol, veh/h	0	0	129	13	0	0	140	5	5	0	17	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	143	14	0	0	156	6	6	0	19	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	0	0	0	143	0	0	110	100	72	106	171	0
Stage 1	-	-	-	-	-	-	72	72	-	28	28	-
Stage 2	-	-	-	-	-	-	38	28	-	78	143	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	-	-	-	1440	-	-	868	790	990	873	722	-
Stage 1	-	-	-	-	-	-	938	835	-	989	872	-
Stage 2	-	-	-	-	-	-	977	872	-	931	779	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	1440	-	-	-	782	990	856	715	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	782	-	856	715	-
Stage 1	-	-	-	-	-	-	938	835	-	989	863	-
Stage 2	-	-	-	-	-	-	946	863	-	920	779	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	7.5		
HCM LOS			-	-

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-	1440	-	-	-
HCM Lane V/C Ratio	-	-	-	-	0.01	-	-	-
HCM Control Delay (s)	-	0	-	-	7.5	0	-	-
HCM Lane LOS	-	A	-	-	A	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	39	12	15	66	0
Future Vol, veh/h	0	39	12	15	66	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	43	13	17	73	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	116	73	73	0	-	0
Stage 1	73	-	-	-	-	-
Stage 2	43	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	880	989	1527	-	-	-
Stage 1	950	-	-	-	-	-
Stage 2	979	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	872	989	1527	-	-	-
Mov Cap-2 Maneuver	872	-	-	-	-	-
Stage 1	941	-	-	-	-	-
Stage 2	979	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.8	3.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1527	-	989	-	-
HCM Lane V/C Ratio	0.009	-	0.044	-	-
HCM Control Delay (s)	7.4	0	8.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	7.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	13	13	0	94	31	62	25	0	77	112	0
Future Vol, veh/h	0	13	13	0	94	31	62	25	0	77	112	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	14	14	0	104	34	69	28	0	86	124	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	531	462	124	476	462	28	124	0	0	28	0	0
Stage 1	296	296	-	166	166	-	-	-	-	-	-	-
Stage 2	235	166	-	310	296	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	459	497	927	499	497	1047	1463	-	-	1585	-	-
Stage 1	712	668	-	836	761	-	-	-	-	-	-	-
Stage 2	768	761	-	700	668	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	336	446	927	442	446	1047	1463	-	-	1585	-	-
Mov Cap-2 Maneuver	336	446	-	442	446	-	-	-	-	-	-	-
Stage 1	678	629	-	796	724	-	-	-	-	-	-	-
Stage 2	605	724	-	634	629	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.3	14.4	5.4	3
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1463	-	-	602	520	1585	-	-
HCM Lane V/C Ratio	0.047	-	-	0.048	0.267	0.054	-	-
HCM Control Delay (s)	7.6	0	-	11.3	14.4	7.4	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	1.1	0.2	-	-

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	84	29	27	105	0
Future Vol, veh/h	0	84	29	27	105	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	93	32	30	117	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	211	117	117	0	-	0
Stage 1	117	-	-	-	-	-
Stage 2	94	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	777	935	1471	-	-	-
Stage 1	908	-	-	-	-	-
Stage 2	930	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	760	935	1471	-	-	-
Mov Cap-2 Maneuver	760	-	-	-	-	-
Stage 1	888	-	-	-	-	-
Stage 2	930	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.3	3.9	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1471	-	935	-	-
HCM Lane V/C Ratio	0.022	-	0.1	-	-
HCM Control Delay (s)	7.5	0	9.3	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-

Intersection	
Int Delay, s/veh	7.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	31	10	0	0	0
Future Vol, veh/h	0	31	10	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	34	11	0	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	23	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	22	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	993	1084	1622	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	1001	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	986	1084	1622	-	-	-
Mov Cap-2 Maneuver	986	-	-	-	-	-
Stage 1	1015	-	-	-	-	-
Stage 2	1001	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.4	7.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1622	-	1084	-	-
HCM Lane V/C Ratio	0.007	-	0.032	-	-
HCM Control Delay (s)	7.2	0	8.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1243	2145	84	0	146
Future Vol, veh/h	0	1243	2145	84	0	146
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1381	2383	93	0	162

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	1238
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	167
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	167
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	117.4
HCM LOS			F

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	167
HCM Lane V/C Ratio	-	-	-	0.971
HCM Control Delay (s)	-	-	-	117.4
HCM Lane LOS	-	-	-	F
HCM 95th %tile Q(veh)	-	-	-	7.5

Intersection	
Int Delay, s/veh	16.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	246	973	24	7	2024	162	37	0	27	230	0	168
Future Vol, veh/h	246	973	24	7	2024	162	37	0	27	230	0	168
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	100	100	-	375	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	273	1081	27	8	2249	180	41	0	30	256	0	187

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2429	0	0	1108	0	0	2768	4072	541	3352	3919	1125
Stage 1	-	-	-	-	-	-	1627	1627	-	2265	2265	-
Stage 2	-	-	-	-	-	-	1141	2445	-	1087	1654	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	~ 192	-	-	626	-	-	~ 9	3	485	~ 3	3	199
Stage 1	-	-	-	-	-	-	106	159	-	~ 42	75	-
Stage 2	-	-	-	-	-	-	214	61	-	~ 231	154	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	~ 192	-	-	626	-	-	-	0	485	-	0	199
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	0	-	-	0	-
Stage 1	-	-	-	-	-	-	106	0	-	~ 42	74	-
Stage 2	-	-	-	-	-	-	~ 13	60	-	-	0	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	52.3	0		
HCM LOS			-	-

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	-	485	~ 192	-	-	626	-	-	-	199
HCM Lane V/C Ratio	-	0.062	1.424	-	-	0.012	-	-	-	0.938
HCM Control Delay (s)	-	12.9	264.3	-	-	10.8	-	-	-	97.6
HCM Lane LOS	-	B	F	-	-	B	-	-	-	F
HCM 95th %tile Q(veh)	-	0.2	16.4	-	-	0	-	-	-	7.6

Notes
~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	143	11	0	0	145	17	17	0	11	0
Future Vol, veh/h	0	0	143	11	0	0	145	17	17	0	11	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	159	12	0	0	161	19	19	0	12	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	0	0	0	159	0	0	110	104	80	123	183	0
Stage 1	-	-	-	-	-	-	80	80	-	24	24	-
Stage 2	-	-	-	-	-	-	30	24	-	99	159	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	-	-	-	1420	-	-	868	786	980	852	711	-
Stage 1	-	-	-	-	-	-	929	828	-	994	875	-
Stage 2	-	-	-	-	-	-	987	875	-	907	766	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	1420	-	-	-	780	980	815	705	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	780	-	815	705	-
Stage 1	-	-	-	-	-	-	929	828	-	994	868	-
Stage 2	-	-	-	-	-	-	965	868	-	869	766	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	7.6		
HCM LOS			-	-

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-	1420	-	-	-
HCM Lane V/C Ratio	-	-	-	-	0.009	-	-	-
HCM Control Delay (s)	-	0	-	-	7.6	0	-	-
HCM Lane LOS	-	A	-	-	A	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	23	39	43	43	0
Future Vol, veh/h	0	23	39	43	43	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	26	43	48	48	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	182	48	48	0	-	0
Stage 1	48	-	-	-	-	-
Stage 2	134	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	807	1021	1559	-	-	-
Stage 1	974	-	-	-	-	-
Stage 2	892	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	784	1021	1559	-	-	-
Mov Cap-2 Maneuver	784	-	-	-	-	-
Stage 1	947	-	-	-	-	-
Stage 2	892	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	3.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1559	-	1021	-	-
HCM Lane V/C Ratio	0.028	-	0.025	-	-
HCM Control Delay (s)	7.4	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection	
Int Delay, s/veh	7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	75	75	0	19	93	12	72	0	48	71	0
Future Vol, veh/h	0	75	75	0	19	93	12	72	0	48	71	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	83	83	0	21	103	13	80	0	53	79	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	353	291	79	374	291	80	79	0	0	80	0	0
Stage 1	185	185	-	106	106	-	-	-	-	-	-	-
Stage 2	168	106	-	268	185	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	602	619	981	583	619	980	1519	-	-	1518	-	-
Stage 1	817	747	-	900	807	-	-	-	-	-	-	-
Stage 2	834	807	-	738	747	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	506	591	981	459	591	980	1519	-	-	1518	-	-
Mov Cap-2 Maneuver	506	591	-	459	591	-	-	-	-	-	-	-
Stage 1	810	719	-	892	800	-	-	-	-	-	-	-
Stage 2	720	800	-	575	719	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.3	9.8	1.1	3
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1519	-	-	738	882	1518	-	-
HCM Lane V/C Ratio	0.009	-	-	0.226	0.141	0.035	-	-
HCM Control Delay (s)	7.4	0	-	11.3	9.8	7.5	0	-
HCM Lane LOS	A	A	-	B	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.9	0.5	0.1	-	-

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	53	83	82	66	0
Future Vol, veh/h	0	53	83	82	66	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	59	92	91	73	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	348	73	73	0	-	0
Stage 1	73	-	-	-	-	-
Stage 2	275	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	649	989	1527	-	-	-
Stage 1	950	-	-	-	-	-
Stage 2	771	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	608	989	1527	-	-	-
Mov Cap-2 Maneuver	608	-	-	-	-	-
Stage 1	890	-	-	-	-	-
Stage 2	771	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.9	3.8	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1527	-	989	-	-
HCM Lane V/C Ratio	0.06	-	0.06	-	-
HCM Control Delay (s)	7.5	0	8.9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.2	-	0.2	-	-

Intersection	
Int Delay, s/veh	7.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	20	34	0	0	0
Future Vol, veh/h	0	20	34	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	22	38	0	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	77	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	76	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	926	1084	1622	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	947	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	905	1084	1622	-	-	-
Mov Cap-2 Maneuver	905	-	-	-	-	-
Stage 1	998	-	-	-	-	-
Stage 2	947	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.4	7.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1622	-	1084	-	-
HCM Lane V/C Ratio	0.023	-	0.021	-	-
HCM Control Delay (s)	7.3	0	8.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

2030 Background Year with Project Traffic Analysis - Mitigations

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	2185	1193	87	0	215
Future Vol, veh/h	0	2185	1193	87	0	215
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	2428	1326	97	0	239

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	712
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	375
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	375
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	30
HCM LOS			D

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	375
HCM Lane V/C Ratio	-	-	-	0.637
HCM Control Delay (s)	-	-	-	30
HCM Lane LOS	-	-	-	D
HCM 95th %tile Q(veh)	-	-	-	4.2

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	200	1870	115	39	1001	83	0	0	49	0	0	189
Future Vol, veh/h	200	1870	115	39	1001	83	0	0	49	0	0	189
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	100	100	-	375	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	222	2078	128	43	1112	92	0	0	54	0	0	210

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1204	0	0	2206	0	0	-	-	1039	-	-	556
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	575	-	-	235	-	-	0	0	227	0	0	475
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	575	-	-	235	-	-	-	-	227	-	-	475
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.4	0.8	25.8	18.4
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	227	575	-	-	235	-	-	475
HCM Lane V/C Ratio	0.24	0.386	-	-	0.184	-	-	0.442
HCM Control Delay (s)	25.8	15.2	-	-	23.8	-	-	18.4
HCM Lane LOS	D	C	-	-	C	-	-	C
HCM 95th %tile Q(veh)	0.9	1.8	-	-	0.7	-	-	2.2

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	129	13	0	0	140	5	5	0	17	0
Future Vol, veh/h	0	0	129	13	0	0	140	5	5	0	17	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	143	14	0	0	156	6	6	0	19	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	0	0	0	143	0	0	110	100	72	106	171	0
Stage 1	-	-	-	-	-	-	72	72	-	28	28	-
Stage 2	-	-	-	-	-	-	38	28	-	78	143	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	-	-	-	1440	-	-	868	790	990	873	722	-
Stage 1	-	-	-	-	-	-	938	835	-	989	872	-
Stage 2	-	-	-	-	-	-	977	872	-	931	779	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	1440	-	-	-	782	990	856	715	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	782	-	856	715	-
Stage 1	-	-	-	-	-	-	938	835	-	989	863	-
Stage 2	-	-	-	-	-	-	946	863	-	920	779	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	7.5		
HCM LOS			-	-

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-	1440	-	-	-
HCM Lane V/C Ratio	-	-	-	-	0.01	-	-	-
HCM Control Delay (s)	-	0	-	-	7.5	0	-	-
HCM Lane LOS	-	A	-	-	A	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	39	12	15	66	0
Future Vol, veh/h	0	39	12	15	66	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	43	13	17	73	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	116	73	73	0	-	0
Stage 1	73	-	-	-	-	-
Stage 2	43	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	880	989	1527	-	-	-
Stage 1	950	-	-	-	-	-
Stage 2	979	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	872	989	1527	-	-	-
Mov Cap-2 Maneuver	872	-	-	-	-	-
Stage 1	941	-	-	-	-	-
Stage 2	979	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.8	3.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1527	-	989	-	-
HCM Lane V/C Ratio	0.009	-	0.044	-	-
HCM Control Delay (s)	7.4	0	8.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	7.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	13	13	0	94	31	62	25	0	77	112	0
Future Vol, veh/h	0	13	13	0	94	31	62	25	0	77	112	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	14	14	0	104	34	69	28	0	86	124	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	531	462	124	476	462	28	124	0	0	28	0	0
Stage 1	296	296	-	166	166	-	-	-	-	-	-	-
Stage 2	235	166	-	310	296	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	459	497	927	499	497	1047	1463	-	-	1585	-	-
Stage 1	712	668	-	836	761	-	-	-	-	-	-	-
Stage 2	768	761	-	700	668	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	336	446	927	442	446	1047	1463	-	-	1585	-	-
Mov Cap-2 Maneuver	336	446	-	442	446	-	-	-	-	-	-	-
Stage 1	678	629	-	796	724	-	-	-	-	-	-	-
Stage 2	605	724	-	634	629	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.3	14.4	5.4	3
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1463	-	-	602	520	1585	-	-
HCM Lane V/C Ratio	0.047	-	-	0.048	0.267	0.054	-	-
HCM Control Delay (s)	7.6	0	-	11.3	14.4	7.4	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	1.1	0.2	-	-

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	84	29	27	105	0
Future Vol, veh/h	0	84	29	27	105	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	93	32	30	117	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	211	117	117	0	-	0
Stage 1	117	-	-	-	-	-
Stage 2	94	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	777	935	1471	-	-	-
Stage 1	908	-	-	-	-	-
Stage 2	930	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	760	935	1471	-	-	-
Mov Cap-2 Maneuver	760	-	-	-	-	-
Stage 1	888	-	-	-	-	-
Stage 2	930	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.3	3.9	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1471	-	935	-	-
HCM Lane V/C Ratio	0.022	-	0.1	-	-
HCM Control Delay (s)	7.5	0	9.3	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-

Intersection	
Int Delay, s/veh	7.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	31	10	0	0	0
Future Vol, veh/h	0	31	10	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	34	11	0	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	23	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	22	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	993	1084	1622	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	1001	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	986	1084	1622	-	-	-
Mov Cap-2 Maneuver	986	-	-	-	-	-
Stage 1	1015	-	-	-	-	-
Stage 2	1001	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.4	7.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1622	-	1084	-	-
HCM Lane V/C Ratio	0.007	-	0.032	-	-
HCM Control Delay (s)	7.2	0	8.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	36.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1243	2288	84	0	269
Future Vol, veh/h	0	1243	2288	84	0	269
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1381	2542	93	0	299

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	1318
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	~ 148
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	~ 148
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	$ 532.1
HCM LOS			F

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	148
HCM Lane V/C Ratio	-	-	-	2.02
HCM Control Delay (s)	-	-	-	$ 532.1
HCM Lane LOS	-	-	-	F
HCM 95th %tile Q(veh)	-	-	-	23.6

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	39.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	246	973	24	7	2024	162	0	0	64	0	0	275
Future Vol, veh/h	246	973	24	7	2024	162	0	0	64	0	0	275
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	100	100	-	375	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	273	1081	27	8	2249	180	0	0	71	0	0	306

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2429	0	0	1108	0	0	-	-	541	-	-	1125
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	~ 192	-	-	626	-	-	0	0	485	0	0	~ 199
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	~ 192	-	-	626	-	-	-	-	485	-	-	~ 199
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	52.3	0	13.7	$ 307.9
HCM LOS			B	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	485	~ 192	-	-	626	-	-	199
HCM Lane V/C Ratio	0.147	1.424	-	-	0.012	-	-	1.535
HCM Control Delay (s)	13.7	264.3	-	-	10.8	-	-	$ 307.9
HCM Lane LOS	B	F	-	-	B	-	-	F
HCM 95th %tile Q(veh)	0.5	16.4	-	-	0	-	-	19.3

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	93	11	0	0	145	17	17	0	11	0
Future Vol, veh/h	0	0	93	11	0	0	145	17	17	0	11	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	103	12	0	0	161	19	19	0	12	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	0	0	0	103	0	0	82	76	52	95	127	0
Stage 1	-	-	-	-	-	-	52	52	-	24	24	-
Stage 2	-	-	-	-	-	-	30	24	-	71	103	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	-	-	-	1489	-	-	905	814	1016	888	764	-
Stage 1	-	-	-	-	-	-	961	852	-	994	875	-
Stage 2	-	-	-	-	-	-	987	875	-	939	810	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	1489	-	-	-	807	1016	851	758	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	807	-	851	758	-
Stage 1	-	-	-	-	-	-	961	852	-	994	868	-
Stage 2	-	-	-	-	-	-	965	868	-	901	810	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	7.4		
HCM LOS			-	-

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-	1489	-	-	-
HCM Lane V/C Ratio	-	-	-	-	0.008	-	-	-
HCM Control Delay (s)	-	0	-	-	7.4	0	-	-
HCM Lane LOS	-	A	-	-	A	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	23	39	43	43	0
Future Vol, veh/h	0	23	39	43	43	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	26	43	48	48	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	182	48	48	0	-	0
Stage 1	48	-	-	-	-	-
Stage 2	134	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	807	1021	1559	-	-	-
Stage 1	974	-	-	-	-	-
Stage 2	892	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	784	1021	1559	-	-	-
Mov Cap-2 Maneuver	784	-	-	-	-	-
Stage 1	947	-	-	-	-	-
Stage 2	892	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	3.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1559	-	1021	-	-
HCM Lane V/C Ratio	0.028	-	0.025	-	-
HCM Control Delay (s)	7.4	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection	
Int Delay, s/veh	6.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	25	125	0	19	93	12	72	0	48	71	0
Future Vol, veh/h	0	25	125	0	19	93	12	72	0	48	71	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	28	139	0	21	103	13	80	0	53	79	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	353	291	79	375	291	80	79	0	0	80	0	0
Stage 1	185	185	-	106	106	-	-	-	-	-	-	-
Stage 2	168	106	-	269	185	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	602	619	981	582	619	980	1519	-	-	1518	-	-
Stage 1	817	747	-	900	807	-	-	-	-	-	-	-
Stage 2	834	807	-	737	747	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	506	591	981	465	591	980	1519	-	-	1518	-	-
Mov Cap-2 Maneuver	506	591	-	465	591	-	-	-	-	-	-	-
Stage 1	810	719	-	892	800	-	-	-	-	-	-	-
Stage 2	720	800	-	586	719	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10	9.8	1.1	3
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1519	-	-	884	882	1518	-	-
HCM Lane V/C Ratio	0.009	-	-	0.189	0.141	0.035	-	-
HCM Control Delay (s)	7.4	0	-	10	9.8	7.5	0	-
HCM Lane LOS	A	A	-	B	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.7	0.5	0.1	-	-

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	53	83	82	66	0
Future Vol, veh/h	0	53	83	82	66	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	59	92	91	73	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	348	73	73	0	-	0
Stage 1	73	-	-	-	-	-
Stage 2	275	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	649	989	1527	-	-	-
Stage 1	950	-	-	-	-	-
Stage 2	771	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	608	989	1527	-	-	-
Mov Cap-2 Maneuver	608	-	-	-	-	-
Stage 1	890	-	-	-	-	-
Stage 2	771	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.9	3.8	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1527	-	989	-	-
HCM Lane V/C Ratio	0.06	-	0.06	-	-
HCM Control Delay (s)	7.5	0	8.9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.2	-	0.2	-	-

Intersection	
Int Delay, s/veh	7.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	20	34	0	0	0
Future Vol, veh/h	0	20	34	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	22	38	0	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	77	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	76	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	926	1084	1622	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	947	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	905	1084	1622	-	-	-
Mov Cap-2 Maneuver	905	-	-	-	-	-
Stage 1	998	-	-	-	-	-
Stage 2	947	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.4	7.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1622	-	1084	-	-
HCM Lane V/C Ratio	0.023	-	0.021	-	-
HCM Control Delay (s)	7.3	0	8.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Queuing Analysis

Queuing and Blocking Report
2023 Background w Project AM

08/01/2022

Intersection: 1: SH 44 & Hamlin Ave

Movement	SB
Directions Served	R
Maximum Queue (ft)	61
Average Queue (ft)	28
95th Queue (ft)	50
Link Distance (ft)	650
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Short Road & SH 44

Movement	EB	EB	WB	NB	NB	SB	SB
Directions Served	L	R	L	L	TR	L	TR
Maximum Queue (ft)	45	11	42	38	34	152	82
Average Queue (ft)	11	0	11	12	10	61	13
95th Queue (ft)	34	6	34	33	28	125	51
Link Distance (ft)					784		648
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	100	100	100	100		100	
Storage Blk Time (%)						8	0
Queuing Penalty (veh)						2	0

Intersection: 3: Short Road & Amazon Dr

Movement	WB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	18	50	36
Average Queue (ft)	2	24	12
95th Queue (ft)	12	48	37
Link Distance (ft)	271	648	276
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Hamlin Ave & Schultz Ct

Movement	NB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	4
95th Queue (ft)	20
Link Distance (ft)	295
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Hamlin Ave & Amazon Dr

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	31	19
Average Queue (ft)	13	1
95th Queue (ft)	37	12
Link Distance (ft)	714	296
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Hamlin Ave & Apartment Access

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	58	6
Average Queue (ft)	32	0
95th Queue (ft)	50	4
Link Distance (ft)	270	296
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 2

Queuing and Blocking Report
2023 Background w/ Project PM

08/01/2022

Intersection: 1: SH 44 & Hamlin Ave

Movement	WB	SB
Directions Served	TR	R
Maximum Queue (ft)	8	67
Average Queue (ft)	0	22
95th Queue (ft)	6	50
Link Distance (ft)	711	640
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 2: Short Road & SH 44

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	L	R	L	TR	L	TR
Maximum Queue (ft)	61	18	25	11	72	30	125	86
Average Queue (ft)	25	1	2	0	22	11	55	14
95th Queue (ft)	54	13	12	8	53	29	118	70
Link Distance (ft)		711				784		642
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	100		100	375	100		100	
Storage Blk Time (%)		0			0		9	0
Queuing Penalty (veh)		0			0		1	0

Intersection: 3: Short Road & Amazon Dr

Movement	WB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	18	57	31
Average Queue (ft)	1	32	10
95th Queue (ft)	10	49	33
Link Distance (ft)	251	642	281
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Hamlin Ave & Schultz Ct

Movement	NB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	3
95th Queue (ft)	18
Link Distance (ft)	277
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Hamlin Ave & Amazon Dr

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	40	25
Average Queue (ft)	24	1
95th Queue (ft)	45	11
Link Distance (ft)	707	326
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Hamlin Ave & Apartment Access

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	65	6
Average Queue (ft)	28	0
95th Queue (ft)	54	6
Link Distance (ft)	170	326
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 1

Queuing and Blocking Report
2023 Background w/ Project AM - Mitigations

08/01/2022

Intersection: 1: SH 44 & Hamlin Ave

Movement	SB
Directions Served	R
Maximum Queue (ft)	56
Average Queue (ft)	33
95th Queue (ft)	50
Link Distance (ft)	650
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Short Road & SH 44

Movement	EB	EB	WB	NB	SB
Directions Served	L	R	L	R	R
Maximum Queue (ft)	40	9	46	44	46
Average Queue (ft)	9	0	10	15	21
95th Queue (ft)	31	4	33	35	39
Link Distance (ft)				783	647
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	100	100	100		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 3: Short Road & Amazon Dr

Movement	WB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	18	48	31
Average Queue (ft)	1	21	15
95th Queue (ft)	8	47	40
Link Distance (ft)	277	647	276
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Hamlin Ave & Schultz Ct

Movement	NB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	2
95th Queue (ft)	16
Link Distance (ft)	295
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Hamlin Ave & Amazon Dr

Movement	WB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	12
95th Queue (ft)	36
Link Distance (ft)	720
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 6: Hamlin Ave & Apartment Access

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	58	6
Average Queue (ft)	31	0
95th Queue (ft)	50	4
Link Distance (ft)	270	296
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0

Queuing and Blocking Report
2023 Background w/ Project PM - Mitigations

08/01/2022

Intersection: 1: SH 44 & Hamlin Ave

Movement	SB
Directions Served	R
Maximum Queue (ft)	66
Average Queue (ft)	30
95th Queue (ft)	55
Link Distance (ft)	640
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Short Road & SH 44

Movement	EB	WB	WB	NB	SB
Directions Served	L	L	R	R	R
Maximum Queue (ft)	61	15	4	44	49
Average Queue (ft)	24	1	0	18	19
95th Queue (ft)	52	9	3	35	39
Link Distance (ft)				783	642
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	100	100	375		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 3: Short Road & Amazon Dr

Movement	WB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	18	57	31
Average Queue (ft)	1	32	9
95th Queue (ft)	8	47	32
Link Distance (ft)	257	642	281
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Hamlin Ave & Schultz Ct

Movement	NB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	3
95th Queue (ft)	17
Link Distance (ft)	277
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Hamlin Ave & Amazon Dr

Movement	WB
Directions Served	LR
Maximum Queue (ft)	42
Average Queue (ft)	24
95th Queue (ft)	46
Link Distance (ft)	713
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 6: Hamlin Ave & Apartment Access

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	53	6
Average Queue (ft)	28	0
95th Queue (ft)	49	4
Link Distance (ft)	170	326
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0

Queuing and Blocking Report
2024 Background w/ Project AM

08/01/2022

Intersection: 1: SH 44 & Hamlin Ave

Movement	SB
Directions Served	R
Maximum Queue (ft)	64
Average Queue (ft)	33
95th Queue (ft)	55
Link Distance (ft)	650
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Short Road & SH 44

Movement	EB	EB	WB	NB	NB	SB	SB
Directions Served	L	R	L	L	TR	L	TR
Maximum Queue (ft)	49	12	48	42	40	200	554
Average Queue (ft)	13	0	14	10	11	166	318
95th Queue (ft)	37	5	40	33	30	251	748
Link Distance (ft)					784		648
Upstream Blk Time (%)							15
Queuing Penalty (veh)							21
Storage Bay Dist (ft)	100	100	100	100		100	
Storage Blk Time (%)						77	
Queuing Penalty (veh)						17	

Intersection: 3: Short Road & Amazon Dr

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	84	44	52	61
Average Queue (ft)	23	6	26	19
95th Queue (ft)	119	32	48	59
Link Distance (ft)	707	237	648	276
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: Hamlin Ave & Schultz Ct

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	46	12
Average Queue (ft)	24	0
95th Queue (ft)	47	6
Link Distance (ft)	496	316
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: Hamlin Ave & Amazon Dr

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	46	36
Average Queue (ft)	21	2
95th Queue (ft)	45	16
Link Distance (ft)	707	296
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Hamlin Ave & Apartment Access

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	76	29
Average Queue (ft)	33	2
95th Queue (ft)	61	17
Link Distance (ft)	219	296
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Queuing and Blocking Report
2024 Background w/ Project AM

08/01/2022

Intersection: 7: Hamlin Ave & SF Housing Access

Movement	EB
Directions Served	LR
Maximum Queue (ft)	67
Average Queue (ft)	22
95th Queue (ft)	51
Link Distance (ft)	254
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 38

Queuing and Blocking Report
2024 Background w/ Project PM

08/01/2022

Intersection: 1: SH 44 & Hamlin Ave

Movement	SB
Directions Served	R
Maximum Queue (ft)	64
Average Queue (ft)	28
95th Queue (ft)	54
Link Distance (ft)	640
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Short Road & SH 44

Movement	EB	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	L	R	L	TR	L	TR
Maximum Queue (ft)	105	33	4	27	18	130	28	200	592
Average Queue (ft)	42	2	0	3	1	49	11	174	358
95th Queue (ft)	80	21	3	15	9	112	29	241	793
Link Distance (ft)		711					784		644
Upstream Blk Time (%)									24
Queuing Penalty (veh)									22
Storage Bay Dist (ft)	100		100	100	375	100		100	
Storage Blk Time (%)	1	0				13		87	
Queuing Penalty (veh)	2	0				2		11	

Intersection: 3: Short Road & Amazon Dr

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	225	76	66	66
Average Queue (ft)	56	16	38	20
95th Queue (ft)	244	70	57	65
Link Distance (ft)	706	237	644	279
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: Hamlin Ave & Schultz Ct

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	31	26
Average Queue (ft)	15	1
95th Queue (ft)	39	12
Link Distance (ft)	414	292
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: Hamlin Ave & Amazon Dr

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	61	31
Average Queue (ft)	31	2
95th Queue (ft)	47	16
Link Distance (ft)	706	324
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Hamlin Ave & Apartment Access

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	54	35
Average Queue (ft)	27	4
95th Queue (ft)	47	20
Link Distance (ft)	219	324
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Queuing and Blocking Report
2024 Background w/ Project PM

08/01/2022

Intersection: 7: Hamlin Ave & SF Housing Access

Movement	EB
Directions Served	LR
Maximum Queue (ft)	40
Average Queue (ft)	15
95th Queue (ft)	41
Link Distance (ft)	170
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 38

Queuing and Blocking Report
2024 Background w/ Project AM - Mitigations

08/01/2022

Intersection: 1: SH 44 & Hamlin Ave

Movement	SB
Directions Served	R
Maximum Queue (ft)	72
Average Queue (ft)	40
95th Queue (ft)	63
Link Distance (ft)	650
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Short Road & SH 44

Movement	EB	WB	NB	SB
Directions Served	L	L	R	R
Maximum Queue (ft)	42	52	62	59
Average Queue (ft)	13	15	17	22
95th Queue (ft)	37	40	44	42
Link Distance (ft)			783	647
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	100	100		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Short Road & Amazon Dr

Movement	EB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	4	48	36
Average Queue (ft)	0	24	14
95th Queue (ft)	3	47	39
Link Distance (ft)		647	276
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Hamlin Ave & Schultz Ct

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	44	6
Average Queue (ft)	21	0
95th Queue (ft)	45	4
Link Distance (ft)	496	316
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: Hamlin Ave & Amazon Dr

Movement	WB
Directions Served	LR
Maximum Queue (ft)	35
Average Queue (ft)	18
95th Queue (ft)	42
Link Distance (ft)	713
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 6: Hamlin Ave & Apartment Access

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	57	18
Average Queue (ft)	32	1
95th Queue (ft)	53	10
Link Distance (ft)	219	296
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Queuing and Blocking Report
2024 Background w/ Project AM - Mitigations

Intersection: 7: Hamlin Ave & SF Housing Access

Movement	EB
Directions Served	LR
Maximum Queue (ft)	48
Average Queue (ft)	20
95th Queue (ft)	45
Link Distance (ft)	254
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 0

Queuing and Blocking Report
2024 Background w/ Project PM - Mitigations

08/01/2022

Intersection: 1: SH 44 & Hamlin Ave

Movement	SB
Directions Served	R
Maximum Queue (ft)	80
Average Queue (ft)	41
95th Queue (ft)	68
Link Distance (ft)	640
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Short Road & SH 44

Movement	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	T	L	T	R	R	R
Maximum Queue (ft)	96	27	20	4	17	48	56
Average Queue (ft)	42	1	1	0	1	18	19
95th Queue (ft)	84	14	11	3	9	39	43
Link Distance (ft)		717		2639		783	644
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	100		100		375		
Storage Blk Time (%)	1	0					
Queuing Penalty (veh)	2	0					

Intersection: 3: Short Road & Amazon Dr

Movement	WB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	6	71	31
Average Queue (ft)	0	39	11
95th Queue (ft)	4	59	35
Link Distance (ft)	243	644	279
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Hamlin Ave & Schultz Ct

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	31	19
Average Queue (ft)	18	1
95th Queue (ft)	42	9
Link Distance (ft)	414	292
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: Hamlin Ave & Amazon Dr

Movement	WB
Directions Served	LR
Maximum Queue (ft)	62
Average Queue (ft)	32
95th Queue (ft)	47
Link Distance (ft)	712
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 6: Hamlin Ave & Apartment Access

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	59	42
Average Queue (ft)	28	5
95th Queue (ft)	50	26
Link Distance (ft)	219	324
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Queuing and Blocking Report
2024 Background w/ Project PM - Mitigations

Intersection: 7: Hamlin Ave & SF Housing Access

Movement	EB
Directions Served	LR
Maximum Queue (ft)	30
Average Queue (ft)	16
95th Queue (ft)	41
Link Distance (ft)	170
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 2

Intersection: 1: SH 44 & Hamlin Ave

Movement	SB
Directions Served	R
Maximum Queue (ft)	120
Average Queue (ft)	29
95th Queue (ft)	85
Link Distance (ft)	656
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Short Road & SH 44

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	T	R	L	TR	L	TR
Maximum Queue (ft)	143	103	30	96	45	6	34	194	465	200	658
Average Queue (ft)	60	3	2	30	1	0	3	133	159	188	617
95th Queue (ft)	107	40	14	70	21	4	16	237	490	205	792
Link Distance (ft)		711			2633	2633			784		650
Upstream Blk Time (%)											84
Queuing Penalty (veh)											134
Storage Bay Dist (ft)	100		100	100			375	100		100	
Storage Blk Time (%)	2	0		1	0			71	1	99	
Queuing Penalty (veh)	18	0		3	0			21	0	99	

Intersection: 3: Short Road & Amazon Dr

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	720	184	72	264
Average Queue (ft)	501	80	38	115
95th Queue (ft)	953	204	59	265
Link Distance (ft)	714	257	650	274
Upstream Blk Time (%)	50	1		9
Queuing Penalty (veh)	45	0		0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: Hamlin Ave & Schultz Ct

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	197	6	286
Average Queue (ft)	48	1	47
95th Queue (ft)	143	8	202
Link Distance (ft)	507	322	365
Upstream Blk Time (%)			1
Queuing Penalty (veh)			0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: Hamlin Ave & Amazon Dr

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	250	71	38	273
Average Queue (ft)	77	36	4	127
95th Queue (ft)	220	56	21	342
Link Distance (ft)	399	714	656	270
Upstream Blk Time (%)	0			41
Queuing Penalty (veh)	0			78
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 6: Hamlin Ave & Apartment Acess

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	209	24	330
Average Queue (ft)	93	1	112
95th Queue (ft)	222	12	350
Link Distance (ft)	198	270	322
Upstream Blk Time (%)	31		25
Queuing Penalty (veh)	0		27
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 7: Hamlin Ave & SF Housing Access

Movement	EB
Directions Served	LR
Maximum Queue (ft)	52
Average Queue (ft)	20
95th Queue (ft)	47
Link Distance (ft)	291
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 424

Intersection: 1: SH 44 & Hamlin Ave

Movement	EB	EB	SB
Directions Served	T	T	R
Maximum Queue (ft)	2921	2917	181
Average Queue (ft)	1352	1336	34
95th Queue (ft)	3297	3287	120
Link Distance (ft)	2944	2944	649
Upstream Blk Time (%)	26	23	
Queuing Penalty (veh)	0	0	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Short Road & SH 44

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	L	T	R	L	TR	L	TR
Maximum Queue (ft)	250	726	716	22	8	27	183	790	189	650
Average Queue (ft)	246	665	138	3	0	2	162	471	188	625
95th Queue (ft)	266	913	563	16	4	15	232	992	195	732
Link Distance (ft)		711	711		2633			784		642
Upstream Blk Time (%)		69	0					36		88
Queuing Penalty (veh)		429	2					0		146
Storage Bay Dist (ft)	150			100		375	100		100	
Storage Blk Time (%)	98	0					89		100	1
Queuing Penalty (veh)	477	0					24		168	1

Intersection: 3: Short Road & Amazon Dr

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	724	171	65	226
Average Queue (ft)	565	71	35	104
95th Queue (ft)	987	176	55	233
Link Distance (ft)	714	247	642	282
Upstream Blk Time (%)	65			4
Queuing Penalty (veh)	79			0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: Hamlin Ave & Schultz Ct

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	186	19	236
Average Queue (ft)	39	1	56
95th Queue (ft)	132	8	203
Link Distance (ft)	419	364	344
Upstream Blk Time (%)			0
Queuing Penalty (veh)			0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: Hamlin Ave & Amazon Dr

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	314	57	13	247
Average Queue (ft)	202	29	1	151
95th Queue (ft)	410	49	8	342
Link Distance (ft)	309	714	649	247
Upstream Blk Time (%)	56			55
Queuing Penalty (veh)	0			66
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 6: Hamlin Ave & Apartment Access

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	224	40	369
Average Queue (ft)	114	2	168
95th Queue (ft)	260	17	445
Link Distance (ft)	214	247	364
Upstream Blk Time (%)	37		35
Queuing Penalty (veh)	0		23
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 7: Hamlin Ave & SF Housing Access

Movement	EB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	14
95th Queue (ft)	39
Link Distance (ft)	308
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 1415

Intersection: 1: SH 44 & Hamlin Ave

Movement	SB
Directions Served	R
Maximum Queue (ft)	89
Average Queue (ft)	44
95th Queue (ft)	75
Link Distance (ft)	656
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Short Road & SH 44

Movement	EB	EB	EB	WB	WB	WB	WB	NB	SB
Directions Served	L	T	R	L	T	T	R	R	R
Maximum Queue (ft)	121	38	13	93	58	4	20	73	147
Average Queue (ft)	58	1	1	28	2	0	1	24	69
95th Queue (ft)	100	19	9	72	25	3	11	56	119
Link Distance (ft)		717			2639	2639		783	649
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	100		100	100			375		
Storage Blk Time (%)	1	0		2	0				
Queuing Penalty (veh)	13	0		9	0				

Intersection: 3: Short Road & Amazon Dr

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	8	31	68	31
Average Queue (ft)	0	3	38	12
95th Queue (ft)	4	17	57	36
Link Distance (ft)	720	263	649	274
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: Hamlin Ave & Schultz Ct

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	49	25
Average Queue (ft)	22	1
95th Queue (ft)	47	9
Link Distance (ft)	507	322
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: Hamlin Ave & Amazon Dr

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	35	73	39	25
Average Queue (ft)	17	36	7	2
95th Queue (ft)	42	55	28	16
Link Distance (ft)	399	720	656	270
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 6: Hamlin Ave & Apartment Acess

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	64	39
Average Queue (ft)	34	5
95th Queue (ft)	55	24
Link Distance (ft)	198	270
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: Hamlin Ave & SF Housing Access

Movement	EB
Directions Served	LR
Maximum Queue (ft)	50
Average Queue (ft)	19
95th Queue (ft)	45
Link Distance (ft)	291
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 22

Intersection: 1: SH 44 & Hamlin Ave

Movement	EB	EB	SB
Directions Served	T	T	R
Maximum Queue (ft)	2981	2981	300
Average Queue (ft)	1443	1420	144
95th Queue (ft)	3325	3308	273
Link Distance (ft)	2944	2944	649
Upstream Blk Time (%)	23	22	
Queuing Penalty (veh)	0	0	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Short Road & SH 44

Movement	EB	EB	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	T	T	R	L	T	R	R	R
Maximum Queue (ft)	200	730	722	4	34	18	54	87	536
Average Queue (ft)	197	685	134	0	4	1	4	26	402
95th Queue (ft)	209	878	568	3	21	13	23	61	515
Link Distance (ft)		717	717			2639		783	641
Upstream Blk Time (%)		73	0						
Queuing Penalty (veh)		451	2						
Storage Bay Dist (ft)	100			100	100		375		
Storage Blk Time (%)	99					0			
Queuing Penalty (veh)	481					0			

Intersection: 3: Short Road & Amazon Dr

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	4	25	63	31
Average Queue (ft)	0	1	35	8
95th Queue (ft)	3	10	53	29
Link Distance (ft)	720	253	641	282
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: Hamlin Ave & Schultz Ct

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	36	12
Average Queue (ft)	16	1
95th Queue (ft)	41	10
Link Distance (ft)	419	364
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: Hamlin Ave & Amazon Dr

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	75	55	19	36
Average Queue (ft)	38	31	1	5
95th Queue (ft)	60	45	10	24
Link Distance (ft)	309	720	649	247
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 6: Hamlin Ave & Apartment Access

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	52	31
Average Queue (ft)	29	3
95th Queue (ft)	49	18
Link Distance (ft)	214	247
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: Hamlin Ave & SF Housing Access

Movement	EB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	16
95th Queue (ft)	40
Link Distance (ft)	308
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 934

Turn Lane Analysis Worksheets

Turn Lane Warrant Analysis

Following the District Policy as outlined in 7106.4.4, the proposed intersections along Hamlin Avenue with the addition of the Northern Star Development were analyzed for turn lane warrants. For major roads at an intersection, District Policy per NCHRP Reports 279 and 457 were used applying Figure 1 for Left-Turn Guidelines for Two-Lane Roads less than or equal to 40 mph. For minor roads, the evaluation of a second lane per NCHRP Report 457 was followed. Within this study area, Hamlin Ave would follow the major roadway analysis, where the site accesses would fall under the minor roadway analysis. The following Advancing Volumes and Opposing Volumes under the different scenarios were used. **Red AM**, **Blue PM**

Hamlin Avenue and Amazon Drive:

2030 Background with Project Northbound Left Turn Lane: **Does Not Warrant**

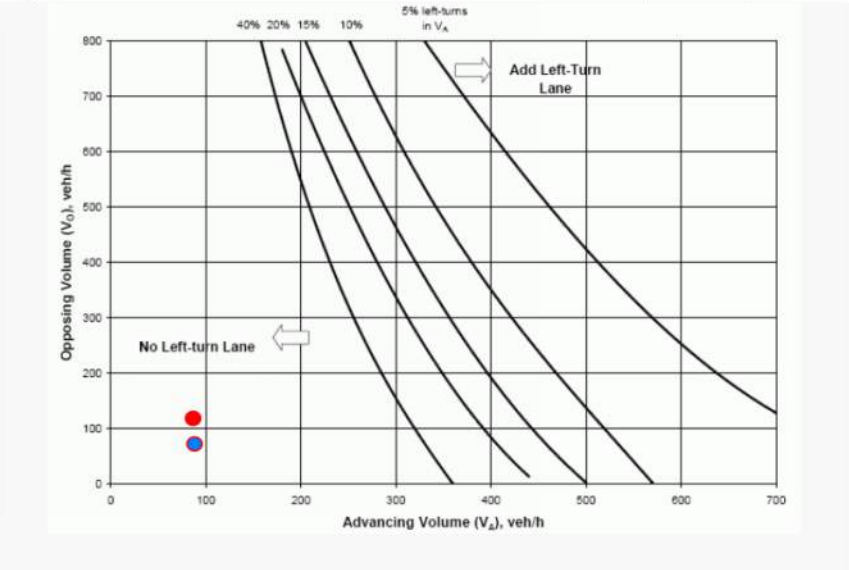
AM Northbound Advancing Volume = 87 vph (71% left turns)

AM Southbound Opposing Volumes = 112 vph

PM Northbound Advancing Volumes = 84 vph (15% left turns)

PM Southbound Opposing Volumes = 71 vph

Figure 1 – Left-Turn Lane Guidelines for Two-Lane Roads less than or equal to 40 mph



2030 Background with Project Southbound Left Turn Lane: **Does Not Warrant**

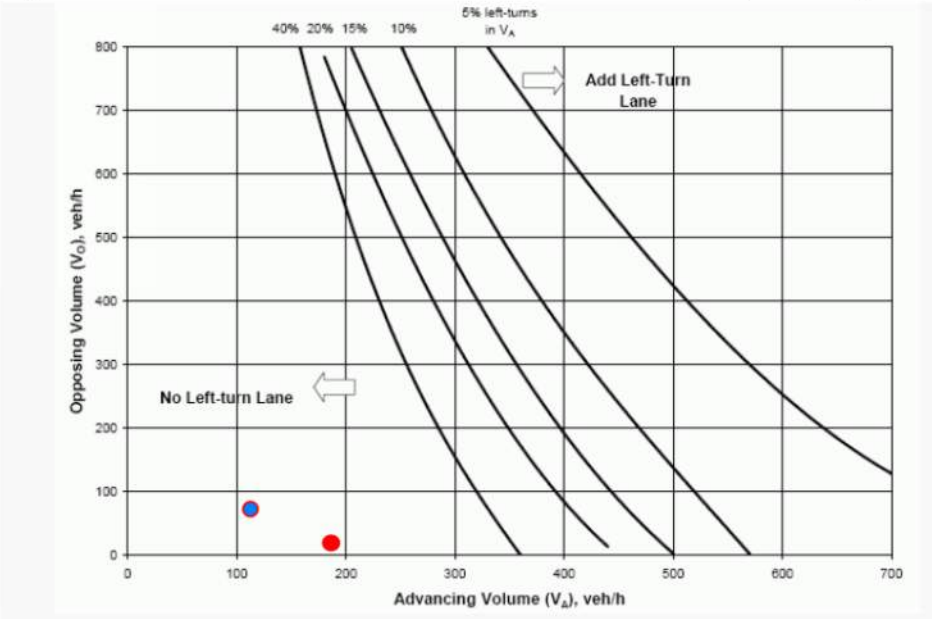
AM Southbound Advancing Volumes = 189 vph (41% left turns)

AM Northbound Opposing Volumes = 25 vph

PM Southbound Advancing Volumes = 119 vph (40% left turns)

PM Northbound Opposing Volumes = 72 vph

Figure 1 – Left-Turn Lane Guidelines for Two-Lane Roads less than or equal to 40 mph



2030 Background with Project Westbound Left Turn Lane: **Does Not Warrant as "0" vehicles are planned to make this movement**

2030 Background with Project Eastbound Left Turn Lane: **Does Not Warrant as "0" vehicles are proposed to make this turning moment.**

2030 Background with Project Northbound Right Turn Lane: **Does Not Warrant as "0" vehicles are proposed to make this turning moment.**

2030 Background with Project Southbound Right Turn Lane: **Does Not Warrant as "0" vehicles are proposed to make this turning moment.**

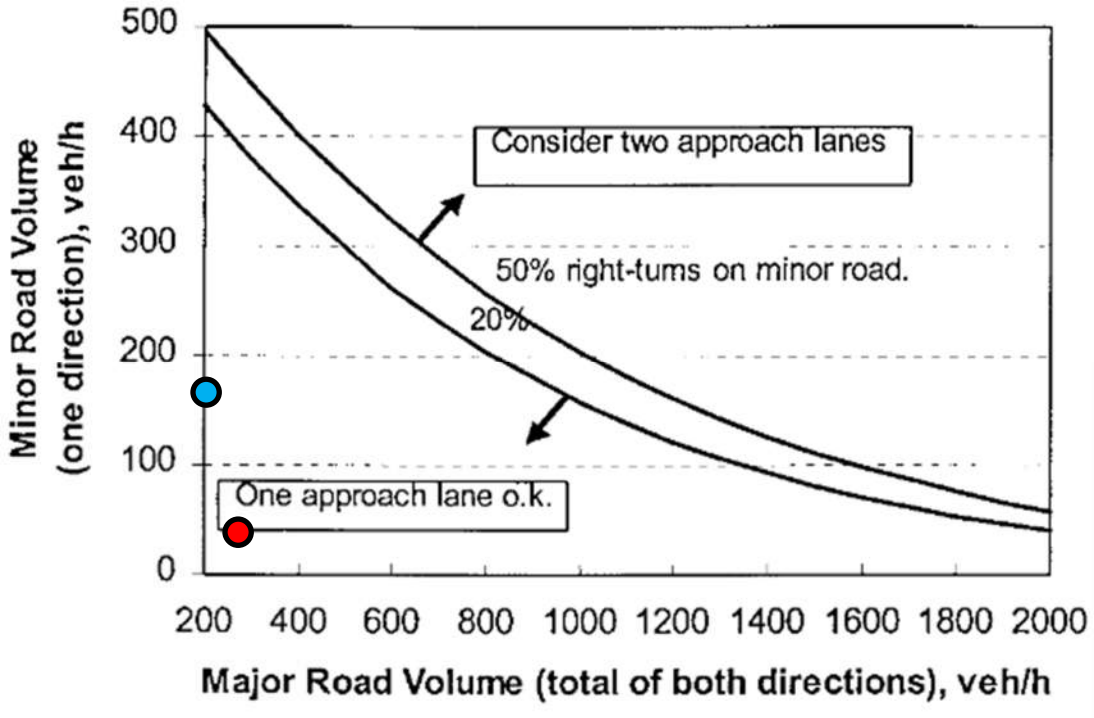
2030 Background Eastbound Right Turn Lane: **Does Not Warrant**

AM Eastbound Minor Road Volume = 26 vph

AM Major Road Volume = 276 vph

PM Eastbound Minor Road Volume = 150 vph

PM Major Road Volume = 203 vph



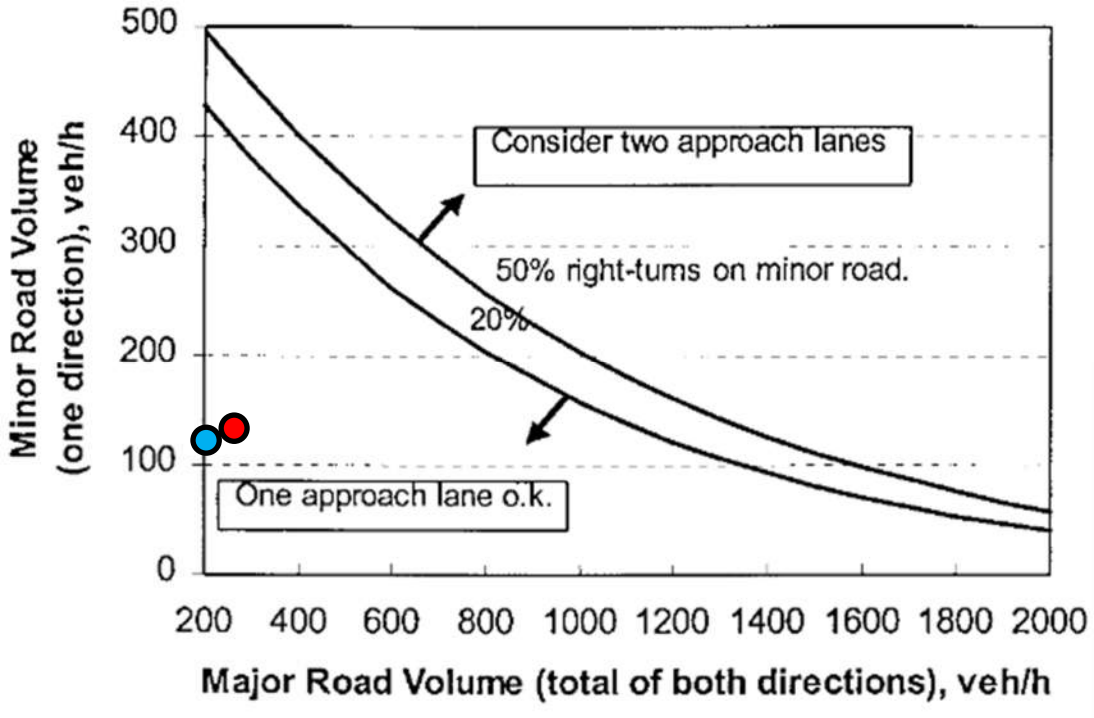
2030 Background Westbound Right Turn Lane: **Does Not Warrant**

AM Westbound Minor Road Volumes = 125 vph

AM Major Road Volumes = 276 vph

PM Westbound Right Turn Volumes = 112 vph

PM Major Road Volumes = 203 vph



Hamlin Avenue and Apartment Access:

2030 Background with Project Northbound Left Turn Lane: **Does Not Warrant**

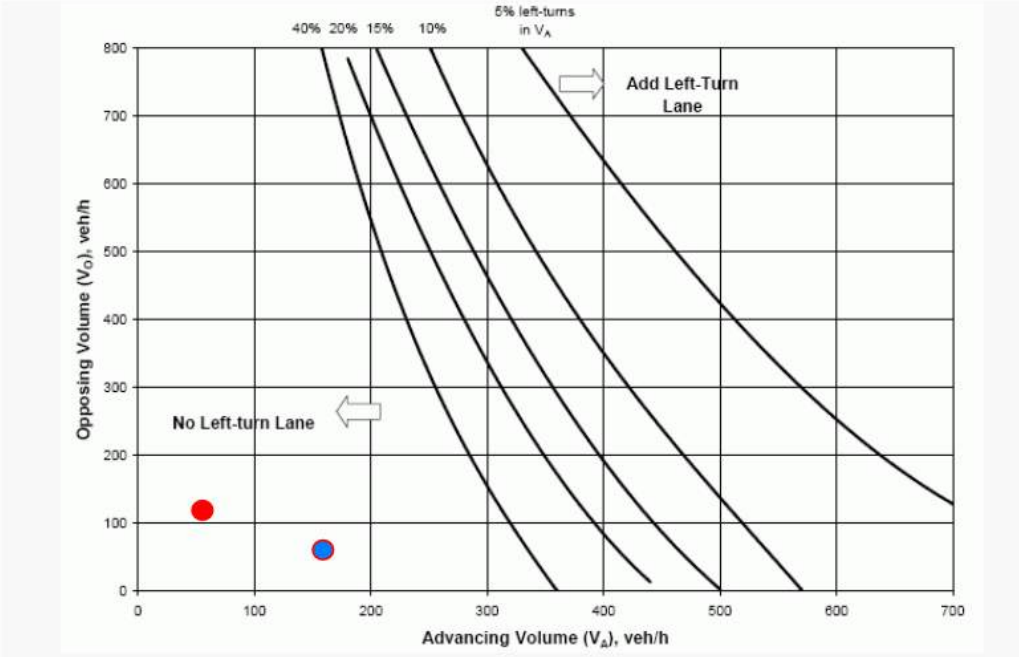
AM Northbound Advancing Volume = 56 vph (52% left turns)

AM Southbound Opposing Volumes = 105 vph

PM Northbound Advancing Volumes = 165 vph (50% left turns)

PM Southbound Opposing Volumes = 66 vph

Figure 1 – Left-Turn Lane Guidelines for Two-Lane Roads less than or equal to 40 mph



2030 Background with Project Westbound Left Turn Lane: **Does Not Warrant as "0" vehicles are planned to make this movement**

2030 Background with Project Southbound Right Turn Lane: **Does Not Warrant as "0" vehicles are proposed to make this turning moment.**

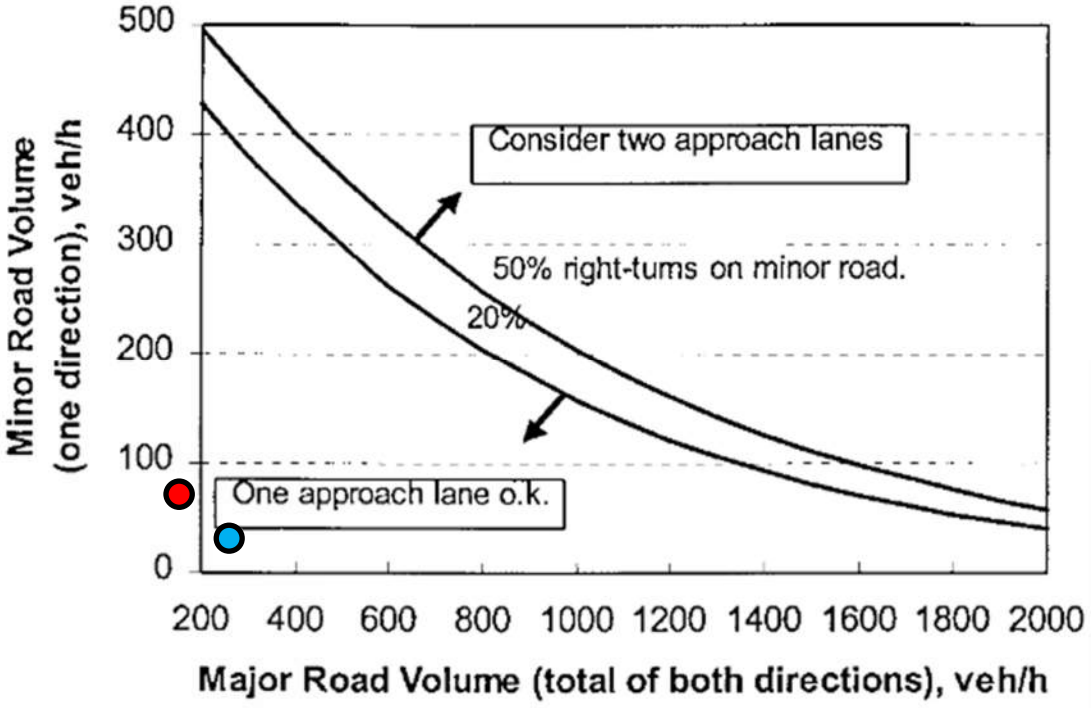
2030 Background Eastbound Right Turn Lane: **Does Not Warrant**

AM Eastbound Minor Road Volume = 84 vph

AM Major Road Volume = 161 vph

PM Eastbound Minor Road Volume = 53 vph

PM Major Road Volume = 231 vph



Hamlin Avenue and Schultz Court:

2030 Background with Project Northbound Left Turn Lane: **Does Not Warrant**

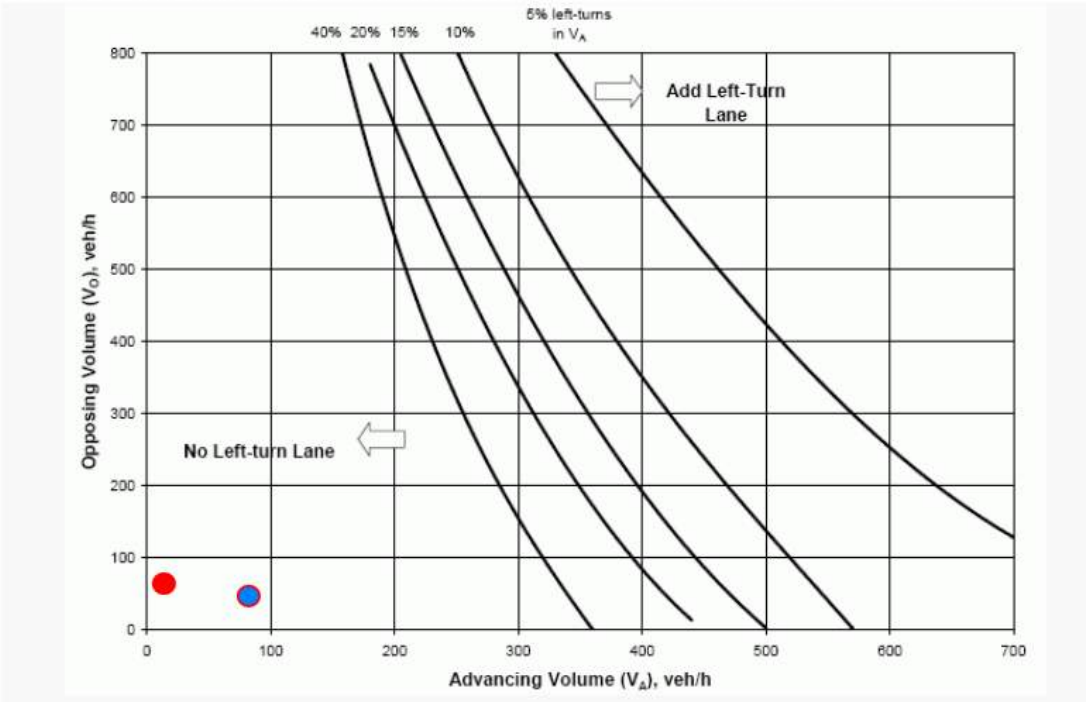
AM Northbound Advancing Volume = 27 vph (44% left turns)

AM Southbound Opposing Volumes = 66 vph

PM Northbound Advancing Volumes = 82 vph (48% left turns)

PM Southbound Opposing Volumes = 43 vph

Figure 1 – Left-Turn Lane Guidelines for Two-Lane Roads less than or equal to 40 mph



2030 Background with Project Westbound Left Turn Lane: **Does Not Warrant as "0" vehicles are planned to make this movement**

2030 Background with Project Southbound Right Turn Lane: **Does Not Warrant as "0" vehicles are proposed to make this turning moment.**

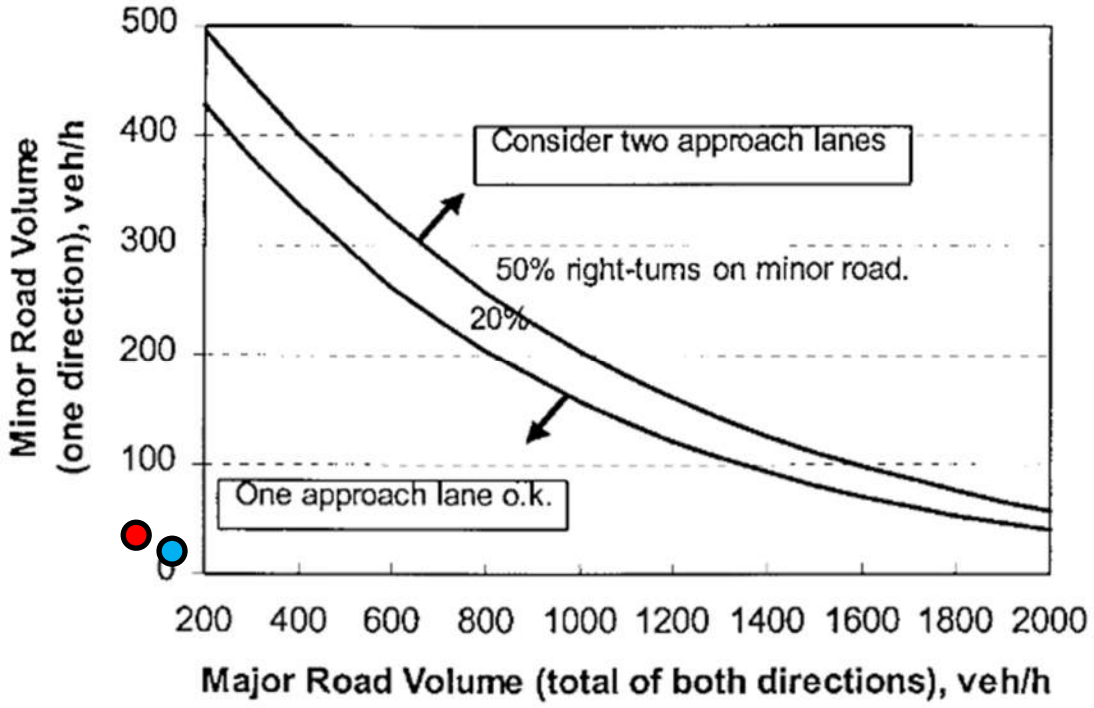
2030 Background Eastbound Right Turn Lane: **Does Not Warrant**

AM Eastbound Minor Road Volume = 39 vph

AM Major Road Volume = 93 vph

PM Eastbound Minor Road Volume = 23 vph

PM Major Road Volume = 125 vph



Hamlin Avenue and Single-Family Access:

2030 Background with Project Northbound Left Turn Lane: **Does Not Warrant**

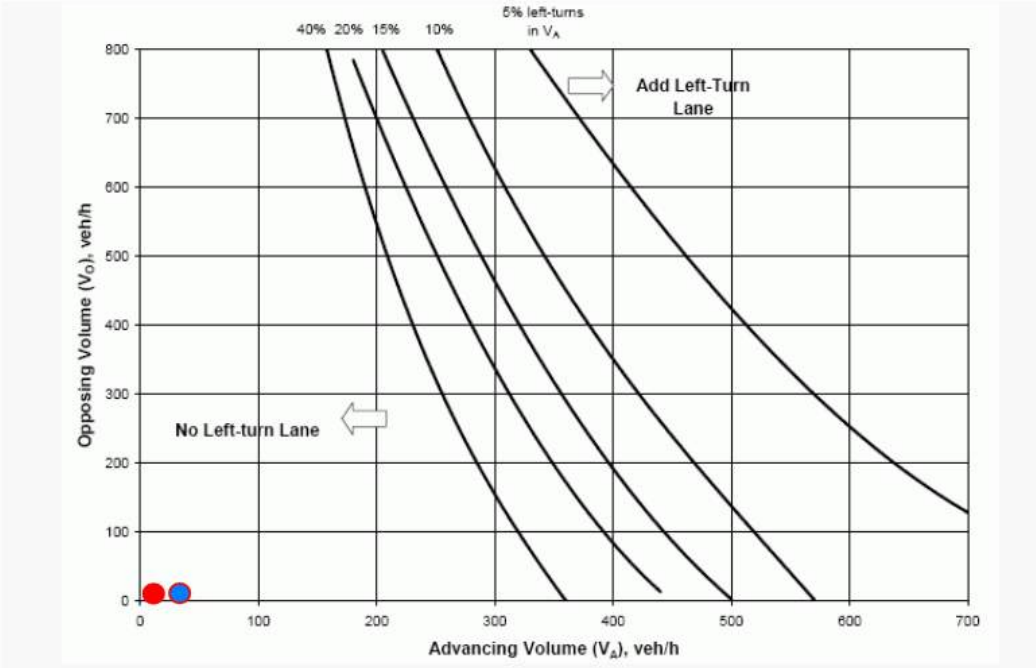
AM Northbound Advancing Volume = 10 vph (100% left turns)

AM Southbound Opposing Volumes = 0 vph

PM Northbound Advancing Volumes = 34 vph (100% left turns)

PM Southbound Opposing Volumes = 0 vph

Figure 1 – Left-Turn Lane Guidelines for Two-Lane Roads less than or equal to 40 mph



2030 Background with Project Westbound Left Turn Lane: **Does Not Warrant as "0" vehicles are planned to make this movement**

2030 Background with Project Southbound Right Turn Lane: **Does Not Warrant as "0" vehicles are proposed to make this turning moment.**

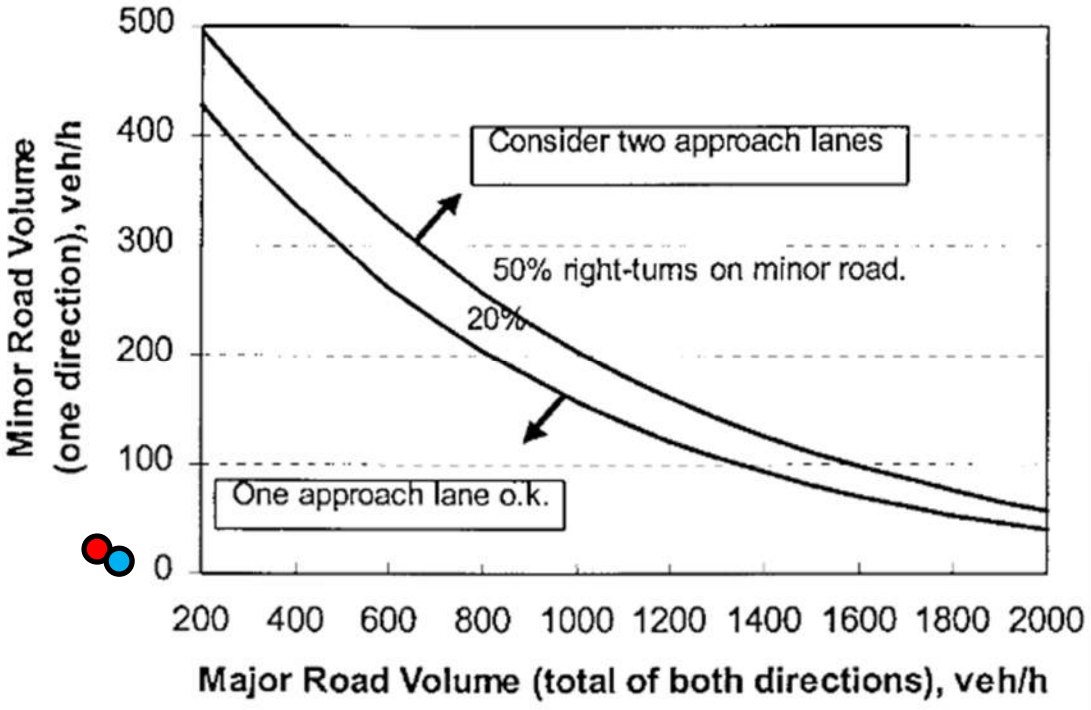
2030 Background Eastbound Right Turn Lane: **Does Not Warrant**

AM Eastbound Minor Road Volume = 31 vph

AM Major Road Volume = 10 vph

PM Eastbound Minor Road Volume = 20 vph

PM Major Road Volume = 34 vph



Based on the above analysis for the needs of right and left turn lanes along Hamlin Avenue and the roadway intersecting from the Northern Star development, no turn lanes are warranted.

Hamlin Avenue & SH 44

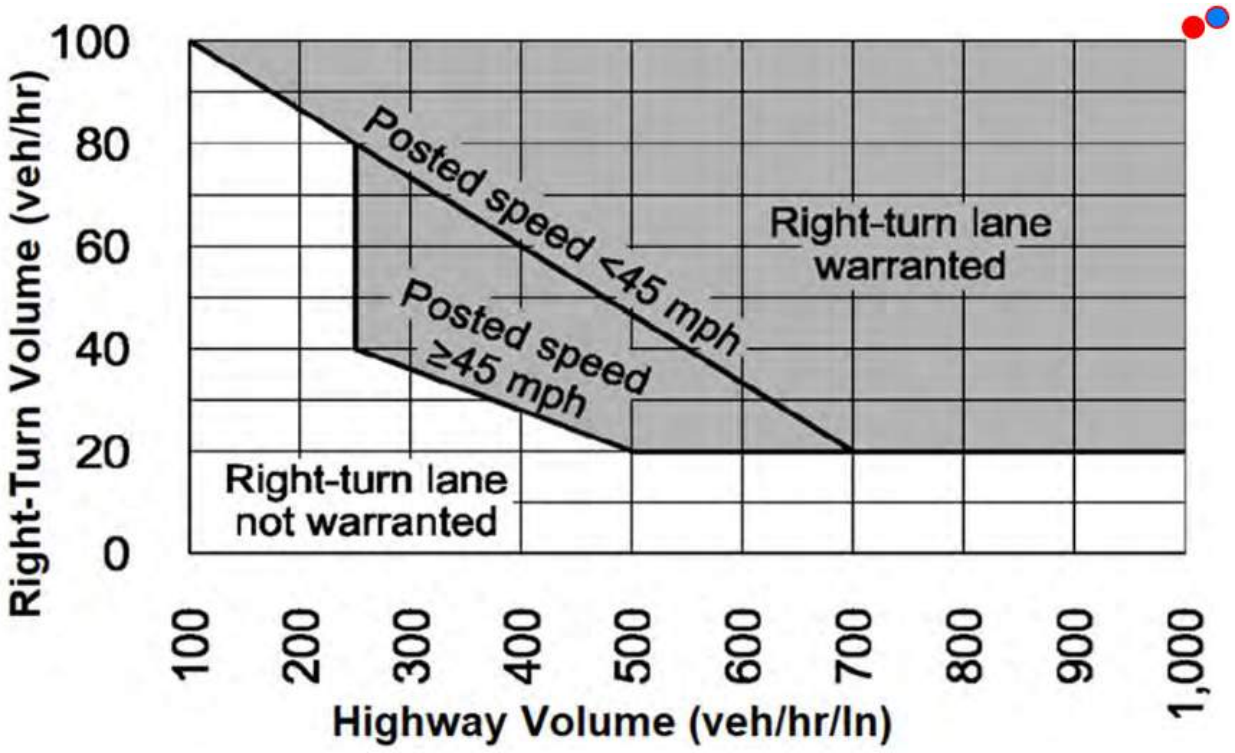
2030 Background Southbound Right Turn Lane: **Warrant**

AM Southbound Right Turn Volume = 125 vph

AM Westbound Major Roadway Volume = 1034 vph

PM Southbound Right Turn Volume = 146 vph

PM Westbound Major Roadway Volume = 2145 vph



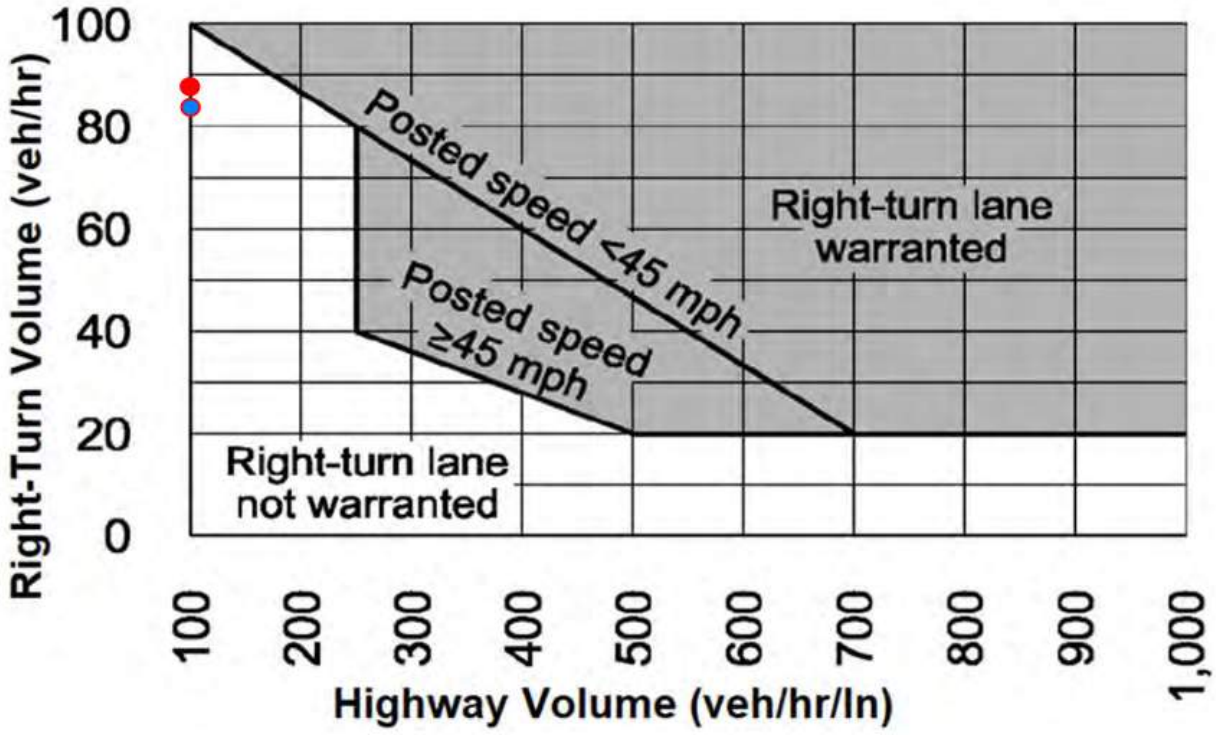
2030 Background Westbound Right Turn Lane: **Does Not Warrant**

AM Westbound Right Turn Volume = 87 vph

AM Northbound Major Roadway Volume = 0 vph

PM Westbound Right Turn Volume = 84 vph

PM Northbound Major Roadway Volume = 0 vph



MIDDLETON STAR FIRE DISTRICTS

Fire District Headquaters
11665 W. State St., Suite B
Star, Idaho 83669

Tel. No.: (208) 286-7772
Web: www.midstarfire.org
Email: permits@starfirerescue.org

DATE: November 29, 2023

TO: City of Star – Planning and Zoning

FROM: Victor Islas, Deputy Chief

SUBJECT: Fire District Review

PROJECT NAME: Talega Village Subdivision
Files: AZ-22-11, RZ-22-03, DA-22-12, CU-22-05, PP-22-17, PR-22-08

Fire District Summary Report:

1. **Overview** This development can be serviced by the Star Fire Protection District. This development shall comply with the 2018 International Fire Code (IFC) and any codes set forth by the City of Star, Idaho.

2. **Fire Response Time:**

    a. This development will be served by the Star Fire Protection District Station 51, located at 11665 W. State St., Star, Idaho 83669. Station 51 is 2.3 miles from the entrance of the development off Hamlin Ave.
    b. *The preliminary plat does not provide for cross access or connection to the north. The future station on Floating Feather will be the primary response station as presented crews will have no access from the north to the development for quicker response times.*

3. **Setbacks:** Side Setback as per City Code with no modification to decrease without Fire District approval.

4. **Accessibility:** Roadway Access, Traffic, Radio Coverage
    a. Access roads shall be provided and maintained following Appendix D and Section 503 of the IFC. Access shall include adequate roadway widths, signage, turnarounds, and turning radius for fire apparatus.
    b. Access road design shall be designed and constructed to allow for evacuation simultaneously with emergency response operations.
        i. *The preliminary plat provided poses a risk to emergency service response. The development currently has no direct access east bound off State Street. In the event of an emergency incident resources would have to make a U-turn on State Street at the intersection of Short Lane to make access onto Hamlin Ave.*
        ii. *Cross access shall be required to be constructed prior to building permits being issued.*

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c. *One- or two-family dwelling residential developments: Developments of one- or two-family dwellings where the number of dwelling units exceeds 30 shall provide with at least two separate and approved fire apparatus access roads. Each phase shall be held to this requirement and adequate access will be required.*
d. All Roads width to be constructed per city code public road standards with no modifications.
e. It shall be the responsibility of the developer and or HOA to maintain clearance of access roads all year around. This shall include but not limited to snow removal and vehicles.
f. All access roads in this development shall remain clear and unobstructed during construction of the development. Additional parking restrictions may be required as to always maintain access for emergency vehicles. Hydrants shall always remain unobstructed per city code.
g. Traffic calming devices will require approval by the Fire District
h. An unobstructed vertical clearance of no less than 13 feet 6 inches shall be always maintained.
i. All residential, commercial, and industrial buildings within the City shall have approved address numbers, building numbers, or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. When required by the fire code official, address numbers shall be provided in additional approved locations to facilitate emergency response.
j. Upon commencement of initial construction of a new structure, a clear visible freestanding sign or post hall be erected and maintained in place until the permanent address numerals are attached or otherwise displaced upon the premises at completion.

5. **Water Supply:** Water supply requirements will be followed as described in Appendix B of the 2018 International Fire Code unless agreed upon by the Fire District.
   a. Fire Flow: One- and two-family dwellings not exceeding 3,600 square feet require a fire-flow of 1,000 gallons per minute for a duration of 1 hours to service the entire project. One- and two-family dwellings in excess of 3,600 square feet require a minimum fire flow as specified in Appendix B of the International Fire Code
   b. All multi-family building will be equipped with Fire Sprinklers and Alarms.
   c. A Fire hydrant will be placed within 100 feet of the FDC.
   d. Water Supply: Acceptance of the water supply for fire protection will be by the Fire District and water quality by Star Sewer & Water for bacteria testing.
   e. Water Supply: Final Approval of the fire hydrant locations shall be by the Star Fire Protection District or their designee in accordance with International Fire Code Section (IFC) 508.5.4 as follows:
      i. Fire hydrants shall have a locking Storz LDH connection in place of the 4 ½" outlet. The Storz connection may be integrated into the hydrant, or an approved adapter may be used on the 4 1/2" outlet.
      ii. Fire hydrants shall have the Storz outlet face the main street or parking lot drive aisle.
      iii. Fire hydrants shall be placed on corners when spacing permits.
      iv. Fire hydrants shall not have any vertical obstructions to outlets within 10'.

MIDDLETON STAR FIRE DISTRICTS

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v. Fire hydrants shall be placed 18" above finished grade to the center of the Storz outlet.
vi. Fire hydrants shall be provided to meet the requirements of Star Sewer & Water Standards.
vii. Show all proposed or existing hydrants for all new construction or additions to existing buildings within 1,000 feet of the project.
viii. Fire hydrant relocations to be approved by the Fire District & Star Sewer and Water.
ix. Hydrants are to always remain clear and unobstructed.
x. Hydrants to be marked with temporary fencing creating a 3 ft clearance around the hydrant and shall remain in place until approved by fire district.
xi. Developer to review landscape plans to ensure landscaping will not obstruct hydrants.

6. **Inspections:** Final inspection by the Fire District of the above listed including hydrant flow must be completed before building permits are issued.

7. **Additional Comments:**
   a. Additional review for building code compliance to occur during the building permit phase of the development. It shall be the responsibility of the applicant to provide the fire district with the appropriate applications and review documents.
   b. The use of common driveway at for 2030 and 2032 is not approved.

8. *It is the recommendation to the council that this development be tabled until further work can be completed on the traffic and access plan. As stated above in this document the current plans provided by the application DO NOT provide for adequate access for response from emergency services.*

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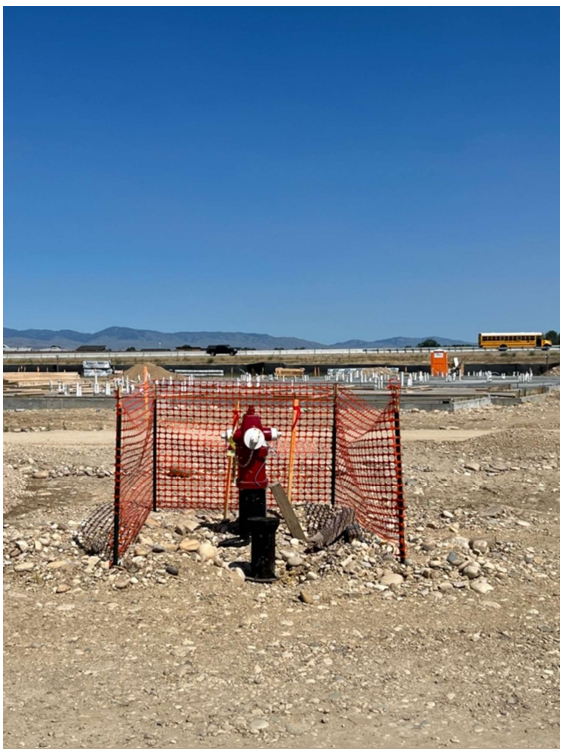
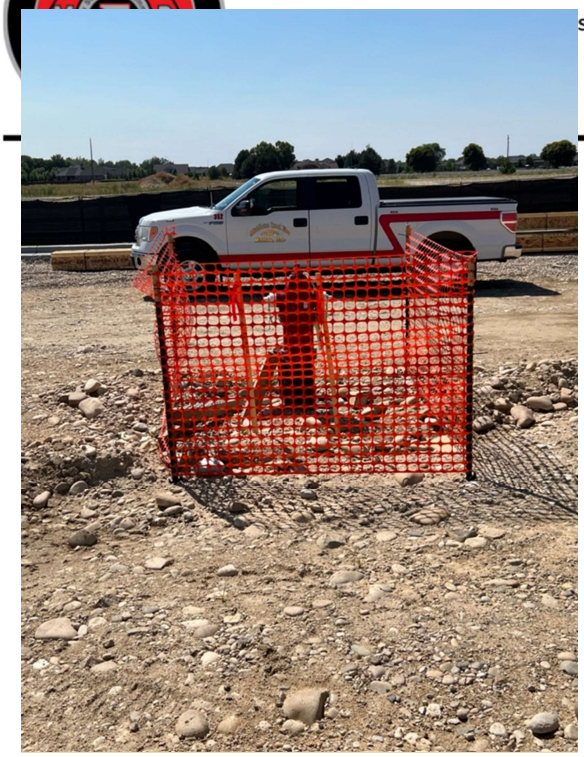
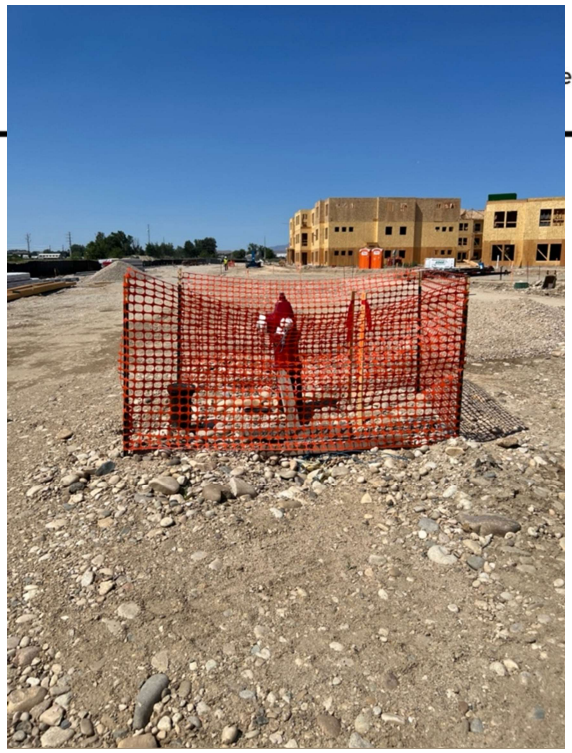
Exabit 1







Your Safety • Your Mobility
Your Economic Opportunity

IDAHO TRANSPORTATION DEPARTMENT
P.O. Box 8028 • Boise, ID 83707-2028
(208) 334-8300 • itd.idaho.gov

December 4, 2023

Shawn Nickel
Planning Director and Zoning Administrator
City of Star
10769 West State Street
Star, Idaho 83669

VIA EMAIL

Development Application	AZ-22-11, RZ-22-03, DA-22-12, CU-22-05, PP-22-17, PR-22-08
Project Name	Talega Village Subdivision (previously North Star Development)
Project Location	NEC of SH-16 and SH-44 @ approximate MP 12.5 (58 N Truman Place, Star, Idaho) at the northeast corner of SH-16 and SH-44.
Project Description	Proposed multifamily residential use (340 units), Proposed residential and commercial uses consisting of 155 lots (1 commercial lot, 1 multi-family lot, 55 single-family residential lots, 98 townhome lots, multiple common lots), and private streets
Applicant	Chad Garner, Focus Engineering & Surveying

The Idaho Transportation Department (ITD) appreciates the opportunity to provide comments regarding the planned Talega Village Subdivision at the northeast corner of State Highway 44 and State Highway 16, Star, Idaho. Please see the below comments:

1. This project abuts the State Highway system (SH-16/SH-44).
2. No direct access to the State Highway system has been requested with this application and none is approved.
3. Due to the type and proximity of this facility, impacts to the State Highway system may be anticipated. Based on IDAPA 39.03.42 Section 400.03.f, table 2 (100 or more residential dwelling units at build out), a Traffic Impact Study (TIS) is required.
    a. Any necessary mitigation for traffic impacts identified by the TIS shall be the responsibility of the applicant to install.
4. Due to the size of this development and the impacts this project will have on multiple accesses along SH-44 (State Street), ITD highly recommends constructing this development in a phased approach. ITD requests to have the TIS revised to show each phase of the development along with impacts that each phase will create.
5. N Hamlin Avenue is currently designed as a right-in right-out (RIRO).
    a. Keep in mind that it is possible that N Hamlin Ave will eventually be a right-in only. The location of N Hamlin Ave and SH-44 is the beginning of the taper for the widening of W State St to three (3) more lanes to its west. The development to the east of N Hamlin Ave is planned to eventually have its interior road connected to N Hamlin Ave at which point may restrict it to a right-out only.

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P.O. Box 8028 • Boise, ID 83707-2028
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6. Only planting of forage plants, grasses, flowers, and shrubs with a mature height not to exceed three (3) feet will be allowed within the clear zone of the state highway right-of-way. Type and size of grasses, flowers, and shrubs will be determined by the Department.
    a. No trees shall be allowed within the clear zone of the state highway right-of-way.
    b. Irrigation systems shall be no closer than five (5) feet from the pavement edge and shall be adjusted so water does not cover any portion of the highway pavement.

ITD reserves the right to make further comments upon review of any submitted documentation. If you have any questions, you may contact me at (208) 334-8337.

Sincerely,

Niki Benyakhlef

Niki Benyakhlef
Development Services Coordinator
Niki.Benyakhlef@itd.idaho.gov

CITY OF STAR

STAFF MEMO

TO: Mayor & Council

FROM: Shawn L. Nickel, Planning Director and Zoning Administrator

MEETING DATE: **December 5, 2023 – PUBLIC HEARING (tabled from October 3, 2023)**

FILE(S) #: AZ-23-03 Annexation/Zoning
DA-21-09 (MOD) Development Agreement Modification
PP-23-02 Preliminary Plat for **Starpointe Subdivision Phase Two**
PR-23-02 Private Street
PP-21-10 (Amended) Amended Preliminary Plat Starpointe Subdivision

OWNER/APPLICANT/REPRESENTATIVE

Property Owner/Applicant
W. West Development, LLC
Criterion Land Management, LLC
7629 E. Pinnacle Peak Road, Ste. 110
Scottsdale, AZ 85255

Representative:
Teller Bard
Kimley-Horn & Associates
950 W. Bannock Street, Ste. 1100
Boise, ID 83702

REQUEST

Request: The Applicant is requesting approval of an Annexation and Zoning (R-4), a Development Agreement Modification, a Preliminary Plat for a proposed residential subdivision consisting of 12 residential lots and 2 common lots, a private street and an amendment to the original Starpointe Subdivision Preliminary Plat. The property is located at 6777 and 6825 N. Star Road in Star, Idaho, and consists of 3.08 acres with a proposed density of 3.89 dwelling units per acre.

STAFF DISCUSSION

The applicant has requested a postponement of this application until January 16, 2024 in order to continue to work with ACHD on roadway issues.

LEGAL NOTICE
PUBLIC HEARING

Notice is hereby given that the Star City Council will hold a Public Hearing on **October 3, 2023** at the Star City Hall, 10769 W. State Street, Star, Idaho at 7:00 pm, or as soon thereafter as the matter may be heard.

Application: Starpointe Subdivision Phase Two
Files #'s AZ-23-03 Annexation/Zoning
DA-21-09 (MOD) Development Agreement Modification
PP-23-02 Preliminary Plat
PR-23-02 Private Street
PP-21-10 (Amended) Amended Preliminary Plat Starpointe Subdivision

Representative: Teller Bard, Kimley-Horn

Owner/Applicant: W. West Development LLC & GHW Holdings, LLC/Criterion Land Management, LLC

Action: The Applicant is requesting approval of an Annexation and Zoning (R-4), a Development Agreement Modification, a Preliminary Plat for a proposed residential subdivision consisting of 12 residential lots and 2 common lots, a private street and an amendment to the original Starpointe Subdivision Preliminary Plat. The property is located at 6777 and 6825 N. Star Road in Star, Idaho, and consists of 3.08 acres with a proposed density of 3.08 dwelling units per acre.

Property Location: The subject property is generally located on the west side of N. Star Road between Hwy 20/26 (Chinden Blvd) and W. Joplin Road. Ada County Parcel No's. S0419449020 & S0419417750.

Information/Comments: A complete copy of the applications are available at City Hall for public review. The City invites all interested parties to attend the meeting and provide public testimony. Written comments will be accepted by the City up to 2 days prior to the date of the public hearing.

Services for persons with disabilities may be made available if notice is received in advance of the meeting by calling Star City Hall at (208) 286-7247.

Shawn L. Nickel
Planning Director and Zoning Administrator
snickel@staridaho.org

Star Fire Protection District
Impact Fee Analysis

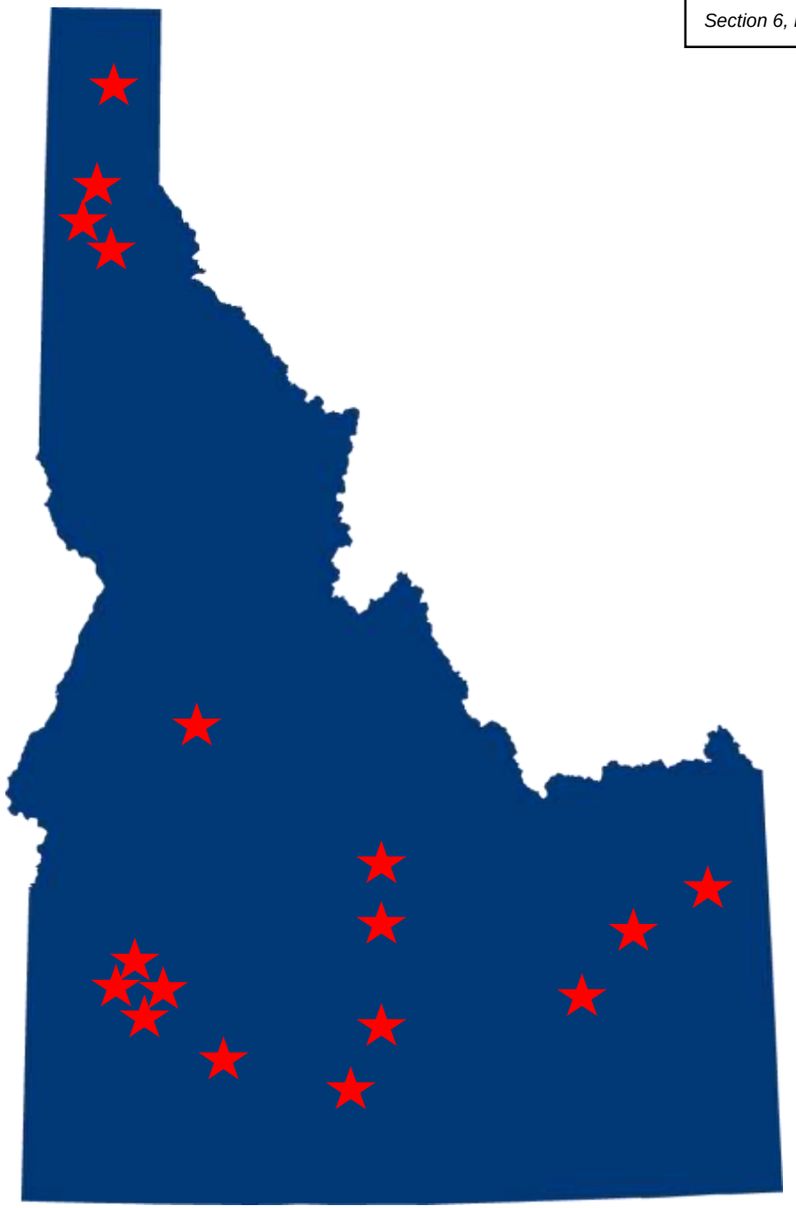
December 5, 2023

TischlerBise
FISCAL | ECONOMIC | PLANNING

Galena
CONSULTING

TischlerBise | Galena
FISCAL | ECONOMIC | PLANNING
CONSULTING

- Impact fees/infrastructure financing strategies
- Fiscal/economic impact analyses
- Capital improvement planning
- Infrastructure finance/revenue enhancement
- Real estate and market feasibility



Impact Fee Fundamentals

- One-time payment for growth-related infrastructure, usually collected at the time buildings permits are issued
- Not a tax, similar to a contractual arrangement to build infrastructure with fee revenue, with three requirements
  - Need (system improvements, not project-level improvements)
  - Benefit
    - Short range expenditures
    - Geographic service areas and/or benefit districts
  - Proportionate

Eligible Costs

- Facilities/improvements required to serve new development – Yes
- Excess capacity in existing facilities – Yes
- Improvements required to correct existing deficiencies – No
  - Unless there is a funding plan
- Maintenance and repairs – No
- Operating costs – No

Impact Fees in Idaho

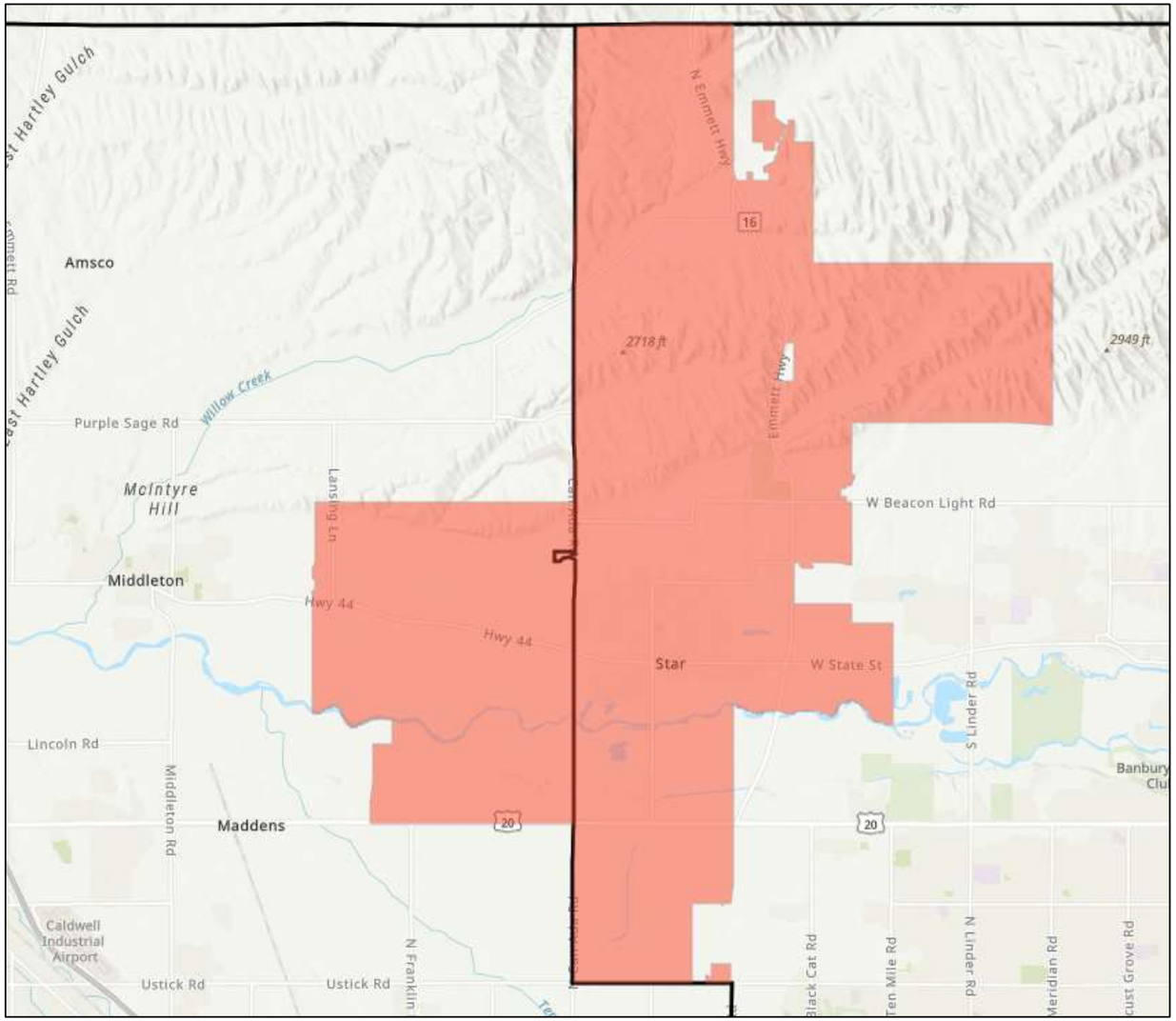
- Impact fee revenue must be maintained in an interest bearing account
- Monies must be spent within 8 years from collection (11 years in certain cases)
- Community must publish an Annual Monitoring Report and have Advisory Committee
- Comprehensive review and update every 5 years
- Capital improvement plan (CIP) required
- Eligible for the following public facilities with useful life of 10 years or more:
  - Water, wastewater, stormwater
  - Transportation
  - Parks & Recreation
  - Public safety: law enforcement, fire, EMS

Impact Fee Study Process

- Determine existing development base and projected future growth ✓
- Determine existing levels of service and capital needs due to new growth ✓
- Determine appropriate indicators of demand ✓
- Evaluate methodological alternatives ✓
- Evaluate need for credits ✓
- Calculate fees ✓
- Review and input from Fire Board ✓
- Review and input from Advisory Committees ✓
- Adoption process

Star Fire Impact Fee Study

- Fire District Boundary



Star Fire Impact Fee Study

- Plan-Based Methodology
  - Fire station space, fire apparatus, eligible equipment, cost of fee study
- Fee is attributed to residential and nonresidential development based on calls for service data

Star Fire Impact Fee Study

- Capital Improvement Plan

10-Year Capital Improvement Plan	Need	Time Frame (Yrs)	Current Cost	Growth Related Cost
Station #55: Floating Feather	8,392 square feet	1 to 3	$3,000,000	$3,000,000
Station #52: Training Facility & Engine Bay	3,000 square feet	2 to 5	$250,000	$250,000
Station #52: Training Facility Prop & Storage Container	1 unit	1 to 3	$25,000	$25,000
Station #58: Hwy 16 & Arie	8,392 square feet	3 to 10	$4,000,000	$4,000,000
Station #56: Purple Sage (50% split with Middleton)	4,196 square feet	7 to 10	$3,000,000	$3,000,000
Station #55 units: New Brush & Engine	2 units	1 to 8	$1,400,000	$1,400,000
Station #56 units: New Brush & Engine (50% split with Middleton)	2 units	7 to 10	$825,000	$825,000
Station #58 units: New Brush/Engine/Water Tender	3 units	7 to 10	$2,050,000	$2,050,000
SCBAs (6) for Station #55	6 units	1 to 3	$42,000	$42,000
SCBAs (6) for Station #58	6 units	7 to 10	$50,000	$50,000
New UTV for River Rescue	1 unit	2 to 3	$35,000	$35,000
Station #51 units: Replace Tender/Ladder/Brush	3 units	7 to 15	$2,700,000	$0
Station #52 units: Replace Engines/Brush	3 units	1 to 10	$2,150,000	$0
Replace Battalion Command (50% split with Middleton)	1 unit	2 to 3	$70,000	$0
Replace Command 2017 Chevy 502	1 unit	3 to 5	$65,000	$0
Replace Command 2022 Chevy 501	1 unit	5 to 10	$80,000	$0
		Total	**$19,742,000**	**$14,677,000**

Calls for Service Data

- Used to assign proportionate share for Fire services

Land Use	Annual Calls for Service	% of Total
Residential	783	68%
Nonresidential	64	6%
Traffic	308	27%
Total	**1,155**	**100%**

Land Use	Base Year Vehicle Trips	% of Total
Residential	51,939	89%
Nonresidential	6,593	11%
Total	**58,532**	**100%**

Land Use	Adj. Calls for Service	% of Total
Residential	1,056	**91%**
Nonresidential	99	**9%**
Total	**1,155**	**100%**

Source: Star Fire Protection District

Star Fire Impact Fee Study

- Fire Station 10-Year Capital Plan Compared to 10-Year Growth

Fire Stations	Square Feet	Replacement Cost
Station #55: Floating Feather	8,392	$3,000,000
Station #52: Training Facility & Engine Bay	3,000	$250,000
Station #52: Prop & Storage Container	-	$25,000
Station #58: Hwy 16 & Arie	8,392	$4,000,000
Station #56: Purple Sage (50% split)	4,196	$3,000,000
Total	**23,980**	**$10,275,000**

Level-of-Service Standards	**Residential**	**Nonresidential**
Proportionate Share	91%	9%
Share of Square Feet	21,931	2,049
10-Year Population/Nonres. Vehicle Trips Increase	14,929	17,108
Square Feet per 1,000 Persons/Vehicle Trips	**1,469**	**120**

Cost Analysis	**Residential**	**Nonresidential**
Square Feet per 1,000 Persons/Vehicle Trips	1,469	120
Average Cost per Square Foot	$428	$428
Capital Cost per Person/Vehicle Trip	**$629**	**$51**

Star Fire Impact Fee Study

- Fire Apparatus 10-Year Capital Plan Compared to 10-Year Growth

Apparatus	Units	Replacement Cost
Fire Engine	2	$1,950,000
Water Tender	1	$500,000
Brush Truck	2	$1,000,000
Engine & Brush (50% split)	2	$825,000
Total	**7**	**$4,275,000**

Level-of-Service Standards	**Residential**	**Nonresidential**
Proportionate Share	91%	9%
Share of Units	6.4	0.6
10-Year Population/Nonres. Vehicle Trips Increase	14,929	17,108
Units per 1,000 Persons/Vehicle Trips	**0.43**	**0.03**

Cost Analysis	**Residential**	**Nonresidential**
Units per 1,000 Persons/Vehicle Trips	0.43	0.03
Average Cost per Unit	$611,000	$611,000
Capital Cost per Person/Vehicle Trip	**$263**	**$18**

Star Fire Impact Fee Study

- Fire Equipment 10-Year Capital Plan Compared to 10-Year Growth

Equipment Type	Units	Replacement Cost
SCBAs	12	$92,000
UTV - River Rescue	1	$35,000
Total	**13**	**$127,000**

Level-of-Service Standards	Residential	Nonresidential
Proportionate Share	91%	9%
Share of Units	11.9	1.1
10-Year Population/Nonres. Vehicle Trips	14,929	17,108
Units per 1,000 Persons/Vehicle Trips	**0.80**	**0.06**

Cost Analysis	Residential	Nonresidential
Units per 1,000 Persons/Vehicle Trips	0.80	0.06
Average Cost per Unit	$10,000	$10,000
Capital Cost per Person/Vehicle Trip	**$8**	**$1**

Star Fire Impact Fee Study

- Cost of impact fee study can be recovered by the collection

Share of Study Cost	Residential Share	Nonresidential Share
$19,720	91%	9%

Residential Growth Share	Five-Year Population Increase	Capital Cost per Person
100%	10,208	$2

Nonresidential Growth Share	Five-Year Veh. Trip Increase	Capital Cost per Trip
100%	9,240	$1

Star Fire Impact Fee Study

- Credit included for existing fund balance

Fire Impact Fee Fee Credit	
Available Fund Balance	$2,390,184
10-Year Capital Plan	$14,677,000
Available Fund Balance % of Plan	**16%**

Star Fire Impact Fee Study

- Maximum Supportable Impact Fees

Fee Component	Cost per Person	Cost per Vehicle Trip
Fire Stations	$629	$51
Fire Apparatus	$263	$18
Fire Equipment	$8	$1
Impact Fee Study	$2	$1
Gross Total	$902	$71
Credit for Fund Balance (16%)	($144)	($11)
Net Total	**$758**	**$60**

Residential

Housing Type	Persons per Housing Unit	Maximum Supportable Fee	Current Fee	Increase/ (Decrease)
Residential (per housing unit)				
Single Family	2.84	**$2,152**	$809	$1,343
Multifamily	1.62	**$1,227**	$809	$418

Nonresidential

Development Type	Vehicle Trips per KSF	Maximum Supportable Fee	Current Fee	Increase/ (Decrease)
Nonresidential (per 1,000 square feet)				
Retail	14.06	**$839**	$380	$459
Office	5.42	**$323**	$380	($57)
Industrial	2.44	**$145**	$380	($235)
Institutional	9.76	**$582**	$380	$202

Star Fire Impact Fee Study

- Projected Revenue from Maximum Supportable Fees

Infrastructure Costs for Fire Facilities

	Total Cost	Growth Cost
Fire Stations	$10,275,000	$10,275,000
Fire Apparatus	$4,275,000	$4,275,000
Fire Equipment	$127,000	$127,000
Impact Fee Study	$39,440	$39,440
Total Expenditures	**$14,716,440**	**$14,716,440**

Projected Revenue =>	**$12,508,000**
Projected Expenditures =>	**$14,716,000**
Non-Impact Fee Funding =>	**$2,208,000**

Projected Development Impact Fee Revenue

Year		Single Family $2,152 per unit	Multifamily $1,227 per unit	Retail $839 per KSF	Office $323 per KSF	Industrial $145 per KSF	Institutional $582 per KSF
		Housing Units	Housing Units	KSF	KSF	KSF	KSF
Base	2023	6,494	556	223	102	204	246
1	2024	6,994	601	351	148	204	368
2	2025	7,494	646	416	176	253	438
3	2026	7,994	691	481	205	302	508
4	2027	8,494	736	546	233	351	577
5	2028	8,994	781	611	262	400	647
6	2029	9,494	826	676	290	449	717
7	2030	9,994	871	741	319	497	787
8	2031	10,494	916	806	347	546	857
9	2032	10,994	961	871	375	595	927
10	2033	11,494	1,006	936	404	644	997
Ten-Year Increase		5,000	450	713	302	439	750
Projected Revenue		$10,760,385	$551,931	$597,885	$97,644	$63,695	$436,652

Funding gap is the result of existing balance credit and will be funded with balance

Star Fire Impact Fee Study

- Comparables

Jurisdiction	Single Family per Unit	Retail per 1,000 Sq. Ft.
Star Fire District - Maximum*	$2,152	$839
Eagle Fire District - Maximum*	$2,111	$2,779
City of Boise	$2,019	$1,670
City of Kuna	$1,792	$720
Middleton Fire District - Maximum*	$1,481	$780
Eagle Fire District - Current*	$897	$360
North Ada Fire - Maximum*	$879	$1,238
Middleton Fire District*	$849	$420
Star Fire District - Current*	$809	$380
City of Meridian	$693	$640
North Ada Fire - Current*	$647	$320

List is ordered based on single family impact fee per unit

* Currently being updated

Discussion

Residential

Housing Type	Persons per Housing Unit	Maximum Supportable Fee	Current Fee	Increase/ (Decrease)
Residential (per housing unit)				
Single Family	2.84	**$2,152**	$809	$1,343
Multifamily	1.62	**$1,227**	$809	$418

Nonresidential

Development Type	Vehicle Trips per KSF	Maximum Supportable Fee	Current Fee	Increase/ (Decrease)
Nonresidential (per 1,000 square feet)				
Retail	14.06	**$839**	$380	$459
Office	5.42	**$323**	$380	($57)
Industrial	2.44	**$145**	$380	($235)
Institutional	9.76	**$582**	$380	$202

Capital Improvement Plan and Development Impact Fee Study

Submitted to:

Star Fire Protection District

August 23, 2023

Prepared by:

TischlerBise
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Development Impact Fee Study
Star Fire Protection District

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EXECUTIVE SUMMARY

The Star Fire Protection District ("The Fire District") retained TischlerBise to prepare a Capital Improvement Plan and Development Impact Fee Study in order to meet the new demands generated by new development within the district. This report presents the methodology and calculation used to generate current levels of service and updated maximum supportable impact fees. It is intended to serve as supporting documentation for the evaluation and update of the Fire District's impact fees.

The purpose of this study is to demonstrate the Fire District's compliance with Idaho Statutes as authorized by the Idaho Legislature. Consistent with the authorization, it is the intent of the Fire District to: (Idaho Code 67-8202(1-4))

1. Collect impact fees to ensure that adequate public facilities are available to serve new growth and development;
2. Promote orderly growth and development by establishing uniform standards by which local governments may require that those who benefit from new growth and development pay a proportionate share of the cost of new public facilities needed to serve new growth and development;
3. Establish minimum standards for the adoption of development impact fee ordinances by government entities;
4. Ensure that those who benefit from new growth and development are required to pay no more than their proportionate share of the cost of public facilities needed to serve new growth and development and to prevent duplicate and ad hoc development requirements;

Impact fees are one-time payments used to construct system improvements needed to accommodate new development. An impact fee represents new growth's fair share of capital facility needs. By law, impact fees can only be used for capital improvements, not operating or maintenance costs. Impact fees are subject to legal standards, which require fulfillment of three key elements: need, benefit and proportionality.

- First, to justify a fee for public facilities, it must be demonstrated that new development will create a need for capital improvements.
- Second, new development must derive a benefit from the payment of the fees (i.e., in the form of public facilities constructed within a reasonable timeframe).
- Third, the fee paid by a particular type of development should not exceed its proportional share of the capital cost for system improvements.

TischlerBise evaluated possible methodologies and documented appropriate demand indicators by type of development for the levels of service and fees. Local demographic data and improvement costs were used to identify specific capital costs attributable to growth. This report includes summary tables indicating the specific factors, referred to as level of service standards, used to derive the impact fees.

Fee Methodology

A summary of impact fee components is provided below:

Figure 1. Summary of Impact Fee Methodologies

Fee Category	Service Area	Cost Recovery	Incremental Expansion	Plan-Based	Cost Allocation
Fire	Districtwide	Impact Fee Study		Fire Stations, Fire Apparatus, and Fire Equipment	Person & Vehicle Trips

Capital Improvement Plan

Below in Figure 2 is the ten-year capital improvement plan the Fire District is anticipating to accommodate future demand. In the Plan, there are facility, fleet, and equipment expansions that are consistent with or below the projected need to serve growth at the current level of service. The capital improvement plan can be updated annually and revised to reflect any shift in demand, market, and costs.

Figure 2. Growth-Related Capital Improvement Plan

10-Year Capital Improvement Plan	Need	Time Frame (Yrs)	Current Cost	Growth Related Cost
Station #55: Floating Feather	8,392 square feet	1 to 3	$3,000,000	$3,000,000
Station #52: Training Facility & Engine Bay	3,000 square feet	2 to 5	$250,000	$250,000
Station #52: Training Facility Prop & Storage Container	1 unit	1 to 3	$25,000	$25,000
Station #58: Hwy 16 & Arie	8,392 square feet	3 to 10	$4,000,000	$4,000,000
Station #56: Purple Sage (50% split with Middleton)	4,196 square feet	7 to 10	$3,000,000	$3,000,000
Station #55 units: New Brush & Engine	2 units	1 to 8	$1,400,000	$1,400,000
Station #56 units: New Brush & Engine (50% split with Middleton)	2 units	7 to 10	$825,000	$825,000
Station #58 units: New Brush/Engine/Water Tender	3 units	7 to 10	$2,050,000	$2,050,000
SCBAs (6) for Station #55	6 units	1 to 3	$42,000	$42,000
SCBAs (6) for Station #58	6 units	7 to 10	$50,000	$50,000
New UTV for River Rescue	1 unit	2 to 3	$35,000	$35,000
Station #51 units: Replace Tender/Ladder/Brush	3 units	7 to 15	$2,700,000	$0
Station #52 units: Replace Engines/Brush	3 units	1 to 10	$2,150,000	$0
Replace Battalion Command (50% split with Middleton)	1 unit	2 to 3	$70,000	$0
Replace Command 2017 Chevy 502	1 unit	3 to 5	$65,000	$0
Replace Command 2022 Chevy 501	1 unit	5 to 10	$80,000	$0
		Total	**$19,742,000**	**$14,677,000**

Maximum Supportable Development Impact Fees

Figure 3 provides a schedule of the maximum supportable development impact fees by type of land use for the Fire District. The fees represent the highest supportable amount for each type of applicable land use and represent new growth's fair share of the cost for capital facilities. The Fire Board may adopt fees that are less than the amounts shown. However, a reduction in impact fee revenue will necessitate an increase in other revenues, a decrease in planned capital expenditures, and/or a decrease in levels of service.

The fees for residential development are to be assessed per housing unit based on the person per housing unit factors for single family and multifamily development. For nonresidential development, the fees are assessed per square foot of floor area based on vehicle trip rates. Nonresidential development categories are consistent with the terminology and definitions contained in the reference book, Trip Generation 11th Edition, published by the Institute of Transportation Engineers. These definitions are provided in the Appendix A. Land Use Definitions.

Figure 3. Summary of Maximum Supportable Development Impact Fee

Residential

Housing Type	Persons per Housing Unit	Maximum Supportable Fee	Current Fee	Increase/ (Decrease)
Residential (per housing unit)				
Single Family	2.84	**$2,152**	$809	$1,343
Multifamily	1.62	**$1,227**	$809	$418

Nonresidential

Development Type	Vehicle Trips per KSF	Maximum Supportable Fee	Current Fee	Increase/ (Decrease)
Nonresidential (per 1,000 square feet)				
Retail	14.06	**$839**	$380	$459
Office	5.42	**$323**	$380	($57)
Industrial	2.44	**$145**	$380	($235)
Institutional	9.76	**$582**	$380	$202

DEVELOPMENT IMPACT FEE FRAMEWORK

IDAHO DEVELOPMENT IMPACT FEE ENABLING LEGISLATION

The Enabling Legislation governs how development fees are calculated for municipalities in Idaho. All requirements of the Idaho Development Impact Fee Act have been met in the supporting documentation prepared by TischlerBise. There are four requirements of the Idaho Act that are not common in the development impact fee enabling legislation of other states. This overview offers further clarification of these unique requirements.

First, as specified in 67-8204(2) of the Idaho Act, "development impact fees shall be calculated on the basis of levels of service for public facilities . . . applicable to existing development as well as new growth and development."

Second, Idaho requires a Capital Improvements Plan (CIP) [see 67-8208]. The CIP requirements are summarized in this report, with detailed documentation provided in the discussion on infrastructure.

Third, the Idaho Act also requires documentation of any existing deficiencies in the types of infrastructure to be funded by development impact fees [see 67-8208(1)(a)]. The intent of this requirement is to prevent charging new development to cure existing deficiencies. In the context of development impact fees for the Fire District, the term "deficiencies" means a shortage or inadequacy of current system improvements when measured against the levels of service to be applied to new development. It does not mean a shortage or inadequacy when measured against some "hoped for" level of service.

TischlerBise used the current infrastructure cost per service unit (i.e., existing standards), or future levels of service where appropriate, multiplied by the projected increase in service units over an appropriate planning timeframe, to yield the cost of growth-related system improvements. The relationship between these three variables can be reduced to a mathematical formula, expressed as A x B = C. In section 67-8204(16), the Idaho Act simply reorganizes this formula, stating the cost per service unit (i.e., development impact fee) may not exceed the cost of growth-related system improvements divided by the number of projected service units attributable to new development (i.e., A = C ÷ B). By using existing infrastructure standards to determine the need for growth-related capital improvements, the Fire District ensures the same level-of-service standards are applicable to existing and new development. Using existing infrastructure standards also means there are no existing deficiencies in the current system that must be corrected from non-development impact fee funding.

Fourth, Idaho requires a proportionate share determination [see 67-8207]. Basically, local government must consider various types of applicable credits and/or other revenues that may reduce the capital costs attributable to new development. The development impact fee methodologies and the cash flow analysis have addressed the need for credits to avoid potential double payment for growth-related infrastructure.

SUMMARY OF CAPITAL IMPROVEMENT PLANS AND DEVELOPMENT IMPACT FEES

Development impact fees can be calculated by any one of several legitimate methods. The choice of a particular method depends primarily on the service characteristics and planning requirements for each facility type. Each method has advantages and disadvantages in a particular situation, and to some extent can be interchangeable, because each allocates facility costs in proportion to the needs created by development.

Reduced to its simplest terms, the process of calculating development impact fees involves two main steps: (1) determining the cost of development-related capital improvements and (2) allocating those costs equitably to various types of development. In practice, though, the calculation of impact fees can become quite complicated because of the many variables involved in defining the relationship between development and the need for facilities. The following paragraphs discuss three basic methods for calculating development impact fees, and how each method can be applied.

- ***Cost Recovery*.** The rationale for the cost recovery approach is that new development is paying for its share of the useful life and remaining capacity of facilities already built or land already purchased from which new growth will benefit. This methodology is often used for systems that were oversized such as sewer and water facilities.
- ***Incremental Expansion*.** The incremental expansion method documents the current level of service (LOS) for each type of public facility in both quantitative and qualitative measures, based on an existing service standard (such as park land acres per 1,000 residents). This approach ensures that there are no existing infrastructure deficiencies or surplus capacity in infrastructure. New development is only paying its proportionate share for growth-related infrastructure. An incremental expansion cost method is best suited for public facilities that will be expanded in regular increments, with LOS standards based on current conditions in the community.
- ***Plan-Based*.** The plan-based method allocates costs for a specified set of improvements to a specified amount of development. Facility plans identify needed improvements, and land use plans identify development. In this method, the total cost of relevant facilities is divided by total demand to calculate a cost per unit of demand. Then, the cost per unit of demand is multiplied by the amount of demand per unit of development (e.g., housing units or square feet of building area) in each category to arrive at a cost per specific unit of development (e.g., single family detached unit).
- ***Credits.*** Regardless of the methodology, a consideration of "credits" is integral to the development of a legally valid impact fee methodology. There are two types of "credits," each with specific and distinct characteristics, but both of which should be addressed in the calculation of development impact fees. The first is a credit due to possible double payment situations. This could occur when contributions are made by the property owner toward the capital costs of the public facility covered by the impact fee. This type of credit is integrated into the impact fee calculation. The second is a credit toward the payment of a fee for dedication of public sites or improvements provided by the developer and for which the facility fee is imposed. This type of credit is addressed in the administration and implementation of a facility fee program.

FIRE PROTECTION DEVELOPMENT IMPACT FEES

The Fire District's development impact fee includes three components: station space, vehicles/apparatus, and equipment. TischlerBise recommends a *plan-based* approach, based on current capital expansion plans. Per the Idaho Act, capital improvements are limited to those improvements that have a certain lifespan. As specified in 67-8203(3) of the Idaho Act, "'Capital improvements' means improvements with a useful life of ten (10) years or more, by new construction or other action, which increase the service capacity of a public facility." The residential portion of the fee is derived from the product of persons per housing unit (by type of unit) multiplied by the net capital cost per person. The nonresidential portion is derived from the product of nonresidential vehicle trips per 1,000 square feet of nonresidential space multiplied by the net capital cost per vehicle trip.

COST ALLOCATION FOR FIRE PROTECTION INFRASTRUCTURE

Both residential and nonresidential developments increase the demand for fire services and facilities. To calculate the proportional share between residential and nonresidential demand on service and facilities, calls for service data is analyzed. Shown at the top of Figure 4**,** 68 percent of calls are to residential locations, 6 percent to nonresidential locations, and 27 percent are classified as traffic calls.

Base year vehicle trips are used to assign traffic calls to residential and nonresidential land uses. This results in 273 additional residential calls (51,939 residential vehicle trips / 58,532 total vehicle trips x 308 traffic calls for service) and 35 additional nonresidential calls (6,583 nonresidential vehicle trips / 58,532 total vehicle trips x 308 traffic calls for service).

After this adjustment 91 percent of calls are attributed to residential development and 9 percent are attributed to nonresidential development. These percentages are used to attribute facilities to respective demand units.

Figure 4. Calls for Service

Land Use	Annual Calls for Service	% of Total
Residential	783	68%
Nonresidential	64	6%
Traffic	308	27%
Total	**1,155**	**100%**

Land Use	Base Year Vehicle Trips	% of Total
Residential	51,939	89%
Nonresidential	6,593	11%
Total	**58,532**	**100%**

Land Use	Adj. Calls for Service	% of Total
Residential	1,056	**91%**
Nonresidential	99	**9%**
Total	**1,155**	**100%**

Source: Star Fire Protection District & Ada County

FIRE PROTECTION LEVEL OF SERVICE AND COST ANALYSIS

The following section details the current level of service calculations and capital cost for each infrastructure category.

FIRE STATIONS

Listed in Figure 5, the Fire District currently operates two stations, which total 44,000 square feet. The existing level of service for residential development is 1,903 square feet per 1,000 persons. The nonresidential level of service is 570 square feet per 1,000 vehicle trips. This is determined by multiplying the total square footage by the proportionate share factors (91 percent for residential development and 9 percent for nonresidential development), and then dividing the respective totals by the current service units (21,150 persons and 6,593 nonresidential vehicle trips) and multiplying by 1,000.

Figure 5. Existing Fire Station Level of Service

Fire Stations	Square Feet
Station #51: State St	37,000
Station #52: Kingsbury	7,000
Total	**44,000**

Level-of-Service Standards	Residential	Nonresidential
Proportionate Share	91%	9%
Share of Square Feet	40,240	3,760
2023 Population/Nonres. Vehicle Trips	21,150	6,593
Square Feet per 1,000 Persons/Vehicle Trips	**1,903**	**570**

FIRE APPARATUS

Shown in Figure 6, the Fire District currently has 15 pieces of apparatus. The existing level of service for residential development is 0.65 pieces of apparatus for every 1,000 persons. The nonresidential level of service is 0.19 pieces of apparatus per 1,000 vehicle trips. This is determined by multiplying the total apparatus inventory by the proportionate share factors (91 percent for residential development and 9 percent for nonresidential development), and then dividing the respective totals by the current service units (21,150 persons for residential and 6,593 nonresidential vehicle trips) and multiplying by 1,000.

Figure 6. Existing Fire Apparatus Level of Service

Apparatus	Units
Fire Engine	3
Water Tender	1
Brush Truck	2
Command Vehicle	6
Water Rescue Boat	1
Trailers	2
Total	**15**

Level-of-Service Standards	Residential	Nonresidential
Proportionate Share	91%	9%
Share of Units	13.7	1.3
2023 Population/Nonres. Vehicle Trips	21,150	6,593
Units per 1,000 Persons/Vehicle Trips	**0.65**	**0.19**

FIRE EQUIPMENT

Shown in Figure 7, the Fire District currently has 54 pieces of equipment with a useful life of 10 years or longer. The existing level of service for residential development is 2.34 pieces of equipment for every 1,000 persons. The nonresidential level of service is 0.70 pieces of equipment per 1,000 vehicle trips. This is determined by multiplying the total equipment inventory by the proportionate share factors (91 percent for residential development and 9 percent for nonresidential development), and then dividing the respective totals by the current service units (21,150 persons for residential and 6,593 nonresidential vehicle trips) and multiplying by 1,000.

Figure 7. Existing Fire Equipment Level of Service

Equipment Type	Units
Handheld Radios	21
SCBAs	15
Generators	2
Extrication Equipment	5
Printer/Copier	2
Thermal Imaging Equipment	5
Extractor	1
Air Compressor	1
Power Column Lift	1
Respirator Testing System	1
Total	**54**

Level-of-Service Standards	Residential	Nonresidential
Proportionate Share	91%	9%
Share of Units	49.4	4.6
2023 Population/Nonres. Vehicle Trips	21,150	6,593
Units per 1,000 Persons/Vehicle Trips	**2.34**	**0.70**

PLANNED GROWTH-RELATED INFRASTRUCTURE IMPROVEMENTS

The following section details the future capital plans to accommodate growth.

FIRE STATIONS

The Fire District currently plans on constructing three new stations, one at a 50 percent split with Middleton Rural Fire Protection District and expanding one existing station. Shown in Figure 8, the Fire District estimates adding approximately 23,980 square feet, with an estimated cost of $10,275,000, would be sufficient through the year 2033.

The cost per residential and nonresidential service unit is determined by multiplying the planned square footage by the proportionate share factors (91 percent for residential and 9 percent for nonresidential), and then dividing the respective totals by the projected increase in service units through the year 2033 (14,929 persons and 17,108 nonresidential vehicle trips). When the resulting residential and nonresidential levels of service (1,469 square feet per 1,000 persons and 120 square feet per 1,000 nonresidential trips) are compared to the cost per square foot ($428), the resulting cost per service units are $629 per person and $51 per nonresidential vehicle trip.

Based on development trends, market needs, and projections the demand on fire services is going to shift further towards housing development compared to commercial development.

Figure 8. Planned Fire Station Level of Service & Cost Analysis

Fire Stations	Square Feet	Replacement Cost
Station #55: Floating Feather	8,392	$3,000,000
Station #52: Training Facility & Engine Bay	3,000	$250,000
Station #52: Prop & Storage Container	-	$25,000
Station #58: Hwy 16 & Arie	8,392	$4,000,000
Station #56: Purple Sage (50% split)	4,196	$3,000,000
Total	**23,980**	**$10,275,000**

Level-of-Service Standards	**Residential**	**Nonresidential**
Proportionate Share	91%	9%
Share of Square Feet	21,931	2,049
10-Year Population/Nonres. Vehicle Trips Increase	14,929	17,108
Square Feet per 1,000 Persons/Vehicle Trips	**1,469**	**120**

Cost Analysis	**Residential**	**Nonresidential**
Square Feet per 1,000 Persons/Vehicle Trips	1,469	120
Average Cost per Square Foot	$428	$428
Capital Cost per Person/Vehicle Trip	**$629**	**$51**

FIRE APPARATUS

To compliment the planned additional stations, the Fire District plans on purchasing seven additional pieces of apparatus. Shown in Figure 9, the estimated cost of the apparatus is $4,275,000. Similar to the planned station, the Fire District estimates the apparatus will be sufficient through the year 2033.

In Figure 9, the cost per residential and nonresidential service unit is determined by multiplying the planned apparatus by the proportionate share factors (91 percent for residential and 9 percent for nonresidential), and then dividing the respective totals by the projected increase in service units through the year 2033 (14,929 persons and 17,108 nonresidential vehicle trips). When the resulting residential and nonresidential levels of service (0.43 units per 1,000 persons and 0.03 units per 1,000 nonresidential trips) are compared to the cost for the apparatus ($611,000), the resulting cost per service units are $263 per person and $18 per nonresidential vehicle trip.

Based on development trends, market needs, and projections the demand on fire services is going to shift further towards housing development compared to commercial development.

Figure 9. Planned Fire Apparatus Level of Service & Cost Analysis

Apparatus	Units	Replacement Cost
Fire Engine	2	$1,950,000
Water Tender	1	$500,000
Brush Truck	2	$1,000,000
Engine & Brush (50% split)	2	$825,000
Total	**7**	**$4,275,000**

Level-of-Service Standards	Residential	Nonresidential
Proportionate Share	91%	9%
Share of Units	6.4	0.6
10-Year Population/Nonres. Vehicle Trips Increase	14,929	17,108
Units per 1,000 Persons/Vehicle Trips	**0.43**	**0.03**

Cost Analysis	Residential	Nonresidential
Units per 1,000 Persons/Vehicle Trips	0.43	0.03
Average Cost per Unit	$611,000	$611,000
Capital Cost per Person/Vehicle Trip	**$263**	**$18**

FIRE EQUIPMENT

To facilitate the addition of growth-related personnel, the Fire District plans on purchasing 13 additional pieces of equipment: 12 self-contained breathing apparatus (SCBA) and 1 additional UTV. Shown in Figure 10, the estimated cost of the equipment is $127,000. Similar to the planned station, the Fire District estimates the equipment will be sufficient through the year 2033.

In Figure 10 the cost per residential and nonresidential service unit is determined by multiplying the planned equipment by the proportionate share factors (91 percent for residential and 9 percent for nonresidential), and then dividing the respective totals by the projected increase in service units through the year 2032 (14,929 persons and 17,108 nonresidential vehicle trips). When the resulting residential and nonresidential levels of service (0.80 equipment units per 1,000 persons and 0.06 equipment units per 1,000 nonresidential trip) are compared to the average cost per piece of equipment ($10,000), the resulting cost per service units are $8 per person and $1 per nonresidential vehicle trip.

Figure 10. Planned Equipment Level of Service & Cost Analysis

Equipment Type	Units	Replacement Cost
SCBAs	12	$92,000
UTV - River Rescue	1	$35,000
Total	**13**	**$127,000**

Level-of-Service Standards	Residential	Nonresidential
Proportionate Share	91%	9%
Share of Units	11.9	1.1
10-Year Population/Nonres. Vehicle Trips I	14,929	17,108
Units per 1,000 Persons/Vehicle Trips	**0.80**	**0.06**

Cost Analysis	Residential	Nonresidential
Units per 1,000 Persons/Vehicle Trips	0.80	0.06
Average Cost per Unit	$10,000	$10,000
Capital Cost per Person/Vehicle Trip	**$8**	**$1**

SHARE OF THE DEVELOPMENT IMPACT FEE STUDY

Under the Idaho enabling legislation, the Fire District is able to recover the cost of the study through the collection of future fees. An impact fee study must be completed every five years, so the study cost is compared to the five-year projected increase in population and nonresidential vehicle trips. As a result, the cost per person is $2 and the cost per vehicle trip is $1.

Figure 11. Share of the Development Impact Fee Study

Share of Study Cost	Residential Share	Nonresidential Share
$19,720	91%	9%

Residential Growth Share	Five-Year Population Increase	Capital Cost per Person
100%	10,208	$2

Nonresidential Growth Share	Five-Year Veh. Trip Increase	Capital Cost per Trip
100%	9,240	$1

FIRE IMPACT FEE CREDIT ANALYSIS

The district currently has an impact fee fund balance of $2,390,184, which requires consideration of a credit. As shown below in Figure 12, this balance accounts for 16 percent of the ten-year projected growth expenditures, resulting in a 16 percent credit of the impact fee.

Figure 12. Fire Impact Fee Credit Analysis

Fire Impact Fee Fee Credit	
Available Fund Balance	$2,390,184
10-Year Capital Plan	$14,677,000
Available Fund Balance % of Plan	**16%**

INPUT VARIABLES AND MAXIMUM SUPPORTABLE IMPACT FEES

Figure 13 provides a summary of the input variables (described in the chapter sections above) used to calculate the net cost per person and vehicle trip. The residential Fire Development Impact Fees are the product of persons per housing unit by type multiplied by the total net capital cost per person. For example, the single family maximum impact fee is $2,152 per unit ($758 per person x 2.84 persons per housing unit = $2,152, rounded). The nonresidential fees are the product of vehicle trips per 1,000 square feet multiplied by the net capital cost per nonresidential vehicle trip.

The Fire District Board may adopt fees that are less than the amounts shown. However, a reduction in impact fee revenue will necessitate an increase in other revenues, a decrease in planned capital expenditures, and/or a decrease in levels of service.

Figure 13. Star Fire Protection District Maximum Supportable Impact Fees

Fee Component	Cost per Person	Cost per Vehicle Trip
Fire Stations	$629	$51
Fire Apparatus	$263	$18
Fire Equipment	$8	$1
Impact Fee Study	$2	$1
Gross Total	$902	$71
Credit for Fund Balance (16%)	($144)	($11)
Net Total	**$758**	**$60**

Residential

Housing Type	Persons per Housing Unit	Maximum Supportable Fee	Current Fee	Increase/ (Decrease)
Residential (per housing unit)				
Single Family	2.84	**$2,152**	$809	$1,343
Multifamily	1.62	**$1,227**	$809	$418

Nonresidential

Development Type	Vehicle Trips per KSF	Maximum Supportable Fee	Current Fee	Increase/ (Decrease)
Nonresidential (per 1,000 square feet)				
Retail	14.06	**$839**	$380	$459
Office	5.42	**$323**	$380	($57)
Industrial	2.44	**$145**	$380	($235)
Institutional	9.76	**$582**	$380	$202

CASH FLOW PROJECTIONS FOR MAXIMUM SUPPORTABLE IMPACT FEE

This section summarizes the potential cash flow to the Fire District if the development impact fees are implemented at the maximum supportable amounts. The cash flow projections are based on the assumptions detailed in this chapter and the development projections discussed in Appendix B. Demographic Assumptions.

The summary provides an indication of the impact fee revenue generated by new development. Shown at the bottom of the figure, the maximum supportable fire impact fee is estimated to generate $12.5 million in revenue while there is a growth-related cost of $14.7 million. The revenue is able to mitigate 85 percent of growth-related costs. The remaining funding gap is the result of the credit for the existing impact fee fund balance and the impact fee program will be made whole with those funds.

Figure 14. Projected Revenue from Maximum Supportable Impact Fees

Infrastructure Costs for Fire Facilities

	Total Cost	Growth Cost
Fire Stations	$10,275,000	$10,275,000
Fire Apparatus	$4,275,000	$4,275,000
Fire Equipment	$127,000	$127,000
Impact Fee Study	$39,440	$39,440
Total Expenditures	**$14,716,440**	**$14,716,440**

Projected Development Impact Fee Revenue

		Single Family $2,152 per unit	Multifamily $1,227 per unit	Retail $839 per KSF	Office $323 per KSF	Industrial $145 per KSF	Institutional $582 per KSF
Year		Housing Units	Housing Units	KSF	KSF	KSF	KSF
Base	2023	6,494	556	223	102	204	246
1	2024	6,994	601	351	148	204	368
2	2025	7,494	646	416	176	253	438
3	2026	7,994	691	481	205	302	508
4	2027	8,494	736	546	233	351	577
5	2028	8,994	781	611	262	400	647
6	2029	9,494	826	676	290	449	717
7	2030	9,994	871	741	319	497	787
8	2031	10,494	916	806	347	546	857
9	2032	10,994	961	871	375	595	927
10	2033	11,494	1,006	936	404	644	997
Ten-Year Increase		5,000	450	713	302	439	750
Projected Revenue		$10,760,385	$551,931	$597,885	$97,644	$63,695	$436,652
						Projected Revenue =>	**$12,508,000**
						Projected Expenditures =>	**$14,716,000**
						Non-Impact Fee Funding =>	**$2,208,000**

In Figure 15, the summary provides an indication of the impact fee revenue generated by new development if the City of Eagle does not collect the fire impact fee on the behalf of Star Fire Protection District. In this scenario, due to the estimate development to occur in the City of Eagle that will be serviced by Star Far a significant funding gap occurs for needed capital expansion. Shown at the bottom of the figure, the maximum supportable fire impact fee is estimated to generate $8.2 million in revenue while there is a growth-related cost of $14.7 million. Based on the revenue potential, there would be $4.2 million in missed revenue if the impact fees are not collected in Eagle.

Figure 15. Projected Revenue from Maximum Supportable Impact Fees without Eagle Collection

Infrastructure Costs for Fire Facilities

	Total Cost	Growth Cost
Fire Stations	$10,275,000	$10,275,000
Fire Apparatus	$4,275,000	$4,275,000
Fire Equipment	$127,000	$127,000
Impact Fee Study	$39,440	$39,440
Total Expenditures	**$14,716,440**	**$14,716,440**

Projected Development Impact Fee Revenue

Year		Single Family $2,152 per unit	Multifamily $1,227 per unit	Retail $839 per KSF	Office $323 per KSF	Industrial $145 per KSF	Institutional $582 per KSF
		Housing Units	Housing Units	KSF	KSF	KSF	KSF
Base	2023	4,045	346	223	102	204	246
1	2024	4,356	374	351	148	204	368
2	2025	4,668	402	416	176	253	438
3	2026	4,979	430	481	205	302	508
4	2027	5,291	458	546	233	351	577
5	2028	5,602	486	611	262	400	647
6	2029	5,914	515	676	290	449	717
7	2030	6,225	543	741	319	497	787
8	2031	6,537	571	806	347	546	857
9	2032	6,848	599	871	375	595	927
10	2033	7,160	627	936	404	644	997
Ten-Year Increase		3,115	280	713	302	439	750
Projected Revenue		$6,702,542	$343,792	$597,885	$97,644	$63,695	$436,652
						Projected Revenue =>	**$8,242,000**
						Projected Expenditures =>	**$14,716,000**
						Non-Impact Fee Funding =>	**$6,474,000**

CAPITAL IMPROVEMENT PLAN

The following section provides a summary of the Capital Improvement Plans depicting growth-related capital demands. First, Figure 16 lists the projected growth over the next ten years in the Fire District. Overall, there is an estimated 71 percent increase in population (14,929 new residents) a 77 percent increase in housing development (5,450 new housing units) and a 251 percent increase in nonresidential development (3,398 new jobs and 1,935,000 square feet of development). Further details on the growth projections can be found in Appendix B. Demographic Assumptions

Figure 16. Ten-Year Growth Projections

		5-Year Increment						
	Base Year	***1***	***2***	***3***	***4***	***5***	***10***	**Total**
	2023	**2024**	**2025**	**2026**	**2027**	**2028**	**2033**	**Increase**
Population [1]	21,150	22,643	24,136	25,629	27,122	28,615	36,079	**14,929**
Housing Units by Type [1]								
Single Family	6,494	6,994	7,494	7,994	8,494	8,994	11,494	**5,000**
Multifamily	556	601	646	691	736	781	1,006	**450**
Total Housing Units	7,050	7,595	8,140	8,685	9,230	9,775	12,500	**5,450**
Jobs [1]								
Retail	474	721	834	948	1,061	1,174	1,740	**1,266**
Office	331	468	547	626	705	784	1,179	**848**
Industrial	321	321	398	474	551	627	1,011	**690**
Institutional	229	332	386	441	496	550	824	**595**
Total Jobs	1,355	1,842	2,165	2,489	2,812	3,136	4,753	**3,398**
Nonresidential Floor Area (1,000 sq. ft.) [2]								
Retail	223	340	393	446	500	553	819	**596**
Office	102	144	168	192	216	241	362	**260**
Industrial	204	204	253	302	351	400	644	**439**
Institutional	246	357	416	474	533	592	886	**640**
Total Floor Area	776	1,045	1,230	1,415	1,600	1,785	2,711	**1,935**
Vehicle Trips [2]								
Residential Subtotal	*51,939*	*55,948*	*59,957*	*63,966*	*67,975*	*71,984*	*92,027*	**40,088**
Nonresidential Subtotal	*6,593*	*9,538*	*11,111*	*12,685*	*14,259*	*15,832*	*23,701*	**17,108**
Total Vehicle Trips	58,532	65,486	71,068	76,651	82,234	87,816	115,729	**57,197**

[1] Source: Star Fire Protection District Population and Housing Estimates; ESRI Business Analyst; TischlerBise analysis
[2] Source: Institute of Transportation Engineers, Trip Generation, 2021

The Idaho Development Fee Act requires Capital Improvement Plans to be updated regularly, at least once every five years (Idaho Code 67-8208(2)). This report projects revenue and fees based on ten-year forecast in an effort to provide the public and elected officials with illustrative guidance of probable growth demands based on current trends however, per Idaho Code, it is expected that an update to all Capital Improvement Plans included in this study will occur within five years.

The development impact fee is based on capital improvement plans to accommodate future growth. To serve projected growth over the next ten years, the following infrastructure is planned:

- 23,980 square feet of new station space
- 7 new fleet units
- 13 new equipment units
- 2 updates to impact fee study (once every five years)
- $14.7 million growth-related costs

Additionally, there are replacement plans in the CIP that are not growth-related, thus not included in the impact fee study and not eligible for impact fee funding.

Figure 17. Capital Improvement Plan

10-Year Capital Improvement Plan	Need	Time Frame (Yrs)	Current Cost	Growth Related Cost
Station #55: Floating Feather	8,392 square feet	1 to 3	$3,000,000	$3,000,000
Station #52: Training Facility & Engine Bay	3,000 square feet	2 to 5	$250,000	$250,000
Station #52: Training Facility Prop & Storage Container	1 unit	1 to 3	$25,000	$25,000
Station #58: Hwy 16 & Arie	8,392 square feet	3 to 10	$4,000,000	$4,000,000
Station #56: Purple Sage (50% split with Middleton)	4,196 square feet	7 to 10	$3,000,000	$3,000,000
Station #55 units: New Brush & Engine	2 units	1 to 8	$1,400,000	$1,400,000
Station #56 units: New Brush & Engine (50% split with Middleton)	2 units	7 to 10	$825,000	$825,000
Station #58 units: New Brush/Engine/Water Tender	3 units	7 to 10	$2,050,000	$2,050,000
SCBAs (6) for Station #55	6 units	1 to 3	$42,000	$42,000
SCBAs (6) for Station #58	6 units	7 to 10	$50,000	$50,000
New UTV for River Rescue	1 unit	2 to 3	$35,000	$35,000
Station #51 units: Replace Tender/Ladder/Brush	3 units	7 to 15	$2,700,000	$0
Station #52 units: Replace Engines/Brush	3 units	1 to 10	$2,150,000	$0
Replace Battalion Command (50% split with Middleton)	1 unit	2 to 3	$70,000	$0
Replace Command 2017 Chevy 502	1 unit	3 to 5	$65,000	$0
Replace Command 2022 Chevy 501	1 unit	5 to 10	$80,000	$0
		Total	**$19,742,000**	**$14,677,000**

FUNDING SOURCES FOR CAPITAL IMPROVEMENTS

In determining the proportionate share of capital costs attributable to new development, the Idaho Development Fee Act states that local governments must consider historical, available, and alternative sources of funding for system improvements (Idaho Code 67-8209(2)). Currently, there are no other dedicated revenues being collected by the Fire District to fund growth-related projects. However, there is an existing balance in the Fire District's impact fee fund which has been set aside for future expansions in the CIP. A credit is included in the impact fee analysis to account for the balance's share of the future CIP.

PROPORTIONATE SHARE ANALYSIS

Development impact fees for Star Fire Protection District are based on reasonable and fair formulas or methods. The fees do not exceed a proportionate share of the costs incurred or to be incurred by the District in the provision of system improvements to serve new development. The District will fund non-growth-related improvements with non-development impact fee funds as it has in the past. Specified in the Idaho Development Impact Fee Act (Idaho Code 67-8207), several factors must be evaluated in the development impact fee study and are discussed below.

1) The development impact fees for Star Fire Protection District are based on new growth's share of the costs of previously built projects along with planned public facilities as provided by the Fire District. Projects are included in the District's capital improvements plan and will be included in annual capital budgets.
2) TischlerBise estimated development impact fee revenue based on the maximum supportable development impact fees for the one, districtwide service area; results are shown in the cash flow analyses in this report. Existing and future development impact fee revenue will entirely fund growth-related improvements.
3) TischlerBise has evaluated the extent to which new development may contribute to the cost of public facilities.
4) The relative extent to which properties will make future contributions to the cost of existing public facilities has also been evaluated in regards to existing debt.
5) The District will evaluate the extent to which newly developed properties are entitled to a credit for system improvements that have been provided by property owners or developers. These "site-specific" credits will be available for system improvements identified in the annual capital budget and long-term Capital Improvement Plans. Administrative procedures for site-specific credits should be addressed in the development impact fee ordinance.
6) Extraordinary costs, if any, in servicing newly developed properties should be addressed through administrative procedures that allow independent studies to be submitted to the District. These procedures should be addressed in the development impact fee ordinance.
7) The time-price differential inherent in fair comparisons of amounts paid at different times has been addressed. All costs in the development impact fee calculations are given in current dollars with no assumed inflation rate over time. Necessary cost adjustments can be made as part of the annual evaluation and update of development impact fees.

IMPLEMENTATION AND ADMINISTRATION

The Idaho Development Impact Fee Act (hereafter referred to as the Idaho Act) requires jurisdictions to form a Development Impact Fee Advisory Committee (DIFAC). The committee must have at least five members with a minimum of two members active in the business of real estate, building, or development. The committee acts in an advisory capacity and is tasked to do the following:

- Assist the governmental entity in adopting land use assumptions;
- Review the capital improvements plan, and proposed amendments, and file written comments;
- Monitor and evaluate implementation of the capital improvements plan;
- File periodic reports, at least annually, with respect to the capital improvements plan and report to the governmental entity any perceived inequities in implementing the plan or imposing the development impact fees; and
- Advise the governmental entity of the need to update or revise land use assumptions, the capital improvements plan, and development impact fees.

Furthermore, it is the collecting jurisdiction that is required to form the DIFAC. In this case, Star Fire Protection Impact Fees will be collected by the City of Star, City of Middleton, Canyon County, Gem County, and Ada County. Thus, those jurisdictions will form separate DIFACs.

Per the above, each jurisdiction has formed a DIFAC. TischlerBise has met with each DIFAC during the process and provided information on land use assumptions, level of service and cost assumptions, and draft development impact fee schedules. This report reflects comments and feedback received from the DIFACs.

The Fire District must develop and adopt a capital improvements plan (CIP) that includes those improvements for which fees were developed. The Idaho Act defines a capital improvement as an "improvement with a useful life of ten years or more, by new construction or other action, which increases the service capacity of a public facility." Requirements for the CIP are outlined in Idaho Code 67-8208. Certain procedural requirements must be followed for adoption of the CIP and the development impact fee ordinance. Requirements are described in detail in Idaho Code 67-8206. The Fire District has a CIP that meets the above requirements.

TischlerBise recommends that development impact fees be updated annually to reflect recent data. One approach is to adjust for inflation in construction costs by means of an index like the RSMeans or Engineering News Record (ENR). This index can be applied against the calculated development impact fee. If cost estimates change significantly the Fire District should evaluate an adjustment to the CIP and development impact fees.

Idaho's enabling legislation requires an annual development impact fees report that accounts for fees collected and spent during the preceding year (Idaho Code 67-8210). Development impact fees must be deposited in interest-bearing accounts earmarked for the associated capital facilities as outlined in capital improvements plans. Also, fees must be spent within eight years of when they are collected (on a first in, first out basis) unless the local governmental entity identifies in writing (a) a reasonable cause why the fees should be held longer than eight years; and (b) an anticipated date by which the fees will be expended but in no event greater than eleven years from the date they were collected.

Credits must be provided for in accordance with Idaho Code Section 67-8209 regarding site-specific credits or developer reimbursements for system improvements that have been included in the development impact fee calculations. Project improvements normally required as part of the development approval process are not eligible for credits against development impact fees. Specific policies and procedures related to site-specific credits or developer reimbursements for system improvements should be addressed in the ordinance that establishes the fees.

The general concept is that developers may be eligible for site-specific credits or reimbursements only if they provide system improvements that have been included in CIP and development impact fee calculations. If a developer constructs a system improvement that was included in the fee calculations, it is necessary to either reimburse the developer or provide a credit against the fees in the area that benefits from the system improvement. The latter option is more difficult to administer because it creates unique fees for specific geographic areas. Based on TischlerBise's experience, it is better for a reimbursement agreement to be established with the developer that constructs a system improvement. For example, if a developer elects to construct a system improvement, then a reimbursement agreement can be established to payback the developer from future development impact fee revenue. The reimbursement agreement should be based on the actual documented cost of the system improvement, if less than the amount shown in the CIP. However, the reimbursement should not exceed the CIP amount that has been used in the development impact fee calculations.

APPENDIX A. LAND USE DEFINITIONS

- **Single Family:**
    1. Single family detached is a one-unit structure detached from any other house, that is, with open space on all four sides. Such structures are considered detached even if they have an adjoining shed or garage. A one-family house that contains a business is considered detached as long as the building has open space on all four sides.
    2. Single family attached (townhouse) is a one-unit structure that has one or more walls extending from ground to roof separating it from adjoining structures. In row houses (sometimes called townhouses), double houses, or houses attached to nonresidential structures, each house is a separate, attached structure if the dividing or common wall goes from ground to roof.
    3. Mobile home includes both occupied and vacant mobile homes, to which no permanent rooms have been added. Mobile homes used only for business purposes or for extra sleeping space and mobile homes for sale on a dealer's lot, at the factory, or in storage are not counted in the housing inventory.
- **Multifamily:**
    1. 2+ units (duplexes and apartments) are units in structures containing two or more housing units, further categorized as units in structures with “2 or more units.”
    2. Boat, RV, Van, etc. includes any living quarters occupied as a housing unit that does not fit the other categories (e.g., houseboats, railroad cars, campers, and vans). RVs, boats, vans, and the like are included only if they are occupied as a current place of residence.

Nonresidential development categories used throughout this study are based on land use classifications from the book *Trip Generation* (ITE, 2021). A summary description of each development category is provided below.

- **Retail:** Establishments primarily selling merchandise, eating/drinking places, and entertainment uses. By way of example, *Retail* includes shopping centers, supermarkets, pharmacies, restaurants, bars, nightclubs, automobile dealerships, movie theaters, and lodging (hotel/motel).
- **Office:** Establishments providing management, administrative, professional, or business services. By way of example, *Office* includes banks, business offices.
- **Industrial:** Establishments primarily engaged in the production and transportation of goods. By way of example, *Industrial* includes manufacturing plants, trucking companies, warehousing facilities, utility substations, power generation facilities, and telecommunications buildings.
- **Institutional:** Public and quasi-public buildings providing educational, social assistance, or religious services. By way of example, *Institutional* includes schools, universities, churches, daycare facilities, hospitals, health care facilities, and government buildings.

APPENDIX B. DEMOGRAPHIC ASSUMPTIONS

POPULATION AND HOUSING CHARACTERISTICS

Impact fees often use per capita standards and persons per housing unit or persons per household to derive proportionate share fee amounts. Housing types have varying household sizes and, consequently, a varying demand on District infrastructure and services. Thus, it is important to differentiate between housing types and size.

When persons per housing unit (PPHU) is used in the development impact fee calculations, infrastructure standards are derived using year-round population. In contrast, when persons per household (PPHH) is used in the development impact fee calculations, the fee methodology assumes all housing units will be occupied, thus requiring seasonal or peak population to be used when deriving infrastructure standards. TischlerBise recommends that fees for residential development in Star Fire Protection District be imposed according to persons per housing unit.

Based on housing characteristics, TischlerBise recommends using two housing unit categories for the Impact Fee study: (1) Single Family and (2) Multifamily. Each housing type has different characteristics which results in a different demand on District facilities and services.

The boundaries of the Fire District are not contiguous with available US Census geographies. In this case, geographies have been chosen that best represent the demographics of each area. The estimates in Figure 18 are for PPHU calculations for Star Fire District. Base year population and housing units are estimated with another, more recent data source.

The U.S Census Tracts comprising Star Fire Protection District were selected for estimates to provide a better sample of demographics in the Star Fire Protection District. As a result, single family units have a household size of 2.84 persons and multifamily units have a household size of 1.62 persons. Additionally, there is a housing mix of 92 percent single family and 8 percent multifamily.

Figure 18. Persons per Housing Unit – Star Fire Protection District

Housing Type	Persons	Housing Units	Persons per Housing Unit	Households	Persons per Household	Housing Unit Mix
Single Family [1]	17,007	5,978	**2.84**	5,899	2.88	92%
Multifamily [2]	831	512	**1.62**	368	2.26	8%
Total	17,838	6,490	**2.75**	6,267	2.85	

[1] Includes attached and detached Single Family homes and mobile homes
[2] Includes all other types
Source: U.S. Census Bureau, 2021 American Community Survey 5-Year Estimates

BASE YEAR HOUSING UNITS AND POPULATION

Base year population is derived from Star Fire Protection District Population and Housing Growth estimate data provided by the district. Based off of this data, the base year population estimate for Star Fire Protection District is 21,150. PPHU data shown in Figure 18 is used to convert the district provided housing unit estimate of 7,050 units into single family and multifamily housing units.

Figure 19. Base Year Housing Units and Population

Star Fire Protection District	Base Year 2023
Population [1]	21,150
Housing Units [2]	
Single Family	6,494
Multifamily	556
Total Housing Units	7,050

[1] Star Fire Protection District Population Estimate
[2] Star Fire Protection District Housing Estimate, TischlerBise analysis

NEW RESIDENTIAL CONSTRUCTION TREND

To illustrate residential development trends in the district, Figure 20 lists the past five years of new construction in Star Fire Protection District. The Fire District provides service to areas in Canyon County, Gem County, and Ada County. Housing growth estimates provided by the Fire District were analyzed to calculate the annual totals.

As seen in Figure 20, over the past five years in the Star Fire Protection District there has been a total of 2,723 housing units added with 2,500 being single family homes and 223 being multifamily homes. This leads to a five-year average of 545 housing units added annually.

Figure 20. Annual New Construction Estimates by Housing Type – Star Fire Protection District

Housing Type	2018	2019	2020	2021	2022	Total	5-Year Average
Single Family	265	314	599	757	565	2,500	**500**
Multifamily	0	24	0	199	0	223	**45**
Total	265	338	599	956	565	2,723	**545**

Source: Star Fire Protection District Growth Projections; Ada County Assessor
[1] Includes attached and detached single family homes and mobile homes
[2] Includes all other types

HOUSING UNIT AND POPULATION PROJECTIONS

Past housing construction trends are assumed to continue through the next ten years. The five-year annual average totals are included in the projections to estimate housing growth in the Fire District. Population growth is estimated based on housing development and PPHU by housing type. As a result, there are 5,450 new housing units projected in the Fire District over the next ten years, 5,000 units single family and 450 units multifamily. Based on the housing development, the population in the Fire District is estimated to grow by 14,929 residents or 70.6 percent.

Figure 21. Residential Development Projections

Star Fire Protection District	Base Year 2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Total Increase
Population [1]	21,150	22,643	24,136	25,629	27,122	28,615	30,108	31,601	33,093	34,586	36,079	**14,929**
Percent Increase		*7.1%*	*6.6%*	*6.2%*	*5.8%*	*5.5%*	*5.2%*	*5.0%*	*4.7%*	*4.5%*	*4.3%*	***70.6%***
Housing Units [2]												
Single Family	6,494	6,994	7,494	7,994	8,494	8,994	9,494	9,994	10,494	10,994	11,494	**5,000**
Multifamily	556	601	646	691	736	781	826	871	916	961	1,006	**450**
Total Housing Units	7,050	7,595	8,140	8,685	9,230	9,775	10,320	10,865	11,410	11,955	12,500	**5,450**

[1] Population projections are based on housing growth and PPHU factors

[2] Housing projections are based on building permit trends

CURRENT EMPLOYMENT AND NONRESIDENTIAL FLOOR AREA

The impact fee study will include nonresidential development as well. Utilizing ESRI Business Analyst data, 2023 total employment in the district is estimated at 1,355 jobs. ESRI Business Analyst profile data is used to breakdown this job total. Listed in Figure 22, there are an estimated 474 retail jobs, 331 office jobs, 321 industrial jobs, and 229 institutional jobs located in the district.

To estimate the nonresidential floor area, employee density factors from the Institute of Transportation Engineers (ITE) *Trip Generation* Manual (2021) are applied to job estimates. Figure 23 lists the land use type and density factors that are included in the analysis. Overall, there are 775,711 square feet estimated in the district. Institutional and retail development make up the majority of this with a combined 61 percent of the total floor area.

Figure 24 lists the average nonresidential construction in square feet over the last 5 years. This average will be used for employment and floor area projections after 2024. Currently approved is an estimated 269,000 square feet of nonresidential floor area which will be applied to the year 2024 projections.

Figure 22. Base Year Employment and Nonresidential Floor Area

Employment Industries	Base Year Jobs [1]	Sq. Ft. per job [2]	Floor Area (sq. ft.)	Percent of Total
Retail	474	471	223,254	29%
Office	331	307	101,617	13%
Industrial	321	637	204,477	26%
Institutional	229	1,076	246,363	32%
Total	**1,355**		**775,711**	**100%**

[1] ESRI Business Analyst

[2] Source: *Trip Generation* , Institute of Transportation Engineers, 11th Edition (2021)

Figure 23. Institute of Transportation Engineers (ITE) Employment Density Factors

Employment Industry	ITE Code	Land Use	Demand Unit	Emp per Dmd Unit	Sq. Ft. per Emp
Retail	820	Shopping Center	1,000 Sq Ft	2.12	471
Office	710	General Office	1,000 Sq Ft	3.26	307
Industrial	110	Light Industrial	1,000 Sq Ft	1.57	637
Institutional	520	Elementary School	1,000 Sq Ft	0.93	1076

Source: *Trip Generation* , Institute of Transportation Engineers, 11th Edition (2021)

Figure 24. Annual Nonresidential Construction Estimates

Non-residential Construction	2019	2020	2021	2022	2023 est.	Total	5-Year Average
Total Sq. Ft.	16,781	187,993	215,400	236,637	269,000	925,811	185,162

Source: Star Fire Protection District Growth Projections

EMPLOYMENT AND NONRESIDENTIAL FLOOR AREA PROJECTIONS

Job and nonresidential floor area projections for the next ten years are provided in Figure 25. Job growth is projected using commercial building permit data provided by the Fire District. Over the next ten years there is a projected increase of 3,398 jobs in the district, a 251 percent increase from the base year. Retail and institutional developments account for the greatest share of the increase.

Job growth is converted into nonresidential floor area using the ITE square feet per employee averages shown in Figure 23. Over the next ten years, the nonresidential floor area is projected to increase by approximately 1.9 million square feet, a 249 percent increase from the base year.

Figure 25. Employment and Nonresidential Floor Area Projections

Star Fire Protection District	Base Year 2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Total Increase
Jobs [1]												
Retail	474	721	834	948	1,061	1,174	1,287	1,400	1,513	1,626	1,740	**1,266**
Office	331	468	547	626	705	784	863	942	1,021	1,100	1,179	**848**
Industrial	321	321	398	474	551	627	704	781	857	934	1,011	**690**
Institutional	229	332	386	441	496	550	605	660	714	769	824	**595**
Total	1,355	1,842	2,165	2,489	2,812	3,136	3,459	3,782	4,106	4,429	4,753	**3,398**
Nonresidential Floor Area (1,000 sq. ft.) [2]												
Retail	223	340	393	446	500	553	606	659	713	766	819	**596**
Office	102	144	168	192	216	241	265	289	313	338	362	**260**
Industrial	204	204	253	302	351	400	449	497	546	595	644	**439**
Institutional	246	357	416	474	533	592	651	710	769	827	886	**640**
Total	776	1,045	1,230	1,415	1,600	1,785	1,971	2,156	2,341	2,526	2,711	**1,935**

[1] ESRI Business Analyst; TischlerBise analysis
[2] Source: Institute of Transportation Engineers, *Trip Generation* , 2021; Star Commercial Building Permit Data

VEHICLE TRIP GENERATION

RESIDENTIAL VEHICLE TRIPS BY HOUSING TYPE

A customized trip rate is calculated for the single family and multifamily units in the Star Fire Protection District. In Figure 26, the most recent data from the US Census American Community Survey is inputted into equations provided by the ITE to calculate the trip ends per housing unit factor. A single family unit is estimated to generate 11.72 trip ends and a multifamily unit is estimated to generate 6.83 trip ends on an average weekday.

Figure 26. Customized Residential Trip Ends by Housing Type

		Households by Structure Type[2]			
Tenure by Units in Structure	Vehicles Available[1]	Single Family	Multifamily	Total	Vehicles per HH by Tenure
Owner-Occupied	13,222	5,524	0	5,524	2.39
Renter-Occupied	1,490	375	368	743	2.01
Total	14,713	5,899	368	6,267	2.35
Housing Units[3]		5,978	512	6,490	

Housing Type	Persons in Households[4]	Trip Ends[5]	Vehicles by Type of Unit	Trip Ends[6]	Average Trip Ends	Local Trip Ends per HH	National Trip Ends per Unit[7]
Single Family	17,007	47,286	13,956	90,956	69,121	**11.72**	9.43
Multifamily	831	1,822	740	3,208	2,515	**6.83**	4.54
Total	17,838	49,108	14,696	94,163	71,635	**11.43**	

1. Vehicles available by tenure from Table B25046, 2020 American Community Survey 5-Year Estimates.
2. Households by tenure and units in structure from Table B25032, 2020 American Community Survey 5-Year Estimates.
3. Housing units from Table B25024, 2020 American Community Survey 5-Year Estimates.
4. Total population in households from Table B25033, 2020 American Community Survey 5-Year Estimates.
5. Vehicle trips ends based on persons using formulas from Trip Generation (ITE 2021). For single-family housing (ITE 210), the fitted curve equation is EXP(0.89*LN(persons)+1.72). To approximate the average population of the ITE studies, persons were divided by 30 and the equation result multiplied by 30. For multi-family housing (ITE 221), the fitted curve equation is (2.29*persons)-81.02 (ITE 2017).
6. Vehicle trip ends based on vehicles available using formulas from ITE Trip Generation. For single-family housing (ITE 210), the fitted curve equation is EXP(0.99*LN(vehicles)+1.93) [ITE 2017]. To approximate the average number of vehicles in the ITE studies, vehicles available were divided by 54 and the equation result multiplied by 54. For multifamily housing (ITE 220), the fitted curve equation is (3.94*vehicles)+293.58 [ITE 2012].
7. Trip Generation, Institute of Transportation Engineers, 11th Edition (2021).

Residential Vehicle Trips Adjustment Factors

A vehicle trip end is the out-bound or in-bound leg of a vehicle trip. As a result, so to not double count trips, a standard 50 percent adjustment is applied to trip ends to calculate a vehicle trip. For example, the out-bound trip from a person's home to work is attributed to the housing unit and the trip from work back home is attributed to the employer.

However, an additional adjustment is necessary to capture District residents' work bound trips that are outside of the district. The trip adjustment factor includes two components. According to the National Household Travel Survey, home-based work trips are typically 31 percent of out-bound trips (which are 50 percent of all trip ends). Also, utilizing the most recent data from the Census Bureau's web application "OnTheMap", 95 percent of Star workers travel outside the district for work. In combination, these factors account for 15 percent of additional production trips (0.31 x 0.50 x 0.95 = 0.15). Shown in Figure 27, the total adjustment factor for residential housing units includes attraction trips (50 percent of trip ends) plus the journey-to-work commuting adjustment (15 percent of production trips) for a total of 65 percent.

Figure 27. Residential Trip Adjustment Factor for Commuters

Employed Star Residents (2020)	4,369
Residents Working in Star (2020)	199
Residents Commuting Outside of Star for Work	4,170
Percent Commuting Out of Star	95%
Additional Production Trips	**15%**

Standard Trip Adjustment Factor	**50%**
Residential Trip Adjustment Factor	**65%**

Source: U.S. Census, OnTheMap Application, 2020

NONRESIDENTIAL VEHICLE TRIPS

Vehicle trip generation for nonresidential land uses are calculated by using ITE's average daily trip end rates and adjustment factors found in their recently published 11th edition of *Trip Generation*. To estimate the trip generation in the Star Fire Protection District, the weekday trip end per 1,000 square feet factors listed in Figure 28 are used.

Figure 28. Institute of Transportation Engineers Nonresidential Factors

Employment Industry	ITE Code	Land Use	Demand Unit	Wkdy Trip Ends per Dmd Unit	Wkdy Trip Ends per Employee
Retail	820	Shopping Center	1,000 Sq Ft	37.01	17.42
Office	710	General Office	1,000 Sq Ft	10.84	3.33
Industrial	110	Light Industrial	1,000 Sq Ft	4.87	3.10
Institutional	520	Elementary School	1,000 Sq Ft	19.52	21.00

Source: *Trip Generation* , Institute of Transportation Engineers, 11th Edition (2021)

For nonresidential land uses, the standard 50 percent adjustment is applied to office, industrial, and institutional. A lower vehicle trip adjustment factor is used for retail because this type of development attracts vehicles as they pass-by on arterial and collector roads. For example, when someone stops at a convenience store on their way home from work, the convenience store is not their primary destination.

In Figure 29, the Institute for Transportation Engineers' land use code, daily vehicle trip end rate, and trip adjustment factor is listed for each land use.

Figure 29. Daily Vehicle Trip Factors

Land Use	ITE Codes	Daily Vehicle Trip Ends	Trip Adj. Factor	Daily Vehicle Trips
Residential (per housing unit)				
Single Family	210	11.72	65%	7.62
Multifamily	220	6.83	65%	4.44
Nonresidential (per 1,000 square feet)				
Retail	820	37.01	38%	14.06
Office	710	10.84	50%	5.42
Industrial	110	4.87	50%	2.44
Institutional	520	19.52	50%	9.76

Source: *Trip Generation* , Institute of Transportation Engineers, 11th Edition (2021); 'National Household Travel Survey, 2009

VEHICLE TRIP PROJECTIONS

The base year vehicle trip totals and vehicle trip projections are calculated by combining the vehicle trip end factors, the trip adjustment factors, and the residential and nonresidential assumptions for housing stock and floor area. Districtwide, residential land uses account for 51,939 vehicle trips and nonresidential land uses account for 6,593 vehicle trips in the base year (Figure 30).

Through 2033, it is projected that daily vehicle trips will increase by 57,196 trips with the majority of the growth being generated by single family (67 percent) and retail (15 percent) development which leads to a 98 percent increase in vehicle trips from the base year through 2033.

Figure 30. Star Fire Protection District Vehicle Trip Projections

Star Fire Protection District	Base Year 2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Total Increase
Residential Trips												
Single Family	49,470	53,280	57,089	60,898	64,707	68,516	72,325	76,134	79,943	83,752	87,561	**38,091**
Multifamily	2,469	2,668	2,868	3,068	3,267	3,467	3,667	3,867	4,067	4,266	4,466	**1,997**
Subtotal	51,939	55,948	59,957	63,966	67,975	71,984	75,992	80,001	84,010	88,019	92,027	**40,088**
Nonresidential Trips												
Retail	3,140	4,778	5,528	6,277	7,027	7,776	8,526	9,275	10,025	10,774	11,523	**8,384**
Office	551	778	910	1,041	1,173	1,304	1,436	1,567	1,699	1,830	1,962	**1,411**
Industrial	498	498	617	736	854	973	1,092	1,211	1,330	1,449	1,568	**1,070**
Institutional	2,405	3,483	4,057	4,631	5,205	5,779	6,353	6,927	7,501	8,075	8,649	**6,244**
Subtotal	6,593	9,538	11,111	12,685	14,259	15,832	17,406	18,980	20,554	22,127	23,701	**17,108**
Vehicle Trips												
Grand Total	58,532	65,486	71,068	76,651	82,234	87,816	93,399	98,981	104,564	110,146	115,729	**57,196**

Source: Institute of Transportation Engineers, *Trip Generation* , 11th Edition (2021)

CITY OF STAR

RESOLUTION NO. 2023-006

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF STAR:

- **Making certain findings; and**
- **Adopting the Capital Improvement Plan and Development Impact Fee Study submitted to: Star Fire Protection District August 23, 2023; and**
- **Directing the City Clerk; and**
- **Setting an Effective Date.**

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Star:

Section 1: Findings

It is hereby found by the City Council of the City of Star that:

1.1 The City Council has enacted the *Star Fire Protection District Development Impact Fee Ordinance* codified as Article A of Chapter 3 Title 7 Star City Code (the "Fire District Impact Fee Ordinance") which established development impact fees for the Star Fire Protection District (the "Fire District"); and

1.2 As a part of the City Council's process pursuant to the Fire District Impact Fee Ordinance, the City Council approved the following capital improvement plan: the *Star Fire Protection District Idaho Impact Fee Study and Capital Improvement Plan amended June 2020*; and

1.3 The City of Star has formed pursuant to Star City Code Section 7-3A-16 a joint advisory committee with the Fire District which services in an advisory capacity to review the capital improvements plan, propose amendments of the plan when there is a need to update or revise land use assumptions, the capital improvements plan, and development impact fees (I.C. § 67-8205 (4); and

1.4 The Fire District joint advisory committee has recommended and submitted to the Board the following updated and revised fire district capital improvements plan: *Capital Improvement Plan and Development Impact Fee Study Submitted to Star Fire Protection District August 23, 2023,* (the "Updated Capital Improvements Plan") which has been prepared in accordance with the requirements of Idaho Code § 67-8208 in consultation with the Advisory Committees as provided in Idaho Code §§ 67-8205 and 67-8206(2): and

1.5 Prior to the adoption of the Updated Capital Improvements Plan, the Fire District Board of Commissioners and the City Council, in accordance with Idaho Code § 67-8206(3), have published notice, and the Fire District's Board of Commissioners and the City Council of the City of Star held public hearings; and

1.6 The Capital Improvements Plan contains all the necessary contents of a capital improvements plan as provided in the Act by Idaho Code § 67-8208; and

1.7 Fire District's Board of Commissioners and the City Council of the City of Star have concluded all of its process for the adoption of the Capital Improvements Plan as required in the Act by Idaho Code §§ 67-8205 and 67-8206(3); and

1.8 The Fire District's Board of Commissioners and the City Council of the City of Star have determined that it is in the best interests of the residents, persons and property within the city limits of the City of Star all of which is within the boundaries of the respective Fire District that the Updated Capital Improvements Plan be adopted and approved.

Section 2: Action of adoption of the Capital Improvements Plan

2.1 The City Council of the City of Star does hereby adopt the Updated Capital Improvements Plan, a true and correct copy of which is attached hereto and marked **Exhibit A** and by this reference incorporated herein.

Section 3: Direction to City Clerk.

3.1 The City Clerk is hereby directed to retain this resolution in the official records of the City Council of the City of Star and to provide a certified copy of this resolution to the City Attorney, and the Secretary of the Star Fire Protection District.

Section 4: Effective Date.

4.1 This Resolution shall be in full force and effect after its passage and approval.

ADOPTED by the City Council of the City of Star

APPROVED:

Dated: _____, 2023 Signed: _____
Trevor A. Chadwick, Mayor

ATTEST:
I certify that the above Resolution was duly adopted by the City Council of the City of Star on _____, 2023 by the following vote: *Ayes:* _____
Noes: _____
Absent: _____

By _____
Jacob Qualls, City Clerk

EXHIBIT A

Capital Improvement Plan and Development Impact Fee Study Submitted to Star Fire Protection District May 19, 2023

CITY OF STAR
Certification of Resolution 2023-006

STATE OF IDAHO)
: ss.
County of Ada)

I certify that this is a true and correct copy of Resolution 2023-006 an original record of the City Council of the City of Star, in the possession of Jacob Qualls, City Clerk.

Dated: _____

_____
Signature of Notary Public

My commission expires:_____

EXHIBIT A
CAPITAL IMPROVEMENTS PLAN

CITY OF STAR

RESOLUTION NO. 2023-007

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF STAR:

- **Making certain Findings;**
- **Approving and authorizing the Mayor and the City Clerk to execute on behalf of the City Council that certain agreement with the Star Fire Protection District entitled "*City of Star and Star Fire Protection District Second Amended and Reformed Intergovernmental Agreement and Joint Powers Agreement for the Collection and Expenditure of Development Impact Fees for Fire District Systems Improvements";***
- **Directing the City Clerk; and**
- **Setting an Effective Date.**

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Star:

Section 1: Findings

It is hereby found by the City Council that:

1.1 As provided in Idaho Code § 31-1417, the Star Fire Protection District ("Fire District") Board of Commissioners has the discretionary authority to manage and conduct the business and affairs of the Fire District and to make and execute all necessary contracts and to adopt such rules and regulations as may be necessary to carry out their duties and responsibilities; and

1.2 Considerable growth within the City of Star ("City") continues to have impact upon the Fire District's ability to service that new growth with the same level of service in reliance upon existing District income sources; and

1.3 The Fire District has negotiated with the City Council of the City to use the City's ordinance authority to impose a development impact fee for the Fire District's Systems Improvements; and

1.4 As a necessary part of the process of establishing a Fire District development impact fees in addition to the approval of an Ordinance by the City Council, pursuant to Idaho Code § 67-8204A, the Fire District has negotiated the following intergovernmental agreement with the City: *City of Star and Star Fire Protection District Second Amended and Reformed Intergovernmental Agreement and Joint Powers Agreement for the Collection and Expenditure of Development Impact Fees for Fire District Systems Improvements* (the

"Amended Intergovernmental Agreement"); and

1.5 Section 2 "Recitals" of the Amended Intergovernmental Agreement sets forth the authority, intentions, purposes, considerations and reasons for the City and the Fire District for to enter into the Amended Intergovernmental Agreement, and such Recitals are therefore by this reference incorporated herein as if set forth at length.

Section 2: Action authorizing the Mayor and City Clerk to execute the Intergovernmental Agreement

2.1 That the Mayor and City Clerk of this City are hereby authorized, as the agents of this City, to execute the Amended Intergovernmental Agreement, a true and correct copy of which is attached hereto and marked **Exhibit A** and by this reference incorporated herein, and thereby fully bind the City to its terms and conditions upon the same being approved and executed by the Fire District Board of Commissioners.

Section 3: Direction to City Clerk

3.1 The City Clerk is hereby directed to retain this resolution in the official records of the City Council and to provide a certified copy of this resolution to the Secretary of the Fire District and provide a copy to the City attorney.

Section 4: Effective Date

4.1 This Resolution shall be in full force and effect after its passage and approval.

ADOPTED by the City Council of the City of Star

APPROVED:

Dated: _____, 2023 Signed: _____
Trevor A. Chadwick, Mayor

ATTEST:
I certify that the above Resolution was duly adopted by the City Council of the City of Star on _____, 2023 by the following vote:

Ayes: _____
Noes: _____
Absent: _____

By _____
Jacob Qualls, City Clerk

EXHIBIT A

COUNTERPART	2 of 2

CITY OF STAR/STAR FIRE PROTECTION DISTRICT SECOND AMENDED AND REFORMED INTERGOVERNMENTAL AGREEMENT AND JOINT POWERS AGREEMENT FOR THE COLLECTION AND EXPENDITURE OF DEVELOPMENT IMPACT FEES FOR FIRE DISTRICT SYSTEMS IMPROVEMENTS

[Idaho Code §§ 67-8204A & 67-2328]

Parties to the Agreement:

City of Star	"**City**"	City Hall 10769 W. State Street Star, Idaho 83669
Star Fire Protection District	"**Fire District**"	11665 W State Street, Suite B Star, Idaho 83669

THIS AGREEMENT made effective the 6th day of December, 2023, by and between the Parties as herein this Agreement defined.

NOW, THEREFORE, in consideration of the mutual covenants and promises herein set forth, and for other good and valuable consideration hereby acknowledged by the Parties to this Agreement as having been received, the Parties hereby mutually promise, covenant, and agree as follows:

SECTION 1
DEFINITIONS

For all purposes of this Agreement, the following terms have the definitions as herein provided in this Section unless the context of the term clearly requires otherwise:

1.1 **Act:** Means and refers to the Idaho Development Impact Fee Act, Chapter 82, Title 67, Idaho Code as it may be amended or restated from time to time.

1.2 **Advisory Committee**: means and refers to the *City of Star/Star Fire Protection District Joint Development Impact Fee Advisory Standing Committee* formed and staffed by the City and the Fire District pursuant to Idaho Code § 67-8205 to prepare and recommend the Capital Improvements Plan and any amendments, revisions or updates of the same.

1.3 **Agreement:** means and refers to this *City of Star/Star Fire Protection District Second Amended and Reformed Intergovernmental Agreement and Joint Powers Agreement for the Collection*

and Expenditure of Development Impact Fees for Fire District Systems Improvements, which may be referred to and cited as the "Star Impact Fee Agreement".

1.4 Capital Improvements Plan: means and refers to the most recent Impact Fee Study and Capital Improvements Plan, adopted by the City and the Fire District pursuant to the Act which defines the Fire District's Service Area.

1.5 City: means and refers to the *City of Star*, Idaho, party to this Agreement.

1.6 COMPASS: means the *Community Planning Association of Southwest Idaho*, an Idaho non-profit association that serves as the metropolitan planning association for Ada City and Canyon City.

1.7 Costs: means and refers to the expense inclusive of attorney fees, publication costs, experts and/or consultant fees directly related to the performance of a covenant of this Agreement.

1.8 City: means and refers to City of Star.

1.9 Fire District: means and refers to *Star Fire Protection District*, party to this Agreement.

1.10 Fire District Board: Means and refers to the Board of Commissioners of the Fire District.

1.11 Ordinance: means and refers to the *Star Fire Protection District Development Impact Fee Ordinance* codified as Article A of Chapter 3 Title 7 Star City Code together with any amendments thereto approved subsequent to the date of this Agreement.

1.12 Original Agreement: means and refers to the *First Amended and Reformed Intergovernmental Agreement and Joint Powers Agreement for the Collection and Expenditure of Development Impact Fees for Fire District Systems Improvements* dated the September 16, 2020, by and between the City, and Fire District.

1.13 Party/Parties: means and refers to the City and/or the Fire District, as the Parties in this Agreement, depending upon the context of the term used in this Agreement.

1.14 Service Area: means and refers to a service area as defined in the Act at I.C. § 67-8203 (26).

1.15 System Improvements: Means and refers to capital improvements to public facilities designed to provide service to a service area as defined in the Act at Idaho Code § 67 8203(28).

1.16 Trust Fund: means and refers to the *City of Star/ Fire District Development Impact Fee Capital Projects Trust Fund* established by the Fire District pursuant to Section 7-3A-11 of the Ordinance, Chapter 3 of Title 25 Star Fire Protection District Policy Code, and pursuant to Idaho Code § 67-8210(1).

1.17 **All other definitions:** All other definitions of this Agreement are set forth in Section 7-3A-2 of the Ordinance and are herein included as separate definitions as if the same are set forth herein.

SECTION 2
RECITALS

The Parties recite and declare:

2.1 The Purpose of this Agreement is to facilitate the intent and purpose of the Capital Improvement Plan and the Ordinance, to promote and accommodate orderly growth and development, protect the public health, safety, and general welfare of the residents within the boundaries of the Fire District, and to further the best interest of the Parties; and

2.2 Idaho Code § 67-2328 authorizes public agencies in Idaho to exercise jointly any power, privilege, or authority authorized by the Idaho Constitution, statute, or charter. The Parties, each being a public agency, hereby agree to exercise jointly their respective powers, privileges, and authorities to accomplish the collection and expenditure of development impact fees in accordance with Title 67, Chapter 82 Idaho Code; and

2.3 The City is a governmental entity as defined in the Act at Idaho Code § 67-8203(14) and, as provided at Idaho Code § 67-8202(5), has ordinance authority to adopt a development impact fee ordinance whereas the Fire District does not have ordinance authority and cannot adopt a development impact fee ordinance; and

2.4 Idaho Code Section 67-8204A, provides that the City, and the Fire District, when affected by development, each have the authority to enter into an intergovernmental agreement with each other for the purpose of developing joint plans for capital improvements and to collect and expend development impact fees for the protection of public health, safety and general welfare of the residences within the boundaries of the City; and

2.5 Idaho Code § 67-8204A, provides that the City, when affected by development, has the authority to enter into an intergovernmental agreement with the Fire District for the purpose of agreeing to collect and expend development impact fees for System Improvements; and

2.6 The Fire District's duty and responsibility is to provide protection of property against fire and the preservation of life, and enforcement of any of the fire codes and other rules that are adopted by the state fire marshal; and

2.7 The Fire District's boundaries include all the area within the City, and the Fire District provides fire and emergency services within its boundaries; and

2.8 The City is experiencing and is affected by considerable growth and development; and

2.9 The purposes of the Act [Idaho Code § 67-8202] are as follows:

- Ensure that adequate public facilities are available to serve new growth and development;

- Promote orderly growth and development by establishing uniform standards by which local governments, such as the Parties, may require those who benefit from new growth and development pay [development impact fees] their proportionate share of the costs of new public facilities needed to serve that new growth and development; and

- Establish minimum standards for and authorize cities to adopt impact fee ordinances.

2.10 In anticipation and in consideration of the City Council adopting the Ordinance, which is intended to provide for the collection and expenditure of development impact fees for the Fire District, the Parties have established and appointed, pursuant to Idaho Code § 67-8205, the Advisory Committee; and

2.11 Fire District has provided the City with a Capital Improvements Plan prepared in accordance with the requirements of Idaho Code § 67-8208 in consultation with the Advisory Committee appointed as provided in Idaho Code §§ 67-8205 and 67 8206(2); and

2.12 Adoption of the Capital Improvements Plan by the City Council and the Fire District Board of Commissioners were in accordance with Idaho Code §§ 67-8206(3) and 67-8208(1) as applicable; and

2.13 This Agreement facilitates the intent and purposes of the Capital Improvements Plan and the Ordinance, is in the best interest of the Parties, promotes and accommodates orderly growth and development, and protects the public health, safety and general welfare of the residents within the City which are also within the boundaries of the Fire District; and

2.14 The Parties have determined it is necessary and desirable to enter into this Agreement.

SECTION 3
COVENANTS OF PERFORMANCE SPECIFIC TO THE FIRE DISTRICT

The Fire District shall, at all times:

3.1 Abide by the terms and conditions required of the Fire District as set forth in the Ordinance and any amendments to the same; and

3.2 Maintain and staff the position of Fire District Administrator to manage and perform the duties and responsibilities of the Fire District Administrator as set forth in the Ordinance including all determinations of extraordinary impact; and

3.3 Establish and maintain the Trust Fund which is in accordance with the terms and conditions of the Ordinance and the provisions of Idaho Code § 67-8210 and any amendment or recodification of the same; and

3.4 Pay the following costs:

3.4.1 Costs associated with the Advisory Committee review of the Capital Improvement Plan;

3.4.2 Costs of drafting and publication of the Ordinance and any amendment or repeal of the same as may be requested by the Fire District;

3.4.3 Costs of drafting of this Agreement and any amendment or termination of the same as may be requested by the Fire District;

3.4.4 Costs associated with the Fire District's performance of this Agreement;

3.4.5 Cost associated with an appeal of a claim of exemption;

3.4.6 Legal costs and fees of any action brought by a Fee Payer or Developer involving a determination of the Fire District under the provisions of the Ordinance; and

3.5 Be solely responsible for the Fire District's performance of the terms and conditions required of it by the Ordinance and by this Agreement.

3.6 The City shall form and Fire District shall staff the Advisory Committee to prepare and recommend the Capital Improvements Plan and any amendments, revisions or updates of the same.

3.6.1 **Advisory Committee Membership.** Members shall be appointed for a term of one year by the Fire District Board of Commissioners as provided in Idaho Code §§ 67-8205. Notice of these appointments shall be provided to the City Clerk within seven (7) days of any such appointment.

3.6.2 **Charge.** The Advisory Committee shall serve as an advisory committee to the City Council of the City and the Fire District Board, and is charged with the following responsibilities:

3.6.2.1 Assist the City and Fire District in adopting land use assumptions, review the Capital Improvements Plan, and monitor and evaluate implementation of the Capital Improvements Plan;

3.6.2.2 File with the Fire District Administrator and the City, at least annually, with respect to the Capital Improvements Plan a report of any perceived inequities in implementing the Capital Improvements Plan or imposing the Fire District Impact Fees;

3.6.2.3 Advise the City and to the Fire District Board of the need to update or revise land use assumptions, Capital Improvements Plan and Fire District Development Impact Fees; and

3.6.2.4 Fire District shall make available to the Advisory Committee, upon request, all financial and accounting information, professional reports in relation to other development and implementation of land use assumptions, the Capital Improvements Plan, and periodic updates of the Capital Improvements Plan.

3.6.2.5 The Advisory Committee reports directly to the City Council of the City and to the Fire District Board.

SECTION 4
COVENANTS OF PERFORMANCE SPECIFIC TO THE CITY

The City shall:

4.1 Approve and enact the Ordinance and maintain the same in full force and effect until amended and/or repealed in accordance with the provisions of this Agreement; and

4.2 Abide by the terms and conditions required of the City as set forth in the Ordinance and any amendments to the same, including the calculation and collection of Fire District Impact Fees in accordance with the terms of the Ordinance; and

4.3 Maintain and staff the position of the City to manage and perform the duties and responsibilities of the City as set forth in the Ordinance; and

4.4 Remit all Fire District Impact Fees collected by the City to the Fire District for deposit in the Trust Fund in accordance with the terms and conditions of the Ordinance and the provisions of Idaho Code § 67-8210; and

4.5 Be solely responsible for the City's performance of the terms and conditions required of it by the Ordinance and by this Agreement.

SECTION 5
ADMINISTRATIVE STAFFING

5.1 The administration and performance by the City of the Ordinance shall be under the direction of the City Clerk.

5.2 The administration and performance by the Fire District of the Ordinance shall be under the direction of the Fire District Administrator under the Ordinance.

SECTION 6
NOTICE AND DELIVERY OF DOCUMENTS

6.1 The contact information for purposes of notice to and/or the delivery of documents to the City is as follows:

6.1.1 By mail or hand delivery addressed to:

City of Star - City Clerk
10769 W. State Street
Star, Idaho 83669

6.1.2 By scanning, attaching and e-mailing to: jqualls@star.idaho.org

6.2 The contact information for purposes of notice to and/or the delivery of documents to the Fire District is as follows:

6.2.1 By mail or hand delivery addressed to:

Star Fire Protection District
Attention: Fire District Administrator
11665 W State Street, Suite B
Star, Idaho 83669

6.2.2 By scanning, attaching and e-mailing to: rward@starfirerescue.org

6.3 In the event either party has a change in the address and/or contact information provided for in this Section, notice of the same [using the form attached to this Agreement as *Appendix 1*] shall be provided to the other and upon acknowledgment of receipt of said notice, this section of the Agreement shall henceforth be amended.

SECTION 7
DELIVERY OF FIRE DISTRICT IMPACT FEES TO THE FIRE DISTRICT

7.1 **Remittance of Fees to Fire District.** Fire District Impact Fees collected by the City shall be delivered to the Fire District on a monthly basis.

7.2 **Administrative Fee**. The Fire District agrees to pay the City an administrative fee of Twenty and 00/100 Dollars ($20.00) per building permit for the calculation, collection, and remittance of Fire District Impact Fees performed by City staff. The City may deduct the administrative fee from Impact Fees collected by the City before remittance to the Fire District, and the Fire District shall reimburse said amount from its general fund to the Trust Fund, or the City may submit an invoice to the Fire District for the administrative fee and the Fire District will remit payment from its general fund.

SECTION 8
INDEMNIFICATION

8.1 To the extent permitted by law, Fire District shall defend, indemnify, and hold the City, its officers, agents, and employees harmless for all claims, losses, actions, damages, judgements, costs, expenses arising out of or in connection with any acts or omissions of Fire District related to the Ordinance, this Agreement, the assessment, collection and/or expenditure of impact fees provided by the Ordinance, and/or any claim involving the administration of impact fees as provided by this Agreement. In the event of such claim Fire District shall defend such allegations and Fire District shall bear all costs, fees, and expenses of such defense, including, but not limited to, all attorney fees and expenses, court costs, and expert witness fees and expenses. Such indemnification and reimbursement for defense shall be limited to only those claims, and only to the extent that Fire District itself could be liable under state and federal statutes, regulations, common law, and other law.

8.2 To the extent permitted by law, City shall defend, indemnify, and hold Fire District, its officers, agents, subcontractors, and employees harmless for injuries to persons or property resulting from the wrongful acts of City, its officers, agents, or employees in performing the duties described in this Agreement. Such indemnification and defense shall only be limited to those claims, and only to the extent that, City itself could be liable under state and federal statutes, regulations, common law, and other law. City's indemnification and defense of Fire District herein is further limited by all defenses, burdens of proof, immunities, and limitations on damages to which City would be entitled if the claims were asserted against City.

SECTION 9
SERVICE AREA

9.1 Idaho Code § 67-8203(26) provides that the Parties can identify a geographic area by an intergovernmental agreement in which specific public facilities [public safety facilities, for fire and emergency medical and rescue facilities Idaho Code § 67-8203(24)(f)] provide service to development within that geographic area on the basis of sound planning or engineering principles or both.

9.2 The adopted Capital Improvements Plan defines the Fire District's Service Area which includes area within the City of Star, within the City of Eagle west of the Eagle Fire Protection District, area within unincorporated Canyon and Ada Counties, and area within the City of Middleton east of the Middleton Rural Fire District, all of which are located within the boundaries of the Fire District.

SECTION 10
AMENDMENT and REFORMATION OF ORIGINAL AGREEMENT

10.1 This Agreement amends, reforms and supersedes the Original Agreement on the effective date as provided in Section 12.1 of this Agreement.

SECTION 11
AMENDMENT / TERMINATION

11.1 **Term.** This Agreement shall continue in force and effect perpetually from its execution date.

11.2 **Termination.** This Agreement may be terminated by either Party upon ninety (90) day notice in writing to the other Party. Upon termination, City shall remit all collected Fire District Impact Fees as provided in the Ordinance.

11.2.1 Any notice of intent to terminate shall include a proposal regarding repeal of the Ordinance.

11.2.2 No termination of this Agreement **or** repeal of the Ordinance can be retroactive and the Agreement and Ordinance shall remain in effect regarding any active accounts in the Trust Fund.

11.3 **Amendment.** This Agreement may be amended only by written agreement of the Parties.

SECTION 12
EFFECTIVE DATE

12.1 This Agreement is effective simultaneously with the effective date of the Ordinance.

SECTION 13
GENERAL PROVISIONS

13.1 **Third Party Beneficiaries:** Each Party to this Agreement intends that this Agreement shall not benefit or create any right or cause of action in or on behalf of any person or legal entity other than the Parties hereto and/or a Developer or Fee Payer affected by the Ordinance or the Agreement.

13.2 **Severability:** Should any term or provision of this Agreement or the application thereof to any person, parties or circumstances, for any reason be declared illegal or invalid, such illegality or invalidity shall not affect any other provision of this Agreement, and this Agreement shall be construed and enforced as if such illegal or invalid provision had not been contained herein.

13.3 **Counterparts:** This Agreement shall be executed by the Parties in two (2) counterparts, and each such counterpart shall be deemed an "original."

13.4 **Captions:** The subject headings of the paragraphs and subparagraphs of this Agreement are included for purposes of convenience only and shall not affect the construction or interpretation of any of its provisions.

13.5 **Choice of Law:** This Agreement shall be governed and interpreted by the laws of the State of Idaho.

13.6 **Assignment:** No Party may assign this Agreement or any interest therein.

IN WITNESS WHEREOF, the undersigned Parties have by action and/or authority of their Governing Bodies caused this Agreement to be executed and made it effective as hereinabove provided, this _____ day of _____, 2023.

DATED AND SIGNED this ___day of _____, 2023.

CITY OF STAR

By:_____
Trevor A. Chadwick, *Mayor*

ATTEST:

By:_____
Jacob Qualls, *City Clerk*
By: City Council Resolution No. _____

DATED AND SIGNED this _____ day of _____, 2023.

STAR FIRE PROTECTION DISTRICT

By: _____
Jared Joseph Moyle, Chairman/Commissioner

ATTEST:

By:_____
Robin Ward, District Administrator
By: Fire District Resolution No. _____

APPENDIX 1

Notice of Contact Information Change

FROM: _____
TO: _____
DATE: _____

NOTICE IS HEREBY GIVEN, pursuant to Section _____ of the **City of Star/Star Fire Protection District Intergovernmental Agreement and Joint Powers Agreement for the Collection and Expenditure of Development Impact Fees for Fire District Systems Improvements [Idaho Code § 67-8204A]**, dated _____, of the following *CHANGE IN CONTACT INFORMATION:*

***New* Contact Information is as follows:**

*Name/Entity:*_____
*Address:*_____
*Telephone:*_____ *Fax:*_____
*Email:*_____

_____
Signature (Authorized Agent)
*Title:*_____

Certificate of Service

I, the undersigned, hereby certify that on the _____ day of _____, 20_____, a true and correct copy of the above and foregoing NOTICE OF CONTACT INFORMATION CHANGE was served upon the following by the method indicated below:

City or Fire District
Address
City, State ZIP

- ☐ U.S. Mail
- ☐ Hand Delivery
- ☐ Facsimile
- ☐ Email

_____
for *City* or *Fire District*

Acknowledgement of Receipt by:

Name/Signature: _____ Date: _____

CITY OF STAR

RESOLUTION NO. 2023-008

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF STAR:

- **Making Certain Findings;**
- **Amending the *City of Star Comprehensive Plan* by the amendment of the *Public Services, Facilities, and Utilities* component by amending section 11.2.2 Public Safety/Fire Protection Comprehensive Plan by referencing the Star Fire Protection District Development Impact Fee Ordinance and intergovernmental agreement; and by the addition to the Comprehensive Plan as Appendix A the *Capital Improvement Plan and Development Impact Fee Study submitted to: Star Fire Protection District dated August 23, 2023*.**
- **Directing the City Clerk; and**
- **Setting an Effective Date.**

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Star:

Section 1: Findings

It is hereby found by the City Council of the City of Star that:

1.1 On June 7, 2022 the City Council of the City of Star last adopted by resolution amending and approving the current edition of the *City of Star Comprehensive Plan* (the "Comprehensive Plan") and since that date the City has entered into the *City of Star and Star Fire Protection District Second Amended and Reformed Intergovernmental Agreement and Joint Powers Agreement for the Collection and Expenditure of Development Impact Fees for Fire District Systems Improvements* and approved the *Capital Improvement Plan and Development Impact Fee Study Submitted to Star Fire Protection District August 23, 2023* (the "Star Updated Capital Improvement Plan"), and has amended various sections of the *Star Fire Protection District Impact Fee Ordinance* (Article A Chapter 3 of Title 7 Star City Code) (the "Ordinance") to update the provisions of the Ordinance to provide for development impact fees for the Star Fire Protection District, (the "Fire District"); and

1.2 The City is experiencing and is affected by considerable growth and development; and

1.3 The Star Fire Protection District provides fire protection and emergency medical services within the City; and

1.4 The Fire District has requested the City, pursuant to I.C. § 67-8204A, to enter into an amended and reformed intergovernmental agreement and to update the provisions of the Ordinance to provide for development impact fees for the Fire District; and

1.5 The *Idaho Development Impact Fee Act* (the "Act") codified at Chapter 82 of Title 67 Idaho Code provides for:

- the imposition, collection and expenditure of development impact fees in accordance with the provisions of the Act; and
- the promotion of orderly growth and development by establishing uniform standards by which local governments may require that those who benefit from new growth and development pay a proportionate share of the costs of new public facilities needed to serve new growth and development; and
- minimum standards for the adoption of development impact fee ordinances by governmental entities which are authorized to adopt ordinances; and
- The contents of a capital improvements plan and the process to be followed for the adoption of a capital improvements plan.

1.6 The City of Star is a governmental entity as defined in the Act at Idaho Code § 67-8203(14) and, as provided at Idaho Code § 67-8202(5), has ordinance authority to adopt a development impact fee ordinance whereas, the Fire District do not have ordinance authority and cannot adopt a development impact fee ordinance; and

1.7 The Act provides, at Idaho Code § 67-8204A, that the City when affected by growth and development, has the authority to enter into an intergovernmental agreement with the Fire District for the purpose of agreeing to collect and expend development impact fees for Fire District System Improvements; and

1.8 The Ordinance provides for and the City has established and appointed, pursuant to Idaho Code § 67-8205, a Development Impact Fee Advisory Committee for the Fire District development impact fees; and

1.9 The Star Fire Protection District retained TischlerBise Consulting, a qualified professional in the field of public administration, to review and revised and prepare a new and updated impact fee study and capital improvements plan in consultation with the Advisory Committee for the Star Rural Fire District (the "Star Advisory Committee"); and

1.10 The Star Advisory Committee has submitted to the City Council the Star Updated Capital Improvement Plan; which was prepared in accordance with the requirements of Idaho Code § 67-8208 in consultation with the Advisory Committee as provided in Idaho Code §§ 67-8205 and 67-8206(2); and

1.11 Prior to the adoption of the Star Updated Capital Improvements Plans, the City Council of the City of Star, in accordance with Idaho Code § 67-8206(3), has published notice and held a public hearing; and

1.12 The Star Updated Capital Improvement Plan contains all the necessary contents of a capital

improvements plan as provided in the Act by Idaho Code § 67-8208; and

1.13 The Fire District has concluded all of its process for the adoption of the Capital Improvements Plan as required in the Act by Idaho Code § 67-8205 and § 67-8206(3); and

1.14 The Act at I.C. § 67-8208 (1) provides that a governmental entity, such as the City, is required to undertake comprehensive planning pursuant to chapter 65, title 67, Idaho Code, (the "Local Planning Act"), is also required to prepare and adopt capital improvements plans according to the requirements contained in section 67-6509, Idaho Code, which shall be included as an element of the comprehensive plan.

1.15 The City Council has provided notice and held a public hearing, in accordance with section 67-6509, in consideration of the approval of the following amendments to the City of Star Comprehensive Plan:

Chapter 11 - Public Services, Facilities, and Utilities Component to read as follows:

11.2.2 Public Safety/Fire Protection

The Middleton/Star Fire Districts entered into a joint powers agreement to operate in a functional consolidation. Middleton/Star Fire District have combined administration to save both districts overhead costs. Middleton/Star operate as one operation saving both taxpayers in their respective taxing districts money by being more efficient with firefighting staff and coverage. The Middleton/Star Fire District currently operates out of three stations. Station 51 is located at 11665 W State Street in Star Idaho. Station 52 is Shining Bright into the Future - 2040 and beyond | 75 located at 22585 Kingsbury Road in the unincorporated area between Star and Middleton Idaho and Station 53 is located at 302 W Main Street in Middleton Idaho. All three stations are staffed daily with a minimum of a three-man engine company. The Middleton/Star Fire Personnel are certified Emergency Medical Technicians (EMT's) and respond on all emergency calls. In 2021, the Middleton/Star Fire Districts sa a 14% increase in call volume and are currently working on building two more fire station locations. New Station 55 will be located on Floating Feather Road, between Plummer and Pollard Roads. Station 56 will be located at 26476 Harvey Road in Middleton. Funding for the station in Star Idaho on Floating Feather Road will be accomplished through impact fees applied to all new housing and commercial units.

The City of Star is experiencing significant growth, which has and will continue to strain the resources and services provided by the Star Fire District. In response to this growth and to ensure that the Fire District can adequately serve both new developments and existing residents, the City of Star City Council has enacted the Star Fire Protection District

Impact Fee Ordinance. This ordinance imposes development impact fees for the Star Fire District pursuant to an intergovernmental agreement between the City and the Star Fire District. The specific fees are determined based on the approved capital improvement plan, as approved by the City Council. The *Idaho Development Impact Fee Act* mandates that this plan be included in the city's comprehensive plan. The City Council has approved the *Capital Improvement Plan and Development Impact Fee Study Submitted to Star Fire Protection District August 23, 2023*, is included in this Comprehensive Plan as Appendix A.

Funding for staffing the new station will be provided through new construction property tax increases. With the State of Idaho's limitations on new construction to be included in property tax as required by recent State of Idaho legislation, it is imperative that the building community come to the table with solutions on how to fund the Middleton/Star Fire District with future developments to maintain the level of public safety required by the city and fire district with future development.

The city has earned an ISO Rating Class ~~**4**~~ **3** (one is best.) The immediate surrounding area has an ISO rating of 8, 9 and 10. ISO is the insurance rating for the city. Rescue, vehicle extraction, and emergency medical services are provided within the district and the department is a participating organization in the Idaho State Homeland Security program. The Star Fire Department supports the North Star Land Use Map expansion. A portion of that land north of Oasis extended and west of Can-Ada Road is in the Middleton Fire District. Any development will be required to obtain approval for the fire district having jurisdiction.

1.16 The City Council has provided notice and held a public hearing in accordance with section 67-6509 and has made its findings of fact, conclusions of law, and order authorizing this resolution amending the City Comprehensive Plan.

Section 2: Action Amending the *City of Star Comprehensive Plan*.

2.1 That the *City of Star Comprehensive Plan* is amended to read as set forth in Section 1.15 of the Findings hereinabove stated.

2.2 That the City of Star Comprehensive Plan is amended by the inclusion of a new Appendix A the *Capital Improvement Plan and Development Impact Fee Study Submitted to Star Fire Protection District August 23, 2023*.

Section 3: Direction to City Clerk

3.1 The City Clerk is hereby directed to retain this resolution in the official records of the City and to provide a certified copy of this resolution to the District Officer of Administration

of the Star Fire Protection District; and to facilitate the inclusion of the above stated amendment in an updated edition of the *City of Star Comprehensive Plan*.

Section 4: Effective Date.

4.1 This Resolution shall be in full force and effect after its passage and approval.

ADOPTED by the City Council of the City of Star

APPROVED:

Dated: _____, 2023 Signed: _____
Trevor A. Chadwick, Mayor

ATTEST:
I certify that the above Resolution was duly adopted by the City Council of the City of Star on _____, 2023 by the following vote: *Ayes:* _____
Noes: _____
Absent: _____

By _____
Jacob Qualls, City Clerk

CITY OF STAR

Certification of Resolution _____

STATE OF IDAHO)
: ss.
County of Ada)

I certify that this is a true and correct copy of Resolution _____, an original record of the City of Star, in the possession of Jacob Qualls, City Clerk - Treasurer of the City of Star.

Dated: _____

_____
Signature

[seal]

APPENDIX D

CAPITAL IMPROVEMENTS PLAN
Capital Improvement Plan and Development Impact Fee Study submitted to: Star Rural Fire Protection District dated September 15, 2023

APPENDIX G

CAPITAL IMPROVEMENTS PLAN
Capital Improvement Plan and Development Impact Fee Study Submitted to Star Fire Protection District August 23, 2023

CITY OF STAR
Ada and Canyon Counties, Idaho
ORDINANCE No. 396-2023

AN ORDINANCE AMENDING SECTION 2 OF ARTICLE A OF CHAPTER 3 TITLE 7 OF THE STAR CITY CODE BY MAKING A TECHNICAL CORRECTION TO THE DEFINITIONS; AND PROVIDING AN EFFECTIVE DATE AND PUBLICATION.

NOW, THEREFORE, BE IT ORDAINED by the Mayor and City Council of the City of Star, Ada and Canyon Counties, Idaho:

Section 1: That Section 2 of Article A of Chapter 3 Title 7 of the Star City Code be and the same is hereby amended to read as follows:

7-3A-2: Definitions

CAPITAL IMPROVEMENTS ELEMENT: Shall mean a component of the Capital Improvements Plan identified as exhibit III-2 Star Fire Protection District CIP ~~2018-2027~~ adopted by the Fire District and the City pursuant to chapters 65 and 82 of title 67, Idaho Code, and as amended, which component meets the requirements of the capital improvements plan required by the Act.

FIRE DISTRICT ADMINISTRATOR: Shall mean the ~~Officer of Administration of~~ the Fire District**'s Impact Fee Administrator** or their designee.

INTERGOVERNMENTAL AGREEMENT: Shall mean the ~~City of Star/Star Fire Protection District~~ Intergovernmental Agreement ~~to Collect and Expend Development Impact Fees~~ ~~For Fire District Systems Improvements~~ entered into by and between the City and the Fire District pursuant to Idaho Code section 67-8204A for the collection and expenditure of Fire District impact fees established pursuant to this article ~~and on file in the City as exhibit B~~.

SECTION 2: DATE OF EFFECT AND PUBLICATION

2.1 This Ordinance, as required by Idaho Code Section 67-8206(6), shall be in full force and effect on the 30th day following its passage and approval; and shall be published in full or by summary as provided in Idaho Code sections 50-901 and 50-901A within one month of its passage and approval all according to law.

PASSED BY THE COUNCIL OF THE CITY OF STAR, IDAHO, THIS _____ DAY OF _____, 2023.

APPROVED BY THE MAYOR OF THE CITY OF STAR, IDAHO, THIS _____ DAY OF _____, 2023.

CITY OF STAR

By:_____
Trevor A. Chadwick, *Mayor*

ATTEST: By:_____
Jacob Qualls, *City Clerk*

CITY OF STAR
Ada and Canyon Counties, Idaho

ORDINANCE No. 397-2023

AN ORDINANCE AMENDING SECTION 3 OF ARTICLE A OF CHAPTER 3 TITLE 7 OF THE STAR CITY CODE BY MAKING A TECHNICAL CORRECTION AND BY THE ADDITION OF STAR FIRE PROTECTION DISTRICT IMPACT FEE SCHEDULE; AND PROVIDING AN EFFECTIVE DATE AND PUBLICATION.

NOW, THEREFORE, BE IT ORDAINED by the Mayor and City Council of the City of Star, Ada and Canyon Counties, Idaho:

Section 1: That Section 3 of Article A of Chapter 3 Title 7 of the Star City Code be and the same is hereby amended by the addition thereto of a new Subsection 1, to read as follows:

7-3A-3: Imposition Of Fire District Impact Fee

A. Imposition Of Impact Fee: A Fire District impact fee is hereby imposed on all new development in the City.

B. Fee Schedule: Fire District impact fees shall be calculated in accordance with the fee schedule set forth in ~~exhibit III-3 of~~ the Capital Improvements Plan providing for standard fees based on the total number of dwelling units or square feet of nonresidential space in the development, unless: 1) the fee payer requests an individual assessment pursuant to section 7-3A-6 of this article; or 2) the City and the Fire District find the development will have an extraordinary impact pursuant to section 7-3A-9 of this article. The methodology for determining the costs per service unit provided for in the fee schedule is set forth in the Capital Improvements Plan.

1. Impact Fee Schedule

The schedule of development impact fees for the various land uses per unit of development are herein set forth as follows:

Residential (per Single Family per Housing Unit)	$2,152.00
Residential (per Multi-Family per Housing Unit)	$1,227.00
Non-Residential (per 1000 retail square feet)	$ 839.00
Non-Residential (per 1000 office square feet)	$ 323.00
Non-Residential (per 1000 industrial square feet)	$ 145.00
Non-Residential (per 1000 Institutional square feet)	$ 582.00

C. Developer's Election: A developer shall have the right to elect to pay a project's proportionate share of system improvements costs by payment of Fire District impact fee according to the fee schedule as full and complete payment of the development project's

proportionate share of system improvements costs, except as provided in Idaho Code section 67-8214(3), as amended.

D. Procedures:
    1. Building Permit: Upon submittal of complete building permit plans for the development to the City, the City shall calculate the Fire District impact fee for the development within thirty (30) days of submittal unless the fee payer requests an individual assessment or the City determines that the development may have extraordinary impact.
    2. Exemption: An exemption pursuant to section 7-3A-5 of this article must be claimed by the fee payer upon application for a building permit or manufactured home installation permit. Any exemption not so claimed shall be deemed waived by the fee payer.

SECTION 2: DATE OF EFFECT AND PUBLICATION

2.1 This Ordinance, as required by Idaho Code Section 67-8206(6), shall be in full force and effect on the 30th day following its passage and approval; and shall be published in full or by summary as provided in Idaho Code sections 50-901 and 50-901A within one month of its passage and approval all according to law.

PASSED BY THE COUNCIL OF THE CITY OF STAR, IDAHO, THIS _____ DAY OF _____, 2023.

APPROVED BY THE MAYOR OF THE CITY OF STAR, IDAHO, THIS _____ DAY OF _____, 2023.

CITY OF STAR

By:_____
Trevor A. Chadwick, *Mayor*

ATTEST:

By:_____
Jacob Qualls, *City Clerk*

CITY OF STAR
Ada and Canyon Counties, Idaho

ORDINANCE No. 398-2023

AN ORDINANCE AMENDING SECTION 16 OF ARTICLE A OF CHAPTER 3 TITLE 7 OF THE STAR CITY CODE BY THE ADDITION OF STAR FIRE PROTECTION DISTRICT IMPACT FEE SCHEDULE; AND PROVIDING AN EFFECTIVE DATE AND PUBLICATION.

NOW, THEREFORE, BE IT ORDAINED by the Mayor and City Council of the City of Star, Ada and Canyon Counties, Idaho:

Section 1: That Section 16 of Article A of Chapter 3 Title 7 of the Star City Code be and the same is hereby amended to read as follows:

7-3A-16: Joint Development Impact Fee Advisory Standing Committee

A. Committee Created: A joint standing committee of the City Council and the Board of Commissioners of the Fire District is established.
B. Committee Name: The joint standing committee is known and shall continue to be known and designated as the "City of Star/Star Fire Protection District Joint Development Impact Fee Advisory Standing Committee" (hereinafter in this article referred also as "Joint Advisory Committee" or "committee").
C. Membership: The members on the committee shall be appointed as provided in the intergovernmental agreement ~~by the City Council and confirmed by the Board of Commissioners of the Fire District~~ for a term of one year or until someone is appointed in his/her place, and there shall not be fewer than five (5) members of which two (2) or more members shall be active in the business of development, building or real estate and at least two (2) or more members shall not be employees or officials of the City or the Fire District. All members must reside within the service area of the capital improvement plan.

~~1. The members will be appointed during the January regular meeting of the City Council and the Board of Commissioners.~~
~~2. Any vacancy occurring on the committee during the year may be filled during the year, by appointment of the City Council and confirmed by the Board of Commissioners of the Fire District.~~

D. Charge: The Joint Advisory Committee shall serve as an advisory committee to the City Council and the Board of Commissioners of the Fire District and is charged with the following responsibilities:

3. Assist the City and the Fire District in adopting land use assumptions; and
4. Review the Capital Improvements Plan; and
5. Monitor and evaluate implementation of the Capital Improvements Plan;
6. File with the Fire District, Fire District Administrator and the City Clerk, at least annually, with respect to the Capital Improvements Plan, a report of any perceived inequities in implementing the Capital Improvements Plan or imposing the Fire District impact fees;

7. Advise the City Council and the Board of Commissioners of the Fire District of the need to update or revise land use assumptions, Capital Improvements Plan and Fire District development impact fees; and
8. The Fire District shall make available to the Joint Advisory Committee, upon request, all financial and accounting information, professional reports in relation to other development and implementation of land use assumptions, the Capital Improvements Plan and periodic updates of the Capital Improvements Plan.

E. Joint Advisory Committee Organization: The Fire District and Fire District Administrator shall staff the Joint Advisory Committee in order to provide the committee with needed information for the committee's review and to provide for its compliance with the Open Meeting Law[1].

1. The Joint Advisory Committee shall select its officers, which include a Chairman, Vice Chairman and a Secretary of the committee.
2. The Chairman shall conduct the meetings of the committee. The duties of the Chairman shall be performed by the Vice Chairman in the absence of the Chairman or as delegated by the Chairman. The Chairman and the Vice Chairman shall be members of the committee.
3. The Fire District Administrator shall serve as the Secretary of the committee and shall take minutes and post agenda notices required by the Open Meeting Law. The Secretary is not a member of the committee.
4. The committee shall establish a regular meeting schedule.
5. The agenda of each meeting shall include the approval of the minutes of the last meeting and the Secretary shall provide a copy of the approved minutes to the City Council and the Board of Commissioners.
6. Fifty percent (50%) of the membership of the committee shall constitute a quorum. Once a quorum is established for a meeting, the subsequent absence of a member present for creating the quorum shall not dismiss the quorum.
7. A majority vote of those present at any meeting is sufficient to carry motions.

F. Reporting: The Joint Advisory Committee reports directly to the Fire District Board of Commissioners and to the City Council.

G. City Council And Fire District Board Of Commissioners Review Of Committee's Report And Recommendations: The City Council and the Fire District Board of Commissioners shall each consider the Joint Advisory Committee's recommended revision(s) at least once every twelve (12) months. The Joint Advisory Committee's recommendations and the City Council's and Board of Commissioners' actions are intended to ensure that the benefits to a development paying Fire District impact fees are equitable, so that the Fire District impact fee charged to the development shall not exceed a proportionate share of system improvements costs, and that the procedures for administering Fire District impact fees remain efficient.

SECTION 2: DATE OF EFFECT AND PUBLICATION

2.1 This Ordinance, as required by Idaho Code Section 67-8206(6), shall be in full force and effect on the 30th day following its passage and approval; and shall be published in full or by summary as provided in Idaho Code sections 50-901 and 50-901A within one month of its passage and approval all according to law.

PASSED BY THE COUNCIL OF THE CITY OF STAR, IDAHO, THIS _____ DAY OF _____, 2023.

APPROVED BY THE MAYOR OF THE CITY OF STAR, IDAHO, THIS _____ DAY OF _____, 2023.

CITY OF STAR

By:_____
Trevor A. Chadwick, *Mayor*

ATTEST:

By:_____
Jacob Qualls, *City Clerk*

ZWYGART JOHN
CERTIFIED PUBLIC ACCOUNTANTS
Zwygart John & Associates CPAs, PLLC
16130 North Merchant Way, Suite 120 ♦ Nampa, Idaho 83687
Phone: 208-459-4649 ♦ FAX: 208-229-0404

December 1, 2023

City of Star
The Mayor and City Council
PO Box 130
Star, Idaho 83669

The following represents our understanding of the services we will provide the City of Star.

You have requested that we audit the accompanying financial statements of the governmental activities, each major fund, and the remaining fund information of the City of Star as of September 30, 2023, and for the year then ended and the related notes, which collectively comprise the City of Star's basic financial statements as listed in the table of contents. We are pleased to confirm our acceptance and our understanding of this audit engagement by means of this letter. Our audit will be conducted with the objective of our expressing an opinion on each opinion unit applicable to those basic financial statements.

Accounting principles generally accepted in the United States of America, (U.S. GAAP,) as promulgated by *the Governmental Accounting Standards Board* (GASB), issued by the Comptroller General of the United States, require that included supplementary information, such as management's discussion and analysis and budgetary comparison information be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the GASB, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. As part of our engagement, we will apply certain limited procedures to the Required Supplementary Information (RSI) in accordance with auditing standards generally accepted in the United States of America, (U.S. GAAS). These limited procedures will consist primarily of inquiries of management regarding their methods of measurement and presentation, and comparing the information for consistency with management's responses to our inquiries. We will not express an opinion or provide any form of assurance on the RSI. The following RSI is required by U.S. GAAP. This RSI will be subjected to certain limited procedures but will not be audited:

- GASB Required Supplementary Pension Information
- Budgetary Comparison

Supplementary information other than RSI will accompany the City of Star's basic financial statements. We will subject the following supplementary information to the auditing procedures applied in our audit of the basic financial statements and perform certain additional procedures, including comparing and reconciling the supplementary information to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and additional procedures in accordance with U.S. GAAS. We intend to provide an opinion on the following supplementary information in relation to the basic financial statements as a whole:

1) Combining Statements

Auditor Responsibilities

We will conduct our audit in accordance with auditing standards generally accepted in the United States of America (U.S. GAAS) and *Government Auditing Standards*. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the basic financial statements are free from material misstatement. An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the basic financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the basic financial statements, whether due to fraud or error, misappropriation of assets, or violations of laws, governmental regulations, grant agreements, or contractual agreements.

An audit also includes evaluating the appropriateness of accounting policies used, and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the basic financial statements. If appropriate, our procedures will therefore include tests of documentary evidence that support the transactions recorded in the accounts, tests of the physical existence of inventories, and direct confirmation of cash, investments, and certain other assets and liabilities by correspondence with creditors and financial institutions. As part of our audit process, we will request written representations from your attorneys, and they may bill you for responding. At the conclusion of our audit, we will also request certain written representations from you about the basic financial statements and related matters.

Because of the inherent limitations of an audit, together with the inherent limitations of internal control, an unavoidable risk that some material misstatements (whether caused by errors, fraudulent financial reporting, misappropriation of assets, or violations of laws or governmental regulations) may not be detected exists, even though the audit is properly planned and performed in accordance with U.S. GAAS and in accordance with *Government Auditing Standards*.

In making our risk assessments, we consider internal control relevant to the entity's preparation and fair presentation of the basic financial statements in order to design audit procedures that are appropriate in the circumstances but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. However, we will communicate to you in writing concerning any significant deficiencies or material weaknesses in internal control relevant to the audit of the basic financial statements that we have identified during the audit. Our responsibility as auditors is limited to the period covered by our audit and does not extend to any other periods.

We cannot provide assurance that unmodified opinions will be expressed. Circumstances may arise in which it is necessary for us to modify our opinions or add emphasis-of-matter or other-matter paragraphs. If our opinions on the basic financial statements are other than unmodified, we will discuss the reasons with you in advance. If, for any reason, we are unable to complete the audit or are unable to form or have not formed opinions, we may decline to express opinions or to issue a report as a result of this engagement.

Compliance with Laws and Regulations

As previously discussed, as part of obtaining reasonable assurance about whether the basic financial statements are free of material misstatement, we will perform tests of the City of Star's compliance with the provisions of applicable laws, regulations, contracts, and agreements. However, the objective of our audit will not be to provide an opinion on overall compliance, and we will not express such an opinion.

Management Responsibilities

Our audit will be conducted on the basis that *management and those charged with governance* acknowledge and understand that they have responsibility:

a. For the preparation and fair presentation of the basic financial statements in accordance with accounting principles generally accepted in the United States of America;

b. For the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of basic financial statements that are free from material misstatement, whether due to error, fraudulent financial reporting, misappropriation of assets, or violations of laws, governmental regulations, grant agreements, or contractual agreements; and
c. To provide us with:
    i. Access to all information of which management is aware that is relevant to the preparation and fair presentation of the basic financial statements such as records, documentation, and other matters;
    ii. Additional information that we may request from management for the purpose of the audit; and
    iii. Unrestricted access to persons within the entity from whom we determine it necessary to obtain audit evidence.
d. For including the auditor's report in any document containing basic financial statements that indicates that such basic financial statements have been audited by the entity's auditor;
e. For identifying and ensuring that the entity complies with the laws and regulations applicable to its activities;
f. For adjusting the basic financial statements to correct material misstatements and confirming to us in the management representation letter that the effects of any uncorrected misstatements aggregated by us during the current engagement and pertaining to the current year period(s) under audit are immaterial, both individually and in the aggregate, to the basic financial statements as a whole; and
g. For maintaining adequate records, selecting and applying accounting principles, and safeguarding assets.

With regard to the supplementary information referred to above, you acknowledge and understand your responsibility: (a) for the preparation of the supplementary information in accordance with the applicable criteria; (b) to provide us with the appropriate written representations regarding supplementary information; (c) to include our report on the supplementary information in any document that contains the supplementary information and that indicates that we have reported on such supplementary information; and (d) to present the supplementary information with the audited basic financial statements, or if the supplementary information will not be presented with the audited basic financial statements, to make the audited basic financial statements readily available to the intended users of the supplementary information no later than the date of issuance by you of the supplementary information and our report thereon.

As part of our audit process, we will request from management written confirmation concerning representations made to us in connection with the audit.

Reporting

We will issue a written report upon completion of our audit of the City of Star's basic financial statements. Our report will be addressed to the governing body of the City of Star. We cannot provide assurance that unmodified opinions will be expressed. Circumstances may arise in which it is necessary for us to modify our opinions, add an emphasis-of-matter or other-matter paragraph(s), or withdraw from the engagement.

We also will issue a written report on in accordance with the requirements of *Government Auditing Standards*, we will also issue a written report describing the scope of our testing over internal control over financial reporting and over compliance with laws, regulations, and provisions of grants and contracts, including the results of that testing. However, providing an opinion on internal control and compliance will not be an objective of the audit and, therefore, no such opinion will be expressed.

Nonattest Services:

With respect to any nonattest services we perform, the City of Star's management is responsible for (a) making all management decisions and performing all management functions; (b) assigning a competent individual to oversee the services; (c) evaluating the adequacy of the services performed; (d) evaluating and accepting responsibility for the results of the services performed; and (e) establishing and maintaining internal controls, including monitoring ongoing activities. The services we will provide are:

- Help in preparation of the financial statements.

Government Auditing Standards require that we document an assessment of the skills, knowledge, and experience of management, should we participate in any form of preparation of the basic financial statements and related schedules or disclosures as these actions are deemed a non-audit service.

Other

We understand that your employees will prepare all confirmations we request and will locate any documents or support for any other transactions we select for testing.

If you intend to publish or otherwise reproduce the basic financial statements and make reference to our firm, you agree to provide us with printers' proofs or masters for our review and approval before printing. You also agree to provide us with a copy of the final reproduced material for our approval before it is distributed.

During the course of the engagement, we may communicate with you or your personnel via fax or e-mail, and you should be aware that communication in those mediums contains a risk of misdirected or intercepted communications.

Fees and Timing

Jordan Zwygart, CPA is the engagement partner for the audit services specified in this letter. His responsibilities include supervising Zwygart John & Associates CPAs, PLLC's services performed as part of this engagement and signing or authorizing another qualified firm representative to sign the audit report.

We will notify you immediately of any circumstances we encounter that could significantly affect this fee. Whenever possible, we will attempt to use the City of Star's personnel to assist in the preparation of schedules and analyses of accounts. This effort could substantially reduce our time requirements and facilitate the timely conclusion of the audit.

Further, we will be available during the year to consult with you on financial management and accounting matters of a routine nature.

During the course of the audit, we may observe opportunities for economy in, or improved controls over, your operations. We will bring such matters to the attention of the appropriate level of management, either orally or in writing.

You agree to inform us of facts that may affect the basic financial statements of which you may become aware during the period from the date of the auditor's report to the date the financial statements are issued.

We agree to retain our audit documentation or work papers for a period of at least five years from the date of our report.

At the conclusion of our audit engagement, we will communicate to management the following significant findings from the audit:

- Our view about the qualitative aspects of the entity's significant accounting practices.
- Significant difficulties, encountered during the audit, if any.
- Uncorrected misstatements, other than those we believe are trivial, if any.
- Disagreements with management, if any.
- Other findings or issues, if any, arising from the audit that are, in our professional judgment, significant and relevant to those charged with governance regarding their oversight of the financial reporting process.
- Material, corrected misstatements that were brought to the attention of management as a result of our audit procedures.
- Representations we requested from management.
- Management's consultations with other accountants, if any.
- Significant issues, if any, arising from the audit that were discussed, or the subject of correspondence, with management.

The audit documentation for this engagement is the property of Zwygart John & Associates CPAs, PLLC's and constitutes confidential information. However, we may be requested to make certain audit documentation available

to regulatory agencies pursuant to authority given to it by law or regulation, or to peer reviewers. If requested, access to such audit documentation will be provided under the supervision of Zwygart & John & Associates CPAs, PLLC's personnel. Furthermore, upon request, we may provide copies of selected audit documentation to regulatory agency. The regulatory agency may intend, or decide, to distribute the copies of information contained therein to others, including other governmental agencies.

Our fees are based on the amount of time required at various levels of responsibility, plus actual out-of-pocket expenses. We estimate that our fee for the audit will be $7,350.

Please sign and return the attached copy of this letter to indicate your acknowledgment of, and agreement with, the arrangements for our audit of the basic financial statements including our respective responsibilities.

We appreciate the opportunity to be your financial statement auditors and look forward to working with you and your staff.

Respectfully,

Zwygart John & Associates CPAs, PLLC

****

RESPONSE:

This letter correctly sets forth the understanding of the City of Star.

City of Star:

Name: _____

Title: _____

Date: _____

P.O. Box 690
700 W Overland Rd
Meridian, ID 83642

(800) 769-1025
www.mtvieweq.com

QUOTE

Buyer: City of Star | Date: 10/14/2023
Address: 10769 W State St | City, State: Star, ID | Zip: 83669
Invoice No. _____ Date: _____ | Phone #: (208) 286-7247 | Idaho State Sales Tax: NO
Fax: | E-Mail: blittle@staridaho.org | P.O. #

New/ Used	Make	Model	Serial #	Stock #	Description	Amount
New	ARIENS	850	1697	13-011-1	**New Mammoth Stand-on Snow Tractor**	$13,142.22
					* Kawasaki 850V EFI Gas Engine - 28.5 HP, Parker HP2 Charge Pump /	
					Parker DF Series Drive Motors, (4) 22" Terra-Trac Tires, 2-Lever Skid	
					Steer Style Steering w/ Heated Grips, Fingertip Operator Controls (for	
					Ignition, PTO & Attachment Contollers)	
New	ARIENS	44" BRUSH	680	13-011-2	**New Mammoth 44" PTO Driven -Angling Power Broom**	$3,353.22
New	ARIENS	48" V-Plow	335	13-012-8	**New Mammoth 48" Combo Straight Blade / V-Plow**	$2,807.22
~~New~~	~~ARIENS~~	~~48" Blower~~	~~TBD~~		~~**New Mammoth 48" Snow Blower**~~	~~$3,977.22~~
New	ARIENS	SNOW CAB	TBD		**New Mammoth Premium Snow Cab**	$1,364.99
					Factory Freight Charge	$325.00
					Dealer Set-up / Pre-Delivery Inspection Charge	$700.00
						Total: $21,692.65

Terms:
Net Amount of $25,669.87 - Paid by Check No. _____

Warranty:
2 Years / 500 Hours - Base Machine Warranty. 1 Year - Attachment Warranty.

Availability:
2 to 3 Weeks Lead Time

Freight:		
~~Subtotal:~~		~~$25,669.87~~
Tax Rate:	N/A	EXEMPT
Extended Coverage:		
PD Insurance:		
UCC/DOC Fee:		
~~**Total Delivered Price:**~~		~~$25,669.87~~

Total: $21,692.65

Notes

Sourcewell Contract No. 031121-ACO

Government Agency - Sourcewell Member No. _____

NEW HOLLAND AGRICULTURE

ARIENS | CO

WE appreciate your business!

Emmet Bowman e.bowman@mtvieweq.com
(208) 616-2212

NEW HOLLAND CONSTRUCTION

****Quotes are subject to change by availability or manufacturer programs****

Hank Day

From: John Whitney <jwhitney@corwinauto.com>
Sent: Tuesday, November 28, 2023 9:01 AM
To: Hank Day
Subject: Appraised Value on Ford F250

Good Morning, Hank. See below for appraisal: 2019 Ford F250SD (1FTBF2B64KED47454) Regular Cab 4x4 XL Work Truck 6.2L V8 Gas Engine Flex Fuel 49,746 miles at time of appraisal Appraised Value $27

Good Morning, Hank.

See below for appraisal:

2019 Ford F250SD (1FTBF2B64KED47454)
Regular Cab
4x4
XL Work Truck
6.2L V8 Gas Engine Flex Fuel
49,746 miles at time of appraisal

Appraised Value $27,100.00

If you are looking to replace this vehicle, or if you are just looking to sell it and remove it from your fleet, I can help either way. Let me know how I can help you.

Thank you!

John Whitney
Corwin Ford Nampa
Commercial Account Manager
Cell 208-794-1369

Resolution 2023-009 – Asset Disposal

A RESOLUTION OF THE CITY OF STAR, IDAHO WITHIN ADA AND CANYON COUNTIES, CERTAIN CITY OWNED PERSONAL PROPERTY DECLARING THEM SURPLUS AND DISPOSING IN CERTAIN MANNERS.

Vehicle	
2012 Dodge R25 4x4 Truck (VIN 3C6LD5AT5CG192000)	Proposed Method of Disposal: Musick Public Auction KBB Estimated Value: $6,426 - $9,015
Lawn Care Equipment	
2012 Tiger Mower Serial #10035	Proposed Method of Disposal: Donation to City of New Plymouth Estimated Value: $100.00
2014 Tiger Mower Serial #10016	Proposed Method of Disposal: Donation to City of New Plymouth Estimated Value: $100.00
2016 Tiger Mower Serial #12-110022	Proposed Method of Disposal: Donation to City of New Plymouth Estimated Value: $100.00

It is hereby the policy of the Star City Council once a device has been determined to be of no further use to the City of Star, it may be donated, sold, or destroyed based on the recommendation of the Department Head and in agreement with the Buildings & Grounds Maintenance Supervisor / Contractor.

If the asset has a City of Star Asset Tag assigned or attached to it, the property shall be removed from the Asset Log and a list will be generated with the disposed of property to be turned over to the Auditor on an annual basis.

If the asset is leased, it shall be returned to the lessor for credit if possible.

If the asset has an assumed value of over $100 in its current condition, a Surplus Resolution shall be created, and the City Council shall have sole authority to dispose of the asset in accordance with Idaho State Code and the City of Star Policies at the time.

This resolution shall take effect and be in full force from its passage and approval.

APPROVED THIS _____ DAY OF _____ 2023

_____

Trevor A Chadwick, Mayor

ATTEST: _____

Jacob M Qualls, City Clerk – Treasurer