Development Review Committee

September 07, 2023 at 2:00 PM
Howey-in the-Hills Town Hall
101 N. Palm Ave.,
Howey-in-the-Hills, FL 34737

Join Zoom
Meeting: https://us06web.zoom.us/j/81898904489?pwd=T1BHNmNUMlFERzZJbStxYjRuZ2NWQT09
Meeting ID: 818 9890 4489 | **Passcode:** 933417

AGENDA

CALL TO ORDER
ATTENDANCE

NEW BUSINESS

1. Discussion: **Mission Rise Development PUD Rezoning Submittal**

PUBLIC COMMENTS
Any person wishing to address the Development Review Committee and who is not on the agenda is asked to speak their name and address. Three (3) minutes is allocated per speaker.

ADJOURNMENT

To Comply with Title II of the Americans with Disabilities Act (ADA):

Qualified individuals may get assistance through the Florida Relay Service by dialing 7-1-1. Florida Relay is a service provided to residents in the State of Florida who are Deaf, Hard of Hearing, Deaf/Blind, or Speech Disabled that connects them to standard (voice) telephone users. They utilize a wide array of technologies, such as Text Telephone (TTYs) and ASCII, Voice Carry-Over (VCO), Speech to Speech (STS), Relay Conference Captioning (RCC), CapTel, Voice, Hearing Carry-Over (HCO), Video Assisted Speech to Speech (VA-STS) and Enhanced Speech to Speech.

Howey Town Hall is inviting you to a scheduled Zoom meeting.
Topic: **Development Review Committee**
Time: **Sept 7, 2023 02:00 PM Eastern Time** (US and Canada)
Join Zoom Meeting
https://us06web.zoom.us/j/81898904489?pwd=T1BHNmNUMlFERzZJbStxYjRuZ2NWQT09
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Find your local number: https://us06web.zoom.us/u/kvlptCk0A

Please Note: In accordance with F.S. 286.0105: Any person who desires to appeal any decision or recommendation at this meeting will need a record of the proceedings, and that for such purposes may need to ensure that a verbatim record of the proceedings is made, which includes the testimony and evidence upon which the appeal is based. The Town of Howey-in-the-Hills does not prepare or provide this verbatim record. Note: In accordance with the F.S. 286.26: Persons with disabilities needing assistance to participate in any of these proceedings should contact Town Hall, 101 N. Palm Avenue, Howey-in-the-Hills, FL 34737, (352) 324-2290 at least 48 business hours in advance of the meeting.

TMH CONSULTING, INC.
Community Planning Services

TMHConsulting@cfl.rr.com
97 N. Saint Andrews Dr.
Ormond Beach, FL 32174
PH: 386.316.8426

MEMORANDUM

TO:	Howey-in-the-Hills Development Review Committee
CC:	J. Brock, Town Clerk
FROM:	Thomas Harowski, AICP, Planning Consultant
SUBJECT:	Mission Rise Development August 2023 Resubmittal
DATE:	September 6, 2023

These comments are based on the resubmittal package for the Mission Rise proposed development submitted August 23, 2023 and the staff comments from the August 10, 2023 Development Review Committee meeting.

Concept Plan

1. The project still fails to meet the 15% non-residential land area requirements of the Village Mixed Use land use classification. The stormwater areas allocated to the non-residential use calculation are in fact engineering elements of other land uses. The civic land use, the amenity centers and the park areas can count towrd the non-residential land use as proposed. Staff is willing to include the major trail area that falls outside the central collector road right-of-way (so long as this area is not already counted as park area).

2. The proposed recreational facilities have been better detailed, but the “regional” park still fails to meet the definition included in the comprehensive plan. Perhaps revising the name to a neighborhood facility is more appropriate given that the park is unlikely to draw significant interest from residents outside the neighborhood.

3. The area in the center designated as regional park is a bonafide park area. The hgihlighted areas in Phase 3 and at the south end of Phase 2 are just open space and should not be counted as park area.

4. The applicant has elected to retain stormwater retention areas within the central core area which staff recommended for tree preserrvation and green space. As noted in our comments last time, the retention ponds are part of the residential land use and should be located there. Be advised this item will be a comment in the staff report.

5. The park area developments have been detailed but outside of the amenity centers are essentially passive designs. As an additional item, the applicant could consider including some court activities as part of the overall program. We renew our suggestions for repurposing the small residential development at the southeast corner of Phase 2 as a central community facility.

6. The applicant needs to address how the double-frontage lots located in Phase 2 and Phase 3 will be addressed. These lots have access from a parallel street so that the rear yards of these properties will front on the central collector road. Perhaps some sort of buffer such as a landscaped berm or wall is appropriate.

7. For the 55-foot wide lots where no alley access is proposed, what design options are suggested to reduce the impact of a garage-dominate streetscape.

8. The unit totals provided for the phase allocations do not add correctly on the table provided.

9. The note to the table needs to be removed. Movement of units between phases will be considered a major amendment of the development agreement. As an alternative the applicant could propose language in the development agreement allowing for a specifc level of shifting units between phases for Town Council consideration.

10. At the last DRC meeting the applicant was requested to provide a timing proposal for construction of the central collector road. The agreement needs to include a proposed timing.

11. Map 2 seems to be unclear. Phase lines are similar to the symbols for pathways, parking, non-residential areas etc. Perhaps the information can be divided into more maps that will present a clearer summary.

<u>Development Agreement</u>

1. On page two the development agreement states the project is 592 units while the concept plan has 499. These documents need to be in agreement.

2. On page three the minimum lot width at the building line needs to be 75 feet for the 75 x 120 lot size.

3. On page three the wetland buffer needs to reflect the town requirements in Sec. 3.02.03C as well as the water management district and DEP requirements. The Town's requirements vary in some respects fom the state requirements.

4. On page four, the language setting the timing for the Town to ask for utility upgrades is still not satisfactory. The proposed 270 days from approval of the plan is still not what we need. The timing should be triggered by the application for final subdivision approval for the phase of the project proposed. The final subdivision approval gives authorization to construct subdivision improvements.

The Town should be required to make its needs and commitments at this point. If final subdivision approval is sought by phase, then the Town's opportunity to seek utility line upgrades should attach to each phase.

5. On page 6, the Town is not requiring all roads to be public. The applicant has the choice to use gated access for the project or for sub-areas within the project. While the collector road should remain with full public access, the applicant may wish to revise the proposed language to preserve the option for gated areas.

6. On page eleven, the termination language related to sewer service acquisition should be modified to include other options than the CLCDD.

Traffic Impact Assessment

Defer to the Townengineeer comments.

GRIFFEY ENGINEERING, INC.

September 5, 2023
Mission Rise PUD
Engineering Review Comments

Traffic Study

1. The conceptual land use plan states the maximum number of lots is 499. The traffic study and the development agreement states 592 lots. All three need to be the same.

2. The methodology states that Lake Hills & Watermark are to be included in the background traffic projection. The submitted study left these developments out.

3. For the future condition intersection analysis for SR 19 & Revels Rd. include right & left turn lanes on SR 19 and a right turn lane on revels.

4, For the future condition intersection analysis for the Spine Rd. and Number 2 Rd., include right & left turn lanes on Number 2 Rd.

5. Per the MPO TIS Guidelines the study needs to include a section for Mitigation Strategies. This needs to address the road segments and intersections with deficiencies. For unsignalized intersections, side streets with deficient delays need to be evaluated for mitigation. Also, the narrow width of Number 2 Road needs to be addressed in this section. While capacity is not an issue, operational safety is.

6. There is no proposed widening of SR 19 at Central Avenue as stated in the study.

7. Based on Lake County's requirement for turn lane widening on Number 2 Road (all on the south side) the length of tapers will need to be twice the standard length.

Concept Plan

1. The main N-S spine road and realigned Revels Road should not have driveway connections or on-street parking. They should have full pedestrian accommodation including the multi-use trail and raised crosswalks/speed tables at key points along its length connecting the trail and sidewalks to amenity, open space, and park areas.

2. The curb & gutter for the neighborhood roads should 2' wide Type F or Drop Curb.

Development Agreement

1. Section 1. (f) Wetlands: Wetland impacts and buffering shall also be subject to the Town's land development regulations as well as the St Johns River Water Management District.

2. Section 1. (j) Transportation, Streets and Sidewalks: Revels Road and the Spine Road must have a minimum 90-foot right-of-way, 2' curb and gutter, and a minimum 32-foot-wide pavement with 12-foot travel lanes and 4' curb lanes.

August 25, 2023

Thomas A. Harowski, AICP
Town of Howey-in-the-Hills
101 N. Palm Ave., P.O. Box128,
Howey-In-The-Hills, Florida 34737

RE: Mission Rise PUD

Dear: Mr. Harowski

Enclosed please find responses to Staff's comments below in bold. The following items are resubmitted in response to Staff''s comments:

1. Conceptual Land Use Plan
2. Developer's Agreement
3. Traffic Impact Analysis (to be provided 8/29)

VILLAGE MIXED USE CRITERIA:

The Village Mixed Use classification has a set of specific criteria the development must meet. These are set out in Policy 1.1.1 and Policy 1.1.2 of the Future Land Use Element. Policy 1.1.4 includes essential information on open space and density calculation and Policy 1.2.2 sets out the minimum open space requirements. The criteria for VMU are reviewed below:

1. Residential development can occupy a maximum of 85% of the net land area of the project. (Net land area is the total land area of the project less wetlands and waterbodies. In this case the net land area is reported as approximately 153 acres.) The maximum allowable land area to be devoted to residential development is 130 acres. The submittal states that the project allocates 129 acres to residential use.

   RESPONSE: Acknowledged.

2. Non-residential development must occupy 15% of the net land area but not more than 30% of the net land area. In previous development plans for the subject property, it was accepted that the property does not have reasonable commercial development potential, but other options for non-residential use are available. For example, a church site could be proposed. In one previous submittal the Town agreed to allow the allow the land area devoted to a regional bicycle facility to count towards the non-residential component, and the current submittal appears to be offering that option again.

   In this case the proposed regional bicycle trail is located within the central collector road right-of-way and is not specifically an allocated land use. The project requires 23 acres of non-residential use. The applicant claims to meet this requirement by providing a civic use site (1.2 acres), community amenities (3.6 acres), a regional park (8.3 acres), and stormwater ponds (7.7 acres). More definition is needed to determine whether the regional

park is a qualified use. Most of the park area falls within the eagle nest buffer area, and no information has been provided about proposed recreation and park uses. The stormwater pond allocation also needs to be further reviewed to determine if it qualifies as a non-residential use. If the use supports residential development, then it should be counted as residential land.

RESPONSE: As demonstrated on Sheet 1 of the Conceptual Land Use Plan, a total of 23.8 AC (15.5%) of net land area will be dedicated towards non-residential uses. Please see Sheet 3 of the Conceptual Land Use Plan, where additional detail on the proposed regional multiuse trail and park system has been provided. The multiuse trail has been revised to meander outside of the Collector Road ROW. Further, the previously designated 1.2 AC Civic Site is proposed to be developed as a trail head to act as an anchor for the multiuse trail system. Any stormwater ponds included in park areas are not included in the overall open space calculation.

3. A minimum of 5.0% of the non-residential land area of the project needs to be devoted to public/civic buildings. (1.14 acres required.) Again, this could be a church site, or it could be community center buildings or similar buildings open to the public and devoted to civic activities. The concept plan proposes a civic use site along the SR 19 frontage. The specific use is not declared, and the site is not integrated into the overall project design.

   RESPONSE: The 1.2 AC Civic Site will be developed as a trail head to support the multiuse trail system included within the project.

4. Public recreation area is required at a minimum of 10% of the usable open space. (Open space that is not wetland or waterbodies). This requirement is calculated at a minimum of 3.0 acres. Two neighborhood parks totaling one acre have been identified and the proposed regional park is identified at 8.3 acres.

   RESPONSE: Acknowledged.

5. Total open space is required to be a minimum of 25% of the project area. Wetland areas may account for only half of this requirement. Required open space is calculated on the gross project area or 60.8 acres in this case. Total open space is reported as 65.4 acres or 27% of the project area. Stormwater ponds can only count toward the open space requirement if they are designed as natural pond areas and supported with trails. The proposal does show walking trails located with pond areas.

   RESPONSE: Acknowledged.

PUD/DEVELOPMENT AGREEMENT:

1. The applicant has provided a draft development agreement along with the updated concept plan. Section 4.10.09 of the land development code lists the minimum items that need to be included in the conceptual plan package. A review of this code section notes the following deficiencies:

   - 4.10.09 A. The developer's name was not shown on the concept plan document.
   - 4.10.09 N. The number of units by type and lot size for the project and each phase were not shown

RESPONSE: The property owner, ASF TAP FL I LLC is the current applicant/developer. A home builder has not yet been selected for this project. This is noted on Sheets 1-6 of the Conceptual Land Use Plan.

Please see Sheet 2 for a tabulation of the proposed number of units by lot size for each phase of the proposed PUD. Please note that the proposed phasing and allocation of units by phase is approximated, and subject to change during the subdivision plan stage. A note to this effect has been added to Sheet 2 of the Conceptual Land Use Plan.

TRAFFIC IMPACT ASSESSMENT:

1. The Town has approved a methodology for the traffic study and is awaiting the report. In addition to the standard traffic analysis, the study should take note and comment on Number 2 Road. The road is substandard in width and to the extent that this affects the road capacity this should be noted and included in the traffic study. Note also that Number 2 Road is prescriptive right-of-way for most of its length, and this may affect any study recommendations regarding widening.

   RESPONSE: The Traffic Impact Analysis based on the approved methodology has been included in the application materials. This study assigns Number 2 Road as having a reduced volume due to it being a substandard facility.

ENVIRONMENTAL CONSIDERATIONS

1. In reviewing the proposed plan, the Town will need to consider whether the full clear zone around the eagle's nest should be preserved rather than allowing residential development within the 660-foot area. The application states that the buffer areas are in accord with federal guidelines. For any proposed development within the 660-foot area documentation should be provided to demonstrate compliance with the guidelines.

   As noted previously, the proposed regional park needs to be further detailed with regard to planned improvements and how these improvements comply with federal eagle nest protections.

   As an alternative, staff suggests excluding development from the central area around the wetlands core. While few homes are proposed for this area, the plan shows excavating upland areas for stormwater retention. These are some of the most heavily treed areas on the site and should not be removed to support a function that can easily be located elsewhere on the site. The development in this area should be limited to the collector road crossing. A sketch of the subject area has been attached. A tree survey will be required for each phase of the project as it is presented for preliminary subdivision approval. Trees within areas designated for preservation will not need to be surveyed or considered for replacement under the Town's tree protection requirements.

   RESPONSE: The development proposed within the 330' and 660' buffers around the eagle's nest are permissible under relevant State and Federal guidelines.

   At this stage, a detailed tree survey has not been completed for the subject property. The PUD will comply with all requirements of the LDC regarding tree

protection. A note to this effect has been added to the Conceptual Land Use Plan, please refer to Sheet 1.

CONCEPT PLAN COMMENTS

1. Actual lot sizes are a policy decision for the Planning Board and Town Council to approve. Please note that the Town has not been approving lot widths below 75 feet across recent project submittals, and at least some members of Council will have difficulty with 75-foot wide lots.

   RESPONSE: Acknowledged. In response to feedback received at the neighborhood workshop, conducted on August 3, 2023, additional tracts of 75-foot-wide lots have been included in the plan.

2. The plan could take better advantage of the terrain by locating the multi-use trail outside of the collector road right-of-way when possible. This placement will open ROW the door for consideration of the trail as a component of the non-residential area requirement.

   RESPONSE: The multiuse trail design has been updated to locate the trail outside of the Collector Road ROW.

3. Lake County will require additional right-of-way for Number Two Road and will be the permitting agency for the intersection and other external road improvements.

   RESPONSE: Acknowledged. The Applicant is in coordination with Lake County regarding Number Two Road. ROW dedication for Number Two Road has been demonstrated on the Conceptual Land Use Plan. Per Lake County's Public Works Department, Number Two Road is planned as an 80' ROW.

4. Access points for vehicular use are appropriately located, with the following notes
   - Revels Road will need to be improved from the project boundary to the intersection with Orange Blossom Road.
   - The connection with Hilltop Groves will need to be coordinated with the Hilltop Groves development plan to ensure the connection is in the proper location. The Town is currently reviewing a final subdivision plan which will specifically locate the connector road.
   - The Revels Road connection at SR 19 will need to be coordinated with the Hilltop Grove development plan

   RESPONSE: Acknowledged. Any roadway improvements will be provided by the Developer as required by the detailed traffic study.

5. The design of the major collector needs to plan for a median and turn lanes at intersections. The two cross-section provided do not include a landscaped median area. Where properties have direct access from the collector road, periodic openings can be provided

   RESPONSE: As discussed at the DRC meeting on August 10, 2023, the Collector Road cross-section is proposed without a median, but will include 4' bike lanes as well as a 12' multi-use trail.

6. Where a lot must access from the central collector road, the lot sizes need to be larger than 55-foot wide to minimize the number of driveways in this segment.

   RESPONSE: No lots are proposed to have direct access from the Collector Road.

7. The on-street parking proposal needs to be reviewed with regard to placement of the parking. Based on the cross-sections the road width could vary from block to block which might be confusing.

   RESPONSE: Acknowledged. The proposed roadway sections are consistent with the details provided in Table 8.02.02 of the LDC.

8. Where 55-foot lots are proposed, access should be from an alley to avoid a continuous garage-scape street view. Paired one-way alleys may be workable.

   RESPONSE: Any 55-foot-wide lots along the Collector Road have been designed with alley access to prevent a garage-scape street view.

9. Is there any intent to consider housing options such as assisted living or nursing home? Providing a potential site for these types of uses might be another way of meeting the non-residential land area requirement.

   RESPONSE: The multiuse trail and park system is proposed to meet the project's non-residential land area requirement. Please see Sheet 3 of the Conceptual Land Use Plan for further detail.

10. The parcel has an opportunity to create a significant park area in the open space adjacent to Wetland Area 1 and link with bicycle and pedestrian trails.

    RESPONSE: Acknowledged. Further detail on the multiuse trail and park system has been provided on Sheet 3.

11. Each neighborhood area should contain some type of appropriate park facility. Why does phase 2 and phase 3 have a neighborhood park but none is proposed in phase 1? Why do phases one and three have an amenity center while phase 2 does not?

    RESPONSE: While the project is constructed in phases, it is expected that park and amenities will be shared across the project.

12. The civic use parcel needs to be fully integrated into the project design. As shown there is no internal access to the parcel, and there is no assurance that access can be provided from SR 19.

    RESPONSE: Vehicular access from Revels Road to the Civic Site (trail head) has been demonstrated on the Conceptual Land Use Plan, Sheet 3.

13. The plan appears to show wetland impacts in the northern section along what looks to be a ditch line. Is this in fact wetland area?

    RESPONSE: No, it is areas within Flood Zone A.

14. There also appears to be a wetland impact on the parcel proposed for the Phase 1 amenity center. If this is in fact a wetland impact, it needs to be preserved as it cannot be filled to create building sites.

    RESPONSE: Acknowledged. The impacted wetland in the Phase 1 amenity center is a surface water (cow pond). The Conceptual Land Use plan has been revised to exclude this surface water.

DEVELOPMENT AGREEMENT COMMENTS

1. Page 3 of the agreement proposes a minimum street frontage of 20 feet. The code requires a minimum of 30 feet for lots on cul-de-sacs and curves to ensure that adequate area is available for driveway connections. The lots must meet the minimum lot width at the building line. Staff sees no reason to vary from the code minimum standard.

   RESPONSE: Please see the revised Development Agreement where the minimum street frontage has been updated to 30 feet.

2. Page 3 proposes maximum lot coverage of 80%. A calculation of actual lot coverage based on the proposed lot areas and setbacks estimates the lot coverage for 55 x 120 lots at 51% and for the 75 x 120 lots at 53%. There should be no need to allow lot coverages in excess of 60%.

   RESPONSE: Maximum lot coverage has been decreased to 60%.

3. Page 3 refers to rear setbacks as shown on the conceptual use plan. Rear building setbacks need to be a minimum of 25 feet to allow adequate room for swimming pools and pool decks when the Town's 10-foot setback for swimming pool is applied.

   RESPONSE: Rear setbacks have been revised as requested for a principal structure setback of 25' and accessory structure setback of 10'.

4. The paragraph on wastewater service on page 4 should be modified to allow for other treatment options than exclusively negotiating with the CDD. Current Town policy supports other options.

   RESPONSE: Please see the revised Development Agreement.

5. The paragraph on the option for the Town to commit to oversizing utility lines needs to allow more time. There is no reason to artificially terminate this option within three months of approval of the agreement. The deadline for the Town to seek oversizing lines should be tied to the final subdivision approval for each phase of the project. Allowing oversizing of lines at this point allows for more time for the Town to adequately assess overall service needs while still allowing for the adjustment of engineering design to support increased pipe sizing.

   RESPONSE: Please see the revised Development Agreement.

6. With regard to reclaimed water service, the agreement needs to state that potable water will not be used for irrigation.

RESPONSE: Please see the revised Development Agreement.

7. The reference on page 5 to connection of the project street network with adjacent property needs to state, “shall be provided”. The Town will provide for coordination of the location of interconnections of the street network.

   RESPONSE: Please see the revised Development Agreement.

8. The development agreement language in Section 2 page 7 needs to be amended to include standards regarding what constitutes a major amendment. Major amendments would include changes to the conceptual street layout, changes in lot types and sizes, changes in land uses or changes in the allocation of land uses within the project.

   RESPONSE: Please see the revised Development Agreement.

ENGINEERING REVIEW COMMENTS

1. Provide a traffic impact analysis for review.

   RESPONSE: The Traffic Impact Analysis based on the approved methodology has been included in the application materials.

2. The main N-S spine road and realigned Revels Road should be designed using Option1, not Option 2. They should not have driveway connections or on-street parking. They should have full pedestrian accommodation including the multi-use trail and raised crosswalks/speed tables at key points along its length connecting the trail and sidewalks to amenity, open space, and park areas.

   RESPONSE: Acknowledged, the revised Conceptual Land Use Plan proposes Option 1 for the Collector Roadway design. This has further been updated to increase the width of the multiuse trail to 12’.

3. The neighborhood roads should meet the town’s current road standard..

   RESPONSE: The proposed roadway sections are consistent with the details provided in Table 8.02.02 of the LDC.

4. For the sections of neighborhood roads with end-cap parallel parking, a wider right-of-way should be provided to accommodate the additional pavement..

   RESPONSE: The proposed roadway sections are consistent with the details provided in Table 8.02.02 of the LDC.

DEVELOPMENT AGREEMENT

1. Section 1. (f) Wetlands: Wetland impacts and buffering shall also be subject to the Town’s land development regulations as well as the St Johns River Water Management District.

   RESPONSE: Please see the revised Development Agreement.

2. Section 1. (j) Transportation, Streets and Sidewalks: Revels Road and the Spine Road must have a minimum 90-foot right-of-way, 2' curb and gutter, and a minimum 32-foot-wide pavement with 12-foot travel lanes and 4' curb lanes.

   RESPONSE: Please see the revised Development Agreement.

Thank you in advance for your consideration of the above information. If you require further information, please do not hesitate to contact me at 607.216.2390 or rlopes@rviplanning.com

Sincerely,

RVi Planning + Landscape Architecture

Rhea Lopes, AICP
Project Manager

Enclosures

cc: Alexis Crespo, RVi Planning + Landscape Architecture
Jason Humm, ASF TAP FL I LLC
Jonathan Huels. Lowndes Law Group

.

This instrument prepared by and should be returned to:
Thomas J. Wilkes
GrayRobinson
301 East Pine Street, Suite 1400
Orlando, Florida 32801

MISSION RISE PUD
DEVELOPMENT AGREEMENT

This **MISSION RISE PUD DEVELOPMENT AGREEMENT** ("Agreement") is made as of the _____ day of _____, 2023 ("Effective Date"), between the **Town of Howey in the Hills**, Florida, a Florida municipal corporation (the "Town"), and **ASF TAP FL I, LLC,** a Delaware limited liability company (the "Owner").

RECITALS

A. The Owner owns approximately 243 acres of property more particularly described in Attachment A to this Agreement ("the Property").

B. The Property is within the corporate limits of the Town. The Town has assigned the Property a future-land-use designation of Village Mixed Use and has zoned the Property for PUD - Planned Unit Development.

C. The Owner intends to develop and use the Property as a mixed-use planned development consisting of single-family residential, civic and public uses more specifically set forth herein ("the Project"), to be known as the "Mission Rise PUD."

D. The Town and Owner enter into this Agreement to set forth the terms and conditions of approval negotiated between them for the development and use of the Property as the Mission Rise PUD.

NOW, THEREFORE, the Town and the Owner agree as follows:

Section 1. Land development and uses. Development and use of the Property is subject to the following conditions, requirements, restrictions, and terms:

(a) **General**. Development of the Project and use of the Property shall be governed by this Agreement, the Town's Comprehensive Plan, the Town's Land Development Code ("LDC") and Code of Ordinances ("Town Code"), and all other applicable state laws and regulations and Town ordinances and rules. Where in conflict, the terms of this Agreement shall supersede and prevail over the LDC and Town Code, but only to the extent of the conflict.

In the Conceptual Land Use Plan for the Project the term "conceptual" means the location of land uses on the site, including areas for residential development, open space, stormwater management, parks, and roads in relation to the site area and other uses on the site. Subsequent plan development may refine the details based on detailed engineering design. "Conceptual" does not mean or contemplate the modification of proposed housing types or the relocation of land uses and roads other than minor adjustments dictated by engineering needs and best practices.

Unless otherwise noted, the definition of terms in this Agreement shall be the same as the definitions set forth in the LDC.

(b) **Phasing**. The Project will be developed in multiple phases, as shown on the Conceptual Land Use Plan. Each phase must be designed and built to operate independently with all necessary public services and utilities infrastructure, including roads, multimodal trails and master stormwater systems, consistent with Conceptual Land Use Plan. Revisions to the phasing schedule shall be considered as minor amendments to this Agreement, which may be approved by Town Council with no formal amendment to this Agreement required.

(c) **Purpose**. The purpose of the Mission Rise PUD is to:

1. Create an attractive and high-quality single-family housing development compatible with the scale and character of existing residential development and land uses in the Town;
2. Develop a residential area that is safe, comfortable and attractive for and to pedestrians;
3. Create a community with direct visual and physical access to open land, with a strong community identity, and with amenities in the form of community open space;
4. Provide a network of open space for future homeowners; and
5. Provide a variety of lot sizes and housing choices for diverse age and income groups and residential preferences.

(d) **Land uses**. The Conceptual Land Use Plan for the Project is contained in Attachment B and is an integral part of the approval of the Project. Elements in the Concept Plan include single-family detached homes, civic uses, multimodal trails and approximately 65.4 acres of open space.

(e) **Development standards**.

Setbacks
The setbacks for single family residential lots shall be as shown on the Conceptual Land Use Plan for the Project.

Lot Size
A range of lot sizes shall be provided in order to create variety and offer opportunity for different income households. Minimum lot size will be 55' x 120'. The Project may consist of up to 592 total single-family residential detached lots of 55' x 120' and 75' x 120'.

Dwelling Size

The minimum dwelling size for all single-family residences shall be 1,400 square feet of heated/air-conditioned space under roof plus a two-car garage with a minimum of 400 square feet. Maximum dwelling size shall be 4,600 square feet of heated/air-conditioned space under roof.

Lot Width
The minimum lot width at building line shall be 55 feet with a minimum street frontage of 30 feet.

Lot Coverage
Lots shall have a maximum lot coverage of 60% based on the proposed setbacks shown on the Conceptual Land Use Plan for the Project .

Height of Structures
No residential structure may exceed 35 feet in height

Building Design
Building design shall be in accordance with the Architectural Requirements of the Town's LDC and will comply specifically with the design requirements of LDC Sections 4.06.02 and 4.06.03.

The following principles seek to promote a high-quality development that will create a sense of place and community through the development of the site.

- Housing styles, shapes and materials shall meet the Towns Land Development Regulations.
- The different housing types shall be integrated architecturally in order to give the development a harmonious appearance.
- The creation of visual richness shall be considered when choosing materials and details. Local characteristics are encouraged.
- Side entrances for garages are encouraged.
- A variety of roof heights, pitches and materials will be encouraged.
- Landscaping shall be incorporated into the overall design as a means of linking the development areas with the open spaces.
- Each exterior wall for a single-family home must be a minimum of two materials and a minimum of two colors. Primary facades must have one base color and a complementary wall material may be used to meet the second color requirement.
- Block face restrictions may be reduced to 300 linear feet. The same house model may not be used more than three times within a single block face. For purposes of this requirement, a different house model is a different floor plan, not the same floor plan flipped in a different direction and not the same floor plan with a different exterior treatment.

(f) **Wetlands**. Impacts to wetlands, if any, and wetland buffering shall be subject to the St. Johns River Water Management District regulations.

(g) **Potable water, wastewater, and reclaimed water**. For potable water and wastewater service, well and septic systems are not allowed. The Project must be connected to and

served by the Town's potable-water and wastewater systems prior to a certificate of occupancy being issued for a structure in the Project (except temporary construction uses).

Except as may be set forth otherwise in this Agreement, the Owner must install all on-site potable-water, wastewater, and reclaimed-water infrastructure and connect to central water and wastewater systems, and to the Town's reclaimed-water system when available at the Property boundary, all at no cost to the Town. The Owner must pay potable-water, wastewater, and reclaimed-water capital and connection charges, impact fees, and other Town rates, fees, and charges, either applicable currently or in the future.

1. *Potable Water*. The Town will provide potable water, and may in the future provide reclaimed water, to the Project in accordance with its applicable ordinances, resolutions, operating regulations, policies and procedures. The Town will provide potable water to the Property in sufficient quantities for development of the Project as contemplated herein, subject to the limitations and requirements of permits issued to the Town from time to time by the St. John's River Water Management District in connection with water consumption.

The Owner shall construct, at no expense to the Town, all off-site potable-water-system facilities, lines, pumps, valves, control structures, and appurtenances (other than water-treatment plants) necessary to serve the Project. The construction and route of off-site lines and other structures shall be done according to engineering plans prepared by the Owner and approved by the Town Manager. Potable water shall not be used for irrigation.

2. *Wastewater*. The Town will provide wastewater-collection and transmission service to the Project, transmitting Project wastewater to the Central Lake Community Development District ("CDD") or another wastewater utility service provider with available capacity to treat and dispose the Project's wastewater ("Wastewater Utility"). The Owner must obtain from the CDD or Wastewater Utility a contract right for the Project to receive treatment and disposal of its wastewater at such provider's treatment and disposal facilities.

The Owner shall construct, at no expense to the Town, all off-site wastewater-system facilities, lines, lift stations, pumps, valves, control structures, and appurtenances (other than wastewater-treatment plants and disposal facilities) necessary to serve the Project. The construction and route of off-site lines, lift stations, pumps, and other structures shall be done according to engineering plans prepared by the Owner and approved by the Town Manager.

3. *Town Option to Oversize Water and Wastewater Lines*. Within 270 days of the effective date of the Owner's contract right to receive wastewater-treatment and –disposal service, as referenced above, the Town may elect to oversize the off-site lines, pumps, improvements, or other facilities or appurtenances for the Town's water or wastewater system, or for both. If the Town elects to oversize one or both systems, it must inform the Owners in writing of the specifications for the oversizing(s) within the 270-day period. The Town shall reimburse the Owner for the difference in the increase in cost of design, materials and construction to oversize the improvements based on plans and cost estimates provided by the Owner to the Town and approved by the Town Manager, which approval shall not be unreasonably withheld, conditioned or delayed. The Town shall reimburse the Owners for the difference in the costs within 60 days following (i) completion of the improvements and (ii) receipt by the Town of documentation

reasonably demonstrating that the Owner has completed the work and has incurred the costs attributable to the over-sizing, all in keeping with the plans and cost estimate previously approved by the Town Manager.

4. *Permit-Induced Costs, Restrictions, Requirements, and Risks.* Under state and federal laws and regulations, the Town may provide its potable-water and wastewater services to the Property and the Owner and its successors only if the Town first has been issued certain required permits. The Owner acknowledges that the permits are inevitably conditioned with requirements and restrictions that typically impose costs and risks. The Owner further acknowledges that, for the Town to operate its potable-water and wastewater systems in an orderly, dependable, and cost-effective manner, the Town must have the ability legally to spread the costs and risks among customers and property owners benefiting from the services. The Owner acknowledges, therefore, that (i) from time to time the Town may impose rates, fees, and charges and may issue potable-water system and wastewater-system regulations and policies that impose restrictions and requirements on its customers and benefiting property owners, such as the Owner and it successors, and (ii) so long as the Owner or successors are required to pay only their fair share for such rates, fees, and charges, then the imposition of such rates, fees, and charges and the issuance of such system regulations are not prohibited by or otherwise a breach of this Agreement.

5. *Reclaimed Water*. The Owner must install reclaimed water lines as required by the Town's Code of Ordinances, and shall obtain reclaimed-water service for the Project when the Town constructs reclaimed-water lines to the Project's boundaries. Until such time as the Town supplies reclaimed water, the Owner and its successors shall use the reclaimed water lines to irrigate properties within the Project boundaries, but only with stormwater from on-site stormwater-retention ponds or with sources other than potable water as may be approved by the Town and St. John's River Water Management District. Except for installation of reclaimed lines at the time of development as noted above, connection to reclaimed water after the development of the Project may not result in additional costs to the Owner or developer.

(h) **Solid Waste**. Solid Waste collection shall be pursuant to Town regulations.

(i) **Drainage**. The maintenance, repair, and replacement of the drainage system shall be the responsibility of the homeowners association(s).

(j) **Transportation**

Street and Sidewalks

There must be ingress and egress points to Revels Road, County Number Two Road and Orange Blossom Road at final buildout of the Project in the approximate location shown on the Conceptual Land Use Plan. The access at County Road Number Two must be a full intersection subject to review and approval by Lake County. Future access connections at the western and eastern boundaries of the property will also be provided, as shown on the Conceptual Land Use Plan, subject to further coordination with the Town on specific location of interconnections of the street network and the Owner obtaining legal access to the adjacent parcels without imposition of any fees or costs, other than customary fees and costs the Owner incurs in negotiating such access with the owners of adjacent parcels.

Revels Road and the Spine Road must have a minimum 90-foot right-of-way, curb and gutter, and a minimum 24-foot-wide pavement with minimum 12-foot travel lanes. All other internal neighborhood roads must have a minimum 50-foot right-of-way, curb and gutter, and a minimum 24-foot-wide pavement with minimum 12-foot travel lanes, which may be reduced to 11-foot travel lanes when adjacent to on-street parking. All alley roads must have a minimum 22-foot right-of-way, curb and gutter, and a minimum 20-foot-wide pavement. Provision must be made in the rights-of-way for underground utilities.

The Project must have a connected street system that serves vehicles, pedestrians and bicycles and that connects to recreation facilities and adjacent residential/community areas. Revels Road, the Spine Road and all neighborhood roads within the Project must be public, dedicated to and maintained by the Town. No streets in the Project may be gated or otherwise restricted or obstructed by the Owner, by a homeowners' or property owners' association, or by any other person or entity.

All portions of the development must be accessible by a direct, convenient, attractive, safe, and comfortable system of pedestrian facilities. The development must provide appropriate pedestrian amenities. A multimodal trail with minimum width of twelve feet must be constructed within each phase of the Project consistent with Conceptual Land Use Plan and the Town's bicycle/pedestrian plan. The multimodal trail and all sidewalks within rights-of-way must be dedicated to and maintained by the Town.

Transportation Concurrency and Proportionate Fair Share Mitigation

The Project must undergo concurrency review. The Owner must complete and submit for review prior to final development order a traffic-impact analysis.

If the results of the traffic-impact analysis require any mitigation for traffic generation, the Town and the Owner will work together and with any other applicable jurisdiction as required by applicable law to address such mitigation requirements through Owner's funding of its proportionate fair share of traffic improvements. Payment of the Owner's fair share must be made in pro-rata amounts upon the issuance of each building permit.

(k) **Schools**. The Project must apply for concurrency review at Lake County Public Schools. The school district has a specific application process. The Project must be shown to have appropriate school concurrency before building permits are issued.

(l) **Landscaping Requirements**. All landscaping and buffer requirements shall be in accordance with the LDC and as illustrated on the Conceptual Land Use Plan with the exception of the following:

1. All buffer, street, and canopy trees planted at the Project will be a minimum of a 2" caliper;
2. the Owner shall require homebuilders to plant at least one canopy tree for each single-family lot of at least 3" DBH; and
3. the developer will replace the equivalent of 30% of total tree-inches removed.

All trees planted at the Project shall adhere to the current guidelines established by the Florida Grades and Standards for nursery-grown trees and must be Florida grade #1 or better.

Developer must install street trees along the roadway where common areas abuts the road as required by the LDC.

(m) **Tree Protection**. Under no circumstances may any tree, regardless of size or species, be removed from any designated wetland or conservation easement. Trees proposed to be maintained on -site must comply with LDC requirements. No construction activity, equipment or material is permitted inside a tree protection barrier.

(n) **Lighting**. Decorative street lighting (Sanibel fixture, a Duke Energy standard fixture) must be installed (i) at every intersection, (ii) at the end of each cul-de-sac, and (iii) at intervals of 300 feet or as approved otherwise by the Town Manager. Street lighting must be installed by the Owner. All lighting must be directional, shielded lighting designed to minimize light pollution. All lighting must be maintained by the HOA.

(o) **Utilities**. All utilities must be underground.

(p) **Signage**. Entrance signs and informational signage may be located in buffers, setbacks/and or signage easements as approved by the Planning and Zoning Board. The Owner shall present a sign plan for review and approval by the Planning and Zoning Board with the final site plan for each phase of the Project. The Town Council has approved use by the Owner and/or builder(s) of vertical marketing flags, also known as feather banners, with the following stipulations:

1. Feather banners must be placed no less than 200 feet apart.
2. A maximum of 10 feather banners, in total.
3. Feather banners cannot be placed within the right of way.
4. Feather banners cannot be located offsite of PUD property.
5. Feather banners cannot exceed 12 feet in height.
6. Feather banners must be replaced or removed if they become faded, torn, or tattered.
7. Feather banners must be removed when 90% of the homes in the development have received building permit approval.

Billboards and pole signs are prohibited. Unless defined differently in the LDC, a pole sign is a permanent sign supported by at least one upright pole, pylon, or post secured to the ground, with the bottom of the sign face four feet or higher above the finished grade. All additional signage not previously approved must be in compliance with the requirements in the LDC.

(q) **Maintenance of Common Areas**. Maintenance of all common areas within the Project is the responsibility of the homeowners' association(s) for the affected subdivision.

(r) **Prohibited Uses**. No manufactured or modular homes are allowed.

Section 2. Amendments. Any amendments to the Conceptual Land Use Plan that occur after the effective date of this Agreement shall take effect only if and when approved by the Town

Council or Town staff as applicable. Major amendments shall include items such as changes to the location of individual land uses; any increase in the total number of residential units; or relocation of roads and routes for pedestrian and bicycle facilities. Major amendments shall be approved by the Town Council in the manner required by law or otherwise as determined by Town Council, which may include public notice(s) and hearing(s). Minor amendments shall include items such as minor adjustments of roads, trails and pedestrian ways based on more detailed site-specific data; modifications to the phasing schedule; adjustments to utility locations based on more detailed engineering data; or adjustments to parks and open space based on more detailed subdivision design. Minor amendments may be approved by the Town Manager without referral to the Planning and Zoning Board or Town Council. Whether a proposed amendment is major or minor will be determined by the Town Manager. Minor amendments to the Conceptual Land Use Plan shall automatically be incorporated into this Agreement and shall modify or replace the Conceptual Land Use Plan in Attachment B to the extent of such amendment to the Conceptual Land Use Plan, without the necessity for an amendment to this Agreement.

Section 3. **Notices**. All notices or payments required to be made hereunder shall be made at the following addresses:

To Town:	Sean O'Keefe, Town Manager Town of Howey-in-the-Hills 101 North Palm Avenue Howey-in-the-Hills, FL 34737 sokeefe@howey.org
With copies to:	John Brock, CMC, Town Clerk Town of Howey-in-the-Hills 101 North Palm Avenue Howey-in-the-Hills, FL 34737 jbrock@howey.org Thomas J. Wilkes, Town Attorney Gray Robinson, P.A. 301 East Pine Street, Suite 1400 Orlando, FL 32801 twilkes@gray-robinson.com
To Owner:	Jason Humm 1170 Peachtree Street NE, Suite 1150 Atlanta, GA 30309 jhumm@turnstonegroup.com
With copies to:	Rhea Lopes, AICP RVI Planning + Landscape Architecture 10150 Highland Manor Dr, Suite 450 Tampa FL 33610 rlopes@rviplanning.com

Mike Ripley
Land Advisors
399 Carolina Ave, Suite 200
Winter Park, Florida 32789
MRipley@landadvisors.com

Jonathan Huels
Lowndes
215 North Eola Drive
Orlando, Florida 32801
Jonathan.huels@lowndes-law.com

Section 4. Severability. If any provision or portion of this Agreement is declared by a court of competent jurisdiction to be void, unconstitutional, or unenforceable, then all remaining provisions and portions of this Agreement shall remain in full force and effect. To that end, this Agreement is declared to be severable.

Section 5. Binding Effect. This Agreement runs with the land and is binding on and enforceable by and against the parties hereto and all their successors in interest. However, no Lot Owner shall have the obligations imposed on the Owner as the developer of the Project under this Agreement. For that purpose, a "Lot Owner" means an end-user of a lot created within the Property with a completed residential unit constructed thereon, for which a certificate of occupancy has been issued. Each party covenants to each other party that this Agreement is a legal, valid, and binding agreement, enforceable against the party in accordance with its terms.

Section 6. Negotiated Agreement. The land uses, densities, intensities, and other conditions of approval of the Project have been negotiated and agreed to by the Owner and the Town. The Conceptual Land Use Plan and this Agreement together constitute an agreement between the parties with the knowledge that the Owner's successors in title, the future homeowners, and other landowners within the Property, as well as the Town and its affected property owners and residents, all will rely justifiably on the agreed-to land uses, densities, and intensities authorized hereby for the Property. For that reason, the Owner and the Owner's successors in interest have the contract right to develop the PUD with the uses, densities, and intensities approved by the Town, subject to the restrictions and requirements in the conditions of approval set forth in this Agreement. Neither the Owner (and its successors in interest) nor the Town shall have the right in the future to rezone or downzone the property, or otherwise alter the uses, densities and intensities, or delete, waive or amend any conditions of approval except through an amendment to the Plan negotiated and approved by the Town Council and the owner of the then-subject parcel. This section shall survive the termination and expiration of this Agreement.

Section 7. Homeowners' Association(s).

(a) **Association Responsibilities**. A homeowner's association and/or a property owner's association ("HOA") must be created by the Owner. Membership in the HOA shall be mandatory for all property owners within the Project. The HOA shall be responsible for

maintaining all parks, open-space and buffer areas, streetlights, stormwater-management areas and drainage systems, entrance features, boundary walls and/or fences, access tracts, and landscaped tracts within the Project.

(b) **Requirement for Plat Recording**. Before a plat may be recorded for the Property and the Project, the Owner shall furnish to the Town copies of the pertinent documents for the homeowners' or property owners' association or associations, plus the covenants, conditions and restrictions for the Property, setting forth the requirements and restrictions enumerated in this section 7 and other applicable parts of this Agreement.

Section 8. Additional Requirements.

(a) **Letter of credit**. Construction and dedication to the Town of the public facilities and improvements required under this Agreement for each phase of the Project will be a condition precedent to final plat approval for such phase. In lieu of construction and dedication, however, the Owner may post a letter of credit or performance bond with the Town for 125% of the cost of such improvements not completed at the time of plat, in which event this condition precedent to final plat approval will be deemed satisfied.

(b) **Conveyances to the Town**. Property dedicated or otherwise conveyed to the Town under this Agreement must be free and clear of encumbrances unless and to the extent an encumbrance is acceptable to the Town. Encumbrances discovered after the Effective Date of this Agreement must be removed or resolved by the Owner or its successor developer prior to dedication or conveyance of the affected property to the Town.

(c) **Changes in status of land**. Until completion of the Project, the Owner or its successor developer of the Project has a continuing duty (i) to disclose promptly to the Town all changes in ownership, encumbrances, and other matters of record affecting the Property and (ii) to resolve all issues, title or otherwise, that may be identified by the Town as a result of such changes. Failure to disclose such changes or to resolve resulting issues may result in delay in issuance of development permits.

(d) **Developer representations binding**. If at Town Council hearings on the approval of the Project the Owner makes a written or oral promise or representation, and if the promise or representation was relied upon by Town Council in approving the Project or otherwise acted to induce or materially influence Town Council in its vote to approve the Project, the promise or representation is a condition of approval of the Project. The promise or representation is binding on the Owner and its successors and enforceable by the Town against the Owner and its successors as if set forth fully in this Agreement.

Section 9. Governing Law. This Agreement shall be governed by the laws of the State of Florida. Venue for any judicial proceeding pertaining to the Agreement shall be in the Fifth Judicial Circuit of Florida, in Lake County, Florida.

Section 10. Effective Date; Termination.

(a) **Effective Date**. This Agreement shall take effect upon the Effective Date above, or on the date when it has been executed by both the Town Council and the Owner, whichever is later.

(b) **Termination**. This Agreement shall remain in effect unless and until terminated under one of the following conditions:

1. If as of the second anniversary of the Effective Date of this Agreement an Owner's contract right to treatment and disposal services by the CDD, as required under Section 1(g)1 above, has not taken effect, the Town may terminate this Agreement by vote of its Town Council. The vote must occur no later than (i) the third anniversary of the Effective Date or (ii) the CDD Contract Date, whichever occurs first. The "CDD Contract Date" is the date on which the Owner's contract right to treatment and disposal services by the CDD takes effect.

2. If as of the second anniversary of the CDD Contract Date no building permit for a residential unit in the Project has been issued, the Town may terminate this Agreement by vote of its Town Council. The vote must occur no later than (i) the third anniversary of the CDD Contract Date or (ii) the date a building permit is issued, whichever occurs first.

3. If as of the fifth anniversary of the CDD Contract Date no building permit for a residential unit in the second phase of the Project has been issued, the Town may terminate this Agreement by vote of its Town Council, but only as it applies to development of the second phase. The vote must occur no later than (i) the sixth anniversary of the CDD Contract Date or (ii) the date a building permit is issued for a residential unit in the second phase, whichever occurs first. Termination of the Agreement for this reason will not act to preclude the Owner or its successor from completing the first phase of the Project.

4. If as of the tenth anniversary of the CDD Contract Date no building permit for a residential unit in the third phase of the Project has been issued, the Town may terminate this Agreement by vote of its Town Council, but only as it applies to development of the third phase. The vote must occur no later than (i) the eleventh anniversary of the CDD Contract Date or (ii) the date a building permit is issued for a residential unit in the third phase, whichever occurs first. Termination of the Agreement for this reason will not act to preclude the Owner or its successor from completing the first or second phase of the Project.

Termination of this Agreement, in whole or in part, under this section shall be without prejudice to the Owner or its successor to apply for Town approvals to undertake or continue development of the Property in accordance with the circumstances and land-development regulations then existing in the Town.

Section 11. Recording. This Agreement shall be recorded by the Town, at the Owner's expense, in the Public Records of Lake County, Florida, and shall constitute a covenant running with the land.

Section 12. Authority. This Agreement is entered into by the Town under the home-rule powers granted to it by the Florida constitution (including specifically Article VIII, Section 2(b) thereof), the home-rule powers granted municipalities by statute (including specifically Chapter

166, Florida Statutes), and the Town's Charter. This Agreement does not constitute a "development agreement" under the Florida Local Government Development Agreement Act.

Section 13. Entire Agreement. This Agreement constitutes the entire agreement of the parties with respect to the transactions contemplated herein. It supersedes all prior understandings or agreements between the parties relating to the Property and the Project. No amendment to the terms of this Agreement shall be effective unless in writing signed by all parties hereto. Amendments to this Agreement will take effect and will be binding against the Town only if approved by a vote of the Town Council.

Section 14. Waiver. The failure of a party hereto to insist upon or enforce any right or privilege granted hereunder shall not constitute or operate as a waiver thereof and nothing shall constitute a waiver of any party's right to insist upon strict compliance with the terms hereof. However, any party may waive in writing the benefit of any provision or condition for its benefit which is contained herein. Waivers of material provisions of either this Agreement or the Town's LDC will be valid and binding against the Town only if approved by a vote of the Town Council.

[Signature pages follow]

IN WITNESS WHEREOF, the parties are signing this Agreement as of the Effective Date or, if later, the date by which both parties have fully executed this Agreement.

TOWN OF HOWEY IN THE HILLS, FLORIDA

By: its Town Council

By: _____
Hon. Martha McFarlane, Mayor

Attest:

By: _____
John Brock, CMC, Town Clerk

Approved as to form and legality:
(for the use and reliance of the Town only)

_____
Thomas J. Wilkes, Town Attorney

STATE OF FLORIDA
COUNTY OF LAKE

The foregoing instrument was executed, sworn to and acknowledged before me this ____ day of _____, 2023, by Martha McFarlane, as Mayor of the Town of Howey in the Hills.

(SEAL)

_____
Signature of Notary

_____
Name of Notary Public
(Typed, Printed or stamped)

Personally Known ____ OR Produced Identification ____
Type of Identification Produced:

IN WITNESS WHEREOF, the parties have executed this instrument as of the day and year first above written.

Signed, sealed and delivered
in the presence of:

"WITNESSES"

_____
Printed Name: _____

_____
Printed Name: _____

"OWNER"

ASF TAP FL I, LLC, a Delaware limited liability company

By: _____
Printed Name: _____
As its: _____

STATE OF FLORIDA
COUNTY OF _____

The foregoing instrument was executed, sworn to and acknowledged before me by means of ____ physical presence or _____ online notarization, this _____ day of _____, 2022, by _____, as _____ of **ASF TAP FL I, LLC.**, a Delaware limited liability company, on its behalf.

(SEAL)

_____
Signature of Notary Public

_____
Name of Notary Public
(Typed, Printed or stamped)

Personally Known ____ ***OR*** Produced Identification _____
(Type of Identification Produced)

Attachment A
To
MISSION RISE PUD DEVELOPMENT AGREEMENT

LEGAL DESCRIPTION

Attachment B
To
MISSION RISE PUD DEVELOPMENT AGREEMENT

CONCEPTUAL LAND USE PLAN

MISSION RISE
Project № 23017.1, v1.1
August 2023

TRAFFIC IMPACT ANALYSIS
TOWN OF HOWEY-IN-THE HILLS
FLORIDA

Prepared by:

Traffic & Mobility Consultants
3101 Maguire Boulevard, Suite 265
Orlando, Florida 32803
www.trafficmobility.com
(407) 531-5332

Prepared for:
ASF TAP Florida I, LLC
1170 Peachtree Street Northeast, Suite 1150
Atlanta, Georgia 30309

EXECUTIVE SUMMARY

Project Information

Name:	Mission Rise
Location:	West of SR 19 (South Palm Avenue), east of Silverwood Lane, and south of Number 2 Road in the Town of Howey-in-the-Hills, Lake County, Florida
Description:	592 Single Family Residential Units
Access Plan:	One (1) full access at the intersection of Number 2 Road and Spine Road One (1) full access at the intersection of SR 19 and Revels Road One (1) full access at the intersection of Revels Road and Orange Blossom Road (expected to carry limited traffic)

Findings

Trip Generation:	5,181 Daily Trips / 376 AM Peak Hour Trips / 529 PM Peak Hour Trips
Roadway Capacity:	The segments of SR 19, from Lane Park Road to Central Avenue and from CR 455 to CR 478 are projected to operate over their capacities at the project buildout.
Intersection Capacity:	The intersections of SR 19 and CR 48, SR 19 and Central Avenue, SR 19 and Revels Road, and SR 19 and CR 455 are projected to experience delays in the buildout condition. The project does not have a significant impact on the intersections.

Recommendations

Intersection Improvements:	Retime the signal at the intersections of SR 19 and CR 48 to maintain LOS standards. Construct a 430-foot northbound left turn lane and a 405-foot southbound right turn lane at the intersection of SR 19 and Revels Road. Construct a 425-foot westbound left turn lane and a 250-foot eastbound right turn lane at the intersection of Number 2 Road and Spine Road.

PROFESSIONAL ENGINEERING CERTIFICATION

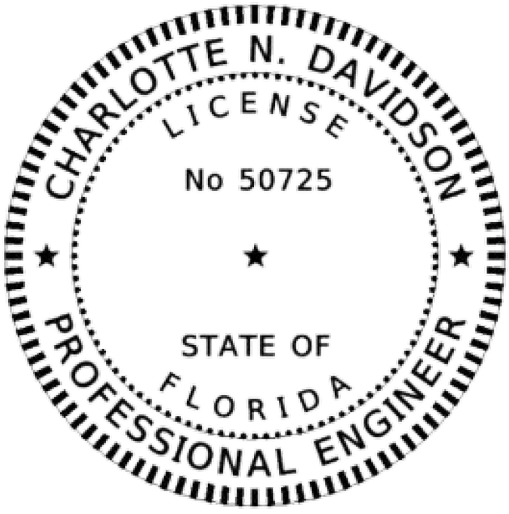
I hereby certify that I am a Professional Engineer properly registered in the State of Florida practicing with Traffic & Mobility Consultants LLC, a corporation authorized to operate as an engineering business, CA-30024, by the State of Florida Department of Professional Regulation, Board of Professional Engineers, and that I have prepared or approved the evaluations, findings, opinions, conclusions, or technical advice attached hereto for:

PROJECT: Mission Rise

LOCATION: Town of Howey-in-the-Hills, Florida

CLIENT: ASF TAP Florida, LLC

I hereby acknowledge that the procedures and references used to develop the results contained in these computations are standard to the professional practice of Transportation Engineering as applied through professional judgment and experience.



THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY

Charlotte N Davidson

Digitally signed by Charlotte N Davidson
Date: 2023.08.29 13:19:00 -04'00'

ON THE DATE ADJACENT TO THE SEAL

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

TRAFFIC & MOBILITY CONSULTANTS LLC
3101 MAGUIRE BOULEVARD, SUITE 265
ORLANDO, FLORIDA 32803
CERTIFICATE OF AUTHORIZATION CA-30024
CHARLOTTE N. DAVIDSON, P.E. NO 50725

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1.0 INTRODUCTION

This Traffic Impact Analysis (TIA) was conducted to assess the impact of the proposed Mission Rise development in the town of Howey-in-the-Hills, Florida. The proposed development consists of 592 single-family units with an anticipated buildout year of 2033. This study conforms to the Tier 2 TIA requirements of the Town of Howey-in-the-Hills and Lake County. The analysis was prepared in accordance with the approved methodology. The TIA has been revised to include updated information based on a meeting with Lake County held on August 21, 2023. The methodology and meeting notes are included in **Appendix A**.

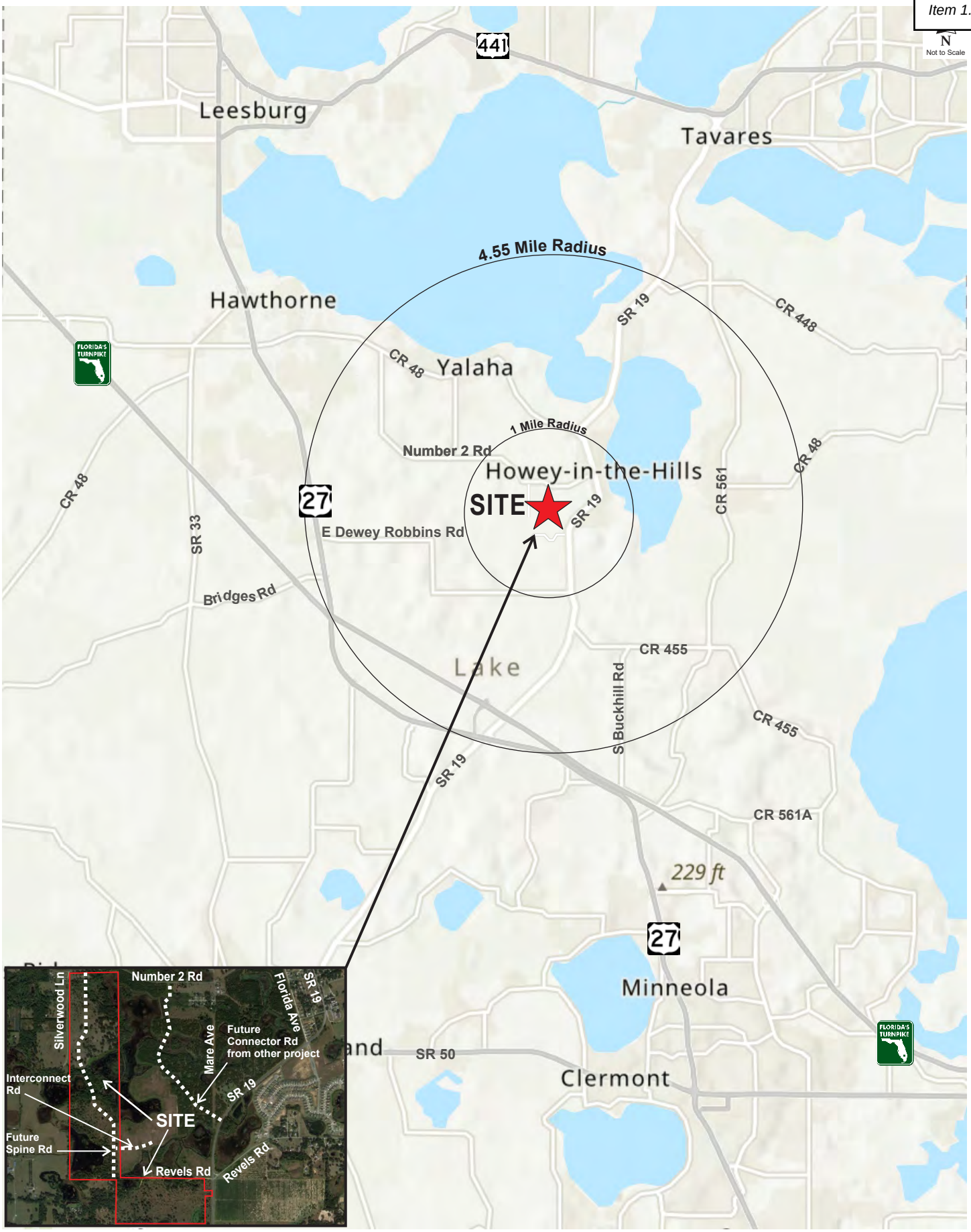
The site is located east of Silverwood Lane, west of SR 19 (South Palm Avenue), and south of Number 2 Road. **Figure 1** depicts the site location and the surrounding transportation network.

The development will be accessed via the intersections of Number 2 Road and Spine Road (future road), SR 19 and Revels Road, and Revels Road and Orange Blossom Road. The preliminary development site plan is provided in **Appendix B**.

Data used in the analysis consisted of site plan/development information provided by the project engineers, AM and PM peak hour intersection traffic counts obtained by Traffic & Mobility Consultants LLC, FDOT's *2023 Multimodal Quality/Level of Service (MQ/LOS) Handbook* and roadway capacities obtained from the *2022 Lake County Congestion Management Process (CMP) Database*.

1.1 Study Area

The project study area was established based on the standard requirements of the Lake Sumter Metropolitan Planning Organization (LSMPO) methodology and the Town of Howey-in-the-Hills *Land Development Code* (*LDC*). In accordance with the requirements of Tier 2 TIA methodology, the impact area includes roadway segments and intersections within a 4.55-mile radius of the site in addition to roadways where the development traffic is expected to consume 5% or more of their adopted Level of Service (LOS) capacities. The roadway segments characteristics were obtained from the *2022 Lake County Congestion Management Process (CMP) Database* and 2023 *FDOT Multimodal Quality/Level of Service (Q/LOS) Handbook Appendix B,* included in **Appendix C**. The project study area determination is provided in **Table 1** as determined in the approved methodology.



TMC Traffic & Mobility Consultants

Site Location Map
Mission Rise
23017.1, v1.1

Figure 1

Table 1
Study Area

Roadway Segment	SEG ID	No Lns	Area Type	Median Type	Speed Limit	LOS Std	Pk Dir Cap	Dir	Project Dist	Project Trips	Within 1-Mile? **	% Cap	In Study?
CR 455													
SR 19 to	950	2	R	Undivided	45	C	740	EB	10%	20	NO	2.7%	NO
CR 561								WB		33		4.5%	
CR 561 to	960	2	R	Undivided	25	C	410	EB	5%	10	NO	2.4%	NO
CR 561A								WB		17		4.1%	
CR 48													
US 27 to	1240	2	U	Undivided	40	D	1,080	EB	15%	50	NO	4.6%	NO
Lime Ave								WB		29		2.7%	
Lime Ave to	1250	2	U	Undivided	40	D	1,080	EB	2%	7	NO	0.6%	NO
SR 19								WB		4		0.4%	
CR 561 to	1260	2	U	Undivided	40	D	840	EB	3%	6	NO	0.7%	NO
Ranch Rd								WB		10		1.2%	
Ranch Rd to	1270	2	R	Undivided	40	C	410	EB	3%	6	NO	1.5%	NO
CR 448A								WB		10		2.4%	
CR 561													
CR 448 to	1410	2	U	Undivided	50	D	1,080	NB	0%	0	NO	0.0%	NO
CR 48								SB		0		0.0%	
CR 48 to	1420	2	U	Undivided	40	D	620	NB	3%	10	NO	1.6%	NO
South Astatula City Limit								SB		6		1.0%	
South Astatula City Limit	1430	2	U	Undivided	40	D	1,080	NB	3%	10	NO	0.9%	NO
to CR 455								SB		6		0.6%	
CR 455 to	1440	2	R	Undivided	35	C	470	NB	2%	7	NO	1.5%	NO
Howey Cross Rd								SB		4		0.9%	
Howey CRoss Rd to	1450	2	R	Undivided	40	C	640	NB	2%	7	NO	1.1%	NO
Turnpike Rd / CR 561A								SB		4		0.6%	
SR 19													
Lane Park Rd to	3040	2	U	Undivided	55	D	920	NB	23%	45	NO	4.9%	**YES**
CR 48								SB		77		**8.4%**	
CR 48 to	3050	2	U	Undivided	40	D	700	NB	25%	49	NO	**7.0%**	**YES**
Central Ave								SB		83		**11.9%**	
Central Ave to	3060	2	U	Undivided	35	D	1,200	NB	50%	167	**YES**	**13.9%**	**YES**
CR 455								SB		98		**8.2%**	
CR 455 to	3070	2	R	Undivided	55	C	450	NB	35%	117	NO	**26.0%**	**YES**
US 27 / SR 25								SB		69		**15.3%**	
US 27 / SR 25	3080	2	R	Undivided	55	C	450	NB	20%	67	NO	**14.9%**	**YES**
to CR 478								SB		39		**8.7%**	
SR 91 (Florida Turnpike)													
US 27/SR 25 to	3566	4	U	Freeway	70	B	2,230	EB	10%	20	NO	0.9%	NO
US 27/SR 25/SR 19 Interchange								WB		33		1.5%	
US 27/SR 25													
SR 19 to	3830	4	U	Divided	55	D	3,280	EB	15%	29	NO	0.9%	NO
CR 561								WB		50		1.5%	
Central Ave													
SR 19 to	N/A	2	U	Undivided	30	D	770 *	EB	10%	20	**YES**	2.6%	**YES**
Mare Ave								WB		33		4.3%	
Number 2 Rd													
Mare Ave to	N/A	2	U	Undivided	30	D	730 *	EB	35%	69	**YES**	**9.5%**	**YES**
Silverwood Ln								WB		117		**16.0%**	
Silverwood Ln to	N/A	2	U	Undivided	45	D	730 *	EB	15%	29	**YES**	4.0%	**YES**
CR 48								WB		50		**6.8%**	

Source: 2022 Lake County CMP Database

** 2023 FDOT Multimodal Quality/Level of Service Handbook, Appendix B: Florida's Generalized Service Volume Tables*

Bold numbers represent capacity equal or higher than 5%.

Based on the study area analysis presented in **Table 1**, the following roadway segments were analyzed for the PM peak hour:

- SR 19
  - Lane Park Road to CR 48
  - CR 48 to Central Avenue
  - Central Avenue to CR 455
  - CR 455 to US 27 / SR 25
  - US 27 / SR 25 to CR 478

- Central Avenue
  - SR 19 to Mare Avenue

- Number 2 Road
  - Mare Avenue to Silverwood Lane
  - Silverwood Lane to CR 48

The following intersections were analyzed for the AM and PM peak hours:

- SR 19 and CR 48 (Signalized)
- SR 19 and Central Avenue (Unsignalized)
- Central Avenue and South Florida Avenue (Unsignalized)
- SR 19 and Revels Road (Unsignalized) (East Project Access)
- SR 19 and CR 455 (Unsignalized)
- Spine Road and Interconnect Road (Proposed)
- Number 2 Road and Spine Road (North Project Access) (Proposed)
- Revels Road and Spine Road (Proposed)
- Revels Road and Orange Blossom Road (South Project Access)

2.0 EXISTING CONDITIONS ANALYSIS

Existing conditions in the vicinity of the site were analyzed to establish a baseline for the traffic conditions prevailing in the vicinity of the proposed development. The analysis included a review of existing roadway segment capacity and analysis of the intersection operations at the study intersections.

2.1 Roadway Segment Capacity

Existing roadway conditions were analyzed by comparing the existing traffic volumes within the study area and the adopted level of service (LOS) standards for the roadway segments. **Table 2** summarizes the roadway segment capacity analysis.

Table 2
Existing Roadway Segment Capacity Analysis

Roadway Segment	Seg ID	No Lns	LOS Std	Pk Dir Cap	Dir	Existing Vol	LOS	V/C	Deficient?
***Central Ave**									
SR 19 to Mare Ave	N/A	2	D	530	EB	57	C	0.11	NO
					WB	59	C	0.11	NO
SR 19									
Lane Park Rd to CR 48	3040	2	D	920	NB	610	C	0.66	NO
					SB	656	C	0.71	NO
CR 48 to Central Ave	3050	2	D	700	NB	433	C	0.62	NO
					SB	372	C	0.53	NO
Central Ave to CR 455	3060	2	D	1,200	NB	433	B	0.36	NO
					SB	372	B	0.31	NO
CR 455 to US 27 / SR 25	3070	2	C	450	NB	507	D	1.13	YES
					SB	435	C	0.97	NO
US 27 / SR 25 to CR 478	3080	2	C	450	NB	466	D	1.04	YES
					SB	519	D	1.15	YES
Number 2 Rd									
Mare Avenue to Silverwood Ln	N/A	2	D	400	EB	57	C	0.14	NO
					WB	59	C	0.15	NO
Silverwood Ln to CR 48	N/A	2	D	400	EB	57	C	0.14	NO
					WB	59	C	0.15	NO

Source: 2022 Lake County CMP Database
** Counts were obtained from PM Peak Turning Movement Counts*
***A reduction of 25% was applied to the Peak Hour Directional Capacity of 530, as Number 2 Road is a substandard road*

The analysis indicates that all study roadway segments currently operate adequately within their capacities except the segments of SR 19 from CR 455 to CR 478 which currently operate over capacity.

2.2 Intersection Capacity

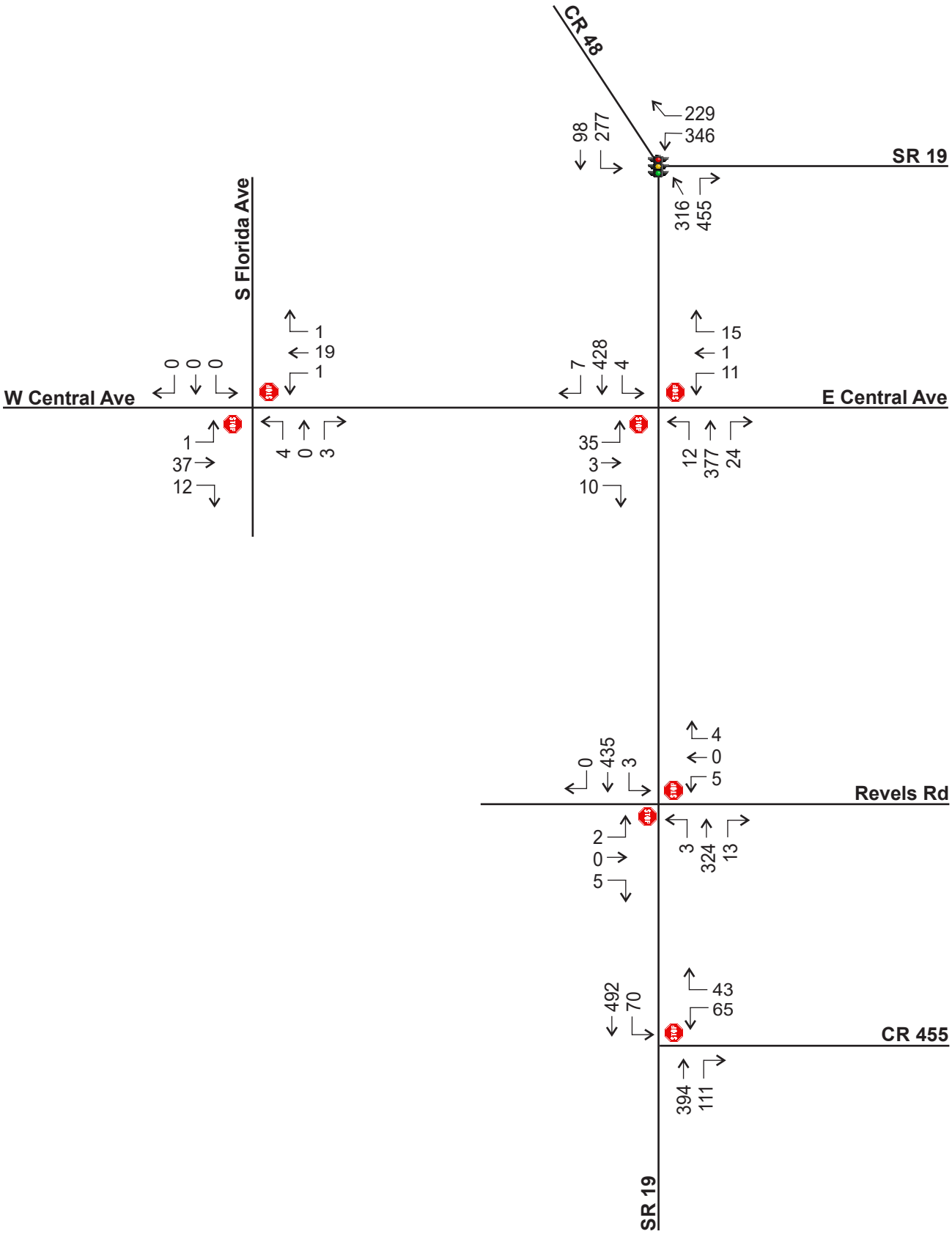
The intersection capacity analysis was performed for the AM and PM peak hour periods. The capacity analysis was performed using *Synchro* and the methods of the *Highway Capacity Manual (HCM)*. Turning movement volumes obtained during the AM and PM peak hour are displayed in **Figure 2** and **Figure 3**, respectively. The counts at SR 19 and CR 455 were collected on January 24, 2023, which coincides with a seasonal factor of 1.0. The remaining intersection turning movement counts were collected on July 19, 2023, during the off-peak season; therefore, a seasonal factor of 1.06 was applied to these counts. The turning movement counts and the seasonal factor report are included in **Appendix D**.

The results of the intersection capacity analysis, summarized in **Table 3,** reveal that all study intersections are currently operating at adequate LOS. Detailed *HCM* analysis worksheets are included in **Appendix E**.

Table 3
Existing Intersection Capacity Analysis

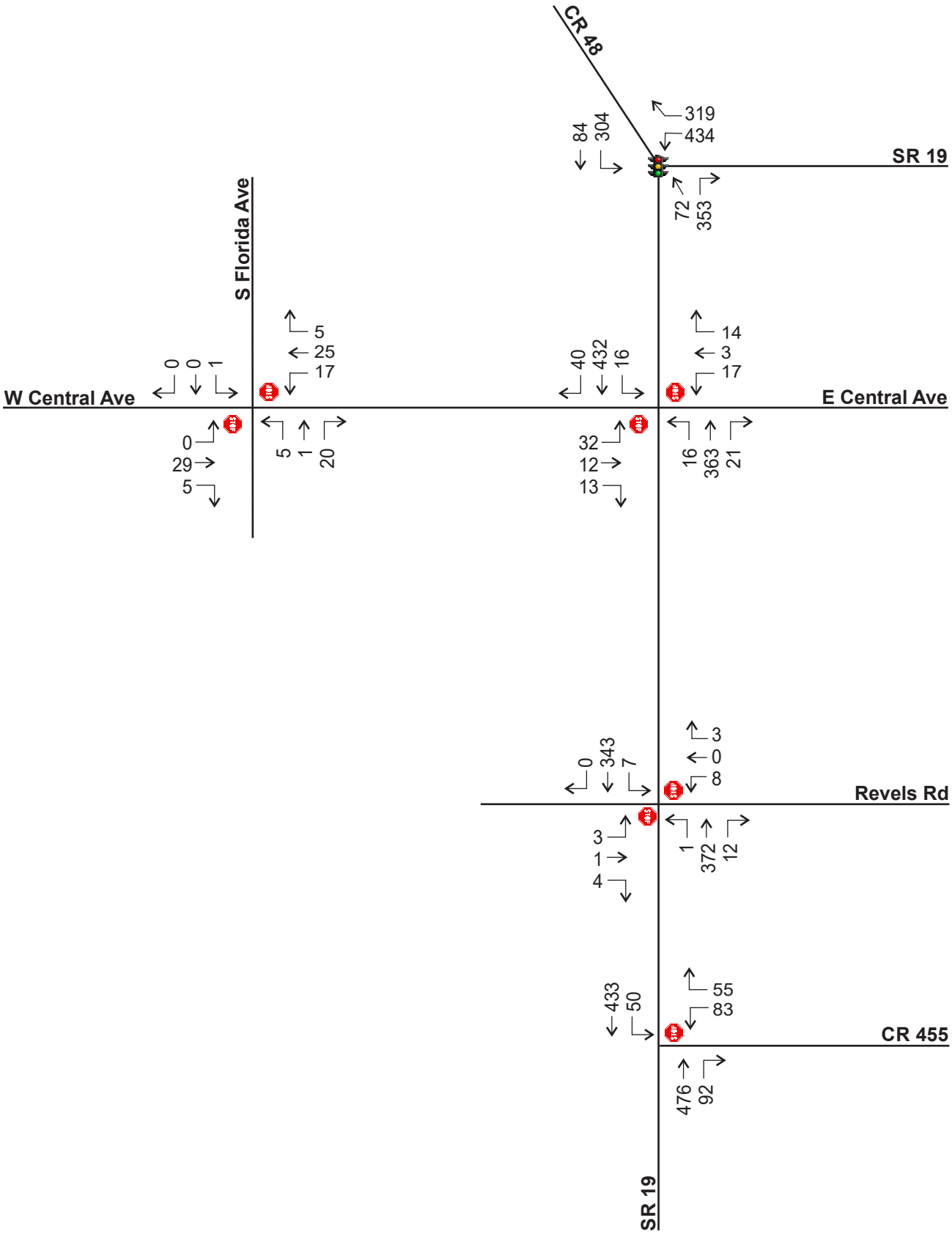
Intersection	Traffic Control	Time Period	EB		WB		NB		SB		Overall	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
SR 19 & CR 48	Signal	AM	--	--	50.7	D	20.3	C	11.2	B	29.5	C
		PM	--	--	87.5	F	17.1	B	10.7	B	55.7	E
SR 19 & Central Ave	TWSC	AM	20.7	C	15.1	C	8.9	A	8.8	A	--	--
		PM	22.6	C	17.9	C	9.0	A	8.8	A	--	--
W Central Ave & S Florida Ave	TWSC	AM	7.3	A	7.3	A	8.8	A	0.0	A	--	--
		PM	0.0	A	7.3	A	8.8	A	9.4	A	--	--
SR 19 & Revels Rd	TWSC	AM	13.3	B	15.0	C	8.3	A	8.0	A	--	--
		PM	14.0	B	16.1	C	8.1	A	8.2	A	--	--
SR 19 & CR 455	TWSC	AM	--	--	25.1	D	--	--	8.9	A	--	--
		PM	--	--	26.7	D	--	--	9.0	A	--	--

Average delay is in seconds



Existing AM Peak Hour Intersection Volumes
Mission Rise
23017.1, v1.1

Figure 2



Existing PM Peak Intersection Volumes
Mission Rise
23017.1, v1.1

Figure 3

3.0 PROJECT TRAFFIC

3.1 Trip Generation

The Trip Generation Analysis was conducted using the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition*. The ITE Information sheets are included in **Appendix F**. **Table 4** summarizes the resulting trip generation analysis.

Table 4
Trip Generation Analysis

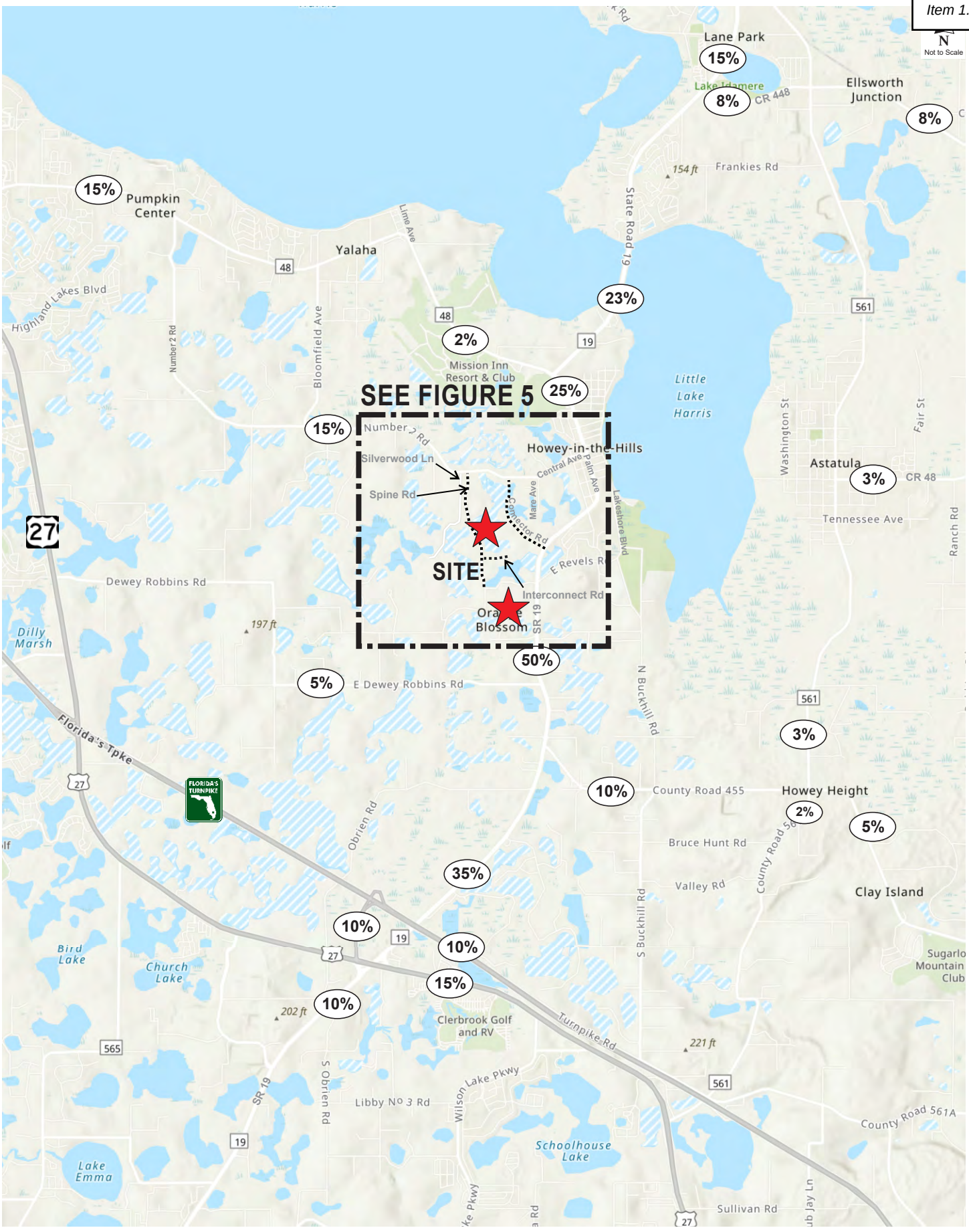
ITE Code	Land Use	Size	Daily		AM Peak Hour				PM Peak Hour			
			Rate	Trips	Rate	Total	Enter	Exit	Rate	Total	Enter	Exit
210	Single Family Residential (Detached)	592 DU	8.75	5,181	0.63	376	94	282	0.89	529	333	196

Trip Generation analysis based on ITE Trip Generation Manual, 11th Edition.

The proposed development is projected to generate 5,181 new daily trips, of which 376 trips occur during the AM peak hour and 529 trips occur during the PM peak hour.

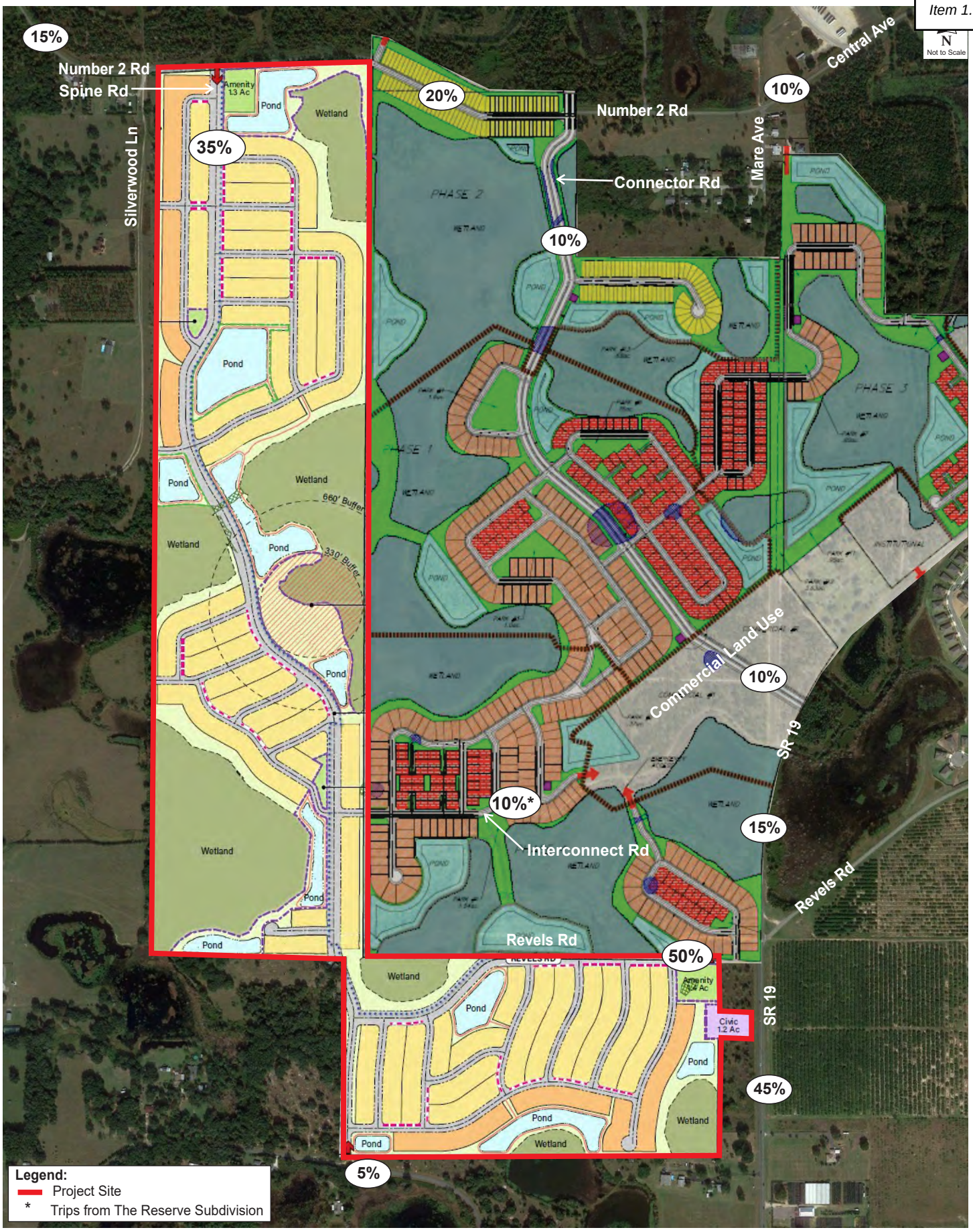
3.2 Trip Distribution

A trip distribution pattern was developed using the *Central Florida Regional Planning Model (CFRPMv7).* The model distribution was slightly adjusted based on local knowledge, professional engineering judgement, and the location of the development with respect to the study area attractions and activity centers to reflect the prevailing travel patterns in the study area and the surrounding transportation network. The raw model plots are provided in **Appendix G**, and the project trip distribution pattern is shown in **Figure 4.** Detailed trip distribution near the project site is shown in **Figure 5.**



Project Trip Distribution
Mission Rise
23017.1, v1.1

Figure 4



Project Trip Distribution Near Project Site

Mission Rise
23017.1, v1.1

Figure 5

4.0 PROJECTED CONDITIONS ANALYSIS

An analysis of projected conditions was conducted to determine the impact of the proposed development on the roadway segments capacity, as well as the proposed access connections and intersections to the site. The project buildout year for the analysis is 2033.

4.1 Planned and Programmed Improvements

The *Lake-Sumter Metropolitan Planning Organization (LSMPO) 2023-2027 Transportation Improvement Program (TIP),* as well as *LSMPO 2022 List of Priority Projects (LOPP)* were reviewed to identify any planned or programmed improvements to the transportation facilities in this area. The improvements are listed in **Table 5**. Construction is not planned to be completed within the next three (3) years for either improvement. Excerpts from the *LSMPO TIP* and *LSMPO LOPP* are provided in **Appendix H**.

Table 5
Planned and Programmed Improvements

FM #	Project Name	From	To	Proposed Phase	Proposed Phase FY	Description of Improvement
2383191	SR 19 *	CR 48	CR 561	PDE-PE-ENV	2023	Add Lanes & Reconstruct
238319-1	SR 19 **	Howey Bridge	CR 561	-	-	Road Widening

** LSMPO TIP Fiscal Year 2023-2027*
*** LSMPO 2022 LOPP Tier 2 project*

4.2 Background Traffic Projection

Projected traffic includes background traffic volumes, the project trips, and committed trips. Projected background traffic for the buildout year of 2033 was estimated by applying the growth rates obtained from *2022 Lake County CMP Database* to the existing traffic volumes. A minimum of 2% annual growth rate was applied to existing traffic volumes for which published annual growth rates are below 2%. The committed trips for the following approved developments within the study area are included in **Appendix I**:

- Whispering Hills
- Talichet Phase 1 and Phase 2
- The Reserve at Howey in the Hills

4.3 Roadway Segment Capacity

Projected roadway conditions were analyzed by comparing the projected traffic volumes on the study segments to their service volumes and adopted LOS standards. The total projected traffic volume is composed of background traffic, vested trips and project trips. **Table 6** summarizes the roadway segment capacity analysis, which reveals the following:

- SR 19 from Lane Park Road to CR 48 is projected to operate over its capacity.
- SR 19 from CR 48 to Central Avenue and from CR 455 to CR 478 are projected to operate over their capacities due to background traffic.
- All remaining roadway segments will continue to operate adequately at project buildout.

SR 19 from CR 48 to CR 561 is programmed in the *TIP* to be widened to four (4) lanes. Number 2 Road is a substandard road with reduced capacity. It is projected to operate at an acceptable LOS, as well.

Table 6
Projected Roadway Segment Capacity Analysis

Roadway Segment	No Lns	LOS Std	PH Dir Capacity	Dir	Exist Vol	Growth Rate	2033 Backg'd	Vested Trips	Total Backg'd Volume	Backg'd LOS	Backg'd V/C	Trip Distr	Proj Dir	Project Volume	Total Volume	Final LOS	Final V/C
***Central Ave**																	
SR 19 to Mare Ave	2	D	530	NB/EB SB/WB	57 59	2.00%	70 72	53 85	123 157	C C	0.23 0.30	10%	OUT IN	20 33	143 190	C C	0.27 0.36
SR 19																	
Lane Park Rd to CR 48	2	D	920	NB/EB SB/WB	610 656	2.00%	744 800	72 115	816 915	C D	0.89 0.99	23%	OUT IN	45 77	861 992	C F	0.94 1.08
CR 48 to Central Ave	2	D	700	NB/EB SB/WB	433 372	2.00%	528 454	167 268	695 722	D F	0.99 1.03	25%	OUT IN	49 83	744 805	F F	1.06 1.15
Central Ave to CR 455	2	D	1,200	NB/EB SB/WB	433 372	2.00%	528 454	266 167	794 621	C C	0.66 0.52	50%	IN OUT	167 98	961 719	D C	0.80 0.60
CR 455 to US 27/ SR 25	2	C	450	NB/EB SB/WB	507 435	2.00%	619 531	102 161	721 692	D D	1.60 1.54	35%	IN OUT	117 69	838 761	E E	1.86 1.69
US 27/ SR 25 to CR 478	2	C	450	NB/EB SB/WB	466 519	2.00%	569 633	102 161	671 794	D E	1.49 1.76	10%	IN OUT	33 20	704 814	D E	1.56 1.81
****Number 2 Rd**																	
Mare Ave to Silverwood Ln	2	D	400	NB/EB SB/WB	57 59	2.00%	70 72	53 53	123 125	C C	0.31 0.31	35%	OUT IN	69 117	192 242	C D	0.48 0.61
Silverwood Ln to CR 48	2	D	400	NB/EB SB/WB	57 59	2.00%	70 72	53 53	123 125	C C	0.31 0.31	15%	IN OUT	50 29	173 154	C C	0.43 0.39

Source: 2022 Lake County Annual Traffic Counts
**Exiting Counts were obtained from PM Peak Turning Movement Counts*
***A reduction of 25% was applied to the Peak Hour Directional Capacity of 530, as Number 2 Road is a substandard road*

4.4 Intersection Capacity Analysis

The projected volumes for the intersection capacity and operations analysis were calculated by assigning the project trips to the project driveways and adding those volumes to the background volumes and vested trips at the study intersections. Projected background traffic was estimated as discussed in the previous section. Projected background traffic on the proposed Spine Road and Revels Road were estimated based on the *CFRPMv7* model daily volumes. The AADT model plots are included in **Appendix J**.

The projected AM and PM peak hour volumes are illustrated in **Figures 6** and **Figure 7**, respectively. The results of the analysis are summarized in **Table 7,** and the analysis worksheets are included in **Appendix K**. The intersection volume projection sheets are included in **Appendix L**.

Table 7
Projected Intersection Capacity Analysis

Intersection	Traffic Control	Time Period	EB		WB		NB		SB		Overall	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
SR 19 & CR 48	Signal	AM	--	--	134.8	**F**	26.1	C	14.8	B	67.0	E
		PM	--	--	>300	**F**	19.0	B	10.8	B	210.5	**F**
SR 19 & Central Ave	TWSC	AM	>300	**F**	22.2	C	9.7	A	10.0	A	--	--
		PM	>300	**F**	48.9	E	10.9	B	9.8	A	--	--
W Central Ave & S Florida Ave	TWSC	AM	7.3	A	7.5	A	9.2	A	0.0	A	--	--
		PM	0.0	A	7.5	A	9.3	A	10.7	B	--	--
SR 19 & Revels Rd / Project Entrance	TWSC	AM	93.6	**F**	217.4	**F**	9.8	A	8.6	A	--	--
		PM	168.6	**F**	>300	**F**	9.8	A	9.4	A	--	--
SR 19 & CR 455	TWSC	AM	--	--	278.4	**F**	--	--	10.2	B	--	--
		PM	--	--	>300	**F**	--	--	11.5	B	--	--
Spine Rd & Interconnect Rd / Proposed	TWSC	AM	--	--	8.8	A	--	--	7.5	A	--	--
		PM	--	--	8.9	A	--	--	7.4	A	--	--
Number 2 Rd and Spine Rd / Project Entrance	TWSC	AM	--	--	7.5	A	10.1	B	--	--	--	--
		PM	--	--	7.6	A	10.4	B	--	--	--	--
Spine Rd & Revels Rd	TWSC	AM	--	--	9.2	A	--	--	7.5	A	--	--
		PM	--	--	9.5	A	--	--	7.5	A	--	--
Revels Rd & Orange Blossom Rd / Project Entrance	TWSC	AM	7.2	A	--	--	--	--	8.6	A	--	--
		PM	7.3	A	--	--	--	--	8.6	A	--	--

Average delay is in seconds

N
Not to Scale

CR 48
118+{22}+(2)=142
332
275
415+{46}+(21)=482
SR 19
379+{45}+(5)=429
546+{105}+(65)=716
18+{47}=65
1
13
Central Ave
S Florida Ave
1
23+(9)=32
1+{9}=10
0
0
0
8+{33}+(9)=50
514+{56}+(14)=584
5+{32}=37
Number 2 Rd
28+{5}=33
30+(19)=49
59+{3}=62
15+(14)=29
Access 1
15+(43)=58
30+(56)=86
(28)
(9)
1
44+(28)=72
14+{3}=17
5+{5}=10
0
4+{16}=20
42+{78}+(28)=148
4
12
14
29
452+{124}+(42)=618
Connector Rd
Spine Rd
SR 19
SITE
25+(20)=45
20+(28)=48
25+(9)=34
(0)
Interconnect Rd
20+(59)=79
{2}+(14)=16
522+{175}+(28)=725
4
5
0
6+{37}=43
Revels Rd
2+{3}+(42)=47
0
6+{30}+(99)=135
4+{12}+(33)=49
389+{67}+(9)=465
16+{22}=38
Revels Rd
4+(6)=10
74+(81)=155
62+(53)=115
3+(8)=11
SITE
4+(2)=6
3+(3)=6
7
(14)
Orange Blossom Rd
(5)
7
590+{144}+(99)=833
84+{41}+(28)=153
52+{16}+(9)=77
78
CR 455
473+{55}+(33)=561
133

Legend:
Background + {Vested} + (Project) = Total

TMC Traffic & Mobility Consultants

Projected AM Peak Hour Intersection Volumes
Mission Rise
23017, v1.1

Figure
6

N
Not to Scale

Number 2 Rd
Central Ave
S Florida Ave
CR 48
SR 19
Connector Rd
Interconnect Rd
Revels Rd
CR 455
Orange Blossom Rd
Spine Rd
Access 1
SITE
SITE

36+{3}=39
30+(67)=97
41+{5}=46
15+(50)=65
15+(29)=44
30+(40)=70
(20)
(33)
0
0
1
0
35+(20)=55
6+{5}=11
6
30+(33)=63
20+{16}=36
6+{3}=9
1
24+{9}=33
48+{85}+(33)=166
518+{134}+(50)=702
19+{47}=66
38+{53}+(20)=111
14
16
101+{47}+(7)=155
365
383
521+{115}+(77)=713
86+{29}+(4)=119
424+{72}+(45)=541
17+{32}=49
4
20
19
436+{82}+(29)=547
25
20+(70)=90
25+(20)=45
20+(33)=53
(0)
25+(41)=66
{2}+(50)=52
412+{124}+(20)=556
8
4
0
10+{22}=32
4+{1}+(29)=34
1
5+{21}+(68)=94
1+{35}+(117)=153
446+{194}+(33)=673
14+{37}=51
3+(3)=6
62+(84)=146
74+(103)=177
4+(7)=11
3+(7)=10
4+(9)=13
7
(10)
(16)
7
520+{102}+(69)=691
60+{29}+(20)=109
66+{46}+(33)=145
100
571+{161}+(117)=849
110

Legend:
Background + {Vested} + (Project) = Total

Projected PM Peak Hour Intersection Volumes
Mission Rise
23017, v1.1

Figure 7

The analysis reveals the following:

- The intersection of SR 19 and CR 48 is projected to operate with delay during the PM peak hour. Further review is needed.

- The intersection of SR 19 and Central Avenue is projected to operate with delay in the eastbound direction. The intersection operation is projected to be improved as part of the widening of SR 19.

- The intersection of SR 19 and Revels Road is projected to operate with delay in the eastbound and westbound directions. The westbound movement does not carry any project traffic. The eastbound and the westbound movements are projected to operate at volume-to-capacity ratio of 1.09 and 1.03, respectively, which are not significantly over the available capacity. Therefore, no further review is needed.

- The intersection of SR 19 and CR 455 is projected to operate with delay for the westbound left movement. Project trips contribute no traffic to the movement and no further review is needed.

The remaining study intersections are projected to operate adequately at the project buildout.

Intersection Capacity Analysis with Recommended Mitigation:

The proposed project does not significantly impact study area intersections. One (1) intersection has been reviewed further. The intersection is determined to need the following improvement to achieve acceptable LOS conditions at project buildout:

- Retiming the signal is recommended at the intersection of SR 19 and CR 48.

The traffic operations for the mitigated intersection is projected to have acceptable LOS, as detailed in **Table 8**. The background conditions and the buildout conditions with the mitigation analysis worksheets are included in **Appendix M**.

Table 8
Projected Intersection Capacity Analysis with Mitigation

Intersection	Peak Period		EB		WB		NB		SB		Overall	
		Scenario	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
SR 19 & CR 48	AM	Background	--	--	117.3	**F**	25.9	C	14.6	B	59.0	E
		Buildout	--	--	134.8	**F**	26.1	C	14.8	B	67.0	E
		Mitigation	--	--	45.7	D	42.9	D	29.9	C	40.0	D
	PM	Background	--	--	274.3	**F**	18.9	B	10.8	B	161.4	**F**
		Buildout	--	--	>300	**F**	19.0	B	10.8	B	210.5	**F**
		Mitigation	--	--	41.5	D	32.8	C	36.6	D	39.2	D

Average delay is in seconds

The analysis reveals the following:

- The intersection of SR 19 and CR 48 is projected to operate at an acceptable overall LOS by optimizing the signal timing.

5.0 ACCESS REVIEW

The development will be accessed via the intersections of Number 2 Road and Spine Road (future road), SR 19 and Revels Road, and Revels Road and Orange Blossom Road. SR 19 is a 2-lane undivided facility with a posted speed limit of 55 miles per hour (mph) near the project entrance. Number 2 Road is a 2-lane undivided facility with a posted speed limit of 30 mph in the east direction and 45 mph in the west direction near the project entrance. Orange Blossom Road is a 2-lane undivided facility with a posted speed limit of 30 mph near the project entrance.

5.1 Turn Lane Review

A review of the need for turn lanes at the project entrance intersections was conducted based on the Lake County *Land Development Code (LDC)* guidelines, which are provided in **Appendix N**. In accordance with the *LDC* guidelines, right and left turn lanes are warranted at the intersection of SR 19 and Revels Road, and at Number 2 Road and Spine Road. The intersection of Orange Blossom Road and Revels Road is expected to carry limited traffic; therefore, exclusive turn lanes are not recommended.

The recommended lengths of the turn lanes on SR 19 were calculated based on the requirements of the *FDOT Design Manual Exhibit 212-1*, provided in **Appendix O**, and the recommended lengths of the turn lanes on Number 2 Road were calculated based on the Lake County *LDC* guidelines. The calculations are provided as follows:

SR 19 and Revels Road

Left Turn Lane Length = Deceleration Distance + Queue Length
Deceleration at 60 mph (design speed) = 405 feet
95th Percentile Queue Length = 1 x 25 = 25 feet
Northbound Left Turn Lane = 405 feet + 25 feet = 430 feet (including a 50-foot taper)

Right Turn Lane Length = Deceleration Distance
Deceleration at 60 mph (design speed) = 405 feet
Southbound Right Turn Lane = 405 feet

Number 2 Road and Spine Road

Left Turn Lane Length = Taper Length + Storage Length
Taper Length at 50 mph (design speed) = 230 feet
Storage Length at 50 mph (design speed) = 195 feet
Westbound Left Turn Lane = 230 feet + 195 feet = 425 feet

Right Turn Lane Length = Taper Length + Storage Length
Taper Length at 35 mph (design speed) = 170 feet
Storage Length at 35 mph (design speed) = 80 feet
Eastbound Right Turn Lane = 170 feet + 80 feet = 250 feet

6.0 STUDY CONCLUSIONS

This traffic analysis was conducted to assess the impact of the proposed Mission Rise development in the Town of Howey-in-the-Hills, Florida. The project will include 592 single family residential units. The analysis included a determination of project trip generation, a review of existing and projected roadway and intersection capacity.

The results of the traffic analysis are summarized as follows:

- The proposed development is projected to generate 5,181 trips per day, of which 376 trips occur during the AM peak hour and 529 trips occur during the PM peak hour.
- SR 19 from Lane Park Road to CR 48 is projected to operate over its capacity.
- SR 19 from CR 48 to Central Avenue and from CR 455 to CR 478 are projected to operate over their capacities due to background traffic.
- SR 19 from CR 48 to CR 561 is programmed in the *TIP* to be widened to 4 lanes.
- All remaining roadway segments are projected to continue to operate adequately at project buildout.
- The intersection of SR 19 and CR 48 is projected to operate with delay during the PM peak hour. It is recommended to retime the signal to maintain LOS standards.
- The intersection of SR 19 and Central Avenue is projected to operate with delay in the eastbound movement. The intersection operation is projected to be improved as part of the widening of SR 19.
- The intersection of SR 19 and Revels Road is projected to operate with delay in the eastbound and westbound directions. The westbound movement does not carry any project traffic. The eastbound and the westbound movements are projected to operate at volume-to-capacity ratio of 1.09 and 1.03, respectively, which are not significantly over the available capacity.

- The intersection of SR 19 and CR 455 is projected to operate with delay for the westbound left movement. Project trips contribute no traffic to the movement.

- All remaining study intersections are projected to operate adequately at project buildout.

- The turn lane recommendations are as follows:
    - Construct a 430-foot northbound left turn lane and a 405-foot southbound right turn lane at the intersection of SR 19 and Revels Road.
    - Construct a 425-foot westbound left turn lane and a 250-foot eastbound right turn lane at the intersection of Number 2 Road and Spine Road.

APPENDICES

Appendix A
Study Methodology and Meeting Notes

MEMORANDUM

May 23, 2023

Re: Mission Rise
Traffic Impact Analysis Methodology, v1.1
Town of Howey-In-The-Hills, Florida
Project № 23017.1

This methodology outlines the proposed Traffic Impact Analysis (TIA) for the above referenced project. This methodology was prepared in accordance with the requirements of the Town of Howey-In-The-Hills and the Lake~Sumter Metropolitan Planning Organization (LSMPO) TIA guidelines for a Tier 2 TIA. This methodology has been revised in accordance with the comments provided by the Town of Howey-In-The-Hills. The comments and response to comments letter are included in the **Attachments**.

Project Description

The ±243.3-acre site is a single-family residential development consisting of 592 dwelling units. The project site consists of parcels 34-20-25-0001-000-00100, 34-20-25-0004-000-01003, 02-21-25-0002-000-04800, and 27-20-25-0004-000-01200. The anticipated buildout year is 2033. A preliminary site plan is included in the **Attachments**.

Project Location

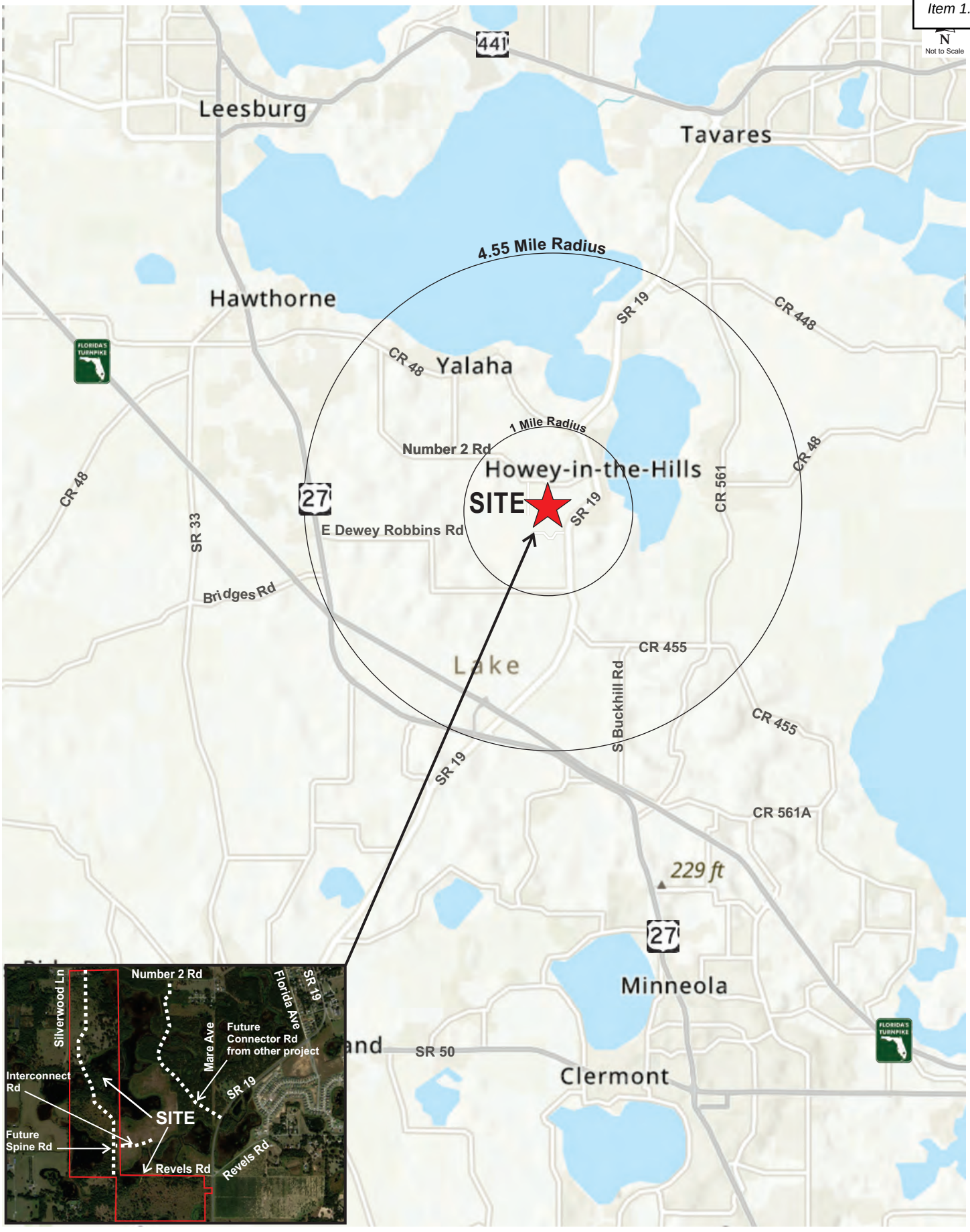
The site is located east of Silverwood Lane, west of SR 19 (South Palm Avenue), and south of Number 2 Road in the Town of Howey-in-the-Hills, Florida. The site will be crossed from north to south by a future two-lane spine road that will connect Number 2 Roadway with Revels Road, as shown in **Figure 1**.

Project Access

The project has access to the external network via one (1) full access driveway on Number 2 Road and one (1) full access driveway on SR 19. In addition, there is an emergency access to the south via Orange Blossom Road. The access configuration is depicted in the preliminary site plan included in the **Attachments**.

Trip Generation

A trip generation analysis was performed for the development using the trip generation information from the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition.* The ITE information sheets are included in the **Attachments**. The trip generation of the proposed development is summarized in **Table 1**.



Site Location Map
Mission Rise v1.1
23017.1

Figure
1

Table 1
Trip Generation Analysis

ITE Code	Land Use	Size	Daily		AM Peak Hour				PM Peak Hour			
			EqvIt Rate	Trips	EqvIt Rate	Total	Enter	Exit	EqvIt Rate	Total	Enter	Exit
210	Single Family Residential (Detached)	592 DU	8.75	5,181	0.63	376	94	282	0.89	529	333	196

Trip Generation analysis based on ITE Trip Generation Manual, 11th Edition.

The proposed development at project buildout is projected to generate 5,181 new daily trips of which 376 trips occur during the AM peak hour, and 529 trips occur during the PM peak hour.

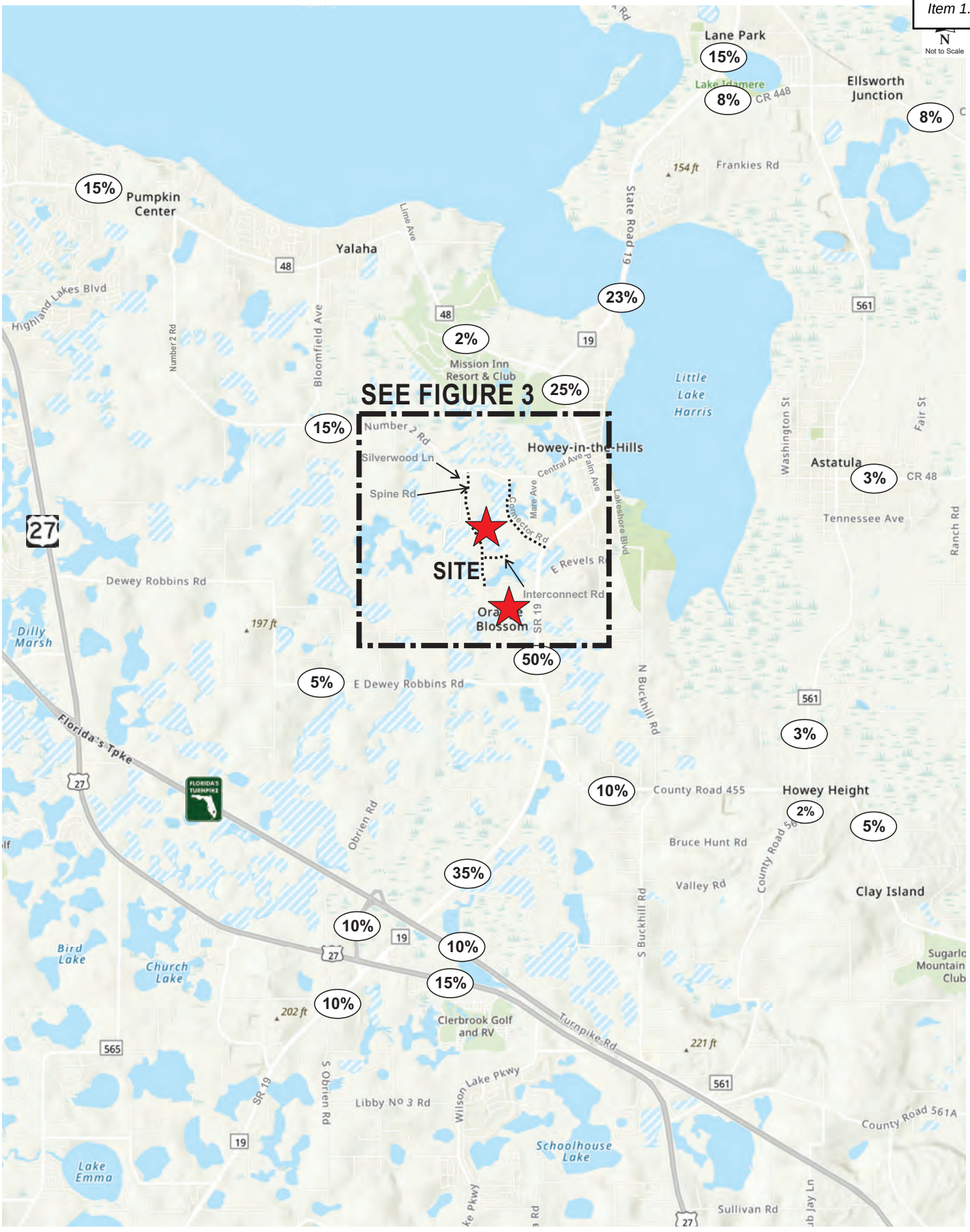
Trip Distribution

A trip distribution pattern in the general vicinity of the project site was initially determined based on the *Central Florida Regional Planning Model (CFRPM v7)*. Two (2) future connections (Spine Road and Connector Road) from SR 19 to Number 2 Road were included in the model for this project. The model distribution was modified to reflect the local network and prevailing traffic patterns. The proposed trip distribution pattern is provided in **Figure 2**. Detailed trip distribution near the project site is shown in **Figure 3**. The model distribution plots are included in the **Attachments**.

Study Area

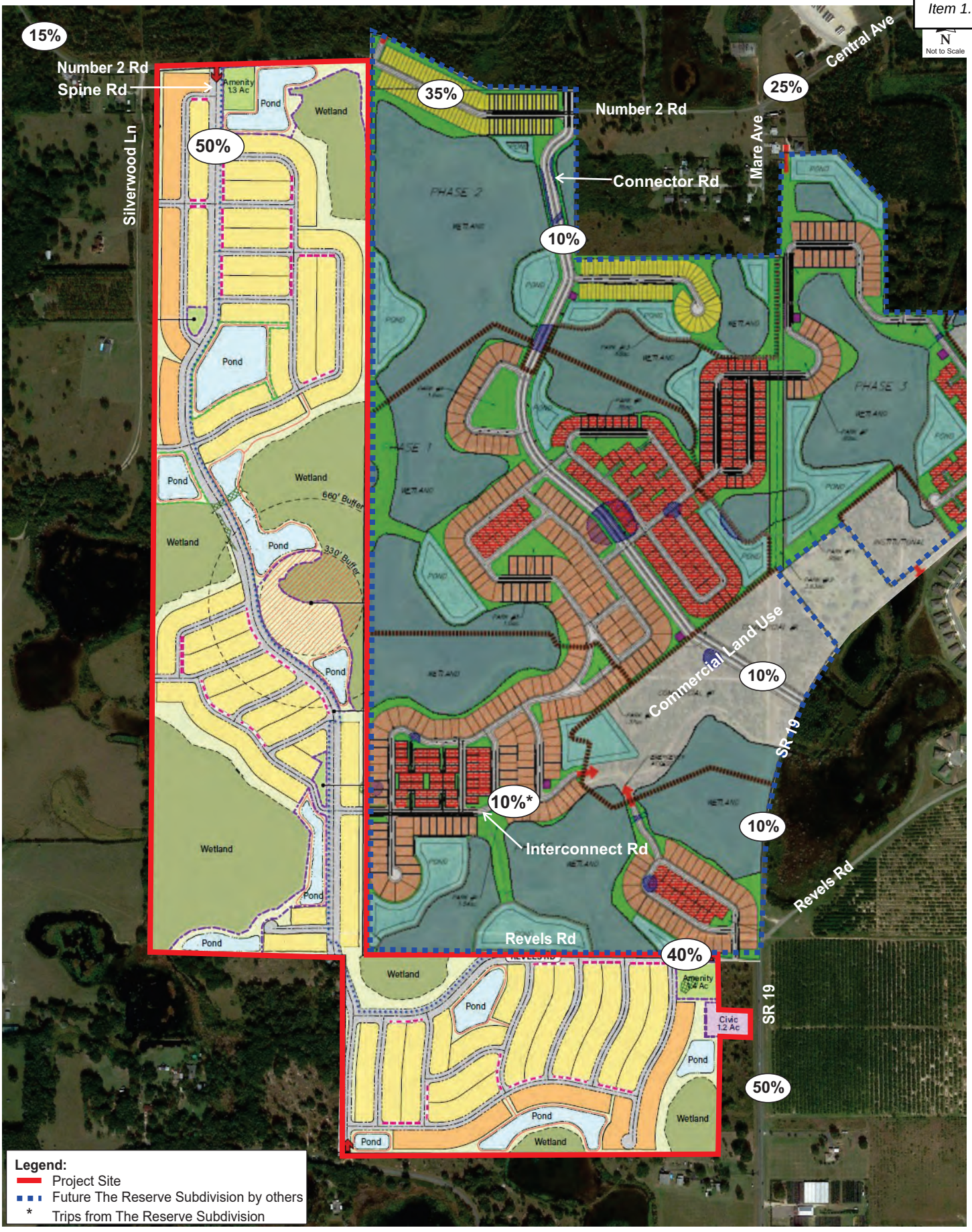
In accordance with the LSMPO requirements for a Tier 2 TIA methodology, the study area will include a minimum 1-mile radius plus all roadway segments within a 4.55-mile radius in addition to roadways where the development is projected to consume 5% or more of their adopted Level of Service (LOS), unless otherwise specified by the City/LSMPO.

The extent of the study impact area shall be determined by the area of influence of the project. The area of influence shall be established as one-half (½) the total trip length associated with the land use of the proposed development, based upon the *2021 Lake County Transportation Impact Fee Update Study Final Report*. The total trip length for single-family is 9.1-miles. Accordingly, the area of influence will encompass all roadway segments within 4.55-mile radius. Excerpts of the *2022 Lake County Congestion Management Process (CMP) Database*, the *2021 Lake County Transportation Impact Fee Update Study Final Report*, and the *2023 FDOT Multimodal Quality/Level of Service (Q/LOS) Handbook Appendix B* are included in the **Attachments**. **Table 2** lists all roadway segments within the area of influence along with their capacities and percentages consumed by the project trips.



Project Trip Distribution
Mission Rise v1.1
23017.1

Figure 2



TMC Traffic & Mobility Consultants

Project Trip Distribution Near the Project Site

Mission Rise v1.1
23017.1

Figure 3

Table 2
Study Area

Roadway Segment	SEG ID	No Lns	Area Type	Median Type	Speed Limit	LOS Std	Pk Dir Cap	Dir	Project Dist	Project Trips	Within 1-Mile? **	% Cap	In Study?
CR 455													
SR 19 to	950	2	R	Undivided	45	C	740	EB	10%	20	NO	2.7%	NO
CR 561								WB		33		4.5%	
CR 561 to	960	2	R	Undivided	25	C	410	EB	5%	10	NO	2.4%	NO
CR 561A								WB		17		4.1%	
CR 48													
US 27 to	1240	2	U	Undivided	40	D	1,080	EB	15%	50	NO	4.6%	NO
Lime Ave								WB		29		2.7%	
Lime Ave to	1250	2	U	Undivided	40	D	1,080	EB	2%	7	NO	0.6%	NO
SR 19								WB		4		0.4%	
CR 561 to	1260	2	U	Undivided	40	D	840	EB	3%	6	NO	0.7%	NO
Ranch Rd								WB		10		1.2%	
Ranch Rd to	1270	2	R	Undivided	40	C	410	EB	3%	6	NO	1.5%	NO
CR 448A								WB		10		2.4%	
CR 561													
CR 448 to	1410	2	U	Undivided	50	D	1,080	NB	0%	0	NO	0.0%	NO
CR 48								SB		0		0.0%	
CR 48 to	1420	2	U	Undivided	40	D	620	NB	3%	10	NO	1.6%	NO
South Astatula City Limit								SB		6		1.0%	
South Astatula City Limit	1430	2	U	Undivided	40	D	1,080	NB	3%	10	NO	0.9%	NO
to CR 455								SB		6		0.6%	
CR 455 to	1440	2	R	Undivided	35	C	470	NB	2%	7	NO	1.5%	NO
Howey Cross Rd								SB		4		0.9%	
Howey CRoss Rd to	1450	2	R	Undivided	40	C	640	NB	2%	7	NO	1.1%	NO
Turnpike Rd / CR 561A								SB		4		0.6%	
SR 19													
Lane Park Rd to	3040	2	U	Undivided	55	D	920	NB	23%	45	NO	4.9%	**YES**
CR 48								SB		77		**8.4%**	
CR 48 to	3050	2	U	Undivided	40	D	700	NB	25%	49	NO	**7.0%**	**YES**
Central Ave								SB		83		**11.9%**	
Central Ave to	3060	2	U	Undivided	35	D	1,200	NB	50%	167	**YES**	**13.9%**	**YES**
CR 455								SB		98		**8.2%**	
CR 455 to	3070	2	R	Undivided	55	C	450	NB	35%	117	NO	**26.0%**	**YES**
US 27 / SR 25								SB		69		**15.3%**	
US 27 / SR 25	3080	2	R	Undivided	55	C	450	NB	20%	67	NO	**14.9%**	**YES**
to CR 478								SB		39		**8.7%**	
SR 91 (Florida Turnpike)													
US 27/SR 25 to	3566	4	U	Freeway	70	B	2,230	EB	10%	20	NO	0.9%	NO
US 27/SR 25/SR 19 Interchange								WB		33		1.5%	
US 27/SR 25													
SR 19 to	3830	4	U	Divided	55	D	3,280	EB	15%	29	NO	0.9%	NO
CR 561								WB		50		1.5%	
Central Ave													
SR 19 to	N/A	2	U	Undivided	30	D	770 *	EB	25%	49	**YES**	**6.4%**	**YES**
Mare Ave								WB		83		**10.8%**	
Number 2 Rd													
Mare Ave to	N/A	2	U	Undivided	30	D	730 *	EB	35%	69	**YES**	**9.5%**	**YES**
Silverwood Ln								WB		117		**16.0%**	
Silverwood Ln to	N/A	2	U	Undivided	45	D	730 *	EB	15%	29	**YES**	4.0%	**YES**
CR 48								WB		50		**6.8%**	

Source: 2022 Lake County CMP Database
** 2023 FDOT Multimodal Quality/Level of Service Handbook, Appendix B: Florida's Generalized Service Volume Tables*
Bold numbers represent capacity equal or higher than 5%.

Based on the study area analysis, the following roadway segments will be analyzed for the PM peak hour:

- SR 19
  - Lane Park Road to CR 48
  - CR 48 to Central Avenue
  - Central Avenue to CR 455
  - CR 455 to US 27 / SR 25
  - US 27 / SR 25 to CR 478

- Central Avenue
  - SR 19 to Mare Avenue

- Number 2 Road
  - Mare Avenue to Silverwood Lane
  - Silverwood Lane to CR 48

The following intersections will be analyzed for the AM and PM peak hours:

- SR 19 and CR 48 (Signalized)
- SR 19 and Central Avenue (Unsignalized)
- SR 19 and South Florida Avenue (Unsignalized)
- SR 19 and Revels Road (Unsignalized)
- SR 19 and CR 455 (Unsignalized)
- Spine Road and Interconnect Road (Proposed)
- Number 2 Road and Spine Road (North Project Access) (Proposed)
- Revels Road and Spine Road (South Project Access) (Proposed)

Projected Traffic

Projected traffic includes background traffic volumes, the project trips, and committed trips. Projected background traffic will be calculated using the historical growth rates obtained from the *Lake County CMP* database and *FDOT Florida Traffic Online* web-based database. A 2%, minimum growth rate will be applied if the calculated growth rates are lower than 2%. The committed trips for the following approved developments within the study area will be added to the background traffic:

- The Reserve (traffic study obtained)
- Talichet Phase 2 (traffic study obtained)
- Whispering Hills (traffic study obtained)
- Lake Hills (City to provide traffic study)
- Watermark (City to provide traffic study)

Planned and Programmed Improvements

The *Lake-Sumter Metropolitan Planning Organization (LSMPO) 2023-2027 Transportation Improvement Program (TIP),* as well as *LSMPO 2022 List of Priority Projects (LOPP)* were reviewed to identify any planned or programmed improvements to the transportation facilities in this area. As shown in **Table 3**, construction is not planned to be completed within the next three (3) years for either improvement. Excerpts from the *LSMPO TIP* and *LSMPO LOPP* are provided in the **Attachments**.

Table 3
Planned and Programmed Improvements

FM #	Project Name	From	To	Proposed Phase	Proposed Phase FY	Description of Improvement
2383191	SR 19 *	CR 48	CR 561	PDE-PE-ENV	2023	Add Lanes & Reconstruct
238319-1	SR 19 **	Howey Bridge	CR 561	-	-	Road Widening

** LSMPO TIP Fiscal Year 2023-2027*
*** LSMPO 2022 LOPP Tier 2 project*

Capacity Analysis

The traffic study will include existing and 2033 buildout conditions for the roadway segment and intersection capacity analyses. A capacity analysis of the study roadway segments will be conducted for the PM peak hour under existing and projected conditions. The capacity analysis will be based on service volumes, capacities, and existing volumes, as documented in *2022 Lake County CMP Database* and the *FDOT's 2023 Multimodal Quality/Level of Service (MQ/LOS) Handbook,* included in the **Attachments**.

The intersection turning movement counts will be seasonally adjusted, if needed, using the *2022 FDOT Peak Season Factor Category Report* obtained from the *Florida Traffic Online (FTO)* website.

Right and left turn lane warrant reviews will be performed at the Spine Road accesses on Number 2 Road and at SR 19 and Revels Road in accordance with the Lake County requirements for turn lanes.

In cases where projected conditions require mitigation as a result of the proposed development, an analysis including the recommended mitigation will be conducted.

Alternative Mode Analysis

A review of transit, pedestrian, and bicycle facilities will be conducted in accordance with the LSMPO requirements.

Report

A TIA report detailing the methods and findings of the study, including all associated graphics, tables, calculations, and supporting information will be prepared for submittal to the Town of Howey-In-The-Hills.

ATTACHMENTS

Traffic & Mobility Consultants

May 23, 2023

Mr. John Brock
Town Clerk
PO Box 125
Howey-In-The-Hills, Florida 34737
jbrock@howey.org

Re: Mission Rise
Response to Methodology Comments
TMC Project № 23017.1
Town Howey-In-The-Hills, Florida

Dear Mr. Brock,

Please find below our responses to the review comments prepared on behalf of The Town of Howey-In-The-Hills by TMH Consulting Inc dated May 8, 2023, regarding the above referenced Methodology dated April 28, 2023. The comments are listed in **bold** typeface and the TMC responses follow in *italic* typeface. Additionally, a revised Methodology is provided under cover reflecting the changes resulting from these comments.

1. **The Revels Road access to the south cannot be limited to emergency access as this is a public road now. Since we have received comments from residents to the south, it will be very useful to get some type of prediction about how many trips are likely to use this access point as opposed to SR 19 and Number 2 Road.**

   TMC Response: The emergency access on Orange Blossom Road will be restricted to emergency vehicles only; therefore, no trips were assigned to that access.

2. **There is an interconnect between the Mission Rise parcel and The Reserve parcel. Is the model sensitive enough to determine if this interconnect will impact trip assignments? The Reserve has an approved connecting road which is discussed in the TMC methodology. The Reserve also includes a future commercial development area that might be an attractor.**

   TMC Response: Noted. The Reserve Subdivision includes a future commercial development, therefore, 10% of the trips are assumed to originate from The Reserve's commercial development and use the interconnect road to access the project site.

3. **The study needs to include those projects that have some level of approval. TMC has done the traffic studies for several of these and been provided with traffic studies from others. The projects that need to be included are:**

   - **The Reserve**
   - **Watermark**
   - **Talichet Phase 2 (Phase 1 is mostly in the background traffic by now.)**
   - **Whispering Heights**
   - **Lake Hills**

TMC Response: Noted. The vested trips from The Reserve, Watermark, Talichet Phase 2, Whispering Heights [Whispering Hills], and Lake Hills will be included in the traffic study as indicated in the revised methodology (attached).

4. **The study needs to include CFRPM distributions that show the percentages of future background through traffic that will use the new roads in Mission Rise and The Reserve that link No 2 Road to SR 19. Use that data to project future background traffic volumes on those links.**

   TMC Response: Noted. As reflected in Figure 2, the future Spine Road, which transverses the project site from north to south and connects Number 2 Road with Revels Road, and the future Connector Road, which connects SR 19 and Number 2 Road are included in the project trip distribution Figure 2 in the revised methodology (attached).

5. **The project trip distribution map is basically unreadable. They need to provide a graphic that someone can review and understand.**

   TMC Response: Noted. The distribution map has been revised to show an inset with the detail project distribution within the project site. See Figure 2 in the revised methodology (attached).

6. **SR 19 at Central Avenue is listed as signalized, but it is only a flashing light. The analysis cannot assume it is a true signal.**

   TMC Response: Noted. SR 19 at Central Avenue intersection is listed as an unsignalized intersection in the revised methodology (attached).

7. **The ITE land use, code 210, shows traffic generation as 9.43 trips per unit with 0.70% for the AM Peak and 0.94% for the PM Peak. Why did they use 8.75, 0.63 and 0.89 respectively for the project traffic generation?**

   TMC Response: Per the Trip Generation Handbook, 3rd Edition Figure 4.2 (Process for selecting average rate or equation in trip generation manual data) linear curve equations should be used for the weekday, AM, and PM peak period trip generation calculation. The linear curve equations have an R^2 equal to 0.75 or greater, therefore, the fitted curve equations were used instead of average rate.

   The linear curve equations used for the 592 dwelling residential units corresponding to the weekday, AM, and PM trips are as follows:

   Weekday: Ln(T)=0.92 Ln(X)+2.68 which is equivalent to an average rate of 8.75 (5,181/592).
   AM: Ln(T)=0.91 Ln(X)+0.12 which is equivalent to an average rate of 0.63 (376/592).
   PM: Ln(T)=0.94 Ln(X)+0.27 which is equivalent to an average rate of 0.89 (529/592).

END OF COMMENTS

We trust these responses and the revised Methodology adequately address the review comments. We remain available to discuss this matter further or to answer any questions you may have.

Kind regards,

TRAFFIC & MOBILITY CONSULTANTS LLC

Charlotte N. Davidson, PE
Senior Transportation Engineer

Mission Rise PUD
Meeting with Lake County
August 21, 2023 at 2:00 pm

Attendees
Seth Lynch (Lake County)
Jeffery Earhart (Lake County)
Rhea Lopes (RVi)
Charlotte Davidson (Traffic $ Mobility Consultants)
Santiago Machado (Atwell)

Number 2 Rd

- Need right and left turn lanes on Number 2 Rd.
- Must accommodate full turn lanes (right and left with que lengths). The existing right-of-way is too narrow, and the Mission Rise site will be the only property that can provide additional right-of-way.
- Will need to dedicate right-of-way to accommodate widening improvements. Lake County suggest widening to the south side of the road since Mission Rise will be able to allocate the required right-of-way.
- Speed limit on Number 2 Rd is 30 MPH on east side, but higher to west. Speed changes in front of project. Speed limit changes from 30 MPH to 45 MPH.
- Widen the thru lanes where the turn lanes are designed. Thru lanes and turn lanes shall meet t Lake County standards
- Provide 5 ft sidewalk along frontage. Need to discuss further with County as design progresses. The County understands the area is tight and there are drainage features that need to be accommodated as well.
- Number 2 Rd was an old clay road that was paved. Probably need pavement cores to see what was built.

Revels Rd

- Vacate existing road right-of-way for County and dedicate to Town up to S Palm Rd (SR 19)
- Onsite roads to be maintained by Town.

CR 19 (S Palm Ave)

- Will require FDOT permitting.
- Add right and left turn lanes at entrance to Mission Rise.
- Provide intersection layout for County review before final design. This is an “A Typical” intersection due to the angle of E Revels Rd.

South connection

- Need to pave up to boundary.
- Seth will further discuss internally on how to handle this connection and if connection to Orange Blossom Rd will be required.

West Connections

- Plan for corner clips at entrances for all road stubs to the west.

East Connections

- East roadway connections not provided to the east due to wetlands.

General

- Provide Lake County with floodplain impacts and compensation calculations.
- Floodplain compensation will be provided as cup-for-cup volume.
- TIA will be shared with lake County (Sharon Lewis and Seth Lynch)

Appendix B
Preliminary Development Plan

PRELIMINARY AREA SUMMARY

Total Property Acreage	**+/- 241.3 Ac**
Required Open Space	+/- 60.3 Ac
Additional Wetlands	+/- 31.0 Ac
Developable (Net Land Area)	**+/- 148.0 Ac**

OPEN SPACE ACREAGE

Required (Min 25%)	**+/- 60.3 Ac**
Provided (27.3%)	**+/- 66.0 Ac**
Stormwater (15.4%)	+/- 17.8 Ac
Misc. Open Space	+/- 18.1 Ac
Wetlands (50% Allowed)	+/- 30.1 Ac

DEVELOPMENT SUMMARY

Total Site Parcel Length	**+/- 29,080 LF**
Total Buildable Parcel	+/- 27,626 LF*
Total SFD 55'x120' Parcel	**+/- 23,590 LF**
Total Buildable SFD	+/- 22,410 LF*
Total 55' Units	**407 Lots (86%)**
Total SFD 75'x120' Parcel	**+/- 5,490 LF**
Total Buildable SFD	+/- 5,215 LF*
Total 75' Units	**69 Lots (14%)**
Total SFD Units	**476 Units**
Development Density	**3.2 du/ac**

*Assumes a 5% loss of developable area

NON-RESIDENTIAL ACREAGE

Required (Min 15%)	**+/- 22.2 Ac**
Provided (15%)	**+/- 22.2 Ac**
Civic (5%)	+/- 1.1 Ac
Amenities	+/- 4.2 Ac
Mis. Open Space	+/- 6.6 Ac
Stormwater	+/- 4.7 Ac
Bike Trail	+/- 5.6 Ac

LEGEND

- Non-Residential
- Endcap Parallel Parking
- Pedestrian Path
- Bike Trail

SILVERWOOD LN.
25' Landscaped Berm / 15' Landscaped Buffer with 6' Wall
Access
Property Boundary
Amenity 1.3 Ac
Wetland W3
NUMBER 2 RD.
TO CITY PROPERTY
POND
PHASE 2
WETLAND
PARK #4 1.6ac.
PARK #6 .76ac.
PARK #7 .80ac.
PHASE 1
Wetland W2
PARK #3 1.0ac.
COMMERCIAL
PARK #2 .37ac.
EMERGENCY ACCESS
PARK #1 .55ac.
PHASE 4
Wetland W1
Wetland W6
REVELS RD.
Amenity 1.1 Ac
Civic 1.1 Ac
Wetland W4
Wetland W5
S. PALM AVE.
PARK #5 .26ac.

RVi
111 N Magnolia Ave
Suite 1350
Orlando, Florida 32801
Tel: 407.680.0650
www.rviplanning.com

MISSION RISE • **CONCEPTUAL PLAN**

- Town of Howey Hills, FL
- December 22, 2022
- # 22003786
- Turnstone Group

0 300' 600'

SCALE: 1" = 300'

The plan is conceptual in nature. Final densities, layout, development parameters, calculations, and site conditions may change upon further development of the Preliminary and/or Master Site Plan, and upon evaluation of topographic survey, water management and existing historic and specimen trees to remain.

Appendix C
Lake County CMP Database and 2023 FDOT Q/LOS

Lake County CMP Database

Item 1.

SEGMENT ID	COUNTY STATION	FDOT STATION	DATA SOURCE	SPEED LIMIT	SEGMENT LENGTH (MI)	ROAD NAME	FROM	TO	LANES (2022)	LANES (2027)	URBAN / RURAL	DIVIDED / UNDIVIDED	MAINTAINING AGENCY	JURISDICTION	ADOPTED LOS STANDARD	DAILY SERVICE VOLUME	2022 AADT	2022 DAILY V/C	2022 DAILY LOS	PEAK HOUR DIRECTIONAL SERVICE VOLUME	2022 PEAK HOUR NB/EB VOLUME	2022 PEAK HOUR SB/WB VOLUME	2022 PEAK HOUR V/C	2022 PEAK HOUR LOS	GROWTH RATE	DAILY SERVICE VOLUME (2027)	2027 AADT	2027 DAILY V/C	2027 DAILY LOS	PEAK HOUR DIRECTIONAL SERVICE VOLUME (2027)	2027 PEAK HOUR NB/EB VOLUME	2027 PEAK HOUR SB/WB VOLUME	2027 PEAK HOUR V/C	2027 PEAK HOUR LOS
1100	497		County	35	1.75	C.R. 466B	EAGLE NEST ROAD	CR 466A	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	10,360	5,060	0.49	C	530	193	233	0.44	C	1.25%	10,360	5,385	0.52	D	530	205	248	0.47	C
1110	490		County	35	0.55	C.R. 468	CR 466A	PINE RIDGE DAIRY ROAD	2	2	URBAN	UNDIVIDED	COUNTY	FRUITLAND PARK	D	10,360	4,719	0.46	C	530	190	213	0.40	C	1.25%	10,360	5,021	0.48	C	530	202	227	0.43	C
1120	480		County	35	1.80	C.R. 468	PINE RIDGE DAIRY ROAD	GRIFFIN ROAD	2	2	URBAN	UNDIVIDED	COUNTY	FRUITLAND PARK	D	13,320	7,736	0.58	D	680	343	384	0.56	D	3.00%	13,320	8,968	0.67	D	680	398	445	0.65	D
1130	436		County	45	1.13	C.R. 468	GRIFFIN ROAD	SR 44	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	12,390	9,173	0.74	C	620	440	404	0.71	C	1.75%	12,390	10,005	0.81	C	620	480	440	0.77	C
1145	612		County	55	3.65	C.R. 46A REALIGNMENT	SR 44	SR 46	2	2	RURAL	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	C	7,740	16,576	2.14	E	410	663	857	2.09	E	3.50%	7,740	19,687	2.54	E	410	788	1,018	2.48	E
1150	267		County	55	0.94	C.R. 470	SUMTER COUNTY LINE	FLORIDA TURNPIKE	2	4	RURAL	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	13,300	11,303	0.85	D	690	530	376	0.77	D	8.50%	28,880	16,996	0.59	C	1,500	797	566	0.53	C
1155	266		County	55	2.39	C.R. 470	FLORIDA TURNPIKE	BAY AVENUE	2	2	RURAL	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	12,600	8,826	0.70	D	660	436	278	0.66	D	1.00%	12,600	9,276	0.74	D	660	458	292	0.69	D
1160	266		ADJACENT	55	0.54	C.R. 470	BAY AVENUE	CR 33	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	12,390	8,826	0.71	C	620	436	278	0.70	C	1.00%	12,390	9,276	0.75	C	620	458	292	0.74	C
1170	499		County	35	2.99	C.R. 473	CR 44	FOUNTAIN LAKE BOULEVARD	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	14,060	6,957	0.49	D	710	322	242	0.45	C	1.00%	14,060	7,312	0.52	D	710	338	255	0.48	C
1180	443		County	40	1.03	C.R. 473	FOUNTAIN LAKE BOULEVARD	US 441	4	4	URBAN	DIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	35,820	14,713	0.41	C	1,800	811	461	0.45	C	1.00%	35,820	15,464	0.43	C	1,800	852	485	0.47	C
1190	4		County	55	5.21	C.R. 474	SR 33	GREEN SWAMP ROAD	2	2	RURAL	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	C	7,740	5,962	0.77	C	410	151	240	0.59	C	2.50%	7,740	6,745	0.87	C	410	171	272	0.66	C
1200	3		County	55	3.35	C.R. 474	GREEN SWAMP ROAD	US 27	2	2	RURAL	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	C	7,740	5,436	0.70	C	410	173	202	0.49	B	1.00%	7,740	5,713	0.74	C	410	182	212	0.52	B
1210	222		County	45	5.99	C.R. 478	SR 19	JAMARLY ROAD	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF GROVELAND	D	21,780	2,244	0.10	B	1,080	112	93	0.10	B	7.75%	21,780	3,259	0.15	B	1,080	162	135	0.15	B
1220	259		County	55	3.17	C.R. 48	SUMTER COUNTY LINE	CLEARWATER LAKE RD	2	2	RURAL	UNDIVIDED	COUNTY	CITY OF LEESBURG	C	7,740	3,504	0.45	B	410	112	180	0.44	B	4.25%	7,740	4,315	0.56	C	410	138	222	0.54	C
1225	248		County	55	2.41	C.R. 48	CLEARWATER LAKE RD	CR 33	2	2	RURAL	UNDIVIDED	COUNTY	CITY OF LEESBURG	C	7,740	3,327	0.43	B	410	123	206	0.50	B	1.75%	7,740	3,629	0.47	B	410	134	224	0.55	C
1230	263		County	45	0.46	C.R. 48	CR 33	HAYWOOD WORM FARM RD	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	15,930	8,836	0.55	C	790	370	297	0.47	C	2.75%	15,930	10,120	0.64	C	790	424	340	0.54	C
1235	262		County	45	0.68	C.R. 48	HAYWOOD WORM FARM RD	US 27	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	16,820	9,073	0.54	C	840	401	375	0.48	C	1.00%	16,820	9,536	0.57	C	840	421	394	0.50	C
1240	264		County	40	4.89	C.R. 48	US 27	LIME AVENUE	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	21,780	9,821	0.45	B	1,080	420	380	0.39	B	4.00%	21,780	11,949	0.55	C	1,080	511	462	0.47	B
1250	255		County	40	2.04	C.R. 48	LIME AVENUE	SR 19	2	2	URBAN	UNDIVIDED	COUNTY	HOWEY-IN-THE-HILLS	D	21,780	9,982	0.46	B	1,080	429	404	0.40	B	1.50%	21,780	10,754	0.49	C	1,080	462	435	0.43	B
1260	253		County	40	1.14	C.R. 48	CR 561	RANCH ROAD	2	2	URBAN	UNDIVIDED	COUNTY	TOWN OF ASTATULA	D	16,820	6,515	0.39	C	840	310	292	0.37	C	1.00%	16,820	6,847	0.41	C	840	326	307	0.39	C
1270	253		ADJACENT	40	3.17	C.R. 48	RANCH ROAD	CR 448A	2	2	RURAL	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	C	7,740	6,515	0.84	C	410	310	292	0.76	C	1.00%	7,740	6,847	0.88	C	410	326	307	0.80	C
1280	217		County	30	0.71	C.R. 50 (SUNSET AVENUE)	CR 33	SR 50	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF MASCOTTE	D	10,360	1,592	0.15	C	530	66	95	0.18	C	1.75%	10,360	1,736	0.17	C	530	72	104	0.20	C
1290	210		County	45	1.74	C.R. 50	US 27	N HANCOCK ROAD	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF MINNEOLA	D	16,820	6,981	0.42	C	840	285	346	0.41	C	1.00%	16,820	7,337	0.44	C	840	299	363	0.43	C
1300	202		County	45	2.47	C.R. 50	N HANCOCK ROAD	CR 455	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	21,780	6,877	0.32	B	1,080	228	491	0.45	B	2.00%	21,780	7,593	0.35	B	1,080	251	542	0.50	C
1310	42		County	45	1.92	C.R. 50	CR 455	ORANGE COUNTY LINE	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	16,820	6,828	0.41	C	840	195	557	0.66	C	1.00%	16,820	7,176	0.43	C	840	205	585	0.70	C
1320	417		County	35	1.08	C.R. 500A/ OLD 441	SR 19	DORA AVENUE	2	2	URBAN	DIVIDED	COUNTY	CITY OF TAVARES	D	8,390	9,907	1.18	F	870	367	450	0.52	D	1.00%	8,390	10,412	1.24	F	870	386	473	0.54	D
1325	417		County	35	1.08	C.R. 500A/ OLD 441	DORA AVENUE	SR 19	2	2	URBAN	DIVIDED	COUNTY	CITY OF TAVARES	D	8,390	9,907	1.18	F	870	367	450	0.52	D	1.00%	8,390	10,412	1.24	F	870	386	473	0.54	D
1330	413	115084	County	45	1.94	C.R. 500A/OLD 441/ALFRED ST	DORA AVENUE	BAY ROAD	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF TAVARES	D	16,820	9,558	0.57	C	840	489	424	0.58	C	1.00%	16,820	10,045	0.60	C	840	514	446	0.61	C
1340	420		County	35	0.79	C.R. 500A/OLD 441	BAY ROAD	CR 44C / EUDORA AVENUE	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF MOUNT DORA	D	10,360	9,917	0.96	D	530	465	458	0.88	D	2.50%	10,360	11,220	1.08	F	530	526	518	0.99	D
1350	421		County	35	1.06	C.R. 500A/OLD 441	CR 44C / EUDORA DRIVE	LAKESHORE DRIVE	2	2	URBAN	DIVIDED	COUNTY	CITY OF MOUNT DORA	D	14,760	16,591	1.12	F	750	725	761	1.01	E	4.25%	14,760	20,430	1.38	F	750	893	937	1.25	F
1360	415		County	35	0.79	C.R. 500A/OLD 441	LAKESHORE DRIVE	5TH AVENUE	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF MOUNT DORA	D	10,360	11,207	1.08	F	530	469	505	0.95	D	4.25%	10,360	13,800	1.33	F	530	577	621	1.17	F
1370	415		ADJACENT	25	0.63	C.R. 500A/ 5TH AVENUE	OLD 441	N HIGHLAND STREET	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF MOUNT DORA	D	10,360	11,207	1.08	F	530	469	505	0.95	D	4.25%	10,360	13,800	1.33	F	530	577	621	1.17	F
1380	605		ADJACENT	30	0.26	C.R. 500A (HIGHLAND STREET)	5TH AVENUE	SR 46	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF MOUNT DORA	D	13,320	2,792	0.21	C	680	179	127	0.26	C	3.50%	13,320	3,316	0.25	C	680	213	150	0.31	C
1390	602	115004	County	35	0.75	C.R. 500A/ OLD 441	SR 46	ORANGE COUNTY LINE	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF MOUNT DORA	D	10,360	5,849	0.56	D	530	325	244	0.61	D	5.25%	10,360	7,555	0.73	D	530	419	316	0.79	D
1400	401		County	45	1.62	C.R. 561	SR 19	CR 448	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF TAVARES	D	16,820	16,583	0.99	D	840	622	825	0.98	D	4.75%	16,820	20,914	1.24	F	840	784	1,041	1.24	F
1410	257		County	50	3.93	C.R. 561	CR 448	CR 48	2	2	URBAN	UNDIVIDED	COUNTY	ASTATULA/TAVARES	D	21,780	10,160	0.47	B	1,080	507	590	0.55	C	1.00%	21,780	10,678	0.49	C	1,080	533	620	0.57	C
1420	252		County	40	0.63	C.R. 561	CR 48	SOUTH ASTATULA CITY LIMIT	2	2	URBAN	UNDIVIDED	COUNTY	TOWN OF ASTATULA	D	12,390	11,947	0.96	D	620	570	558	0.92	C	1.00%	12,390	12,556	1.01	F	620	599	586	0.97	D
1430	252		ADJACENT	40	2.49	C.R. 561	SOUTH ASTATULA CITY LIMIT	CR 455	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	21,780	11,947	0.55	C	1,080	570	558	0.53	C	1.00%	21,780	12,556	0.58	C	1,080	599	586	0.55	C
1440	242		County	35	1.74	C.R. 561	CR 455	HOWEY CROSS ROAD	2	2	RURAL	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	C	9,030	7,697	0.85	C	470	369	364	0.78	C	1.00%	9,030	8,090	0.90	C	470	387	382	0.82	C
1450	238		County	40	1.77	C.R. 561	HOWEY CROSS ROAD	TURNPIKE ROAD / CR 561A	2	2	RURAL	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	C	12,260	8,115	0.66	C	640	328	385	0.60	C	1.00%	12,260	8,529	0.70	C	640	345	405	0.63	C
1460	235		County	45	0.46	C.R. 561 / C.R. 561A	TURNPIKE ROAD / CR 561A	US 27	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	12,390	9,075	0.73	C	620	403	385	0.65	C	1.00%	12,390	9,538	0.77	C	620	423	405	0.68	C
1470	214		County	30	1.78	EAST AVE/LAKE MINNEOLA DR/MAIN AVE	US 27	EAST AVENUE	2	2	URBAN	UNDIVIDED	COUNTY	CLERMONT/MINNEOLA	D	14,060	2,151	0.15	C	710	108	124	0.17	C	3.50%	14,060	2,555	0.18	C	710	128	147	0.21	C
1480	214		ADJACENT	30	1.05	8TH ST/OSCEOLA ST/4TH ST/CARROL ST/3RD S	EAST AVENUE	W MINNEOLA AVENUE	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF CLERMONT	D	10,360	2,151	0.21	C	530	108	124	0.23	C	3.50%	10,360	2,555	0.25	C	530	128	147	0.28	C
1490	115065	115065	State	-	0.42	C.R. 561 (W MINNEOLA AVENUE)	8TH STREET	C.R. 561A	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF CLERMONT	D	12,390	1,085	0.09	C	620	179	186	0.30	C	1.00%	12,390	1,140	0.09	C	620	188	195	0.31	C
1500	203		ADJACENT	35	0.23	C.R. 561	C.R. 561A	SR 50	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF CLERMONT	D	14,060	5,175	0.37	C	710	278	212	0.39	C	6.50%	14,060	7,090	0.50	D	710	381	290	0.54	D
1510	45		County	25	4.31	C.R. 561	SR 50	LOG HOUSE ROAD	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF CLERMONT	D	14,060	6,597	0.47	C	710	326	276	0.46	C	1.00%	14,060	6,934	0.49	C	710	342	290	0.48	C
1520	10		County	55	1.56	C.R. 561	LOG HOUSE ROAD	FLORIDA BOYS RANCH ROAD	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	16,820	3,767	0.22	C	840	159	156	0.19	C	2.00%	16,820	4,159	0.25	C	840	175	172	0.21	C
1530	6		County	55	5.87	C.R. 561	FLORIDA BOYS RANCH ROAD	SR 33	2	2	RURAL	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	C	7,740	2,228	0.29	B	410	106	100	0.26	B	2.25%	7,740	2,491	0.32	B	410	118	112	0.29	B
1540	237		County	55	1.16	C.R. 561A	TURNPIKE ROAD / CR 561	SCRUB JAY LN	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	12,390	5,274	0.43	C	620	199	308	0.50	C	1.25%	12,390	5,612	0.45	C	620	212	327	0.53	C
1545	234		County	55	0.69	C.R. 561A	SCRUB JAY LN	N HANCOCK ROAD	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	21,780	5,529	0.25	B	1,080	201	307	0.28	B	1.00%	21,780	5,811	0.27	B	1,080	211	322	0.30	B
1546	234		ADJACENT	55	1.37	C.R. 561A	N HANCOCK ROAD	CR 455	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	21,780	5,529	0.25	B	1,080	201	307	0.28	B	1.00%	21,780	5,811	0.27	B	1,080	211	322	0.30	B
1550	203		County	35	1.69	C.R. 561	W MINNEOLA AVE	C.R. 565A	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	13,320	5,175	0.39	C	680	278	212	0.41	C	6.50%	13,320	7,090	0.53	D	680	381	290	0.56	D
1560	213		County	40	1.67	C.R. 561A	CR 565A	JALARMY ROAD	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	16,820	6,485	0.39	C	840	316	258	0.38	C	4.50%	16,820	8,081	0.48	C	840	393	322	0.47	C
1570	223		County	40	1.11	C.R. 561 (LAKE MINNEOLA SHORES)	JALARMY ROAD	US 27	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF MINNEOLA	D	16,820	11,066	0.66	C	840	397	491	0.58	C	3.00%	16,820	12,829	0.76	C	840	460	569	0.68	C
1580	241		County	55	7.01	C.R. 565	US 27	KJELLSTROM LANE	2	2	RURAL	UNDIVIDED	COUNTY	GROVELAND/MASCOTTE	C	14,130	2,347	0.17	B	740	167	70	0.23	B	5.25%	14,130	3,032	0.21	B	740	215	90	0.29	B
1590	208		County	40	0.63	C.R. 565 (VILLA CITY ROAD)	KJELLSTROM LANE	SR 50	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF GROVELAND	D	16,820	5,367	0.32	C	840	247	249	0.30	C	4.25%	16,820	6,608	0.39	C	840	305	307	0.37	C
1600	118063	118063	ADJACENT	45	1.96	C.R. 565	SR 50	SLOANS RIDGE	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF MASCOTTE	D	16,820	865	0.05	C	840	44	42	0.05	C	2.00%	16,820	955	0.06	C	840	49	46	0.06	C
1610	118063	118063	State	45	5.44	C.R. 565	SLOANS RIDGE	LAKE ERIE ROAD	2	2	RURAL	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	C	7,740	865	0.11	B	410	44	42	0.11	B	2.00%	7,740	955	0.12	B	410	49	46	0.12	B
1620	201		County	40	2.78	C.R. 565A	SR 50	CR 561A	2	2	URBAN	UNDIVIDED	COUNTY	CLERMONT/GROVELAND	D	16,820	9,917	0.59	C	840	407	348	0.48	C	2.25%	16,820	11,084	0.66	C	840	454	389	0.54	C
1630	47		County	55	4.60	C.R. 565A	SR 50	CR 565B	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF GROVELAND	D	21,780	2,549	0.12	B	1,080	82	133	0.12	B	3.25%	21,780	2,991	0.14	B	1,080	96	156	0.14	B
1640	18		County	45	3.66	C.R. 565B	SR 33	CR 561	2	2	RURAL	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	C	7,740	2,796	0.36	B	410	135	152	0.37	B	4.00%	7,740	3,401	0.44	B	410	164	185	0.45	B
1650	434		County	25	0.30	CANAL STREET	US 441	MAIN STREET	2	2	URBAN	DIVIDED	CITY OF LEESBURG	CITY OF LEESBURG	D	13,990	3,765	0.27	C	710	201	137	0.28	C	1.00%	13,990	3,957	0.28	C	710	211	144	0.30	C
1660	426		County	25	0.31	CANAL STREET	MAIN STREET	SR 44	2	2	URBAN	UNDIVIDED	CITY OF LEESBURG	CITY OF LEESBURG	D	13,320	3,169	0.24	C	680	144	127	0.21	C	1.00%	13,320	3,331	0.25	C	680	151	134	0.22	C
1670	205		County	35	1.80	CITRUS TOWER BOULEVARD	US 27	OAKLEY SEAVER DRIVE	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF CLERMONT	D	14,060	12,296	0.87	D	710	651	446	0.92	D	1.00%	14,060	12,923	0.92	D	710	684	469	0.96	D
1680	44		County	30	0.47	CITRUS TOWER BOULEVARD	OAKLEY SEAVER DRIVE	SR 50	4	4	URBAN	DIVIDED	COUNTY	CITY OF CLERMONT	D	29,160	16,240	0.56	D	1,470	561	715	0.49	D	1.00%	29,160	17,068	0.59	D	1,470	590	752	0.51	D
1690	28		County	40	0.28	CITRUS TOWER BOULEVARD	SR 50	HOOKS STREET	4	4	URBAN	DIVIDED	COUNTY	CITY OF CLERMONT	D	35,820	21,470	0.60	C	1,800	798	1,065	0.59	C	1.25%	35,820	22,846	0.64	C	1,800	849	1,134	0.63	C
1692	36		County	30	1.16	CITRUS TOWER BOULEVARD	HOOKS STREET	JOHNS LAKE ROAD	4	4	URBAN	DIVIDED	COUNTY	CITY OF CLERMONT	D	30,780	20,251	0.66	D	1,550	740	901	0.58	D	1.00%	30,780	21,284	0.69	D	1,550	778	947	0.61	D
1695	24		County	40	0.60	CITRUS TOWER BOULEVARD	JOHNS LAKE ROAD	US 27	4	4	URBAN	DIVIDED	COUNTY	CITY OF CLERMONT	D	37,810	17,725	0.47	C	1,900	738	629	0.39	C	1.50%	37,810	19,095	0.51	C	1,900	795	678	0.42	C
1700	442		ADJACENT	35	0.95	DAVID WALKER DRIVE	OLD US 441 / CR 500A	CR 19A	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF TAVARES	D	14,060	8,553	0.61	D	710	388	367	0.55	D	1.00%	14,060	8,989	0.64	D	710	408	386	0.57	D
1710	442		County	35	0.44	DAVID WALKER DRIVE	CR 19A	US 441	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	14,060	8,553	0.61	D	710	388	367	0.55	D	1.00%	14,060	8,989	0.64	D	710	408	386	0.57	D
1720	449		County	35	0.53	DAVID WALKER DRIVE	US 441	MOUNT HOMER ROAD	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF EUSTIS	D	14,060	5,694	0.40	C	710	214	265	0.37	C	1.00%	14,060	5,984	0.43	C	710	225	279	0.39	C
1730	471		County	20	0.74	DAVID WALKER DRIVE	MOUNT HOMER ROAD	FLINKS AVE/KURT AVE	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF EUSTIS	D	10,360	6,537	0.63	D	530	334	277	0.63	D	3.50%	10,360	7,763	0.75	D	530	397	329	0.75	D
1740	406	117014	County	35	2.29	DEAD RIVER ROAD	WEST TERMINI	SR 19	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF TAVARES	D	21,780	6,785	0.31	B	1,080	276	355	0.33	B	1.00%	21,780	7,131	0.33	B	1,080	291	373	0.35	B
1750	617		County	35	1.25	DONNELLY STREET	US 441	11TH AVENUE	2	2	URBAN	DIVIDED	CITY OF MT. DORA	CITY OF MOUNT DORA	D	14,760	11,220	0.76	D	750	535	474	0.71	D	1.00%	14,760	11,792	0.80	D	750	563	498	0.75	D
1760	617		ADJACENT	35	0.38	DONNELLY STREET	11TH AVENUE	5TH AVENUE	2	2	URBAN	UNDIVIDED	CITY OF MT. DORA	CITY OF MOUNT DORA	D	10,360	11,220	1.08	F	530	535	474	1.01	E	1.00%	10,360	11,792	1.14	F	530	563	498	1.06	F
1770	258		County	55	0.64	DUDA ROAD	CR 448A	ORANGE COUNTY LINE	2	2	RURAL	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	C	9,030	7,250	0.80	C	470	293	323	0.69	C	1.50%	9,030	7,810	0.86	C	470	316	348	0.74	C
1780	510		County	40	1.43	EAGLES NEST ROAD	US 27	CR 466B	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	12,390	4,271	0.34	C	620	198	133	0.32	C	3.75%	12,390	5,134	0.41	C	620	238	160	0.38	C
1790	46		County	30	0.73	EAST AVENUE	CR 561	SR 50	2	2	URBAN	UNDIVIDED	CITY OF CLERMONT	CITY OF CLERMONT	D	10,360	5,841	0.56	D	530	-	-	-	-	1.00%	10,360	6,139	0.59	D	530	-	-	-	-
1800	454		ADJACENT	25	0.85	EAST CROOKED LAKE ROAD	LAKEVIEW DRIVE	BROADVIEW AVENUE	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF EUSTIS	D	10,360	5,153	0.50	D	530	273	167	0.52	D	1.00%	10,360	5,416	0.52	D	530	287	176	0.54	D
1810	454		County	25	0.78	EAST CROOKED LAKE ROAD	BROADVIEW AVENUE	US 441	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF EUSTIS	D	10,360	5,153	0.50	D	530	273	167	0.52	D	1.00%	10,360	5,416	0.52	D	530	287	176	0.54	D
1820	501		County	35	0.77	EMERALDA AVENUE	EMERALDA ISLAND ROAD	CR 44	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	13,320	4,265	0.32	C	680	266	149	0.39	C	2.50%	13,320	4,826	0.36	C	680	301	168	0.44	C
1830	41		County	40	4.26	EMPIRE CHURCH ROAD	CR 565	ANDERSON ROAD	2	2	RURAL	UNDIVIDED	COUNTY	CITY OF GROVELAND	C	7,740	1,442	0.19	B	410	-	-	-	-	1.00%	7,740	1,516	0.20	B	410	-	-	-	-
1840	622		ADJACENT	40	0.76	ESTES ROAD	CR 44A	LAKE LINCOLN LANE	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	15,930	4,384	0.28	C	790	146	262	0.33	C	2.75%	15,930	5,021	0.32	C	790	168	300	0.38	C
1850	622		County	40	0.49	ESTES ROAD	LAKE LINCOLN LANE	SR 44	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	16,820	4,384	0.26	C	840	146	262	0.31	C	2.75%	16,820	5,021	0.30	C	840	168	300	0.36	C
1860	452		County	35	0.52	EUDORA ROAD	OLD MT DORA ROAD	US 441	2	2	URBAN	UNDIVIDED	CITY OF EUSTIS	CITY OF EUSTIS	D	10,360	2,998	0.29	C	530	-	-	-	-	1.00%	10,360	3,151	0.30	C	530	-	-	-	-
1865	30		County	35	0.73	EXCALLIBUR ROAD	HOOKS STREET	CITRUS TOWER BOULEVARD	2	2	URBAN	DIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	14,760	5,301	0.36	C	750	346	219	0.46	C	1.00%	14,760	5,572	0.38	C	750	364	230	0.49	C
1870	508		County	35	0.63	FISH CAMP ROAD	CR 452	CR 44	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	10,360	1,521	0.15	C	530	83	72	0.16	C	2.50%	10,360	1,721	0.17	C	530	94	82	0.18	C
1875	221		County	40	1.69	GRASSY LAKE ROAD/FOSGATE ROAD	CR 50 (WASHINGTON STREET)	HANCOCK ROAD	2	2	URBAN	UNDIVIDED	CITY OF CLERMONT	UNINCORPORATED LAKE COUNTY	D	16,820	5,995	0.36	C	840	288	350	0.42	C	7.50%	16,820	8,606	0.51	C	840	414	503	0.60	C
1880	470		County	30	0.39	GOLFLINKS AVENUE	KURT STREET	SR 19 / BAY STREET	2	2	URBAN	UNDIVIDED	CITY OF EUSTIS	CITY OF EUSTIS	D	10,360	940	0.09	C	530	45	49	0.09	C	1.00%	10,360	988	0.10	C	530	47	52	0.10	C
1890	0		NO COUNT	-	0.38	GOLFLINKS AVENUE	SR 19 / BAY STREET	MARY STREET	2	2	URBAN	UNDIVIDED	CITY OF EUSTIS	CITY OF EUSTIS	D	12,390	-	-	-	620	-	-	-	-	N/A	12,390	-	-	-	620	-	-	-	-
1900	514		County	45	1.86	GOOSE PRAIRIE ROAD	EMERALDA AVENUE	CR 452	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	12,390	3,168	0.26	C	620	196	111	0.32	C	3.25%	12,390	3,718	0.30	C	620	230	130	0.37	C
1910	40		County	35	1.23	GRAND HIGHWAY	CITRUS TOWER BOULEVARD	SR 50	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF CLERMONT	D	14,060	6,479	0.46	C	710	268	273	0.39	C	1.00%	14,060	6,809	0.48	C	710	282	287	0.40	C
1915	37		County	25	0.26	S. GRAND HIGHWAY	SR 50	HOOKS STREET	4	4	URBAN	DIVIDED	COUNTY	CITY OF CLERMONT	D	29,160	5,203	0.18	C	1,470	261	203	0.18	C	1.00%	29,160	5,469	0.19	C	1,470	275	213	0.19	C
1920	226		County	40	1.66	CITRUS GROVE ROAD	US 27	GRASSY LAKE ROAD	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF MINNEOLA	D	12,390	5,319	0.43	C	620	270	173	0.44	C	12.00%	12,390	9,373	0.76	C	620	476	305	0.77	C
1930	517	117007	ADJACENT	45	1.76	GRAYS AIRPORT ROAD	MARION COUNTY ROAD	CR 466	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	12,390	2,911	0.23	C	620	173	118	0.28	C	3.25%	12,390	3,416	0.28	C	620	203	138	0.33	C
1940	517	117007	County	45	1.25	GRAYS AIRPORT ROAD	CR 466	GRIFFIN VIEW DRIVE	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	12,390	2,911	0.23	C	620	173	118	0.28	C	3.25%	12,390	3,416	0.28	C	620	203	138	0.33	C
1950	512	117007	County	45	1.75	S GRAYS AIRPORT ROAD	GRIFFIN VIEW DRIVE	EAGLES NEST ROAD	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	12,390	2,966	0.24	C	620	115	174	0.28	C	5.50%	12,390	3,877	0.31	C	620	150	228	0.37	C
1960	505		County	45	1.43	S GRAYS AIRPORT ROAD	EAGLES NEST ROAD	US 27 / US 412	2	2	URBAN	UNDIVIDED	COUNTY	FRUITLAND PARK	D	12,390	786	0.06	C	620	55	28	0.09	C	1.00%	12,390	826	0.07	C	620	58	30	0.09	C
1970	536	117008	County	35	0.85	GRIFFIN AVENUE	US 27 / US 411	CR 25	2	2	URBAN	UNDIVIDED	COUNTY	TOWN OF LADY LAKE	D	13,320	11,009	0.83	D	680	599	378	0.88	D	1.75%	13,320	12,007	0.90	D	680	653	412	0.96	D
1980	535		County	35	1.19	GRIFFIN AVENUE	CR 25	UNCLE DONALDS LANE	2	2	URBAN	UNDIVIDED	COUNTY	TOWN OF LADY LAKE	D	10,360	3,469	0.33	C	530	214	108	0.40	C	1.50%	10,360	3,737	0.36	C	530	230	116	0.43	C
1990	535		ADJACENT	35	1.66	GRIFFIN AVENUE	UNCLE DONALDS LANE	GRAYS AIRPORT ROAD	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	10,360	3,469	0.33	C	530	214	108	0.40	C	1.50%	10,360	3,737	0.36	C	530	230	116	0.43	C
2000	462		County	25	0.51	GRIFFIN ROAD	US 27	LEE STREET	2	2	URBAN	UNDIVIDED	CITY OF LEESBURG	CITY OF LEESBURG	D	13,320	2,061	0.15	C	680	-	-	-	-	1.00%	13,320	2,166	0.16	C	680	-	-	-	-
2010	515		County	45	1.85	GRIFFIN VIEW DRIVE	US 27	GRAYS AIRPORT ROAD	2	2	URBAN	UNDIVIDED	COUNTY	TOWN OF LADY LAKE	D	12,390	3,498	0.28	C	620	202	124	0.33	C	1.00%	12,390	3,676	0.30	C	620	212	130	0.34	C
2020	516		County	45	1.64	GRIFFIN VIEW DRIVE	GRAYS AIRPORT ROAD	SULEN ROAD	2	2	RURAL	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	C	9,030	1,715	0.19	C	470	113	75	0.24	C	1.00%	9,030	1,802	0.20	C	470	118	78	0.25	C
2030	479		County	30	0.36	GROVE STREET	SR 19 (BADGER AVENUE)	LAKEVIEW AVENUE	2	2	URBAN	UNDIVIDED	CITY OF EUSTIS	CITY OF EUSTIS	D	10,360	1,475	0.14	C	530	24	106	0.20	C	1.00%	10,360	1,550	0.15	C	530	25	111	0.21	C
2040	472		County	30	0.37	GROVE STREET	LAKEVIEW AVENUE	GOLFLINKS AVENUE	2	2	URBAN	UNDIVIDED	CITY OF EUSTIS	CITY OF EUSTIS	D	10,360	2,561	0.25	C	530	160	71	0.30	C	1.00%	10,360	2,692	0.26	C	530	168	75	0.32	C
2045	465	117017	County	25	0.50	GROVE STREET	GOLFLINKS AVENUE	OLD MT DORA ROAD	2	2	URBAN	UNDIVIDED	CITY OF EUSTIS	CITY OF EUSTIS	D	10,360	3,733	0.36	C	530	140	250	0.47	C	1.00%	10,360	3,923	0.38	C	530	148	263	0.50	D
2050	21		County	35	2.14	HAMMOCK RIDGE	LAKE SHORE DRIVE	US 27	4	4	URBAN	DIVIDED	COUNTY	CITY OF CLERMONT	D	59,580	18,440	0.31	B	2,950	479	1,149	0.39	B	2.25%	59,580	20,610	0.35	B	2,950	536	1,284	0.44	B

Rev. May 25, 2021

Lake County CMP Database

Item 1.

SEGMENT ID	COUNTY STATION	FDOT STATION	DATA SOURCE	SPEED LIMIT	SEGMENT LENGTH (MI)	ROAD NAME	FROM	TO	LANES (2022)	LANES (2027)	URBAN / RURAL	DIVIDED / UNDIVIDED	MAINTAINING AGENCY	JURISDICTION	ADOPTED LOS STANDARD	DAILY SERVICE VOLUME	2022 AADT	2022 DAILY V/C	2022 DAILY LOS	PEAK HOUR DIRECTIONAL SERVICE VOLUME	2022 PEAK HOUR NB/EB VOLUME	2022 PEAK HOUR SB/WB VOLUME	2022 PEAK HOUR V/C	2022 PEAK HOUR LOS	GROWTH RATE	DAILY SERVICE VOLUME (2027)	2027 AADT	2027 DAILY V/C	2027 DAILY LOS	PEAK HOUR DIRECTIONAL SERVICE VOLUME (2027)	2027 PEAK HOUR NB/EB VOLUME	2027 PEAK HOUR SB/WB VOLUME	2027 PEAK HOUR V/C	2027 PEAK HOUR LOS
3020	110049	110049	State	45	1.38	SR 19	CR 452 (MAIN STREET)	CR 561	4	4	URBAN	DIVIDED	STATE	CITY OF TAVARES	D	41,790	45,500	1.09	F	2,100	2,203	1,892	1.05	F	4.50%	41,790	56,701	1.36	F	2,100	2,745	2,358	1.31	F
3030	110049	110049	ADJACENT	45	0.90	SR 19	CR 561	LANE PARK ROAD	2	2	URBAN	UNDIVIDED	STATE	CITY OF TAVARES	D	18,590	45,500	2.45	F	920	2,203	1,892	2.39	F	4.50%	18,590	56,701	3.05	F	920	2,745	2,358	2.98	F
3040	110494	110494	State	55	3.87	SR 19	LANE PARK ROAD	CR 48	2	2	URBAN	UNDIVIDED	STATE	HOWEY-IN-THE-HILLS/TAVARES	D	18,590	15,980	0.86	C	920	610	656	0.71	C	1.00%	18,590	16,795	0.90	C	920	641	689	0.75	C
3050	110495	110495	State	40	0.84	SR 19	CR 48	CENTRAL AVENUE	2	2	URBAN	UNDIVIDED	STATE	HOWEY-IN-THE-HILLS	D	14,160	8,950	0.63	C	700	433	372	0.62	C	1.00%	14,160	9,407	0.66	C	700	455	391	0.65	C
3060	110495	110495	ADJACENT	35	3.09	SR 19	CENTRAL AVENUE	CR 455	2	2	URBAN	UNDIVIDED	STATE	HOWEY-IN-THE-HILLS	D	24,200	8,950	0.37	B	1,200	433	372	0.36	B	1.00%	24,200	9,407	0.39	B	1,200	455	391	0.38	B
3070	110255	110255	State	55	2.72	SR 19	CR 455	US 27 / SR 25	2	2	RURAL	UNDIVIDED	STATE	CITY OF GROVELAND	C	8,600	9,910	1.15	D	450	507	435	1.13	D	1.00%	8,600	10,416	1.21	D	450	533	457	1.18	D
3080	110376	110376	State	55	4.73	SR 19	US 27 / SR 25	CR 478	2	2	RURAL	UNDIVIDED	STATE	CITY OF GROVELAND	C	8,600	9,350	1.09	D	450	466	519	1.15	D	1.00%	8,600	9,827	1.14	D	450	490	545	1.21	D
3090	110376	110376	ADJACENT	55	1.22	SR 19	CR 478	LAKE CATHERINE ROAD	2	2	URBAN	UNDIVIDED	STATE	CITY OF GROVELAND	D	17,700	9,350	0.53	C	880	466	519	0.59	C	1.00%	17,700	9,827	0.56	C	880	490	545	0.62	C
3100	110097	110097	State	45	0.70	SR 19	LAKE CATHERINE ROAD	SR 50/ SR 33	2	2	URBAN	UNDIVIDED	STATE	CITY OF GROVELAND	D	17,700	12,950	0.73	C	880	449	533	0.61	C	1.50%	17,700	13,951	0.79	C	880	484	574	0.65	C
3110	115072	115072	State	40	0.52	SR 33	SR 50/ SR 33	ANDERSON ROAD	2	2	URBAN	UNDIVIDED	STATE	CITY OF GROVELAND	D	18,590	14,760	0.79	C	920	470	667	0.73	C	4.25%	18,590	18,175	0.98	D	920	579	821	0.89	C
3120	110497	110497	State	60	3.16	SR 33	ANDERSON ROAD	CR 565B	2	2	RURAL	UNDIVIDED	STATE	CITY OF GROVELAND	C	8,600	10,428	1.21	D	450	533	458	1.18	D	3.75%	8,600	12,535	1.46	D	450	641	551	1.42	D
3130	111002	111002	State	60	6.76	SR 33	CR 565B	CR 561	2	2	RURAL	UNDIVIDED	STATE	UNINCORPORATED LAKE COUNTY	C	8,600	8,242	0.96	C	450	421	362	0.94	C	1.75%	8,600	8,988	1.05	D	450	459	395	1.02	D
3140	5		County	60	2.33	SR 33	CR 561	CR 474	2	2	RURAL	UNDIVIDED	STATE	UNINCORPORATED LAKE COUNTY	C	8,600	13,084	1.52	D	450	452	415	1.00	D	1.25%	8,600	13,923	1.62	D	450	480	441	1.07	D
3150	2		County	60	1.04	SR 33	CR 474	POLK COUNTY LINE	2	2	RURAL	UNDIVIDED	STATE	UNINCORPORATED LAKE COUNTY	C	10,320	10,821	1.05	D	540	352	544	1.01	D	4.50%	10,320	13,485	1.31	F	540	438	678	1.26	F
3160	808		County	45	4.71	SR 40	MARION COUNTY LINE	CR 445A	2	2	RURAL	UNDIVIDED	STATE	UNINCORPORATED LAKE COUNTY	C	8,600	5,068	0.59	C	450	169	217	0.48	B	2.75%	8,600	5,805	0.68	C	450	193	248	0.55	C
3170	110503	110503	State	55	1.61	SR 40	CR 445A	RIVER ROAD	2	2	RURAL	UNDIVIDED	STATE	UNINCORPORATED LAKE COUNTY	C	10,320	5,370	0.52	C	540	274	236	0.51	C	1.00%	10,320	5,644	0.55	C	540	288	248	0.53	C
3180	110050	110050	State	45	1.43	SR 40	RIVER ROAD	VOLUSIA COUNTY LINE	2	2	RURAL	DIVIDED	STATE	UNINCORPORATED LAKE COUNTY	C	14,220	10,180	0.72	C	740	401	406	0.55	C	4.75%	14,220	12,839	0.90	C	740	506	512	0.69	C
3190	110496	110496	State	55	2.38	SR 44	SUMTER COUNTY LINE	CR 468	4	4	URBAN	DIVIDED	STATE	CITY OF LEESBURG	D	39,800	21,800	0.55	C	2,000	1,071	964	0.54	C	1.00%	39,800	22,912	0.58	C	2,000	1,126	1,013	0.56	C
3200	110487	110487	State	45	1.54	SR 44	CR 468	S LONE OAK DRIVE	4	4	URBAN	DIVIDED	STATE	UNINCORPORATED LAKE COUNTY	D	39,800	16,540	0.42	C	2,000	610	720	0.36	C	1.00%	39,800	17,384	0.44	C	2,000	641	757	0.38	C
3210	115147	115147	State	35	0.76	SR 44	S LONE OAK DRIVE	US 27	4	4	URBAN	DIVIDED	STATE	CITY OF LEESBURG	D	32,400	19,480	0.60	D	1,630	835	769	0.51	D	1.00%	32,400	20,474	0.63	D	1,630	878	808	0.54	D
3220	115179	115179	State	35	0.57	SR 44 (DIXIE AVENUE)	US 27	S 9TH STREET	4	4	URBAN	DIVIDED	STATE	CITY OF LEESBURG	D	32,400	27,300	0.84	D	1,630	1,322	1,135	0.81	D	1.25%	32,400	29,049	0.90	D	1,630	1,407	1,208	0.86	D
3230	115143	115143	ADJACENT	35	0.34	SR 44 (DIXIE AVENUE)	S 9TH STREET	CANAL STREET	4	4	URBAN	DIVIDED	STATE	CITY OF LEESBURG	D	32,400	23,200	0.72	D	1,630	922	928	0.57	D	1.00%	32,400	24,383	0.75	D	1,630	969	975	0.60	D
3240	115143	115143	State	40	0.41	SR 44 (DIXIE AVENUE)	CANAL STREET	S LAKE STREET	4	4	URBAN	DIVIDED	STATE	CITY OF LEESBURG	D	39,800	23,200	0.58	C	2,000	922	928	0.46	C	1.00%	39,800	24,383	0.61	C	2,000	969	975	0.49	C
3250	115142	115142	State	40	0.79	SR 44 (DIXIE AVENUE)	S LAKE STREET	E MAIN STREET	4	4	URBAN	DIVIDED	STATE	CITY OF LEESBURG	D	39,800	18,760	0.47	C	2,000	908	780	0.45	C	1.00%	39,800	19,717	0.50	C	2,000	954	820	0.48	C
3260	115183	115183	State	40	0.11	SR 44 (DIXIE AVENUE)	E MAIN STREET	US 441	4	4	URBAN	DIVIDED	STATE	CITY OF LEESBURG	D	41,790	18,760	0.45	C	2,100	908	780	0.43	C	1.00%	41,790	19,717	0.47	C	2,100	954	820	0.45	C
3262	110005	110005	State	45	0.45	SR 44 (OLD C.R. 44B)	US 441	WAYCROSS AVENUE	2	2	URBAN	DIVIDED	STATE	CITY OF MOUNT DORA	D	19,510	25,500	1.31	F	970	1,235	1,060	1.27	F	1.00%	19,510	26,801	1.37	F	970	1,298	1,114	1.34	F
3268	110006	110006	State	45	1.65	SR 44 (OLD C.R. 44B)	WAYCROSS AVENUE	ORANGE AVENUE	2	2	URBAN	UNDIVIDED	STATE	EUSTIS/MOUNT DORA	D	18,590	17,880	0.96	D	920	907	637	0.99	D	1.00%	18,590	18,792	1.01	F	920	953	669	1.04	F
3270	110500	110500	ADJACENT	55	2.27	SR 44	ABRAMS ROAD	THRILL HILL ROAD	2	2	URBAN	UNDIVIDED	STATE	CITY OF EUSTIS	D	18,590	13,810	0.74	C	920	706	606	0.77	C	1.00%	18,590	14,514	0.78	C	920	742	637	0.81	C
3280	110500	110500	ADJACENT	55	1.14	SR 44	THRILL HILL ROAD	CR 439	2	2	URBAN	UNDIVIDED	STATE	CITY OF MOUNT DORA	D	17,700	13,810	0.78	C	880	706	606	0.80	C	1.00%	17,700	14,514	0.82	C	880	742	637	0.84	C
3290	110500	110500	State	55	3.03	SR 44	CR 439	CR 437	2	2	RURAL	UNDIVIDED	STATE	UNINCORPORATED LAKE COUNTY	C	15,700	13,810	0.88	C	820	706	606	0.86	C	1.00%	15,700	14,514	0.92	C	820	742	637	0.90	C
3300	110500	110500	ADJACENT	55	1.15	SR 44	CR 437	CR 46A	2	2	RURAL	UNDIVIDED	STATE	UNINCORPORATED LAKE COUNTY	C	13,550	13,810	1.02	D	700	706	606	1.01	D	1.00%	13,550	14,514	1.07	D	700	742	637	1.06	D
3310	110010	110010	ADJACENT	55	3.43	SR 44	CR 46A	CR 44A	2	2	RURAL	UNDIVIDED	STATE	UNINCORPORATED LAKE COUNTY	C	8,600	9,383	1.09	D	450	480	412	1.07	D	1.00%	8,600	9,861	1.15	D	450	504	433	1.12	D
3320	110010	110010	ADJACENT	55	5.34	SR 44	CR 44A	OVERLOOK DRIVE	2	2	RURAL	UNDIVIDED	STATE	UNINCORPORATED LAKE COUNTY	C	8,600	9,383	1.09	D	450	480	412	1.07	D	1.00%	8,600	9,861	1.15	D	450	504	433	1.12	D
3330	110010	110010	State	55	5.64	SR 44	OVERLOOK DRIVE	CR 42	2	2	RURAL	UNDIVIDED	STATE	UNINCORPORATED LAKE COUNTY	C	15,700	9,383	0.60	B	820	480	412	0.59	B	1.00%	15,700	9,861	0.63	B	820	504	433	0.61	B
3340	110010	110010	ADJACENT	55	0.26	SR 44	CR 42	VOLUSIA COUNTY LINE	2	2	RURAL	UNDIVIDED	STATE	UNINCORPORATED LAKE COUNTY	C	13,550	9,383	0.69	C	700	480	412	0.69	C	1.00%	13,550	9,861	0.73	C	700	504	433	0.72	C
3344	110200	110200	State	-	1.80	SR 429 (WEKIVA PKWY)	ORANGE C/L	CR 46A (REALIGNED)	4	4	URBAN	DIVIDED	STATE	UNINCORPORATED LAKE COUNTY	D	66,200	6,200	0.09	B	3,280	422	322	0.13	B	4.25%	66,200	7,634	0.12	B	3,280	519	396	0.16	B
3345	610		County	-	5.54	SR 46	CR 46A (REALIGNED)	SEMINOLE C/L	4	4	URBAN	DIVIDED	STATE	UNINCORPORATED LAKE COUNTY	D	66,200	17,646	0.27	B	3,280	657	874	0.27	B	1.00%	66,200	18,547	0.28	B	3,280	691	919	0.28	B
3350	110501	110501	ADJACENT	45	1.08	SR 46	US 441	VISTA VIEW	6	6	URBAN	DIVIDED	STATE	CITY OF MOUNT DORA	D	62,900	13,420	0.21	C	3,170	650	558	0.21	C	3.25%	62,900	15,747	0.25	C	3,170	763	655	0.24	C
3360	110501	110501	State	55	0.94	SR 46	VISTA VIEW	ROUND LAKE ROAD	6	6	URBAN	DIVIDED	STATE	CITY OF MOUNT DORA	D	62,900	13,420	0.21	C	3,170	650	558	0.21	C	3.25%	62,900	15,747	0.25	C	3,170	763	655	0.24	C
3370	110001	110001	ADJACENT	55	2.11	SR 46	ROUND LAKE ROAD	CR 437 SOUTH	2	2	URBAN	UNDIVIDED	STATE	CITY OF MOUNT DORA	D	24,200	14,950	0.62	C	1,200	600	600	0.50	C	1.50%	24,200	16,105	0.67	C	1,200	646	646	0.54	C
3380	110001	110001	State	45	0.51	SR 46	CR 437 SOUTH	CR 437 NORTH	2	2	URBAN	UNDIVIDED	STATE	UNINCORPORATED LAKE COUNTY	D	17,700	14,950	0.84	C	880	600	600	0.68	C	1.50%	17,700	16,105	0.91	C	880	646	646	0.73	C
3390	111019	111019	State	45	1.11	SR 46	CR 437 NORTH	CR 435	2	2	URBAN	UNDIVIDED	STATE	UNINCORPORATED LAKE COUNTY	D	17,700	13,230	0.75	C	880	641	550	0.73	C	1.00%	17,700	13,905	0.79	C	880	674	578	0.77	C
3395	611	118115	County	45	0.87	SR 46	CR 435	CR 46A (REALIGNED)	2	2	URBAN	UNDIVIDED	STATE	UNINCORPORATED LAKE COUNTY	D	17,700	10,963	0.62	C	880	467	480	0.54	C	1.00%	17,700	11,522	0.65	C	880	490	504	0.57	C
3420	110319	110319	State	55	3.64	SR 50	SUMTER COUNTY LINE	CR 565 / BAY LAKE ROAD	2	2	URBAN	UNDIVIDED	STATE	UNINCORPORATED LAKE COUNTY	D	24,200	14,320	0.59	C	1,200	591	649	0.54	C	1.50%	24,200	15,427	0.64	C	1,200	637	699	0.58	C
3430	110319	110319	ADJACENT	35	0.77	SR 50	CR 565 / BAY LAKE ROAD	CR 33	2	2	URBAN	UNDIVIDED	STATE	CITY OF MASCOTTE	D	14,800	14,320	0.97	D	750	591	649	0.87	D	1.50%	14,800	15,427	1.04	E	750	637	699	0.93	D
3440	110241	110241	State	45	0.96	SR 50	CR 33	GROVELAND FARMS ROAD	4	4	URBAN	DIVIDED	STATE	CITY OF MASCOTTE	D	39,800	26,000	0.65	C	2,000	942	1,013	0.51	C	1.00%	39,800	27,326	0.69	C	2,000	990	1,065	0.53	C
3450	110241	110241	ADJACENT	45	0.63	SR 50	GROVELAND FARMS ROAD	SR 50 ONE WAY PAIRS	4	4	URBAN	DIVIDED	STATE	CITY OF GROVELAND	D	41,790	26,000	0.62	C	2,100	942	1,013	0.48	C	1.00%	41,790	27,326	0.65	C	2,100	990	1,065	0.51	C
3460	115182	115182	State	35	0.44	SR 50 (E)	SR 50 ONE WAY PAIRS	SR 19	4	4	URBAN	DIVIDED	STATE	CITY OF GROVELAND	D	19,440	12,350	0.64	D	1,960	1,110	0	0.57	D	1.00%	19,440	12,980	0.67	D	1,960	1,167	0	0.60	D
3470	115077	115077	State	35	0.44	SR 50 (W)	SR 19	SR 50 ONE WAY PAIRS	4	4	URBAN	DIVIDED	STATE	CITY OF GROVELAND	D	19,440	16,800	0.86	D	1,960	0	1,510	0.77	D	1.75%	19,440	18,322	0.94	D	1,960	0	1,647	0.84	D
3481	115181	115181	State	35	0.33	SR 50 (E)	SR 19	SR 33 SOUTH	4	4	URBAN	DIVIDED	STATE	CITY OF GROVELAND	D	19,440	12,750	0.66	D	1,960	1,146	0	0.58	D	1.00%	19,440	13,400	0.69	D	1,960	1,204	0	0.61	D
3491	115076	115076	State	35	0.34	SR 50 (W)	SR 33 SOUTH	SR 19	4	4	URBAN	DIVIDED	STATE	CITY OF GROVELAND	D	19,440	14,700	0.76	D	1,960	0	1,322	0.67	D	1.00%	19,440	15,450	0.79	D	1,960	0	1,389	0.71	D
3500	115134	115134	State	55	1.53	SR 50	SR 33 SOUTH	CR 565A NORTH	4	4	URBAN	DIVIDED	STATE	CITY OF GROVELAND	D	41,790	30,314	0.73	C	2,100	1,468	1,260	0.70	C	1.00%	41,790	31,861	0.76	C	2,100	1,543	1,324	0.73	C
3510	110396	110396	State	55	3.15	SR 50	CR 565A NORTH	CR 561	4	4	URBAN	DIVIDED	STATE	CITY OF GROVELAND	D	41,790	29,500	0.71	C	2,100	1,059	2,242	1.07	F	1.00%	41,790	31,005	0.74	C	2,100	1,113	2,356	1.12	F
3520	115057	115057	State	40	1.19	SR 50	CR 561	EAST AVENUE	4	4	URBAN	DIVIDED	STATE	CITY OF CLERMONT	D	39,800	35,600	0.89	C	2,000	1,724	1,480	0.86	C	1.50%	39,800	38,351	0.96	D	2,000	1,857	1,594	0.93	C
3530	115050	115050	State	40	0.92	SR 50	EAST AVENUE	US 27	4	4	URBAN	DIVIDED	STATE	CITY OF CLERMONT	D	41,790	32,650	0.78	C	2,100	1,581	1,358	0.75	C	1.00%	41,790	34,315	0.82	C	2,100	1,662	1,427	0.79	C
3540	110390	110390	State	55	2.14	SR 50	US 27	HANCOCK ROAD	6	6	URBAN	DIVIDED	STATE	UNINCORPORATED LAKE COUNTY	D	62,900	54,629	0.87	C	3,170	2,645	2,271	0.83	C	1.00%	62,900	57,415	0.91	C	3,170	2,780	2,387	0.88	C
3550	110390	110390	ADJACENT	55	1.49	SR 50	HANCOCK ROAD	CR 455	6	6	URBAN	DIVIDED	STATE	UNINCORPORATED LAKE COUNTY	D	62,900	54,629	0.87	C	3,170	2,645	2,271	0.83	C	1.00%	62,900	57,415	0.91	C	3,170	2,780	2,387	0.88	C
3560	750572	750572	State	50	1.53	SR 50	CR 455	ORANGE COUNTY LINE	6	6	URBAN	DIVIDED	STATE	UNINCORPORATED LAKE COUNTY	D	62,900	53,750	0.85	C	3,170	2,574	2,264	0.81	C	1.00%	62,900	56,492	0.90	C	3,170	2,705	2,379	0.85	C
3562	972200	972200	State	70	1.38	SR 91 (FLORIDA TURNPIKE)	SUMTER COUNTY LINE	CR 470	4	4	URBAN	FREEWAY	STATE	UNINCORPORATED LAKE COUNTY	B	47,600	46,882	0.98	B	2,230	2,648	2,274	1.19	C	1.00%	47,600	49,273	1.04	C	2,230	2,783	2,390	1.25	C
3564	972160	972160	State	70	7.50	SR 91 (FLORIDA TURNPIKE)	CR 470	US 27/SR 25	4	4	URBAN	FREEWAY	STATE	UNINCORPORATED LAKE COUNTY	B	47,600	49,600	1.04	C	2,230	2,661	1,803	1.19	C	1.00%	47,600	52,130	1.10	C	2,230	2,797	1,895	1.25	C
3566	972006	972006	State	70	3.72	SR 91 (FLORIDA TURNPIKE)	US 27/SR 25	US 27/SR 25/SR 19 INTERCHANGE	4	8	URBAN	FREEWAY	STATE	UNINCORPORATED LAKE COUNTY	B	47,600	43,670	0.92	B	2,230	2,733	1,852	1.23	C	1.00%	92,200	45,898	0.50	B	4,310	2,872	1,946	0.67	B
3568	972005	972005	State	70	10.82	SR 91 (FLORIDA TURNPIKE)	US 27/SR 25/SR 19 INTERCHANGE	ORANGE COUNTY LINE	4	8	URBAN	FREEWAY	STATE	UNINCORPORATED LAKE COUNTY	C	66,400	66,200	1.00	C	3,100	3,551	2,407	1.15	D	1.00%	128,900	69,577	0.54	B	6,030	3,732	2,530	0.62	B
3569	29		County	30	0.84	STEVES ROAD	US 27	CITRUS TOWER BOULEVARD	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF CLERMONT	D	14,060	7,625	0.54	D	710	335	441	0.62	D	2.00%	14,060	8,418	0.60	D	710	370	487	0.69	D
3570	429		County	20	1.46	SUNNYSIDE DRIVE	MAIN STREET/DR NICHOLS DRIVE	SLEEPY HOLLOW ROAD	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF LEESBURG	D	14,060	4,411	0.31	C	710	163	254	0.36	C	2.50%	14,060	4,990	0.35	C	710	184	288	0.41	C
3580	423	117012	County	35	3.31	SUNNYSIDE DRIVE	SLEEPY HOLLOW ROAD	BRIDGEWATER COURT	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF LEESBURG	D	21,780	2,640	0.12	B	1,080	182	98	0.17	B	2.00%	21,780	2,915	0.13	B	1,080	201	108	0.19	B
3590	414	117013	County	35	1.14	SUNNYSIDE DRIVE	BRIDGEWATER COURT	SUNNYSIDE DRIVE	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	10,360	1,523	0.15	C	530	53	70	0.13	C	1.00%	10,360	1,601	0.15	C	530	56	74	0.14	C
3600	466		County	35	0.79	THOMAS AVENUE	CR 460	CR 44A	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF LEESBURG	D	10,360	9,755	0.94	D	530	405	529	1.00	D	1.00%	10,360	10,253	0.99	D	530	426	556	1.05	E
3610	457		County	35	1.07	THOMAS AVENUE	GRIFFIN ROAD (CR 44A)	MAIN STREET	2	2	URBAN	UNDIVIDED	CITY OF LEESBURG	CITY OF LEESBURG	D	10,360	7,696	0.74	D	530	393	340	0.74	D	1.00%	10,360	8,089	0.78	D	530	413	358	0.78	D
3620	211		County	30	0.32	TURKEY FARM ROAD	OLD HWY 50	BRIMMING LAKE ROAD	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF MINNEOLA	D	10,360	209	0.02	C	530	11	13	0.02	C	1.00%	10,360	220	0.02	C	530	11	13	0.02	C
3630	0		NO COUNT	35	4.19	TUSCANOOGA ROAD	SUMTER COUNTY LINE	EGG ROAD	2	2	RURAL	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	C	7,740	-	-	-	410	-	-	-	-	N/A	7,740	-	-	-	410	-	-	-	-
3640	216		County	40	0.54	TUSCANOOGA ROAD	EGG ROAD	SR 50	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF MASCOTTE	C	15,960	2,543	0.16	C	790	157	101	0.20	C	2.00%	15,960	2,807	0.18	C	790	174	111	0.22	C
3650	219		County	40	0.31	UNDERPASS ROAD	CR 33	AMERICAN LEGION ROAD	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF MASCOTTE	D	16,820	1,080	0.06	C	840	61	60	0.07	C	2.00%	16,820	1,193	0.07	C	840	68	67	0.08	C
3660	110470	110470	State	55	1.01	US 192	US 27	ORANGE COUNTY LINE	6	6	URBAN	DIVIDED	STATE	UNINCORPORATED LAKE COUNTY	D	62,900	47,750	0.76	C	3,170	2,312	1,985	0.73	C	1.00%	62,900	50,186	0.80	C	3,170	2,430	2,086	0.77	C
3670	538		County	45	1.11	US 27/US441	SUMTER COUNTY LINE	GRIFFIN AVENUE	6	6	URBAN	DIVIDED	STATE	TOWN OF LADY LAKE	D	59,900	35,295	0.59	C	3,020	1,446	1,484	0.49	C	1.00%	59,900	37,095	0.62	C	3,020	1,519	1,560	0.52	C
3680	111012	111012	State	45	1.12	US 27/US441	GRIFFIN AVENUE	ALT US 441 / ALT US 27	4	8	URBAN	DIVIDED	STATE	TOWN OF LADY LAKE	D	41,790	30,300	0.73	C	2,100	1,467	1,260	0.70	C	1.50%	84,110	32,642	0.39	C	4,240	1,580	1,357	0.37	C
3690	111012	111012	ADJACENT	40	0.79	US 27/US441	ALT US 441 / ALT US 27	CR 466	4	4	URBAN	DIVIDED	STATE	TOWN OF LADY LAKE	D	41,790	30,300	0.73	C	2,100	1,467	1,260	0.70	C	1.50%	62,900	32,642	0.52	C	3,170	1,580	1,357	0.50	C
3700	111021	111021	State	55	2.27	US 27/US441	CR 466	LAKE ELLA ROAD	4	6	URBAN	DIVIDED	STATE	TOWN OF LADY LAKE	D	41,790	29,800	0.71	C	2,100	1,400	1,200	0.67	C	1.00%	62,900	31,320	0.50	C	3,170	1,471	1,261	0.46	C
3710	110430	110430	State	55	1.89	US 27/US441	LAKE ELLA ROAD	CR 466A / MILLER BOULEVARD	6	6	URBAN	DIVIDED	STATE	FRUITLAND PARK	D	59,900	29,350	0.49	C	3,020	1,421	1,220	0.47	C	1.00%	59,900	30,847	0.51	C	3,020	1,493	1,282	0.49	C
3720	110431	110431	State	45	1.35	US 27/US441	CR 466A / MILLER BOULEVARD	CR 460 (MARTIN LUTHER KING BLVD)	6	6	URBAN	DIVIDED	STATE	FRUITLAND PARK	D	59,900	37,800	0.63	C	3,020	1,830	1,572	0.61	C	1.00%	59,900	39,728	0.66	C	3,020	1,923	1,652	0.64	C
3730	110109	110109	ADJACENT	45	0.51	US 27/US441	CR 460 (MARTIN LUTHER KING BLVD)	CR 466A (LEE ROAD)	6	6	URBAN	DIVIDED	STATE	CITY OF LEESBURG	D	59,900	41,600	0.69	C	3,020	2,014	1,730	0.67	C	1.00%	59,900	43,722	0.73	C	3,020	2,117	1,818	0.70	C
3740	110109	110109	State	45	0.67	US 27/US441	CR 466A (LEE ROAD)	CR 44A/ GRIFFIN ROAD	6	6	URBAN	DIVIDED	STATE	CITY OF LEESBURG	D	59,900	41,600	0.69	C	3,020	2,014	1,730	0.67	C	1.00%	59,900	43,722	0.73	C	3,020	2,117	1,818	0.70	C
3750	110109	110109	ADJACENT	35	0.15	US 27/US441	CR 44A/ GRIFFIN ROAD	US 27/US441 SPLIT	6	6	URBAN	DIVIDED	STATE	CITY OF LEESBURG	D	50,000	41,600	0.83	D	2,520	2,014	1,730	0.80	D	1.00%	50,000	43,722	0.87	D	2,520	2,117	1,818	0.84	D
3760	115120	115120	State	35	1.04	US 27/SR 25	US 27/US441 SPLIT	MAIN STREET	4	4	URBAN	DIVIDED	STATE	CITY OF LEESBURG	D	32,400	28,300	0.87	D	1,630	1,370	1,177	0.84	D	1.00%	32,400	29,744	0.92	D	1,630	1,440	1,237	0.88	D
3770	115119	115119	State	35	0.57	US 27/SR 25	MAIN STREET	SR 44	4	4	URBAN	DIVIDED	STATE	CITY OF LEESBURG	D	32,400	29,100	0.90	D	1,630	1,409	1,210	0.86	D	2.00%	32,400	32,129	0.99	D	1,630	1,556	1,336	0.95	D
3780	115116	115116	State	35	0.63	US 27/SR 25	SR 44	CR 25A (NORTH)	4	4	URBAN	DIVIDED	STATE	CITY OF LEESBURG	D	32,400	44,350	1.37	F	1,630	2,147	1,844	1.32	F	1.50%	32,400	47,778	1.47	F	1,630	2,313	1,987	1.42	F
3785	110014	110014	State	55	2.16	US 27/SR 25	CR 25A (NORTH)	CR 33	4	4	URBAN	DIVIDED	STATE	CITY OF LEESBURG	D	41,790	35,700	0.85	C	2,100	1,729	1,484	0.82	C	1.00%	41,790	37,521	0.90	C	2,100	1,817	1,560	0.87	C
3790	110014	110014	ADJACENT	55	1.12	US 27/SR 25	CR 33	CR 48	4	4	URBAN	DIVIDED	STATE	UNINCORPORATED LAKE COUNTY	D	41,790	35,700	0.85	C	2,100	1,729	1,484	0.82	C	1.00%	41,790	37,521	0.90	C	2,100	1,817	1,560	0.87	C
3800	110362	110362	State	55	2.54	US 27/SR 25	CR 48	PLANTATION BOULEVARD	4	4	URBAN	DIVIDED	STATE	UNINCORPORATED LAKE COUNTY	D	66,200	29,750	0.45	B	3,280	1,222	1,260	0.38	B	1.75%	66,200	32,446	0.49	B	3,280	1,333	1,374	0.42	B
3810	110362	110362	ADJACENT	55	2.67	US 27/SR 25	PLANTATION BOULERVARD	FLORIDA TURNPIKE	4	4	URBAN	DIVIDED	STATE	UNINCORPORATED LAKE COUNTY	D	66,200	29,750	0.45	B	3,280	1,222	1,260	0.38	B	1.75%	66,200	32,446	0.49	B	3,280	1,333	1,374	0.42	B
3820	240	110364	County	55	4.08	US 27/SR 25	FLORIDA TURNPIKE	SR 19	4	4	URBAN	DIVIDED	STATE	CITY OF GROVELAND	D	41,790	26,086	0.62	C	2,100	1,059	989	0.50	C	1.00%	41,790	27,417	0.66	C	2,100	1,113	1,040	0.53	C
3830	110363	110363	State	55	3.36	US 27/SR 25	SR 19	CR 561	4	4	URBAN	DIVIDED	STATE	CITY OF GROVELAND	D	66,200	21,120	0.32	B	3,280	925	963	0.29	B	1.50%	66,200	22,752	0.34	B	3,280	996	1,037	0.32	B
3840	110468	110468	State	55	2.14	US 27/SR 25	CR 561	CR 561A	4	4	URBAN	DIVIDED	STATE	CITY OF MINNEOLA	D	41,790	32,150	0.77	C	2,100	1,380	1,563	0.74	C	1.00%	41,790	33,790	0.81	C	2,100	1,450	1,643	0.78	C
3850	110163	110163	State	50	0.38	US 27/SR 25	CR 561A	CR 561/ MAIN AVENUE	6	6	URBAN	DIVIDED	STATE	CITY OF MINNEOLA	D	62,900	41,100	0.65	C	3,170	1,990	1,709	0.63	C	1.00%	62,900	43,197	0.69	C	3,170	2,092	1,796	0.66	C
3860	110163	110163	ADJACENT	50	0.68	US 27/SR 25	CR 561/ MAIN AVENUE	CR 50	6	6	URBAN	DIVIDED	STATE	CITY OF MINNEOLA	D	59,900	41,100	0.69	C	3,020	1,990	1,709	0.66	C	1.00%	59,900	43,197	0.72	C	3,020	2,092	1,796	0.69	C
3870	110423	110423	State	50	0.79	US 27/SR 25	CR 50	GRAND HIGHWAY	6	6	URBAN	DIVIDED	STATE	CITY OF MINNEOLA	D	59,900	29,000	0.48	C	3,020	1,084	1,040	0.36	C	1.00%	59,900	30,479	0.51	C	3,020	1,139	1,093	0.38	C
3880	115047	115047	State	50	1.22	US 27/SR 25	GRAND HIGHWAY	SR 50	6	6	URBAN	DIVIDED	STATE	CITY OF CLERMONT	D	62,900	31,500	0.50	C	3,170	1,322	1,455	0.46	C	4.00%	62,900	38,325	0.61	C	3,170	1,608	1,770	0.56	C
3890	110012	110012	State	55	1.54	US 27/SR 25	SR 50	JOHNS LAKE ROAD	6	6	URBAN	DIVIDED	STATE	CITY OF CLERMONT	D	62,900	31,740	0.50	C	3,170	1,537	1,320	0.48	C	1.00%	62,900	33,359	0.53	C	3,170	1,615	1,387	0.51	C
3900	110011	110011	State	55	2.06	US 27/SR 25	JOHNS LAKE ROAD	HARDWOOD MARSH ROAD	6	6	URBAN	DIVIDED	STATE	UNINCORPORATED LAKE COUNTY	D	62,900	36,900	0.59	C	3,170	1,787	1,534	0.56	C	1.00%	62,900	38,782	0.62	C	3,170	1,878	1,612	0.59	C
3910	110311	110311	State	55	0.95	US 27/SR 25	HARDWOOD MARSH ROAD	LAKE LOUISA ROAD	6	6	URBAN	DIVIDED	STATE	UNINCORPORATED LAKE COUNTY	D	62,900	24,200	0.38	C	3,170	1,247	1,378	0.43	C	1.00%	62,900	25,434	0.40	C	3,170	1,311	1,448	0.46	C
3920	110007	110007	State	65	6.51	US 27/SR 25	LAKE LOUISA ROAD	BOGGY MARSH RD	6	6	RURAL	DIVIDED	STATE	UNINCORPORATED LAKE COUNTY	D	48,090	21,400	0.44	C	2,520	1,094	939	0.43	C	1.00%	48,090	22,492	0.47	C	2,520	1,150	987	0.46	C
3927	110007	110007	ADJACENT	65	2.01	US 27/SR 25	BOGGY MARSH RD	CR 474	6	6	URBAN	DIVIDED	STATE	UNINCORPORATED LAKE COUNTY	D	62,900	21,400	0.34	C	3,170	1,094	939	0.35	C	1.00%	62,900	22,492	0.36	C	3,170	1,150	987	0.36	C
3930	1		County	55	1.72	US 27/SR 25	CR 474	US 192	6	6	URBAN	DIVIDED	STATE	UNINCORPORATED LAKE COUNTY	D	62,900	55,383	0.88	C	3,170	1,945	1,878	0.61	C	1.00%	62,900	58,208	0.93	C	3,170	2,045	1,974	0.65	C
3940	115096	115096	State	35	0.75	US 441/ SR 500	US 27/US441 SPLIT	LEE STREET	4	4	URBAN	DIVIDED	STATE	CITY OF LEESBURG	D	34,020	29,150	0.86	D	1,710	1,411	1,212	0.83	D	1.00%	34,020	30,637	0.90	D	1,710	1,483	1,274	0.87	D
3950	110492	110492	State	35	0.42	US 441/ SR 500	LEE STREET	N CANAL STREET	4	4	URBAN	DIVIDED	STATE	CITY OF LEESBURG	D	32,400	31,850	0.98	D	1,630	1,542	1,324	0.95	D	1.00%	32,400	33,475	1.03	E	1,630	1,621	1,392	0.99	D
3960	115093	115093	State	45	1.06	US 441/ SR 500	N CANAL STREET	E DIXIE AVENUE	4	4	URBAN	DIVIDED	STATE	CITY OF LEESBURG	D	41,790	33,850	0.81	C	2,100	1,386	1,158	0.66	C	1.00%	41,790	35,577	0.85	C	2,100	1,457	1,217	0.69	C
3970	115092	115092	State	45	0.25	US 441/ SR 500	E DIXIE AVENUE	E MAIN STREET	6	6	URBAN	DIVIDED	STATE	CITY OF LEESBURG	D	59,900	44,550	0.74	C	3,020	2,157	1,852	0.71	C	1.00%	59,900	46,822	0.78	C	3,020	2,267	1,946	0.75	C
3980	110177	110177	State	45	1.41	US 441/ SR 500	E MAIN STREET	CR 44	6	6	URBAN	DIVIDED	STATE	CITY OF LEESBURG	D	59,900	34,100	0.57	C	3,020	1,654	1,415	0.55	C	1.00%	59,900	35,839	0.60	C	3,020	1,738	1,487	0.58	C
3990	110177	110177	ADJACENT	45	3.07	US 441/ SR 500	CR 44	RADIO ROAD	6	6	URBAN	DIVIDED	STATE	CITY OF LEESBURG	D	62,900	34,100	0.54	C	3,170	1,654	1,415	0.52	C	1.00%	62,900	35,839	0.57	C	3,170	1,738	1,487	0.55	C

C3C & C3R

Motor Vehicle Arterial Generalized Service Volume Tables

(C3C-Suburban Commercial)

Peak Hour Directional

	B	C	D	E
1 Lane	*	760	1,070	**
2 Lane	*	1,520	1,810	**
3 Lane	*	2,360	2,680	**
4 Lane	*	3,170	3,180	**

Peak Hour Two-Way

	B	C	D	E
2 Lane	*	1,380	1,950	**
4 Lane	*	2,760	3,290	**
6 Lane	*	4,290	4,870	**
8 Lane	*	5,760	5,780	**

AADT

	B	C	D	E
2 Lane	*	15,300	21,700	**
4 Lane	*	30,700	36,600	**
6 Lane	*	47,700	54,100	**
8 Lane	*	64,000	64,200	**

(C3R-Suburban Residential)

	B	C	D	E
1 Lane	*	970	1,110	**
2 Lane	*	1,700	1,850	**
3 Lane	*	2,620	2,730	**

	B	C	D	E
2 Lane	*	1,760	2,020	**
4 Lane	*	3,090	3,360	**
6 Lane	*	4,760	4,960	**

	B	C	D	E
2 Lane	*	19,600	22,400	**
4 Lane	*	34,300	37,300	**
6 Lane	*	52,900	55,100	**

Adjustment Factors

The peak hour directional service volumes should be adjust by multiplying by 1.2 for one-way facilities
The AADT service volumes should be adjusted by multiplying 0.6 for one way facilities 2 Lane Divided Roadway with an Exclusive Left Turn Lane(s): Multiply by 1.05
2 lane Undivided Roadway with No Exclusive Left Turn Lane(s): Multiply by 0.80

Exclusive right turn lane(s): Multiply by 1.05
Multilane Undivided Roadway with an Exclusive Left Turn Lane(s): Multiply by 0.95
Multilane Roadway with No Exclusive Left Turn Lane(s): Multiply by 0.75
Non-State Signalized Roadway: Multiply by 0.90

This table does not constitute a standard and should be used only for general planning applications. The table should not be used for corridor or intersection design, where more refined techniques exist.
* Cannot be achieved using table input value defaults.
** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached.

C1 & C2

Motor Vehicle Highway Generalized Service Volume Tables

(C1-Natural & C2-Rural)

Peak Hour Directional

	B	C	D	E
1 Lane	240	430	730	1,490
2 Lane	1,670	2,390	2,910	3,340
3 Lane	2,510	3,570	4,370	5,010

Peak Hour Two-Way

	B	C	D	E
2 Lane	440	780	1,330	2,710
4 Lane	3,040	4,350	5,290	6,070
6 Lane	4,560	6,490	7,950	9,110

AADT

	B	C	D	E
2 Lane	4,600	8,200	14,000	28,500
4 Lane	32,000	45,800	55,700	63,900
6 Lane	48,000	68,300	83,700	95,900

Adjustment Factors

2 Lane Divided Roadway with Exclusive Left Turn Adjustment: Multiply by 1.05
Multilane Undivided Highway with Exclusive Left Turn Adjustment: Multiply by 0.95
Multilane Undivided Highway without Exclusive Left Turn Adjustment:: Multiply by 0.75

This table does not constitute a standard and should be used only for general planning applications. The table should not be used for corridor or intersection design, where more refined techniques exist.

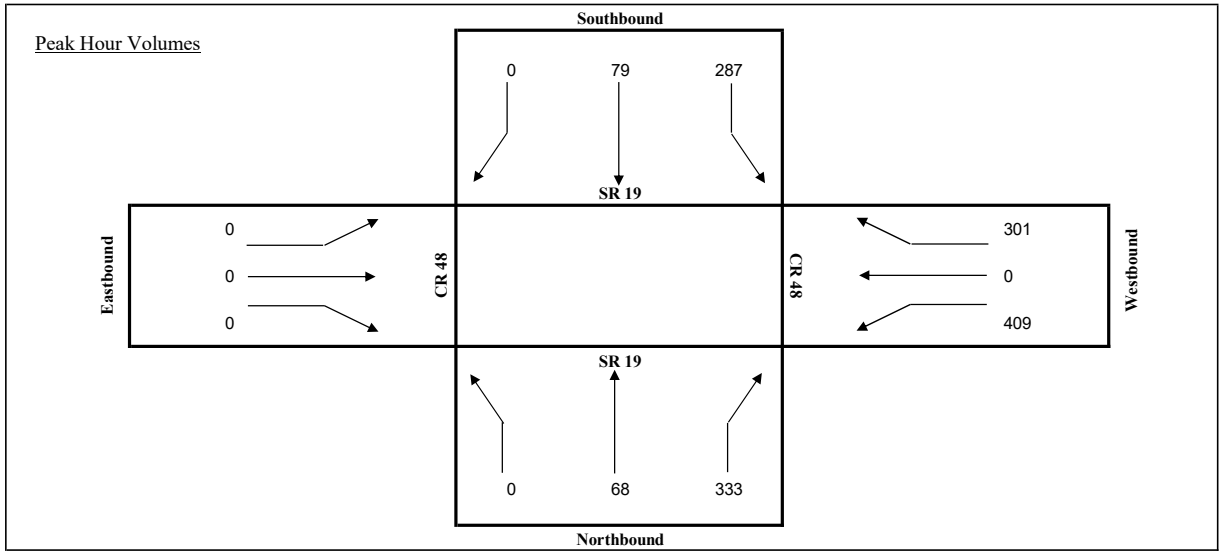
Appendix D
Turning Movement Counts and Seasonal Factor Data

TURNING MOVEMENT COUNT ANALYSIS

AUTOS & TRUCKS

Intersection (N/S): SR 19
Intersection (E/W): CR 48
Date: 7/19/2023

			SR 19 NB			SR 19 SB			CR 48 EB			CR 48 WB			
Start	End	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
4:00 PM	4:15 PM	0	19	82	68	13	0	0	0	0	84	0	65	331
4:15 PM	4:30 PM	0	24	91	71	13	0	0	0	0	83	0	79	361
4:30 PM	4:45 PM	0	18	72	68	17	0	0	0	0	93	0	76	344
4:45 PM	5:00 PM	0	23	90	85	15	0	0	0	0	92	0	61	366
5:00 PM	5:15 PM	0	18	71	73	23	0	0	0	0	88	0	73	346
5:15 PM	5:30 PM	0	15	80	71	19	0	0	0	0	114	0	80	379
5:30 PM	5:45 PM	0	12	92	58	22	0	0	0	0	115	0	87	386
5:45 PM	6:00 PM	0	16	70	54	14	0	0	0	0	94	0	72	320
Total for:	4:00 PM	5:00 PM	0	84	335	292	58	0	0	0	0	352	0	281	1402
Total for:	5:00 PM	6:00 PM	0	61	313	256	78	0	0	0	0	411	0	312	1431
Tota Peak Hour:	4:45 PM	5:45 PM	0	68	333	287	79	0	0	0	0	409	0	301	1477
Overall PHF:	0.96														

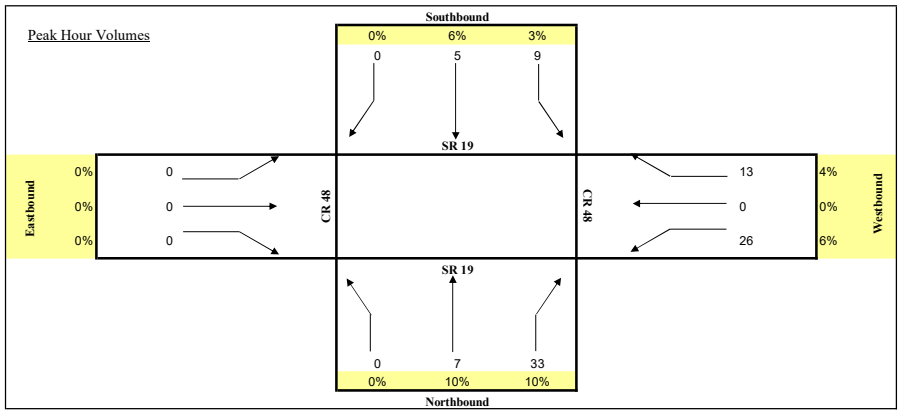


TURNING MOVEMENT COUNT ANALYSIS

TRUCKS

Intersection (N/S): SR 19
Intersection (E/W): CR 48
Date: 7/19/2023

		SR 19 NB			SR 19 SB			CR 48 EB			CR 48 WB			
Start	End	R	T	L	R	T	L	R	T	L	R	T	L	TOTAL
4:00 PM	4:15 PM	0	3	10	5	0	0	0	0	0	4	0	6	28
4:15 PM	4:30 PM	0	4	11	1	3	0	0	0	0	8	0	2	29
4:30 PM	4:45 PM	0	0	8	2	1	0	0	0	0	7	0	4	22
4:45 PM	5:00 PM	0	0	4	1	1	0	0	0	0	7	0	1	14
5:00 PM	5:15 PM	0	1	7	2	2	0	0	0	0	6	0	0	18
5:15 PM	5:30 PM	0	0	7	2	0	0	0	0	0	6	0	0	15
5:30 PM	5:45 PM	0	0	2	0	0	0	0	0	0	2	0	1	5
5:45 PM	6:00 PM	0	2	4	2	1	0	0	0	0	5	0	1	15
Total for:	4:00 PM	5:00 PM	0	7	33	9	5	0	0	0	0	26	0	13	93
Total for:	5:00 PM	6:00 PM	0	3	20	6	3	0	0	0	0	19	0	2	53
Tota Peak Hour:	4:00 PM	5:00 PM	0	7	33	9	5	0	0	0	0	26	0	13	93
Overall PHF:	0.80														

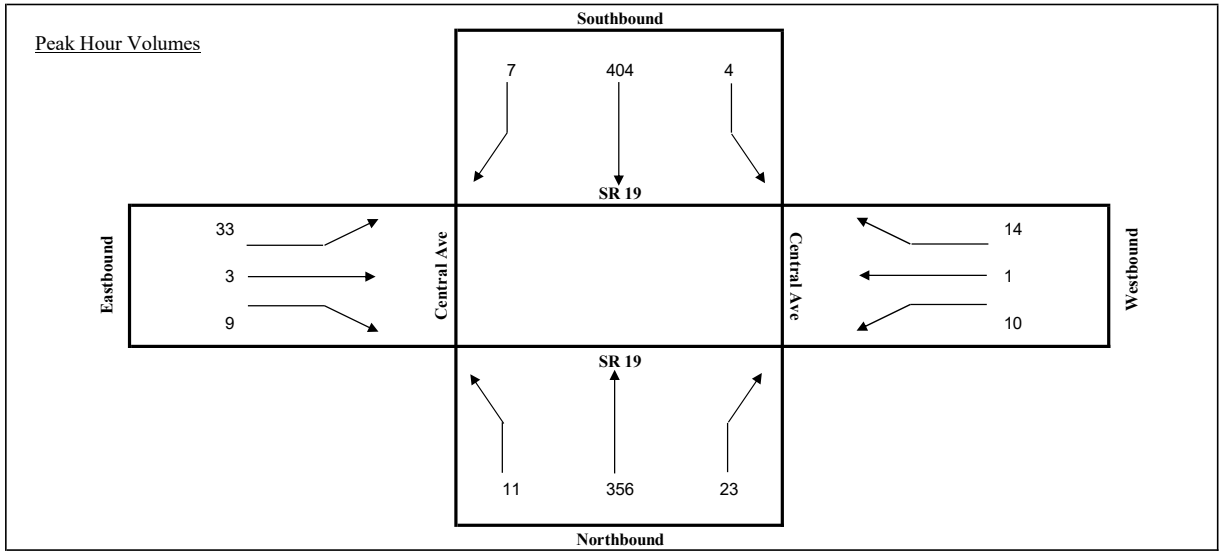


TURNING MOVEMENT COUNT ANALYSIS

AUTOS & TRUCKS

Intersection (N/S): SR 19
Intersection (E/W): Central Ave
Date: 7/19/2023

			SR 19 NB			SR 19 SB			Central Ave EB			Central Ave WB			
Start	End	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
7:00 AM	7:15 AM	7	76	6	1	88	3	5	0	4	3	1	3	197
7:15 AM	7:30 AM	3	92	4	1	101	0	15	1	1	1	0	2	221
7:30 AM	7:45 AM	1	96	4	1	106	2	9	0	1	2	0	4	226
7:45 AM	8:00 AM	5	85	4	2	93	2	4	1	4	4	0	3	207
8:00 AM	8:15 AM	2	83	11	0	104	3	5	1	3	3	1	5	221
8:15 AM	8:30 AM	8	70	1	1	91	5	7	2	0	0	0	4	189
8:30 AM	8:45 AM	3	96	5	1	101	5	5	2	6	2	0	1	227
8:45 AM	9:00 AM	3	77	10	4	68	2	13	0	1	2	0	4	184
Total for:	7:00 AM	8:00 AM	16	349	18	5	388	7	33	2	10	10	1	12	851
Total for:	8:00 AM	9:00 AM	16	326	27	6	364	15	30	5	10	7	1	14	821
Tota Peak Hour:	7:15 AM	8:15 AM	11	356	23	4	404	7	33	3	9	10	1	14	875
Overall PHF:	0.97														

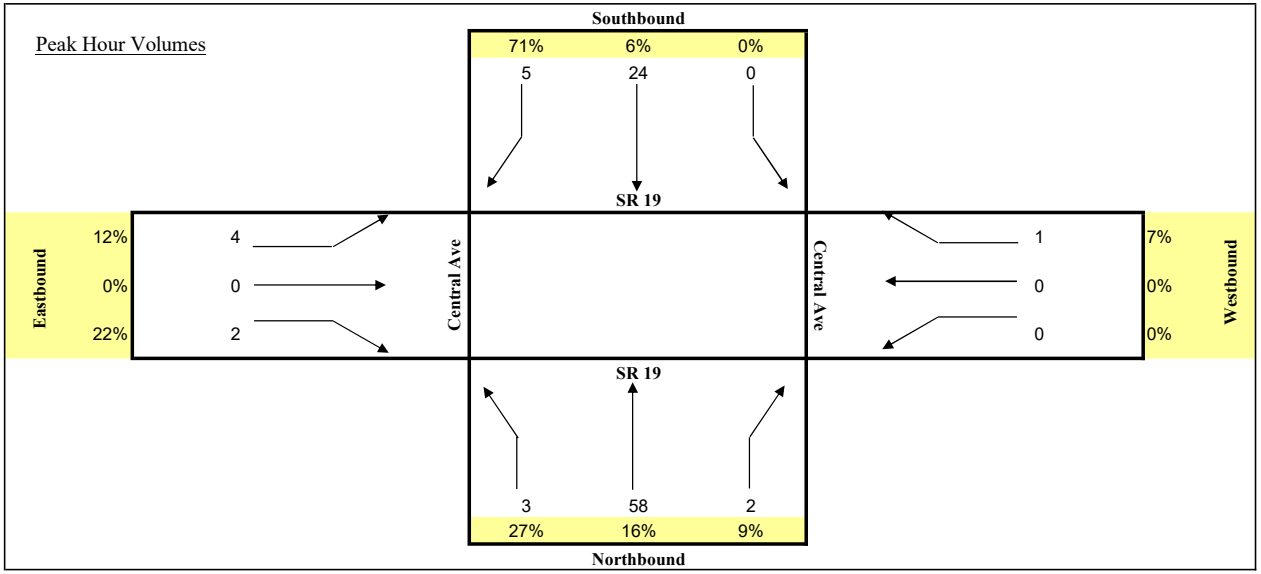


TURNING MOVEMENT COUNT ANALYSIS

TRUCKS

Intersection (N/S): SR 19
Intersection (E/W): Central Ave
Date: 7/19/2023

		SR 19 NB			SR 19 SB			Central Ave EB			Central Ave WB			
Start	End	R	T	L	R	T	L	R	T	L	R	T	L	TOTAL
7:00 AM	7:15 AM	1	13	0	0	10	0	1	0	0	0	0	0	25
7:15 AM	7:30 AM	1	15	1	1	13	0	1	0	0	0	0	0	32
7:30 AM	7:45 AM	0	9	0	0	7	0	0	0	0	0	0	2	18
7:45 AM	8:00 AM	1	12	1	0	2	0	0	0	0	1	0	0	17
8:00 AM	8:15 AM	0	14	1	0	5	0	0	0	0	0	0	1	21
8:15 AM	8:30 AM	2	7	1	0	8	1	2	0	0	0	0	0	21
8:30 AM	8:45 AM	1	19	0	0	6	2	0	0	2	0	0	0	30
8:45 AM	9:00 AM	0	18	0	0	5	2	2	0	0	0	0	0	27
Total for:	7:00 AM	8:00 AM	3	49	2	1	32	0	2	0	0	1	0	2	92
Total for:	8:00 AM	9:00 AM	3	58	2	0	24	5	4	0	2	0	0	1	99
Tota Peak Hour:	8:00 AM	9:00 AM	3	58	2	0	24	5	4	0	2	0	0	1	99
Overall PHF:	0.83														

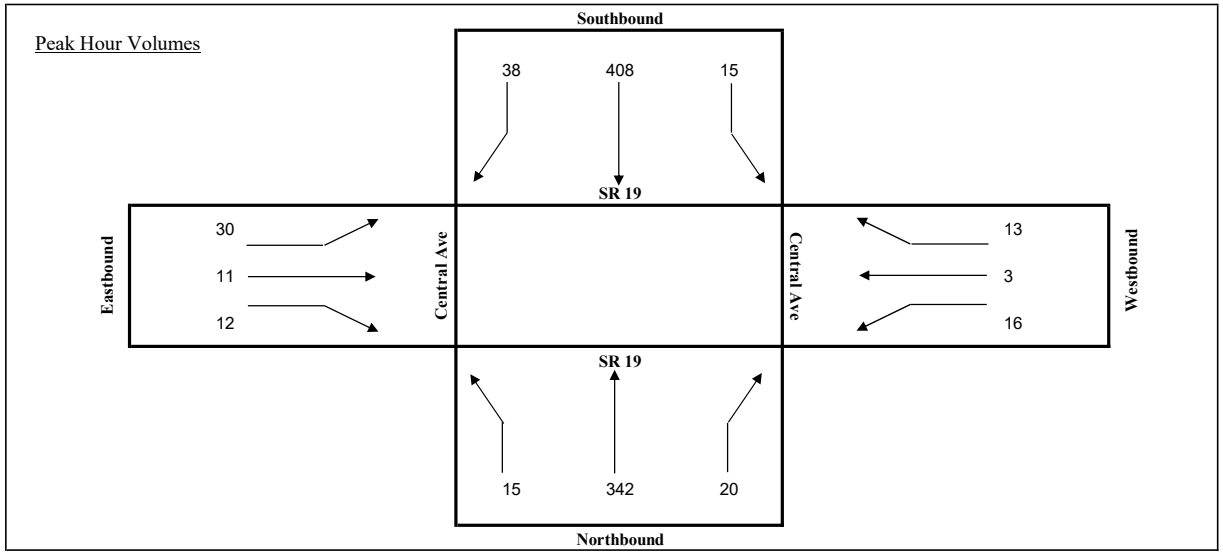


TURNING MOVEMENT COUNT ANALYSIS

AUTOS & TRUCKS

Intersection (N/S): SR 19
Intersection (E/W): Central Ave
Date: 7/19/2023

			SR 19 NB			SR 19 SB			Central Ave EB			Central Ave WB			
Start	End	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
4:00 PM	4:15 PM	2	88	5	3	81	10	7	1	2	1	0	4	204
4:15 PM	4:30 PM	2	98	3	1	79	9	12	0	4	1	3	3	215
4:30 PM	4:45 PM	2	75	7	6	89	10	11	3	4	4	1	1	213
4:45 PM	5:00 PM	2	102	7	4	90	6	6	1	3	1	0	2	224
5:00 PM	5:15 PM	5	66	5	0	96	10	12	5	5	5	0	6	215
5:15 PM	5:30 PM	4	84	4	3	113	8	5	1	1	6	3	2	234
5:30 PM	5:45 PM	4	90	4	8	109	14	7	4	3	4	0	3	250
5:45 PM	6:00 PM	1	71	6	1	86	9	7	1	1	0	2	3	188
Total for:	4:00 PM	5:00 PM	8	363	22	14	339	35	36	5	13	7	4	10	856
Total for:	5:00 PM	6:00 PM	14	311	19	12	404	41	31	11	10	15	5	14	887
Tota Peak Hour:	4:45 PM	5:45 PM	15	342	20	15	408	38	30	11	12	16	3	13	923
Overall PHF:	0.92														

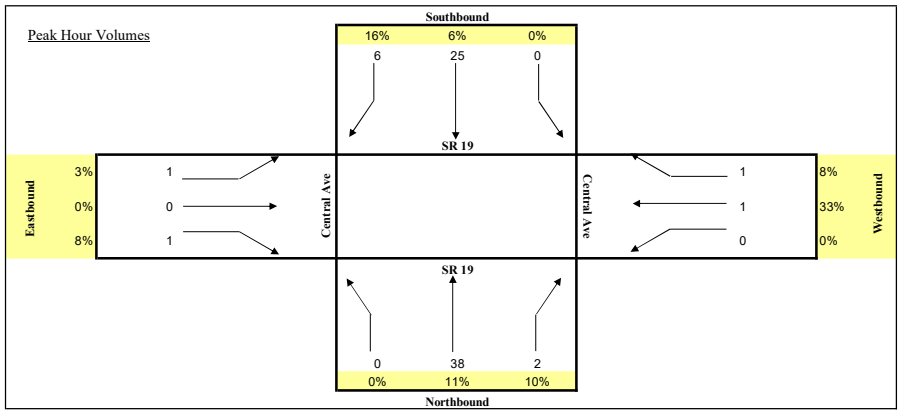


TURNING MOVEMENT COUNT ANALYSIS

TRUCKS

Intersection (N/S): SR 19
Intersection (E/W): Central Ave
Date: 7/19/2023

		SR 19 NB			SR 19 SB			Central Ave EB			Central Ave WB			
Start	End	R	T	L	R	T	L	R	T	L	R	T	L	TOTAL
4:00 PM	4:15 PM	0	13	2	0	2	2	0	0	0	0	0	0	19
4:15 PM	4:30 PM	0	14	0	0	9	2	0	0	0	0	1	1	27
4:30 PM	4:45 PM	0	8	0	0	8	0	0	0	0	0	0	0	16
4:45 PM	5:00 PM	0	3	0	0	6	2	1	0	1	0	0	0	13
5:00 PM	5:15 PM	1	7	0	0	8	0	1	0	0	0	0	0	17
5:15 PM	5:30 PM	0	7	0	0	6	0	0	0	1	0	0	0	14
5:30 PM	5:45 PM	1	2	0	1	0	1	0	0	1	1	0	0	7
5:45 PM	6:00 PM	0	6	0	0	6	0	0	0	0	0	1	0	13
Total for:	4:00 PM	5:00 PM	0	38	2	0	25	6	1	0	1	0	1	1	75
Total for:	5:00 PM	6:00 PM	2	22	0	1	20	1	1	0	2	1	1	0	51
Tota Peak Hour:	4:00 PM	5:00 PM	0	38	2	0	25	6	1	0	1	0	1	1	75
Overall PHF:	0.69														

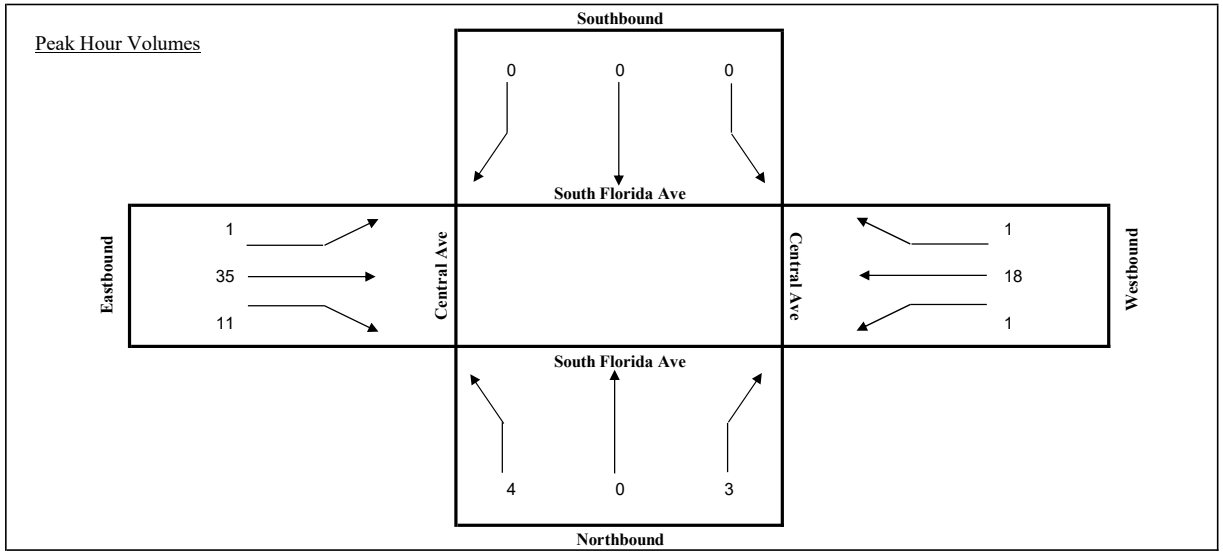


TURNING MOVEMENT COUNT ANALYSIS

AUTOS & TRUCKS

Intersection (N/S): South Florida Ave
Intersection (E/W): Central Ave
Date: 7/19/2023

			South Florida Ave			South Florida Ave			Central Ave			Central Ave			
			NB			SB			EB			WB			
Start	End		L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
7:00 AM	7:15 AM		0	0	0	0	0	0	0	6	4	0	8	1	19
7:15 AM	7:30 AM		2	0	1	0	0	0	1	13	2	0	4	0	23
7:30 AM	7:45 AM		2	0	1	0	0	0	0	9	4	1	1	0	18
7:45 AM	8:00 AM		0	0	1	0	0	0	0	7	1	0	5	0	14
8:00 AM	8:15 AM		0	0	2	0	0	0	0	5	0	2	5	0	14
8:15 AM	8:30 AM		0	0	3	0	0	0	0	8	2	1	3	2	19
8:30 AM	8:45 AM		0	0	1	1	0	1	0	3	1	3	7	0	17
8:45 AM	9:00 AM		1	0	2	0	0	0	0	7	2	1	6	1	20
Total for:	7:00 AM	8:00 AM	4	0	3	0	0	0	1	35	11	1	18	1	74
Total for:	8:00 AM	9:00 AM	1	0	8	1	0	1	0	23	5	7	21	3	70
Tota Peak Hour:	7:00 AM	8:00 AM	4	0	3	0	0	0	1	35	11	1	18	1	74
Overall PHF:	0.80														

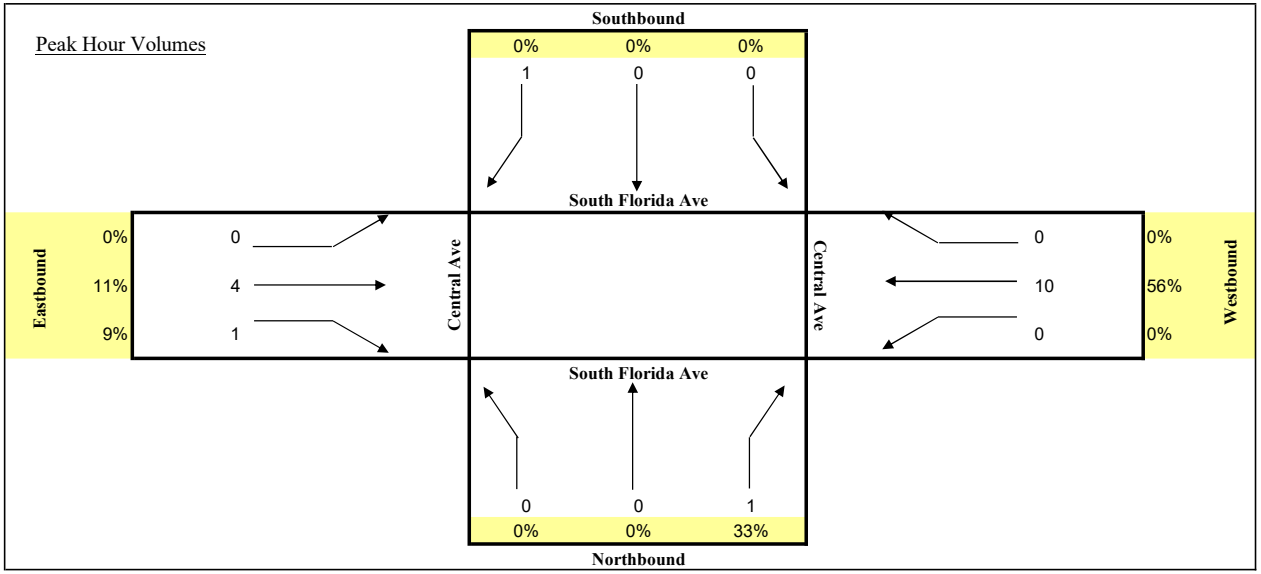


TURNING MOVEMENT COUNT ANALYSIS

TRUCKS

Intersection (N/S): South Florida Ave
Intersection (E/W): Central Ave
Date: 7/19/2023

		South Florida Ave			South Florida Ave			Central Ave			Central Ave			
		NB			SB			EB			WB			
Start	End	R	T	L	R	T	L	R	T	L	R	T	L	TOTAL
7:00 AM	7:15 AM	0	0	0	0	0	0	0	1	0	0	1	0	2
7:15 AM	7:30 AM	0	0	0	0	0	0	0	1	0	0	1	0	2
7:30 AM	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:00 AM	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	8:30 AM	0	0	1	0	0	0	0	2	0	0	2	0	5
8:30 AM	8:45 AM	0	0	0	0	0	1	0	1	0	0	3	0	5
8:45 AM	9:00 AM	0	0	0	0	0	0	0	1	1	0	5	0	7
Total for:	7:00 AM	8:00 AM	0	0	0	0	0	0	0	2	0	0	3	0	5
Total for:	8:00 AM	9:00 AM	0	0	1	0	0	1	0	4	1	0	10	0	17
Tota Peak Hour:	8:00 AM	9:00 AM	0	0	1	0	0	1	0	4	1	0	10	0	17
Overall PHF:	0.61														

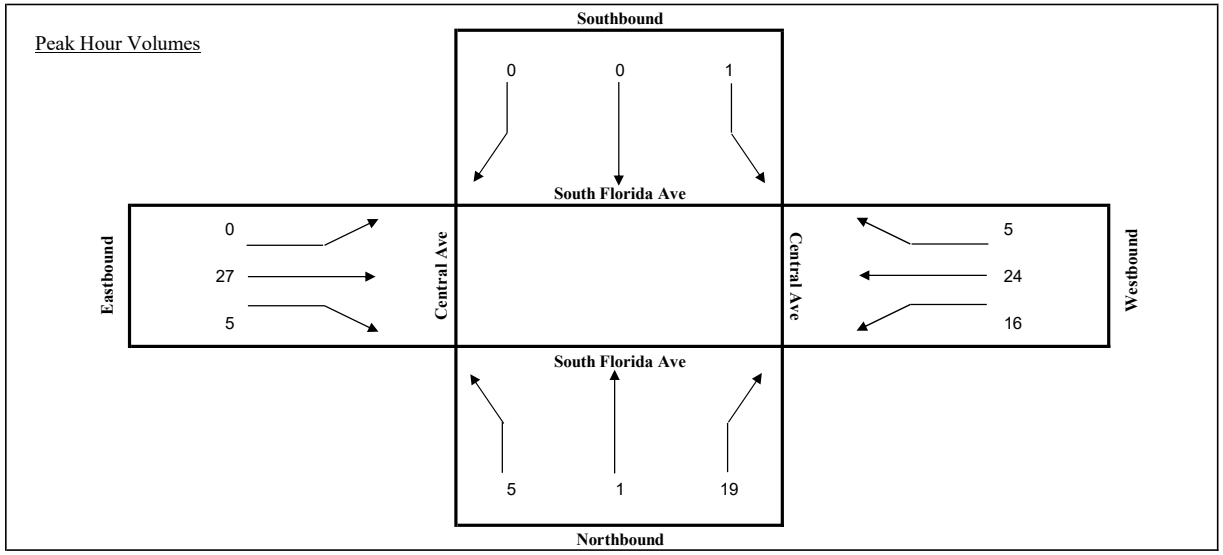


TURNING MOVEMENT COUNT ANALYSIS

AUTOS & TRUCKS

Intersection (N/S): South Florida Ave
Intersection (E/W): Central Ave
Date: 7/19/2023

		South Florida Ave			South Florida Ave			Central Ave			Central Ave			
		NB			SB			EB			WB			
Start	End	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
4:00 PM	4:15 PM	3	0	3	0	0	0	0	3	0	4	5	0	18
4:15 PM	4:30 PM	3	0	5	0	0	0	0	6	2	4	8	0	28
4:30 PM	4:45 PM	2	0	6	0	0	0	0	2	3	3	7	0	23
4:45 PM	5:00 PM	1	0	4	0	0	0	0	5	1	1	4	0	16
5:00 PM	5:15 PM	1	1	7	0	0	0	0	10	2	5	6	0	32
5:15 PM	5:30 PM	1	0	4	0	0	0	0	5	1	0	4	4	19
5:30 PM	5:45 PM	1	0	4	1	0	0	0	6	2	5	9	0	28
5:45 PM	6:00 PM	2	0	4	0	0	0	0	6	0	6	5	1	24
Total for:	4:00 PM	5:00 PM	9	0	18	0	0	0	0	16	6	12	24	0	85
Total for:	5:00 PM	6:00 PM	5	1	19	1	0	0	0	27	5	16	24	5	103
Tota Peak Hour:	5:00 PM	6:00 PM	5	1	19	1	0	0	0	27	5	16	24	5	103
Overall PHF:	0.80														

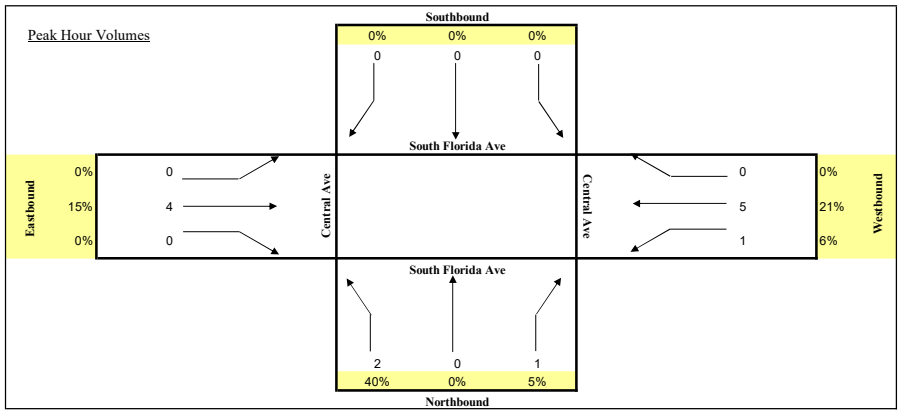


TURNING MOVEMENT COUNT ANALYSIS

TRUCKS

Intersection (N/S): South Florida Ave
Intersection (E/W): Central Ave
Date: 7/19/2023

		South Florida Ave			South Florida Ave			Central Ave			Central Ave			
		NB			SB			EB			WB			
Start	End	R	T	L	R	T	L	R	T	L	R	T	L	TOTAL
4:00 PM	4:15 PM	0	0	0	0	0	0	0	0	0	1	1	0	2
4:15 PM	4:30 PM	1	0	0	0	0	0	0	0	0	1	2	0	4
4:30 PM	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	5:00 PM	1	0	0	0	0	0	0	2	0	1	1	0	5
5:00 PM	5:15 PM	0	0	1	0	0	0	0	0	0	0	1	0	2
5:15 PM	5:30 PM	1	0	0	0	0	0	0	2	0	0	1	0	4
5:30 PM	5:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
5:45 PM	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total for:	4:00 PM	5:00 PM	2	0	0	0	0	0	0	2	0	3	4	0	11
Total for:	5:00 PM	6:00 PM	1	0	1	0	0	0	0	2	0	0	4	0	8
Tota Peak Hour:	4:45 PM	5:45 PM	2	0	1	0	0	0	0	4	0	1	5	0	13
Overall PHF:	0.65														

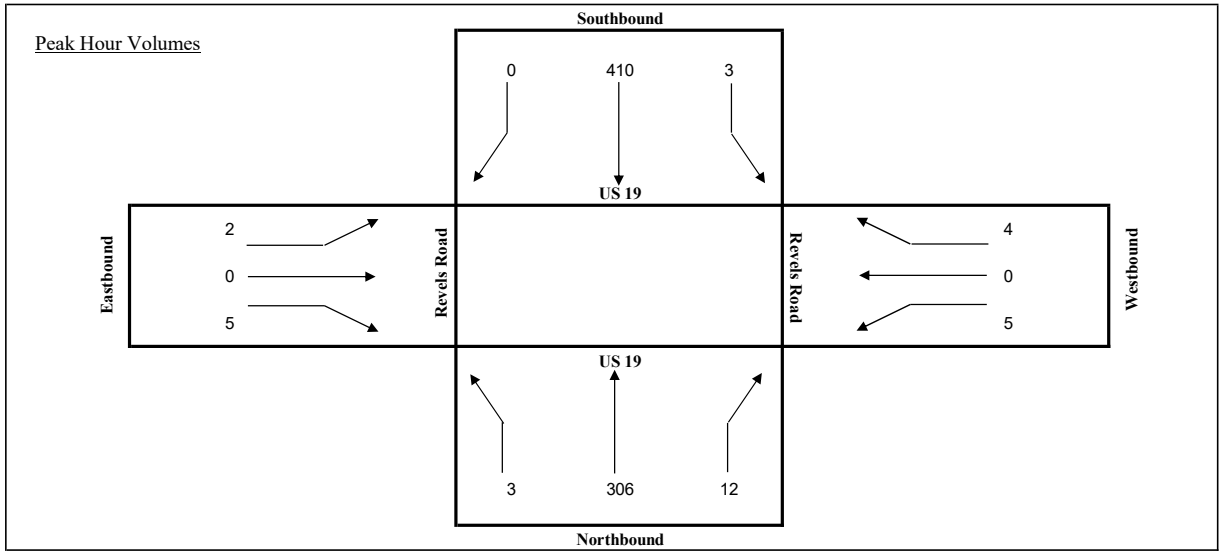


TURNING MOVEMENT COUNT ANALYSIS

AUTOS & TRUCKS

Intersection (N/S): US 19
Intersection (E/W): Revels Road
Date: 7/19/2023

			US 19 NB			US 19 SB			Revels Road EB			Revels Road WB			
Start	End	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
7:00 AM	7:15 AM	3	80	1	0	74	2	0	0	0	3	0	2	165
7:15 AM	7:30 AM	2	60	1	1	94	1	1	0	0	0	1	0	161
7:30 AM	7:45 AM	1	72	0	1	107	0	0	0	2	1	0	1	185
7:45 AM	8:00 AM	1	97	5	0	100	0	0	0	2	2	0	1	208
8:00 AM	8:15 AM	0	71	2	2	110	0	2	0	0	2	0	2	191
8:15 AM	8:30 AM	1	66	5	0	93	0	0	0	1	0	0	0	166
8:30 AM	8:45 AM	0	58	1	0	60	1	1	0	2	4	0	2	129
8:45 AM	9:00 AM	0	57	3	1	63	2	0	0	1	1	0	2	130
Total for:	7:00 AM	8:00 AM	7	309	7	2	375	3	1	0	4	6	1	4	719
Total for:	8:00 AM	9:00 AM	1	252	11	3	326	3	3	0	4	7	0	6	616
Tota Peak Hour:	7:30 AM	8:30 AM	3	306	12	3	410	0	2	0	5	5	0	4	750
Overall PHF:	0.90														

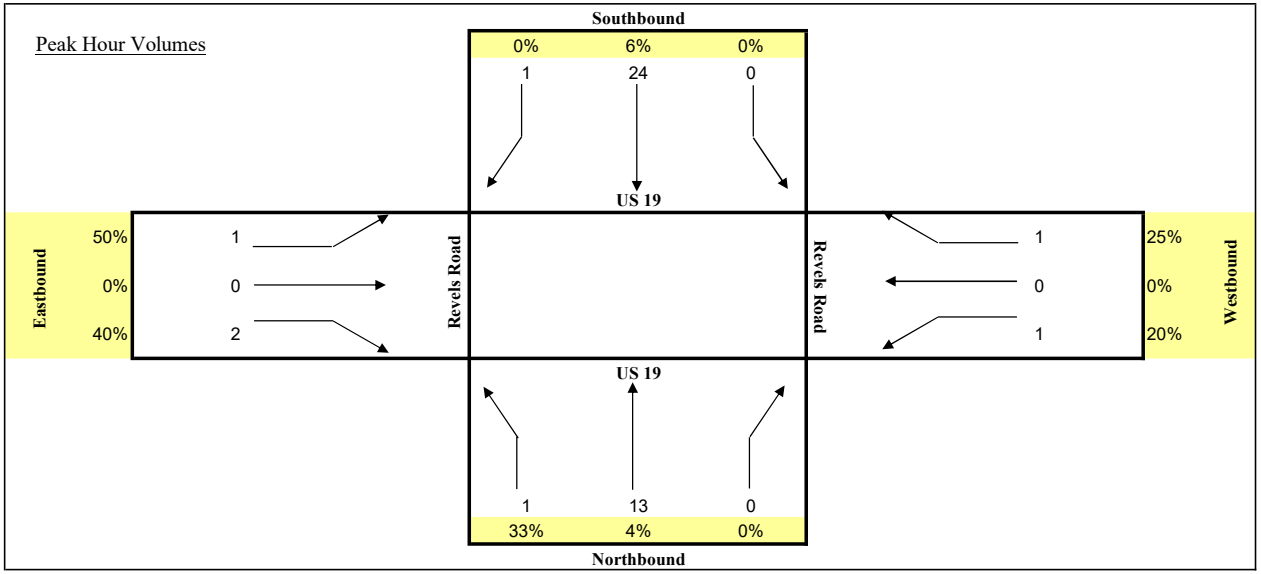


TURNING MOVEMENT COUNT ANALYSIS

TRUCKS

Intersection (N/S): US 19
Intersection (E/W): Revels Road
Date: 7/19/2023

		US 19 NB			US 19 SB			Revels Road EB			Revels Road WB			
Start	End	R	T	L	R	T	L	R	T	L	R	T	L	TOTAL
7:00 AM	7:15 AM	1	3	0	0	5	0	0	0	0	0	0	0	9
7:15 AM	7:30 AM	0	1	0	0	6	0	0	0	0	0	0	0	7
7:30 AM	7:45 AM	0	2	0	0	5	0	0	0	0	0	0	0	7
7:45 AM	8:00 AM	1	6	0	0	3	0	0	0	0	0	0	1	11
8:00 AM	8:15 AM	0	1	0	0	8	0	0	0	0	0	0	0	9
8:15 AM	8:30 AM	0	3	0	0	6	0	0	0	1	0	0	0	10
8:30 AM	8:45 AM	0	3	0	0	7	1	1	0	1	1	0	0	14
8:45 AM	9:00 AM	0	1	0	0	3	1	0	0	0	0	0	0	5
Total for:	7:00 AM	8:00 AM	2	12	0	0	19	0	0	0	0	0	0	1	34
Total for:	8:00 AM	9:00 AM	0	8	0	0	24	2	1	0	2	1	0	0	38
Tota Peak Hour:	7:45 AM	8:45 AM	1	13	0	0	24	1	1	0	2	1	0	1	44
Overall PHF:	0.79														

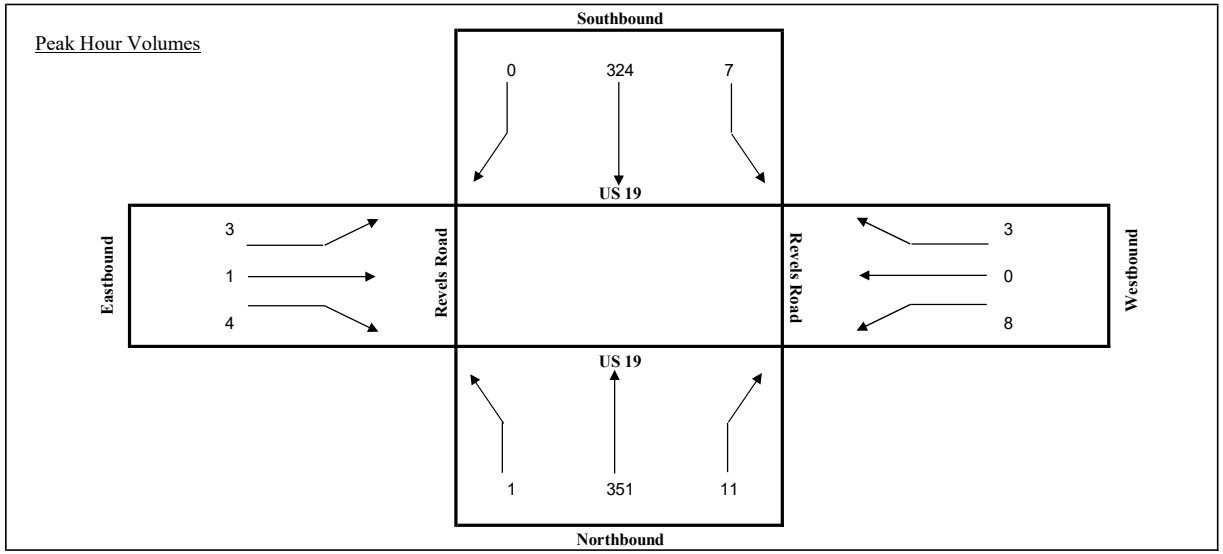


TURNING MOVEMENT COUNT ANALYSIS

AUTOS & TRUCKS

Intersection (N/S): US 19
Intersection (E/W): Revels Road
Date: 7/19/2023

			US 19 NB			US 19 SB			Revels Road EB			Revels Road WB			
Start	End		L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
4:00 PM	4:15 PM		2	89	6	5	61	3	1	0	0	1	1	2	171
4:15 PM	4:30 PM		0	76	3	0	74	1	1	0	1	3	0	1	160
4:30 PM	4:45 PM		1	78	1	2	88	0	0	0	1	2	0	0	173
4:45 PM	5:00 PM		0	93	6	1	91	0	0	0	0	2	0	2	195
5:00 PM	5:15 PM		0	88	3	2	70	0	1	0	2	2	0	0	168
5:15 PM	5:30 PM		0	92	1	2	75	0	2	1	1	2	0	1	177
5:30 PM	5:45 PM		0	92	2	1	70	0	0	0	1	0	0	0	166
5:45 PM	6:00 PM		0	86	3	0	72	0	1	0	0	2	0	1	165
Total for:	4:00 PM	5:00 PM	3	336	16	8	314	4	2	0	2	8	1	5	699
Total for:	5:00 PM	6:00 PM	0	358	9	5	287	0	4	1	4	6	0	2	676
Tota Peak Hour:	4:30 PM	5:30 PM	1	351	11	7	324	0	3	1	4	8	0	3	713
Overall PHF:	0.91														

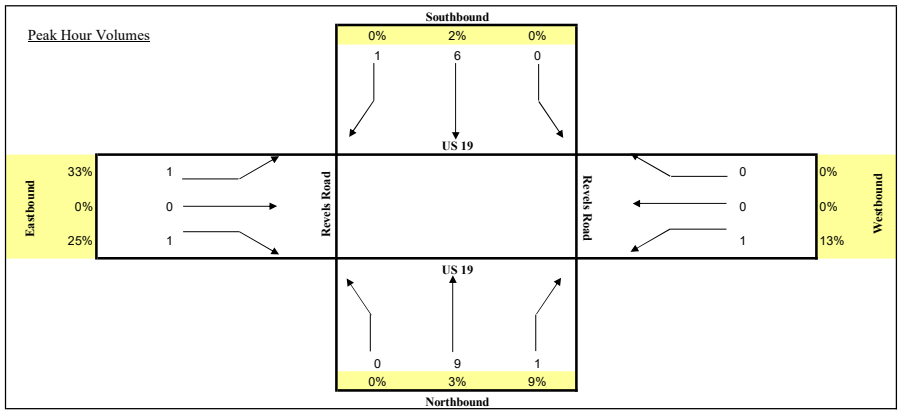


TURNING MOVEMENT COUNT ANALYSIS

TRUCKS

Intersection (N/S): US 19
Intersection (E/W): Revels Road
Date: 7/19/2023

		US 19 NB			US 19 SB			Revels Road EB			Revels Road WB			
Start	End	R	T	L	R	T	L	R	T	L	R	T	L	TOTAL
4:00 PM	4:15 PM	0	1	0	0	1	1	0	0	0	0	0	0	3
4:15 PM	4:30 PM	0	4	1	0	2	0	1	0	0	0	0	0	8
4:30 PM	4:45 PM	0	1	0	0	0	0	0	0	1	1	0	0	3
4:45 PM	5:00 PM	0	3	0	0	3	0	0	0	0	0	0	0	6
5:00 PM	5:15 PM	0	2	0	0	1	0	0	0	0	0	0	0	3
5:15 PM	5:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	2
5:30 PM	5:45 PM	0	5	0	0	2	0	0	0	0	0	0	0	7
5:45 PM	6:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
Total for:	4:00 PM	5:00 PM	0	9	1	0	6	1	1	0	1	1	0	0	20
Total for:	5:00 PM	6:00 PM	0	9	0	0	4	0	0	0	0	0	0	0	13
Tota Peak Hour:	4:00 PM	5:00 PM	0	9	1	0	6	1	1	0	1	1	0	0	20
Overall PHF:	0.63														

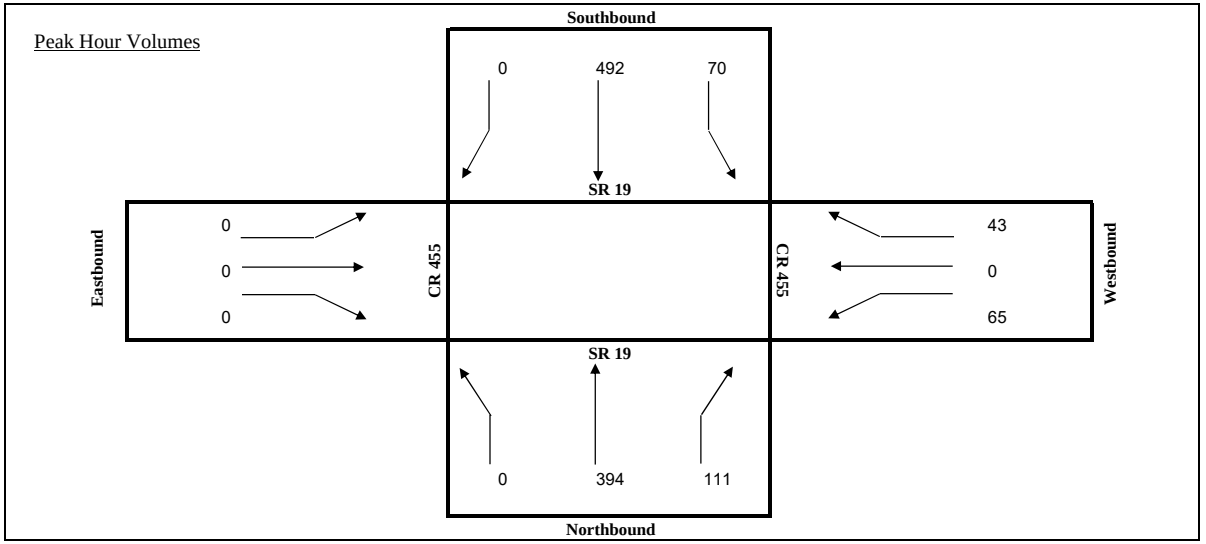


TURNING MOVEMENT COUNT ANALYSIS

AUTOS & TRUCKS

Intersection (N/S): SR 19
Intersection (E/W): CR 455
Date: 1/24/2023

			SR 19 NB			SR 19 SB			CR 455 EB			CR 455 WB			
Start	End	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
7:00 AM	7:15 AM	0	92	15	11	131	0	0	0	0	7	0	4	260
7:15 AM	7:30 AM	0	93	23	16	144	0	0	0	0	9	0	6	291
7:30 AM	7:45 AM	0	111	27	21	105	0	0	0	0	13	0	11	288
7:45 AM	8:00 AM	0	91	26	20	124	0	0	0	0	17	0	12	290
8:00 AM	8:15 AM	0	99	35	13	119	0	0	0	0	26	0	14	306
8:15 AM	8:30 AM	0	93	29	18	98	0	0	0	0	22	0	11	271
8:30 AM	8:45 AM	0	74	27	11	94	0	0	0	0	22	0	12	240
8:45 AM	9:00 AM	0	81	22	9	94	0	0	0	0	17	0	9	232
Total for:	7:00 AM	8:00 AM	0	387	91	68	504	0	0	0	0	46	0	33	1129
Total for:	8:00 AM	9:00 AM	0	347	113	51	405	0	0	0	0	87	0	46	1049
Tota Peak Hour:	7:15 AM	8:15 AM	0	394	111	70	492	0	0	0	0	65	0	43	1175
Overall PHF:	0.96														

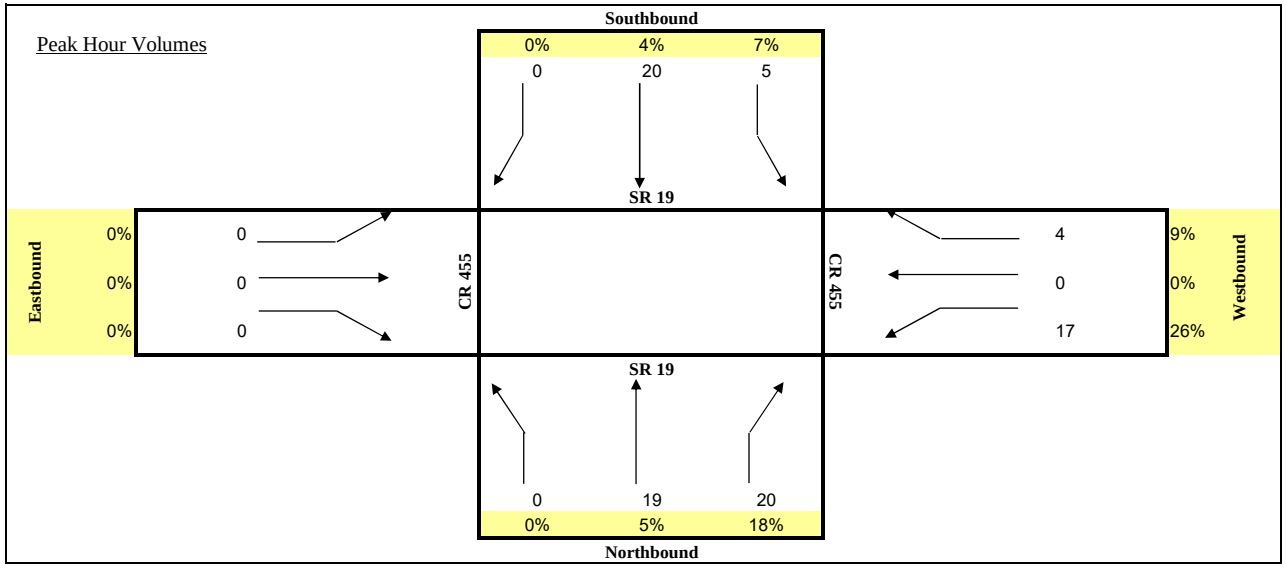


TURNING MOVEMENT COUNT ANALYSIS

TRUCKS

Intersection (N/S): SR 19
Intersection (E/W): CR 455
Date: 1/24/2023

		SR 19 NB			SR 19 SB			CR 455 EB			CR 455 WB			
Start	End	R	T	L	R	T	L	R	T	L	R	T	L	TOTAL
7:00 AM	7:15 AM	0	3	3	0	7	0	0	0	0	2	0	1	16
7:15 AM	7:30 AM	0	6	1	1	8	0	0	0	0	2	0	0	18
7:30 AM	7:45 AM	0	7	7	3	5	0	0	0	0	3	0	2	27
7:45 AM	8:00 AM	0	3	2	1	3	0	0	0	0	1	0	0	10
8:00 AM	8:15 AM	0	6	5	0	5	0	0	0	0	5	0	1	22
8:15 AM	8:30 AM	0	3	6	3	6	0	0	0	0	3	0	2	23
8:30 AM	8:45 AM	0	3	6	1	5	0	0	0	0	6	0	0	21
8:45 AM	9:00 AM	0	7	3	1	4	0	0	0	0	3	0	1	19
Total for:	7:00 AM	8:00 AM	0	19	13	5	23	0	0	0	0	8	0	3	71
Total for:	8:00 AM	9:00 AM	0	19	20	5	20	0	0	0	0	17	0	4	85
Tota Peak Hour:	8:00 AM	9:00 AM	0	19	20	5	20	0	0	0	0	17	0	4	85
Overall PHF:	0.92														

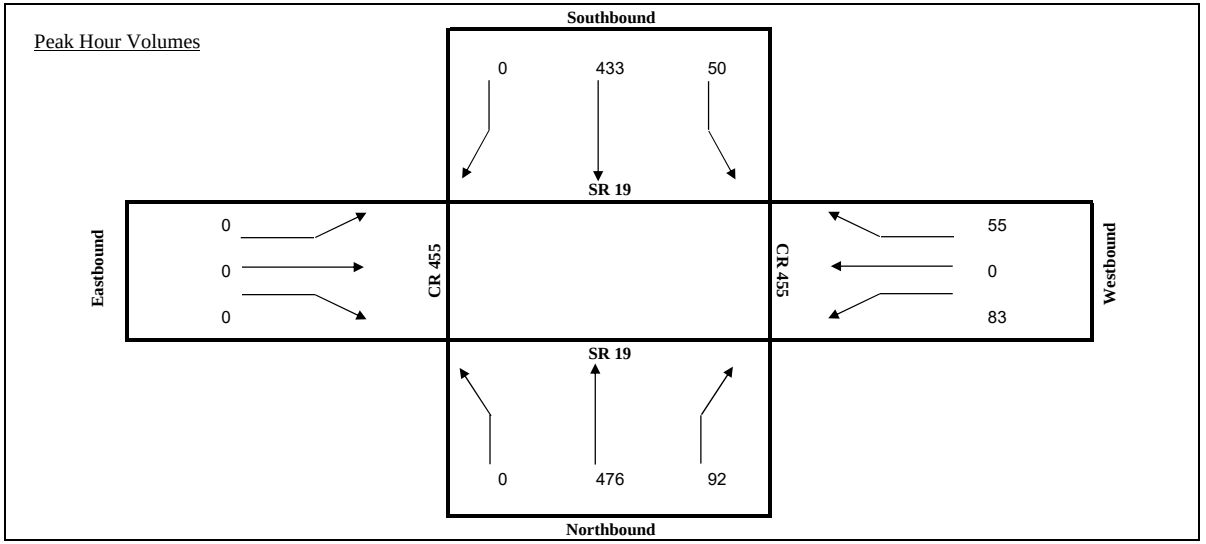


TURNING MOVEMENT COUNT ANALYSIS

AUTOS & TRUCKS

Intersection (N/S): SR 19
Intersection (E/W): CR 455
Date: 1/24/2023

			SR 19 NB			SR 19 SB			CR 455 EB			CR 455 WB			
	Start	End	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
	4:00 PM	4:15 PM	0	97	20	6	117	0	0	0	0	18	0	14	272
	4:15 PM	4:30 PM	0	111	22	9	109	0	0	0	0	22	0	11	284
	4:30 PM	4:45 PM	0	114	25	13	108	0	0	0	0	19	0	16	295
	4:45 PM	5:00 PM	0	118	22	9	108	0	0	0	0	25	0	13	295
	5:00 PM	5:15 PM	0	131	21	14	104	0	0	0	0	18	0	10	298
	5:15 PM	5:30 PM	0	113	24	14	113	0	0	0	0	21	0	16	301
	5:30 PM	5:45 PM	0	96	28	17	94	0	0	0	0	17	0	19	271
	5:45 PM	6:00 PM	0	87	21	10	102	0	0	0	0	21	0	12	253
Total for:	4:00 PM	5:00 PM	0	440	89	37	442	0	0	0	0	84	0	54	1146
Total for:	5:00 PM	6:00 PM	0	427	94	55	413	0	0	0	0	77	0	57	1123
Tota Peak Hour:	4:30 PM	5:30 PM	0	476	92	50	433	0	0	0	0	83	0	55	1189
Overall PHF:	0.99														

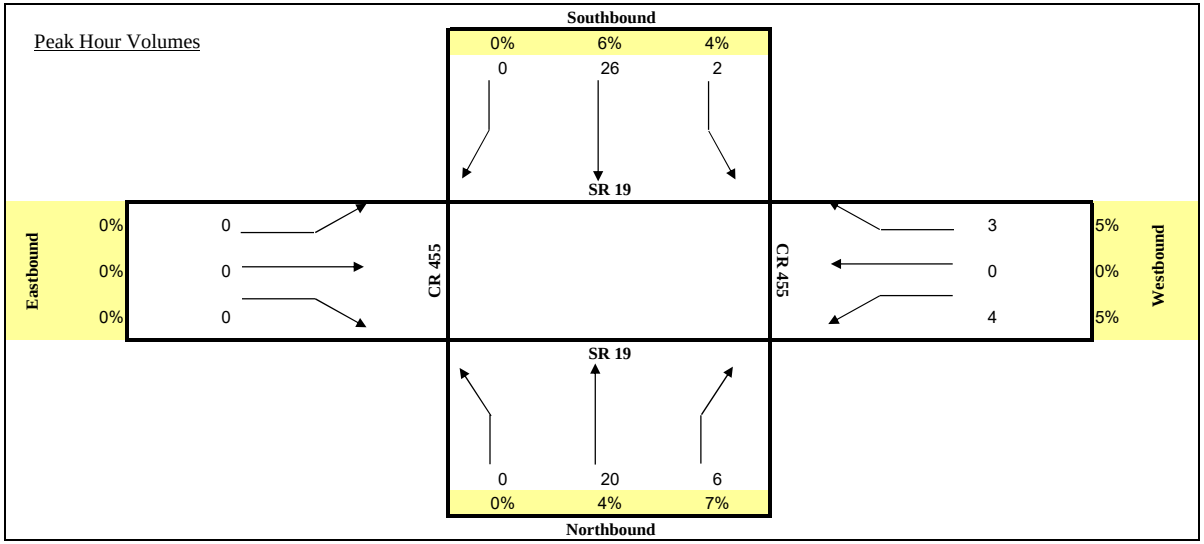


TURNING MOVEMENT COUNT ANALYSIS

TRUCKS

Intersection (N/S): SR 19
Intersection (E/W): CR 455
Date: 1/24/2023

		SR 19			SR 19			CR 455			CR 455			
		NB			SB			EB			WB			
Start	End	R	T	L	R	T	L	R	T	L	R	T	L	TOTAL
4:00 PM	4:15 PM	0	6	3	0	7	0	0	0	0	1	0	1	18
4:15 PM	4:30 PM	0	5	0	1	7	0	0	0	0	1	0	1	15
4:30 PM	4:45 PM	0	7	2	1	4	0	0	0	0	0	0	0	14
4:45 PM	5:00 PM	0	2	1	0	8	0	0	0	0	2	0	1	14
5:00 PM	5:15 PM	0	4	3	1	2	0	0	0	0	0	0	0	10
5:15 PM	5:30 PM	0	3	1	0	7	0	0	0	0	1	0	0	12
5:30 PM	5:45 PM	0	0	4	1	1	0	0	0	0	0	0	2	8
5:45 PM	6:00 PM	0	0	1	0	5	0	0	0	0	1	0	1	8
Total for:	4:00 PM	5:00 PM	0	20	6	2	26	0	0	0	0	4	0	3	61
Total for:	5:00 PM	6:00 PM	0	7	9	2	15	0	0	0	0	2	0	3	38
Tota Peak Hour:	4:00 PM	5:00 PM	0	20	6	2	26	0	0	0	0	4	0	3	61
Overall PHF:	0.85														



2022 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
CATEGORY: 1100 LAKE COUNTYWIDE

MOCF: 0.95

WEEK	DATES	SF	PSCF
1	01/01/2022 - 01/01/2022	0.99	1.04
2	01/02/2022 - 01/08/2022	1.01	1.06
3	01/09/2022 - 01/15/2022	1.03	1.08
4	01/16/2022 - 01/22/2022	1.02	1.07
5	01/23/2022 - 01/29/2022	1.00	1.05
* 6	01/30/2022 - 02/05/2022	0.98	1.03
* 7	02/06/2022 - 02/12/2022	0.97	1.02
* 8	02/13/2022 - 02/19/2022	0.95	1.00
* 9	02/20/2022 - 02/26/2022	0.95	1.00
*10	02/27/2022 - 03/05/2022	0.94	0.99
*11	03/06/2022 - 03/12/2022	0.94	0.99
*12	03/13/2022 - 03/19/2022	0.93	0.98
*13	03/20/2022 - 03/26/2022	0.94	0.99
*14	03/27/2022 - 04/02/2022	0.95	1.00
*15	04/03/2022 - 04/09/2022	0.95	1.00
*16	04/10/2022 - 04/16/2022	0.96	1.01
*17	04/17/2022 - 04/23/2022	0.97	1.02
*18	04/24/2022 - 04/30/2022	0.98	1.03
19	05/01/2022 - 05/07/2022	0.99	1.04
20	05/08/2022 - 05/14/2022	0.99	1.04
21	05/15/2022 - 05/21/2022	1.00	1.05
22	05/22/2022 - 05/28/2022	1.01	1.06
23	05/29/2022 - 06/04/2022	1.02	1.07
24	06/05/2022 - 06/11/2022	1.03	1.08
25	06/12/2022 - 06/18/2022	1.04	1.09
26	06/19/2022 - 06/25/2022	1.05	1.11
27	06/26/2022 - 07/02/2022	1.05	1.11
28	07/03/2022 - 07/09/2022	1.06	1.12
29	07/10/2022 - 07/16/2022	1.06	1.12
30	07/17/2022 - 07/23/2022	1.06	1.12
31	07/24/2022 - 07/30/2022	1.05	1.11
32	07/31/2022 - 08/06/2022	1.05	1.11
33	08/07/2022 - 08/13/2022	1.04	1.09
34	08/14/2022 - 08/20/2022	1.04	1.09
35	08/21/2022 - 08/27/2022	1.05	1.11
36	08/28/2022 - 09/03/2022	1.06	1.12
37	09/04/2022 - 09/10/2022	1.07	1.13
38	09/11/2022 - 09/17/2022	1.08	1.14
39	09/18/2022 - 09/24/2022	1.05	1.11
40	09/25/2022 - 10/01/2022	1.02	1.07
41	10/02/2022 - 10/08/2022	1.00	1.05
42	10/09/2022 - 10/15/2022	0.97	1.02
43	10/16/2022 - 10/22/2022	0.98	1.03
44	10/23/2022 - 10/29/2022	0.99	1.04
45	10/30/2022 - 11/05/2022	0.99	1.04
46	11/06/2022 - 11/12/2022	1.00	1.05
47	11/13/2022 - 11/19/2022	1.01	1.06
48	11/20/2022 - 11/26/2022	1.00	1.05
49	11/27/2022 - 12/03/2022	1.00	1.05
50	12/04/2022 - 12/10/2022	0.99	1.04
51	12/11/2022 - 12/17/2022	0.99	1.04
52	12/18/2022 - 12/24/2022	1.01	1.06
53	12/25/2022 - 12/31/2022	1.03	1.08

* PEAK SEASON

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Appendix E
HCM Analysis Worksheets - Existing Conditions

HCM 6th Signalized Intersection Summary
1: SR 19 & CR 48

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	346	229	316	455	277	98
Future Volume (veh/h)	346	229	316	455	277	98
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1752	1589	1767	1811	1737	1811
Adj Flow Rate, veh/h	357	117	326	0	286	101
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	10	21	9	6	11	6
Cap, veh/h	390	315	751		564	1114
Arrive On Green	0.23	0.23	0.42	0.00	0.12	0.62
Sat Flow, veh/h	1668	1346	1767	1535	1654	1811
Grp Volume(v), veh/h	357	117	326	0	286	101
Grp Sat Flow(s),veh/h/ln	1668	1346	1767	1535	1654	1811
Q Serve(g_s), s	18.9	6.6	11.8	0.0	8.2	2.1
Cycle Q Clear(g_c), s	18.9	6.6	11.8	0.0	8.2	2.1
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	390	315	751		564	1114
V/C Ratio(X)	0.91	0.37	0.43		0.51	0.09
Avail Cap(c_a), veh/h	417	336	751		705	1114
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	33.9	29.2	18.4	0.0	11.8	7.1
Incr Delay (d2), s/veh	23.6	0.7	1.8	0.0	0.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	14.8	3.7	8.6	0.0	5.1	1.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	57.5	29.9	20.3	0.0	12.6	7.3
LnGrp LOS	E	C	C		B	A
Approach Vol, veh/h	474		326	A		387
Approach Delay, s/veh	50.7		20.3			11.2
Approach LOS	D		C			B

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	17.3	45.0		28.6		62.3
Change Period (Y+Rc), s	6.5	6.4		7.3		6.4
Max Green Setting (Gmax), s	18.5	38.6		22.7		38.6
Max Q Clear Time (g_c+I1), s	10.2	13.8		20.9		4.1
Green Ext Time (p_c), s	0.5	1.9		0.3		0.5

Intersection Summary			
HCM 6th Ctrl Delay		29.5	
HCM 6th LOS		C	

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
1: SR 19 & CR 48

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	434	319	72	353	304	84
Future Volume (veh/h)	434	319	72	353	304	84
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1752	1589	1767	1811	1737	1811
Adj Flow Rate, veh/h	447	210	74	0	313	87
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	10	21	9	6	11	6
Cap, veh/h	405	327	729		767	1107
Arrive On Green	0.24	0.24	0.41	0.00	0.13	0.61
Sat Flow, veh/h	1668	1346	1767	1535	1654	1811
Grp Volume(v), veh/h	447	210	74	0	313	87
Grp Sat Flow(s),veh/h/ln	1668	1346	1767	1535	1654	1811
Q Serve(g_s), s	22.7	13.1	2.4	0.0	9.5	1.8
Cycle Q Clear(g_c), s	22.7	13.1	2.4	0.0	9.5	1.8
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	405	327	729		767	1107
V/C Ratio(X)	1.10	0.64	0.10		0.41	0.08
Avail Cap(c_a), veh/h	405	327	729		880	1107
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	35.4	31.8	16.9	0.0	11.2	7.4
Incr Delay (d2), s/veh	76.1	4.3	0.3	0.0	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	25.4	7.8	1.8	0.0	5.8	1.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	111.6	36.1	17.1	0.0	11.5	7.6
LnGrp LOS	F	D	B		B	A
Approach Vol, veh/h	657		74	A		400
Approach Delay, s/veh	87.5		17.1			10.7
Approach LOS	F		B			B

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	18.6	45.0		30.0		63.6
Change Period (Y+Rc), s	6.5	6.4		7.3		6.4
Max Green Setting (Gmax), s	18.5	38.6		22.7		38.6
Max Q Clear Time (g_c+I1), s	11.5	4.4		24.7		3.8
Green Ext Time (p_c), s	0.6	0.4		0.0		0.4

Intersection Summary	
HCM 6th Ctrl Delay	55.7
HCM 6th LOS	E

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	35	3	10	11	1	15	12	377	24	4	428	7
Future Vol, veh/h	35	3	10	11	1	15	12	377	24	4	428	7
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	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	12	33	2	2	2	2	38	10	2	42	2	11
Mvmt Flow	36	3	10	11	1	15	12	389	25	4	441	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	887	891	445	885	882	402	448	0	0	414	0	0
Stage 1	453	453	-	426	426	-	-	-	-	-	-	-
Stage 2	434	438	-	459	456	-	-	-	-	-	-	-
Critical Hdwy	7.22	6.83	6.22	7.12	6.52	6.22	4.48	-	-	4.52	-	-
Critical Hdwy Stg 1	6.22	5.83	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.22	5.83	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.608	4.297	3.318	3.518	4.018	3.318	2.542	-	-	2.578	-	-
Pot Cap-1 Maneuver	254	251	613	266	285	648	946	-	-	960	-	-
Stage 1	568	521	-	606	586	-	-	-	-	-	-	-
Stage 2	581	529	-	582	568	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	243	245	613	255	278	648	946	-	-	960	-	-
Mov Cap-2 Maneuver	243	245	-	255	278	-	-	-	-	-	-	-
Stage 1	558	518	-	596	576	-	-	-	-	-	-	-
Stage 2	556	520	-	565	565	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	20.7	15.1	0.3	0.1
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	946	-	-	278	386	960	-	-
HCM Lane V/C Ratio	0.013	-	-	0.178	0.072	0.004	-	-
HCM Control Delay (s)	8.9	0	-	20.7	15.1	8.8	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.6	0.2	0	-	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	32	12	13	17	3	14	16	363	21	16	432	40
Future Vol, veh/h	32	12	13	17	3	14	16	363	21	16	432	40
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	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	12	33	2	2	2	2	38	10	2	42	2	11
Mvmt Flow	33	12	13	18	3	14	16	374	22	16	445	41

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	924	926	466	927	935	385	486	0	0	396	0	0
Stage 1	498	498	-	417	417	-	-	-	-	-	-	-
Stage 2	426	428	-	510	518	-	-	-	-	-	-	-
Critical Hdwy	7.22	6.83	6.22	7.12	6.52	6.22	4.48	-	-	4.52	-	-
Critical Hdwy Stg 1	6.22	5.83	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.22	5.83	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.608	4.297	3.318	3.518	4.018	3.318	2.542	-	-	2.578	-	-
Pot Cap-1 Maneuver	240	239	597	249	265	663	914	-	-	975	-	-
Stage 1	536	496	-	613	591	-	-	-	-	-	-	-
Stage 2	587	535	-	546	533	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	225	228	597	225	253	663	914	-	-	975	-	-
Mov Cap-2 Maneuver	225	228	-	225	253	-	-	-	-	-	-	-
Stage 1	524	485	-	599	577	-	-	-	-	-	-	-
Stage 2	558	523	-	508	521	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	22.6	17.9	0.4	0.3
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	914	-	-	263	313	975	-	-
HCM Lane V/C Ratio	0.018	-	-	0.223	0.112	0.017	-	-
HCM Control Delay (s)	9	0	-	22.6	17.9	8.8	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.8	0.4	0.1	-	-

HCM 6th TWSC
3: S Florida Ave & W Central Ave

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	1	37	12	1	19	1	4	0	3	0	0	0
Future Vol, veh/h	1	37	12	1	19	1	4	0	3	0	0	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	80	80	80	80	80	80	80	80	80	80	80	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	46	15	1	24	1	5	0	4	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	25	0	0	61	0	0	83	83	54	85	90	25
Stage 1	-	-	-	-	-	-	56	56	-	27	27	-
Stage 2	-	-	-	-	-	-	27	27	-	58	63	-
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	1589	-	-	1542	-	-	904	807	1013	901	800	1051
Stage 1	-	-	-	-	-	-	956	848	-	990	873	-
Stage 2	-	-	-	-	-	-	990	873	-	954	842	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1589	-	-	1542	-	-	902	805	1013	896	798	1051
Mov Cap-2 Maneuver	-	-	-	-	-	-	902	805	-	896	798	-
Stage 1	-	-	-	-	-	-	955	847	-	989	872	-
Stage 2	-	-	-	-	-	-	989	872	-	950	841	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.3	8.8	0
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	946	1589	-	-	1542	-	-	-
HCM Lane V/C Ratio	0.009	0.001	-	-	0.001	-	-	-
HCM Control Delay (s)	8.8	7.3	0	-	7.3	0	-	0
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	-

HCM 6th TWSC
3: S Florida Ave & W Central Ave

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	29	5	17	25	5	5	1	20	1	0	0
Future Vol, veh/h	0	29	5	17	25	5	5	1	20	1	0	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	80	80	80	80	80	80	80	80	80	80	80	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	36	6	21	31	6	6	1	25	1	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	37	0	0	42	0	0	115	118	39	128	118	34
Stage 1	-	-	-	-	-	-	39	39	-	76	76	-
Stage 2	-	-	-	-	-	-	76	79	-	52	42	-
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	-	-	1567	-	-	862	772	1033	845	772	1039
Stage 1	-	-	-	-	-	-	976	862	-	933	832	-
Stage 2	-	-	-	-	-	-	933	829	-	961	860	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1574	-	-	1567	-	-	853	761	1033	815	761	1039
Mov Cap-2 Maneuver	-	-	-	-	-	-	853	761	-	815	761	-
Stage 1	-	-	-	-	-	-	976	862	-	933	820	-
Stage 2	-	-	-	-	-	-	920	817	-	936	860	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	2.7	8.8	9.4
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	980	1574	-	-	1567	-	-	815
HCM Lane V/C Ratio	0.033	-	-	-	0.014	-	-	0.002
HCM Control Delay (s)	8.8	0	-	-	7.3	0	-	9.4
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

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	2	0	5	5	0	4	3	324	13	3	435	0
Future Vol, veh/h	2	0	5	5	0	4	3	324	13	3	435	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	8	12	2	10	2
Mvmt Flow	2	0	6	6	0	4	3	360	14	3	483	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	864	869	483	865	862	367	483	0	0	374	0	0
Stage 1	489	489	-	373	373	-	-	-	-	-	-	-
Stage 2	375	380	-	492	489	-	-	-	-	-	-	-
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	274	290	584	274	293	678	1080	-	-	1184	-	0
Stage 1	561	549	-	648	618	-	-	-	-	-	-	0
Stage 2	646	614	-	558	549	-	-	-	-	-	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	271	288	584	270	291	678	1080	-	-	1184	-	-
Mov Cap-2 Maneuver	271	288	-	270	291	-	-	-	-	-	-	-
Stage 1	559	547	-	645	616	-	-	-	-	-	-	-
Stage 2	639	612	-	551	547	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.3	15	0.1	0.1
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT
Capacity (veh/h)	1080	-	-	439	369	1184	-
HCM Lane V/C Ratio	0.003	-	-	0.018	0.027	0.003	-
HCM Control Delay (s)	8.3	-	-	13.3	15	8	0
HCM Lane LOS	A	-	-	B	C	A	A
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-

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	3	1	4	8	0	3	1	372	12	7	343	0
Future Vol, veh/h	3	1	4	8	0	3	1	372	12	7	343	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	8	12	2	10	2
Mvmt Flow	3	1	4	9	0	3	1	413	13	8	381	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	820	825	381	822	819	420	381	0	0	426	0	0
Stage 1	397	397	-	422	422	-	-	-	-	-	-	-
Stage 2	423	428	-	400	397	-	-	-	-	-	-	-
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	294	308	666	293	310	633	1177	-	-	1133	-	0
Stage 1	629	603	-	609	588	-	-	-	-	-	-	0
Stage 2	609	585	-	626	603	-	-	-	-	-	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	290	305	666	288	307	633	1177	-	-	1133	-	-
Mov Cap-2 Maneuver	290	305	-	288	307	-	-	-	-	-	-	-
Stage 1	628	598	-	608	587	-	-	-	-	-	-	-
Stage 2	605	584	-	615	598	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14	16.1	0	0.2
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT
Capacity (veh/h)	1177	-	-	408	338	1133	-
HCM Lane V/C Ratio	0.001	-	-	0.022	0.036	0.007	-
HCM Control Delay (s)	8.1	-	-	14	16.1	8.2	0
HCM Lane LOS	A	-	-	B	C	A	A
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-

Intersection	
Int Delay, s/veh	2.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	65	43	394	111	70	492
Future Vol, veh/h	65	43	394	111	70	492
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	0	-	590	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	38	15	8	22	9	5
Mvmt Flow	68	45	410	116	73	513

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1069	410	0	0	526	0
Stage 1	410	-	-	-	-	-
Stage 2	659	-	-	-	-	-
Critical Hdwy	6.78	6.35	-	-	4.19	-
Critical Hdwy Stg 1	5.78	-	-	-	-	-
Critical Hdwy Stg 2	5.78	-	-	-	-	-
Follow-up Hdwy	3.842	3.435	-	-	2.281	-
Pot Cap-1 Maneuver	210	614	-	-	1006	-
Stage 1	599	-	-	-	-	-
Stage 2	453	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	189	614	-	-	1006	-
Mov Cap-2 Maneuver	189	-	-	-	-	-
Stage 1	599	-	-	-	-	-
Stage 2	407	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	25.1	0	1.1
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	189	614	1006	-
HCM Lane V/C Ratio	-	-	0.358	0.073	0.072	-
HCM Control Delay (s)	-	-	34.3	11.3	8.9	0
HCM Lane LOS	-	-	D	B	A	A
HCM 95th %tile Q(veh)	-	-	1.5	0.2	0.2	-

Intersection	
Int Delay, s/veh	3.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	83	55	476	92	50	433
Future Vol, veh/h	83	55	476	92	50	433
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	0	-	590	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	38	15	8	22	9	5
Mvmt Flow	86	57	496	96	52	451

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1051	496	0	0	592	0
Stage 1	496	-	-	-	-	-
Stage 2	555	-	-	-	-	-
Critical Hdwy	6.78	6.35	-	-	4.19	-
Critical Hdwy Stg 1	5.78	-	-	-	-	-
Critical Hdwy Stg 2	5.78	-	-	-	-	-
Follow-up Hdwy	3.842	3.435	-	-	2.281	-
Pot Cap-1 Maneuver	215	548	-	-	950	-
Stage 1	544	-	-	-	-	-
Stage 2	509	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	199	548	-	-	950	-
Mov Cap-2 Maneuver	199	-	-	-	-	-
Stage 1	544	-	-	-	-	-
Stage 2	472	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	26.7	0	0.9
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	199	548	950	-
HCM Lane V/C Ratio	-	-	0.434	0.105	0.055	-
HCM Control Delay (s)	-	-	36.3	12.3	9	0
HCM Lane LOS	-	-	E	B	A	A
HCM 95th %tile Q(veh)	-	-	2	0.3	0.2	-

Appendix F
ITE Trip Generation Sheets

Single-Family Detached Housing
(210)

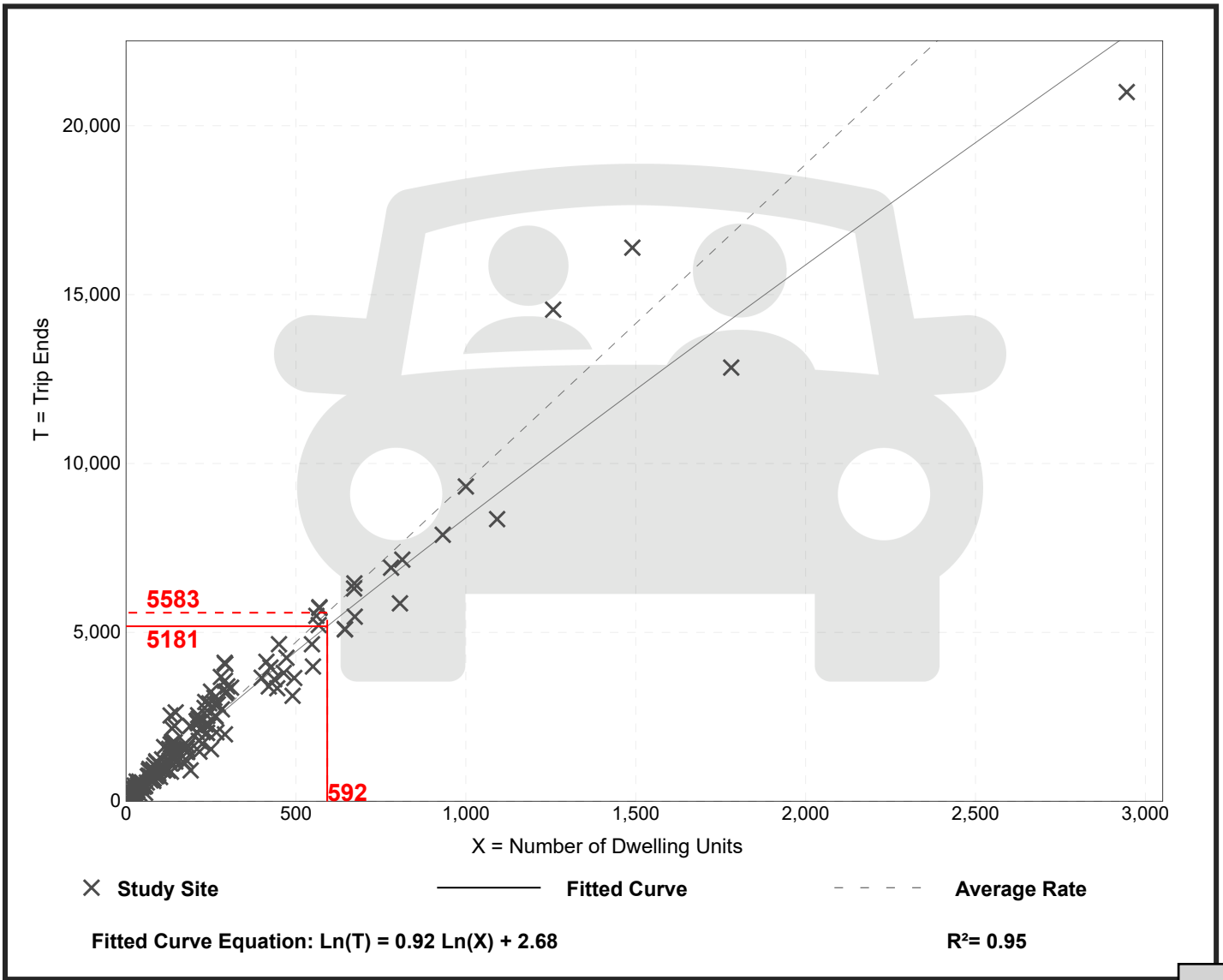
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 174
Avg. Num. of Dwelling Units: 246
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
9.43	4.45 - 22.61	2.13

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.92 Ln(X) + 2.68 **R^2= 0.95**

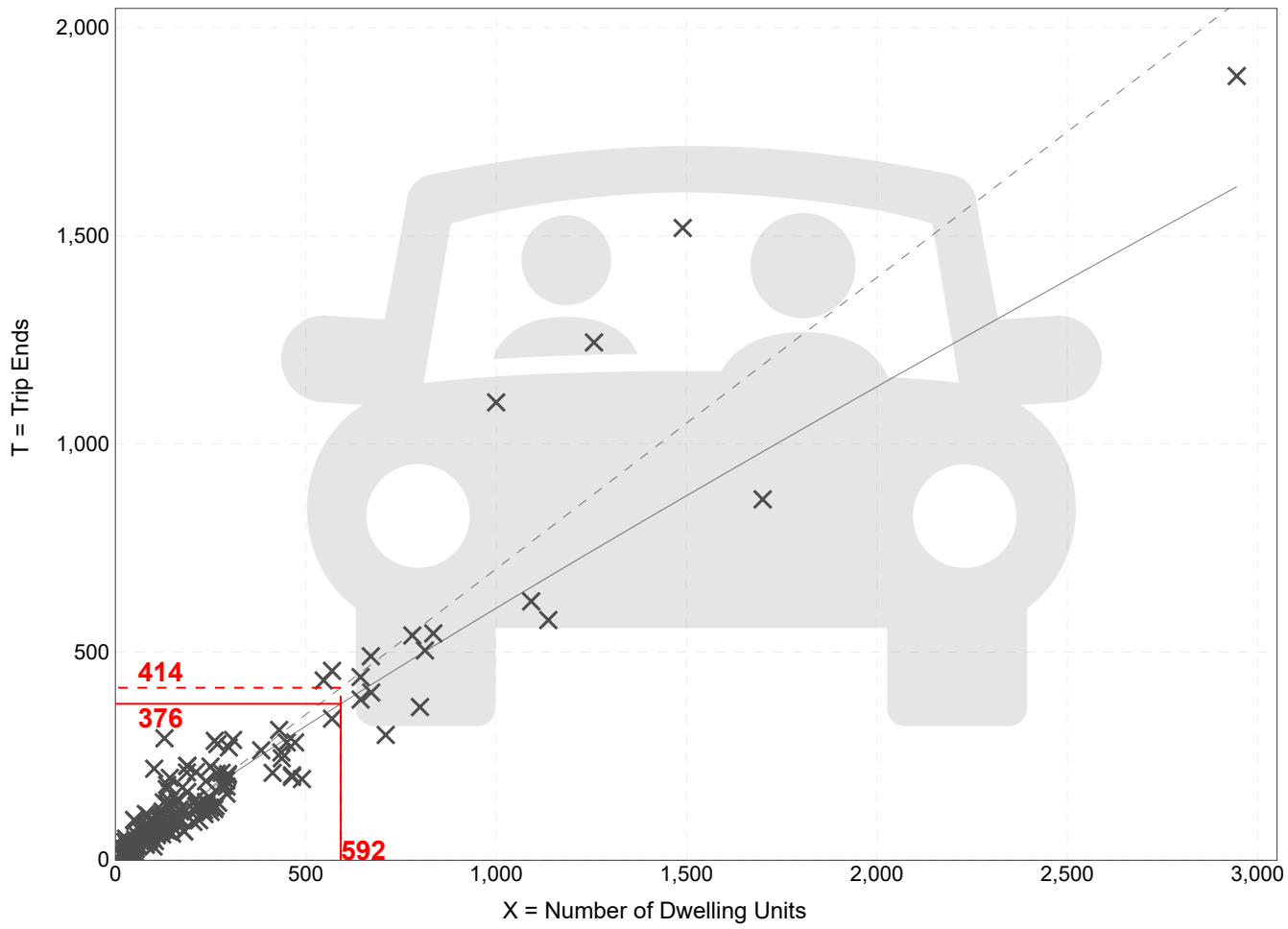
Single-Family Detached Housing
(210)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 192
Avg. Num. of Dwelling Units: 226
Directional Distribution: 25% entering, 75% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.70	0.27 - 2.27	0.24

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.91 Ln(X) + 0.12

R^2= 0.90

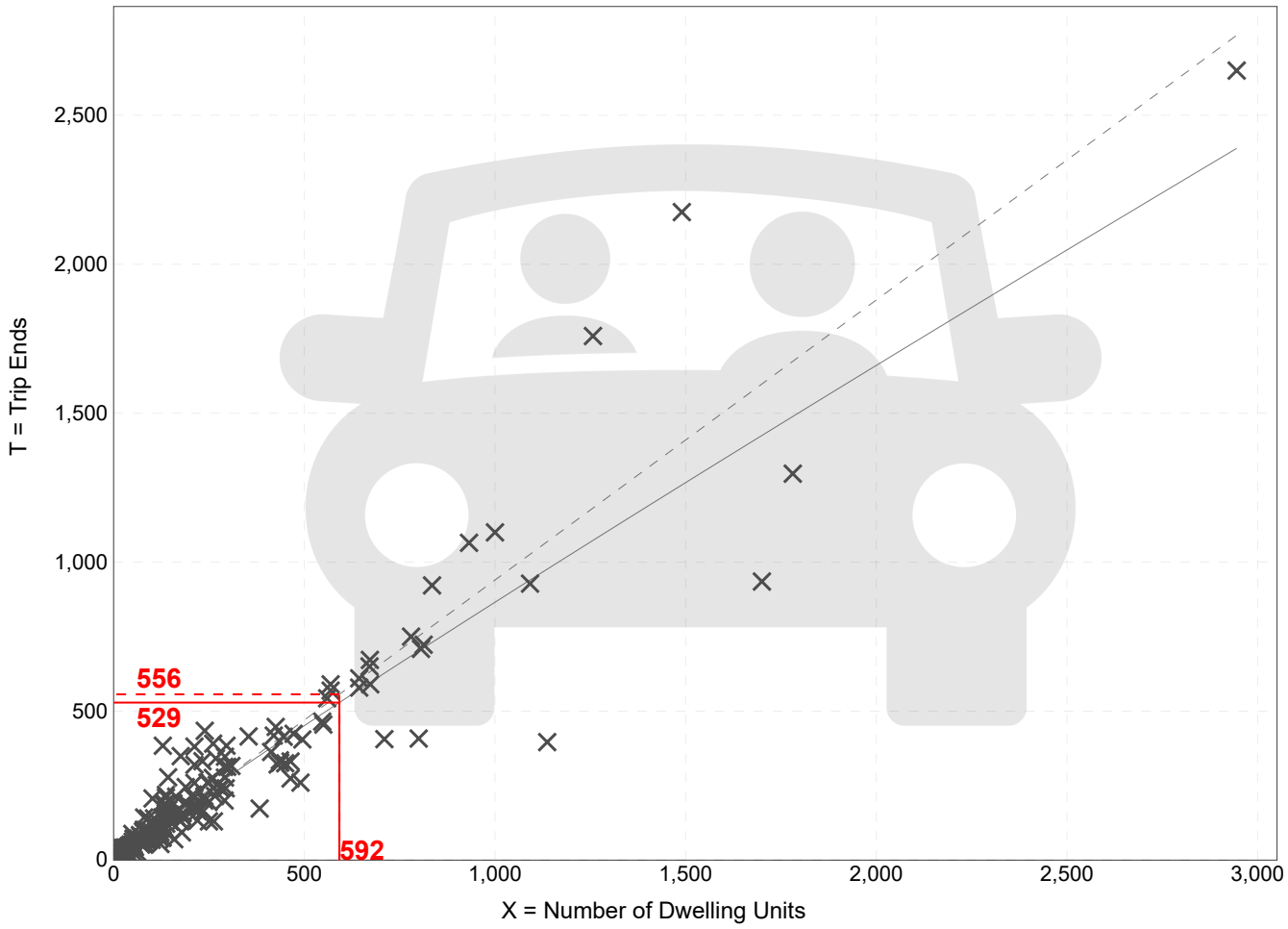
Single-Family Detached Housing
(210)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 208
Avg. Num. of Dwelling Units: 248
Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.94	0.35 - 2.98	0.31

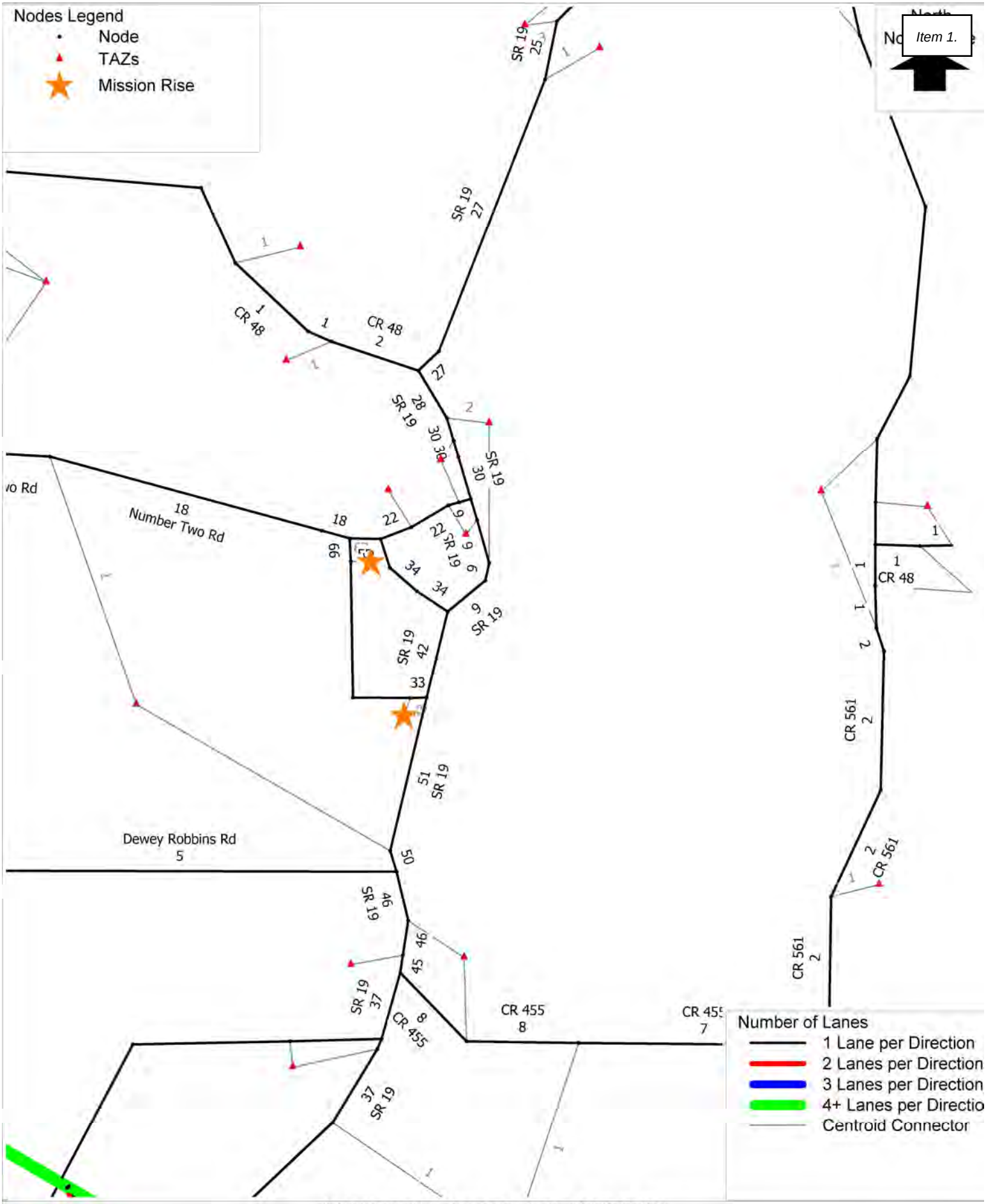
Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.94 Ln(X) + 0.27

R^2= 0.92

Appendix G
CFRPM Model Output



23017 Mission Rise - Osceola County, FL TAZ 7676, 7677
Project Distribution
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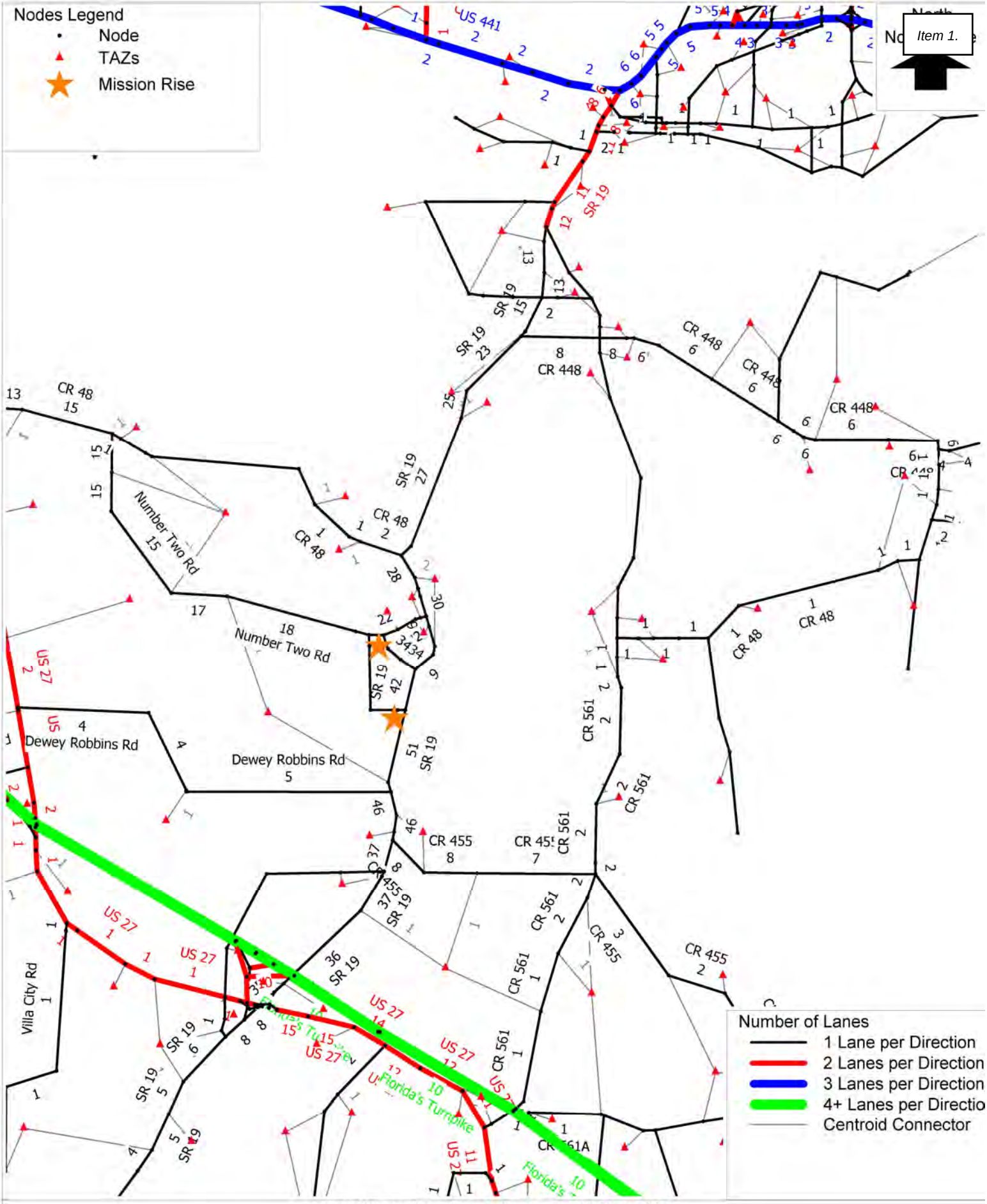
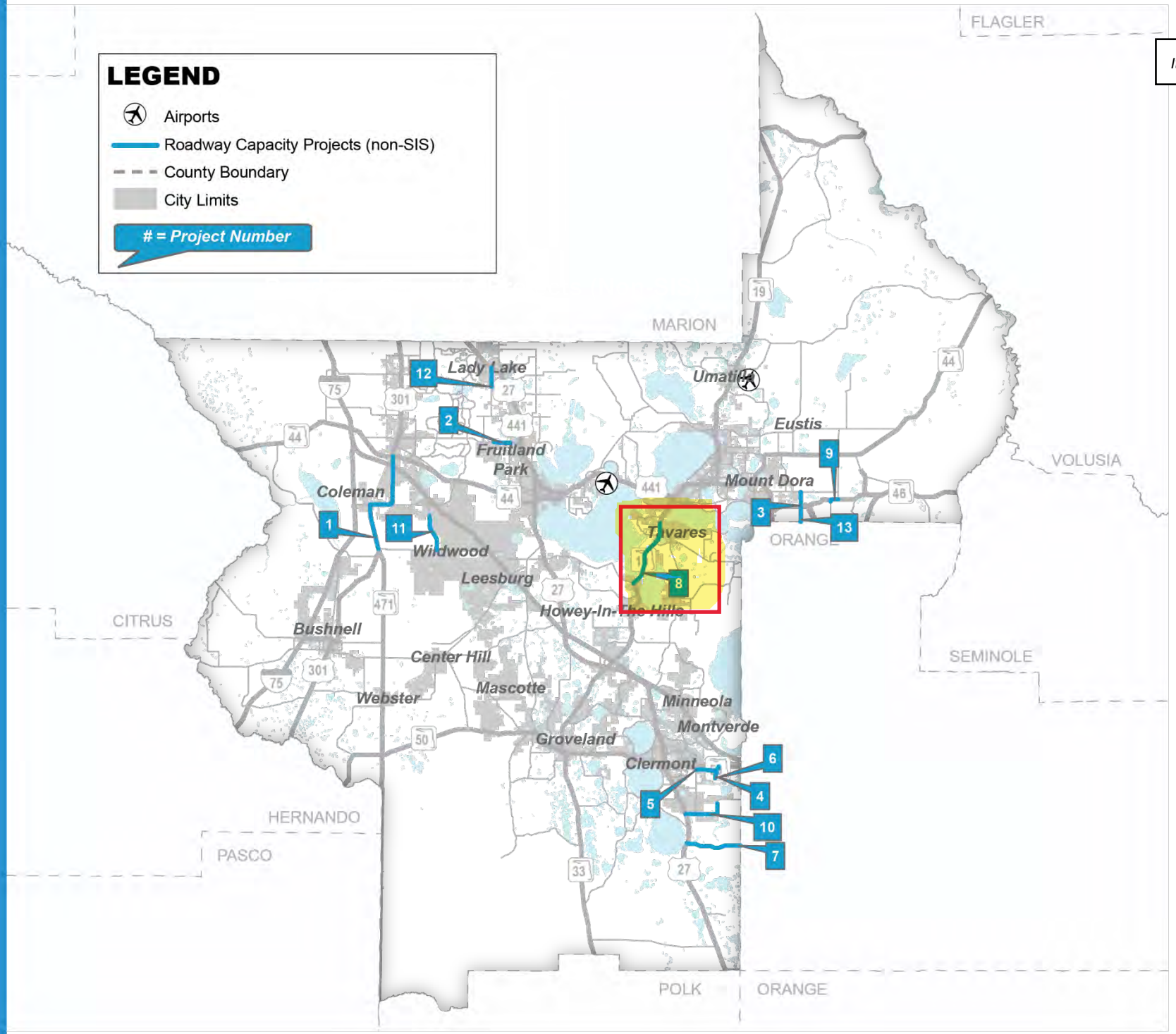


23017 Mission Rise - Osceola County, FL TAZ 7676, 7677
Project Distribution
C:\FSUTMS\D5\CFRPM7\Base\CF_2030\P23017\OUTPUT\HWYLOAD_SL_AllDay_A30.NET

cube (Licensed to Traffic & Mobility Consultants)

Appendix H
LSMPO TIP and *LSMPO LOPP*

ROADWAY CAPACITY PROJECTS (NON-SIS)



7

Project Description: WELLNESS WAY FROM US-27 TO THE LAKE/ORANGE COUNTY LINE

FM# 4487331

Funding Source(s): Local and State

LRTP Page: PG. 4-12

Work Description: NEW ROAD CONSTRUCTION

Phase	<2023	2023	2024	2025	2026	2027	>2027	Amount Funded
PDE	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
PE	$ -	$ -	$ 3,000,000	$ -	$ -	$ -	$ -	$ 3,000,000
ENV	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
ROW	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
LAR	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
RRU	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
CST	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total	$ -	$ -	$ 3,000,000	$ -	$ -	$ -	$ -	$ 3,000,000

Responsible Agency: RESPONSIBLE AGENCY NOT AVAILABLE County: LAKE Total Project Cost: $ 3,000,000

8

Project Description: SR 19 FROM CR 48 TO CR 561

FM# 2383191

Funding Source(s): State and Federal

LRTP Page: PG. 4-12

Work Description: ADD LANES & RECONSTRUCT

Phase	<2023	2023	2024	2025	2026	2027	>2027	Amount Funded
PDE	$ 1,161,015	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,161,015
PE	$ 4,141,718	$ -	$ -	$ -	$ -	$ -	$ -	$ 4,141,718
ENV	$ 492,196	$ 200,000	$ -	$ -	$ -	$ -	$ -	$ 692,196
ROW	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
LAR	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
RRU	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
CST	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total	$ 5,794,929	$ 200,000	$ -	$ -	$ -	$ -	$ -	$ 5,994,929

Responsible Agency: FDOT County: LAKE Total Project Cost: $ 5,994,929

Lake-Sumter MPO
Metropolitan Planning Organization

2022 List of Priority Projects

Lake~Sumter Metropolitan Planning Organization

Adopted June 22, 2022

Table 3 – Roadway Capacity (Non-SIS) Project Priorities

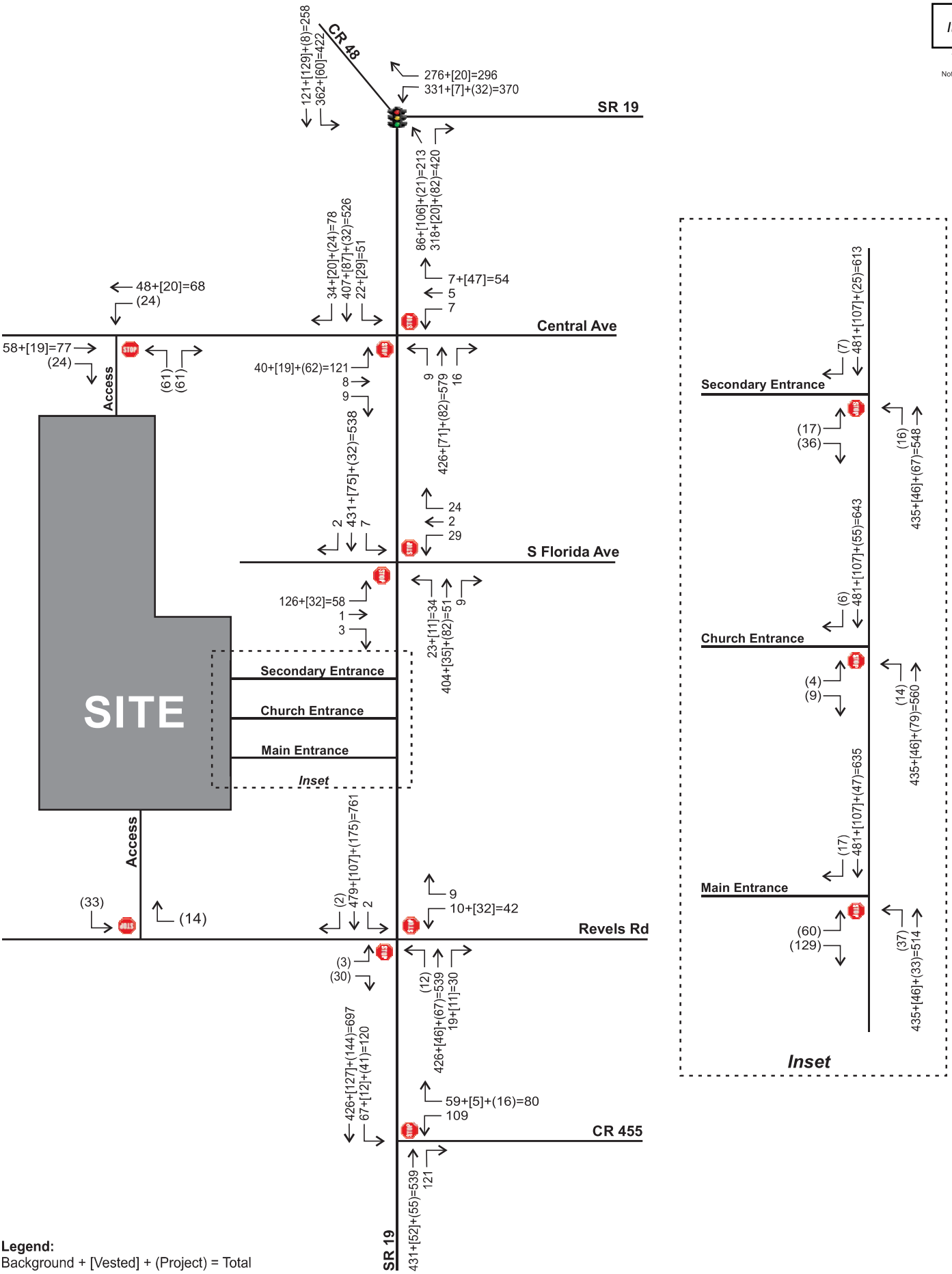
Capacity Rank	Sponsor/ Location	FM #	Project Name	From	To	Description	Performance Measure(s)	Proposed Phase	Proposed Phase FY	Proposed Phase Cost	Programmed Phase(s)	Programmed Phase FY	CMP Congested Corridors 2021 Analysis (for informational purposes)
1	FDOT/ Sumter County	430132-1	SR 35 (US 301)	SR 44	CR 470	Road Widening	System Performance	ROW	2026/27	$27,000,000	Design	2022/23 2025/26	**Extremely Congested (2021)**
2	FDOT/ Lake County	409870-1	SR 44 (CR44B)	US 441	SR44	Road Widening	System Performance; Safety	CST	2024/25	$23,701,500	ROW		**Extremely Congested (2021)**
3	Sumter County	447931-1	Marsh Bend Trail (CR 501)	Corbin Trail	Central Parkway	Roadway Improvements	System Performance	CST	2023/24	$1,275,400	CST	2022/23	**Operating at Acceptable Level of Service**
4	FDOT/ Lake County	238394-3	SR 500 (US 441)	Perkins Street	SR 44	Road Widening	System Performance	CST	2023/24	$13,794,537			**Congested (2026)**
5	FDOT/ Lake County	429356-1	SR 500 (US 441)	SR 44	N of SR 46	Road Widening	System Performance	CST	2023/24	$22,233,040	ROW	2021/22	**Not Congested**
6	Lake County/ Lady Lake	439665-1	Rolling Acres Road	West Lady Lake Ave.	Griffin Ave	Road Widening	System Performance	Design	2026/27	$2,000,000	PD&E	2025/26	**Extremely Congested (2026)**
7	Lake County	441710-1	Round Lake Road	Wolfbranch Rd	North of SR 44	New Roadway/ Alignment	System Performance	CST	2024/25	$30,000,000	Design		**Operating at Acceptable Level of Service**
8	Lake County	441779-1	CR 455 (Hartle Rd)	Lost Lake Rd.	Hartwood Marsh Rd.	Roadway Extension/ Widening	System Performance	CST	2024/25	$19,800,000	ROW	2022/23	**New Roadway, Not on CMP Network**
9	Lake County	-	CR 455 (Hartle Rd)	Hartwood Marsh Rd	CFX Lake-Orange Connector	Road Extension	System Performance	Design	2023/24	$3,000,000	PDE		**New Roadway, Not on CMP Network**

Capacity Rank	Sponsor/ Location	FM #	Project Name	From	To	Description	Performance Measure(s)	Proposed Phase	Proposed Phase FY	Proposed Phase Cost	Programmed Phase(s)	Programmed Phase FY	CMP Congested Corridors 2021 Analysis (for informational purposes)
10	Lake County	-	Citrus Grove Phase II	West of Scrub Jay Lane	Grassy Lake Rd	New Alignment/Widening	System Performance	CST	2024/25	$10,000,000	ROW		**New Roadway, Not on CMP Network**
11	Lake County	-	Citrus Grove Phase V	Turnpike	Blackstill Lake Dr	New Roadway/Alignment	System Performance	CST	2024/25	$5,000,000	Design		**New Roadway, Not on CMP Network**
12	Lake County	441393-1	CR 437 Realignment	Oak Tree Dr	SR 46	New Alignment/Widening	System Performance	CST	2024/25	$4,000,000	Design		**New Roadway, Not on CMP Network**
13	Lake County	-	Hartwood Marsh	Regency Hills Dr	Innovation Lane	Road Widening	System Performance	Design	2023/24	$750,000	PDE		**Approaching Congestion**
14	Lake County	-	CR 455 Paved Shoulder	CR 561	CR 561A	Paved Shoulder	System Performance	Design	2023/24	$700,000			**Operating at Acceptable Level of Service**
15	FDOT/Lake County	-	CR 470/CR 48	Meggison Road at The Villages	US 27	Road Widening	System Performance	Design	2023/24	$4,000,000			**Congested (2026)**
16	Lake County/ Mount Dora	-	Vista Ridge Drive/Wolf Branch Innovation Boulevard	Niles Rd	Round Lake Road	New Roadway	System Performance	Design	2023/24	$1,000,000	Study		**New Roadway, Not on CMP Network**
17	Lake County	-	CR 561A	CR 561	CR 455	Realignment	System Performance; Safety	PDE	2023/24	$750,000	Study		**Operating at Acceptable Level of Service**
18	FDOT/ Lake County	-	SR 44	Orange Ave	CR 46A	Road Widening	System Performance	PDE	2023/24	$TBD			**Congested (2021)**
19	FDOT	-	SR 19	SR 50	CR 455	Road Widening	System Performance	PDE	2023/24	$TBD			**Congested (2021)**

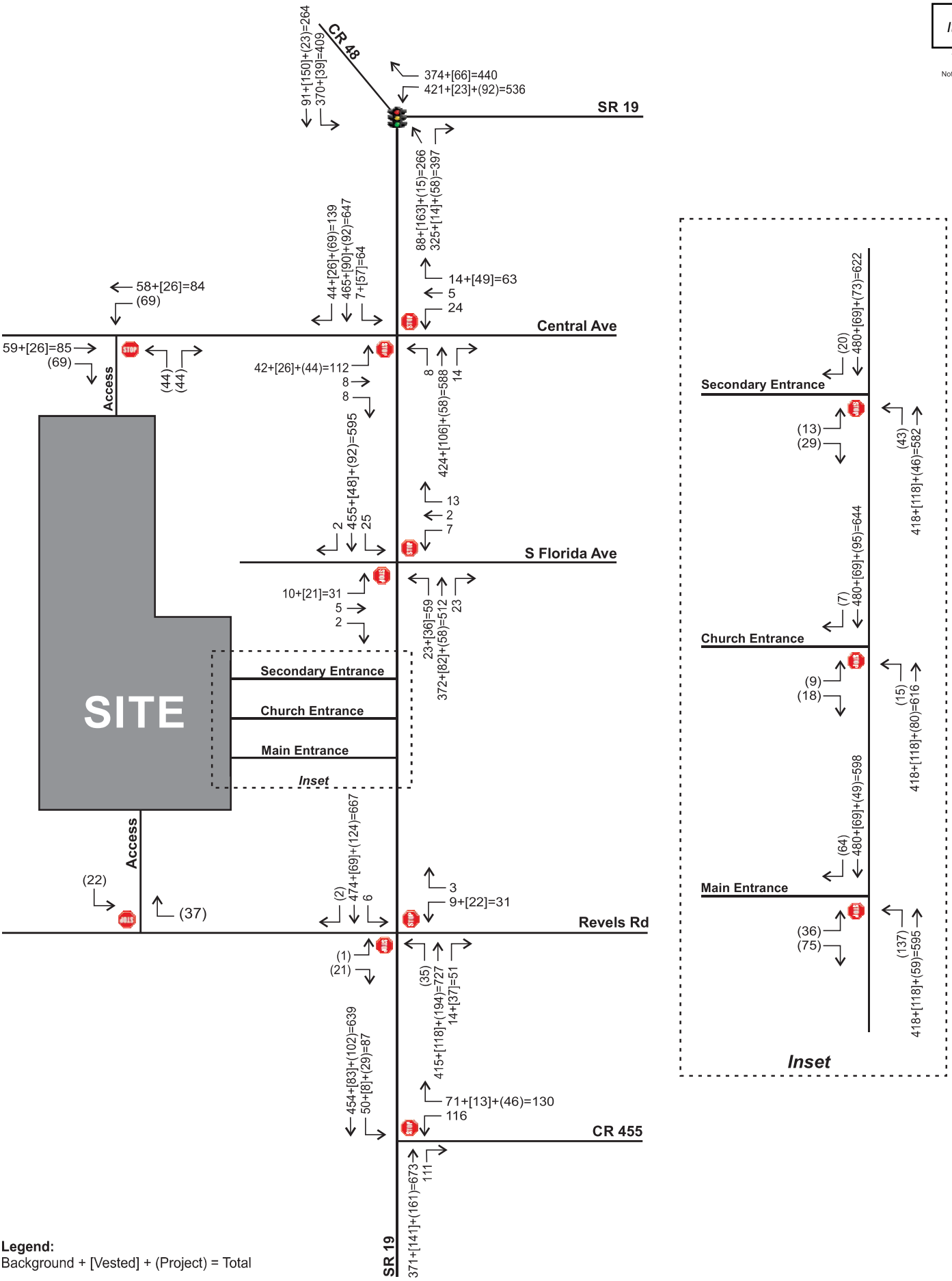
Capacity Rank	Sponsor/ Location	FM #	Project Name	From	To	Description	Performance Measure(s)	Proposed Phase	Proposed Phase FY	Proposed Phase Cost	Programmed Phase(s)	Programmed Phase FY	CMP Congested Corridors 2021 Analysis (for informational purposes)
20	Lake County	-	Woodlea Road	SR 19	End	Road Widening	System Performance	Design Update/ ROW	2023/24	$3,000,000			**Operating at Acceptable Level of Service**
21	FDOT/ Lake County	238319-1	SR 19	Howey Bridge	CR 561	Road Widening	System Performance	CST	2023/24	$35,000,000			**Extremely Congested (2021)**
22	Lake County	-	Hancock Road	Hartwood Marsh Rd	Wellness Way	New Road	System Performance	CST	2025/26	$20,000,000			**New Roadway, Not on CMP Network**
23	Lake County	-	SR 46A	SR 44	SR 46	Road Widening	System Performance	CST	2023/24	$TBD	Design		**Congested (2021)**

Top 20 Project

Appendix I
Vested Trips Data



Legend:
Background + [Vested] + (Project) = Total



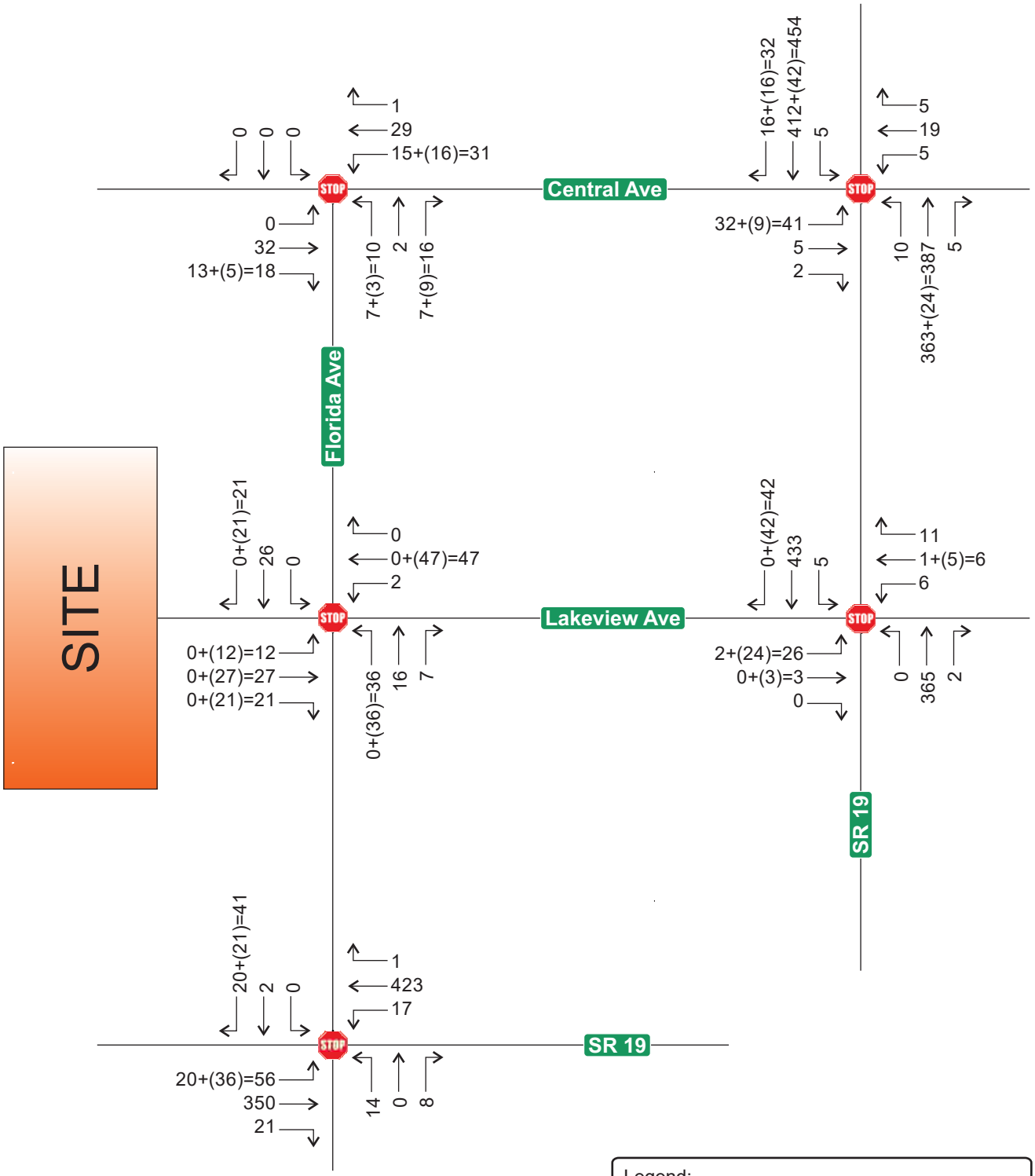
Legend:
Background + [Vested] + (Project) = Total

TMC Traffic & Mobility Consultants

Projected PM Peak Intersection Volumes

The Reserve at Howey in the Hills
21082

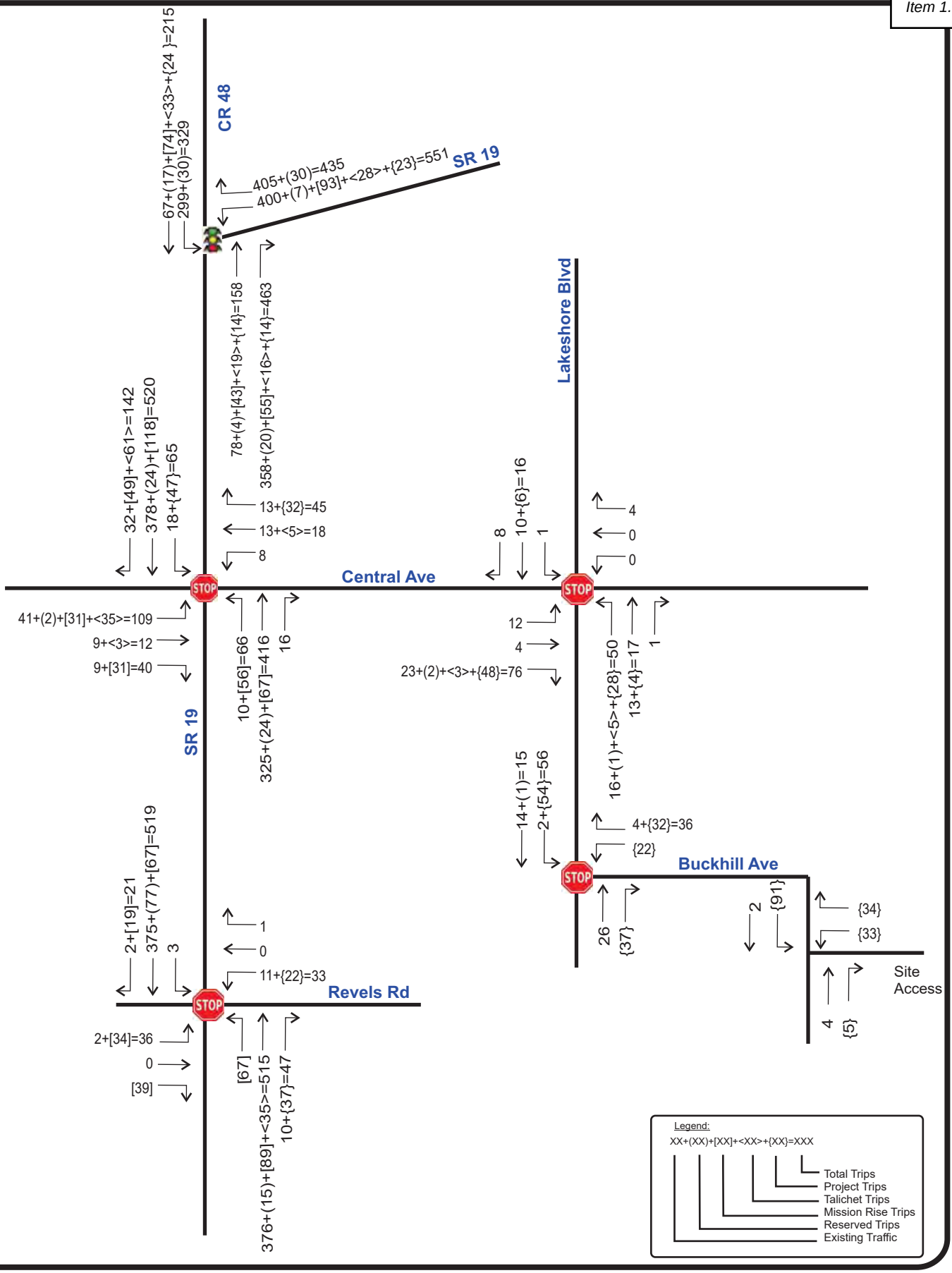
Figure 6



*Schematic drawing. Not to scale.
** Any +/- 1 project trip discrepancy is due to rounding

Talichet PUD
Project № 5045
Figure 5

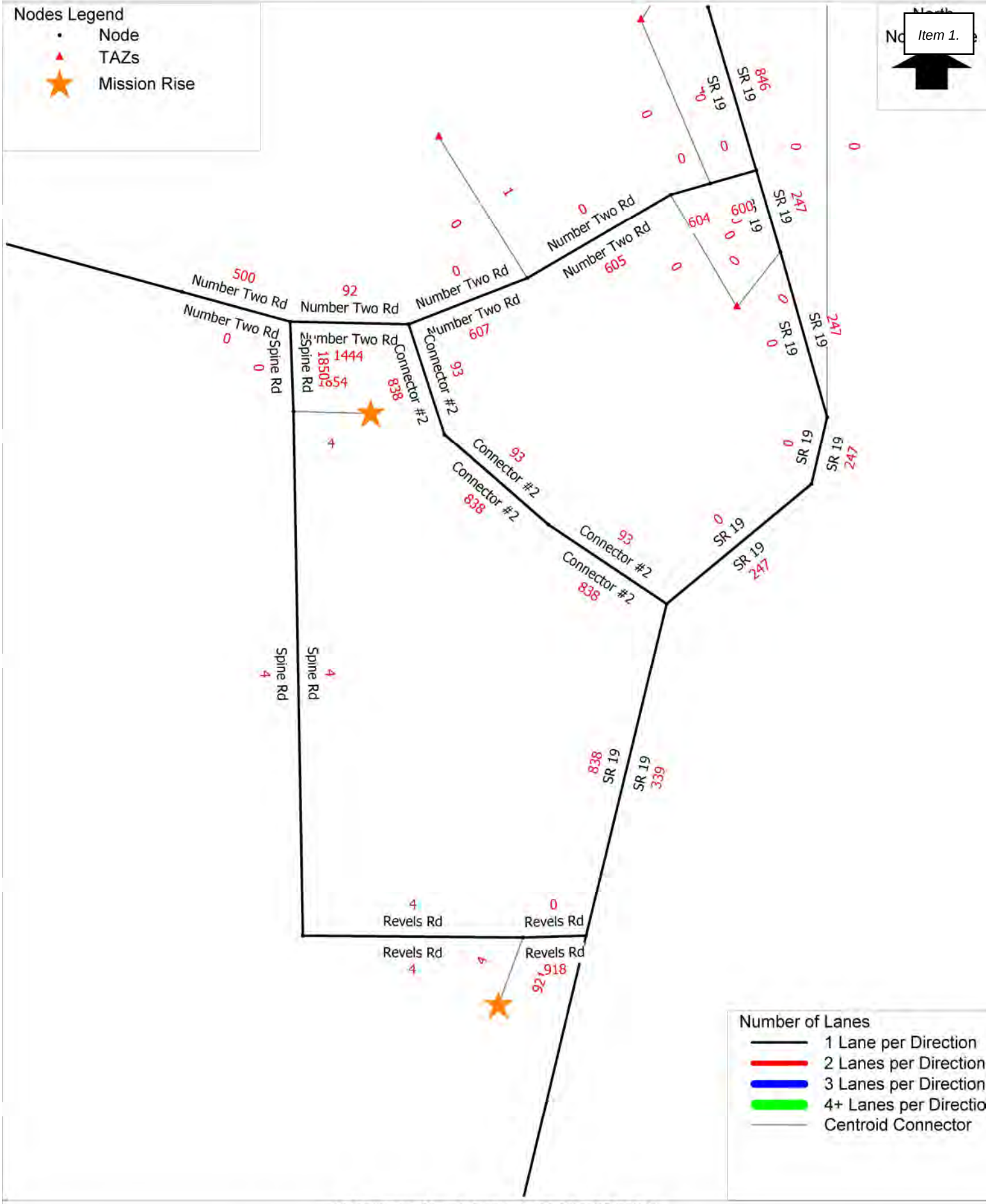
Projected P.M. Peak Hour Traffic Volumes



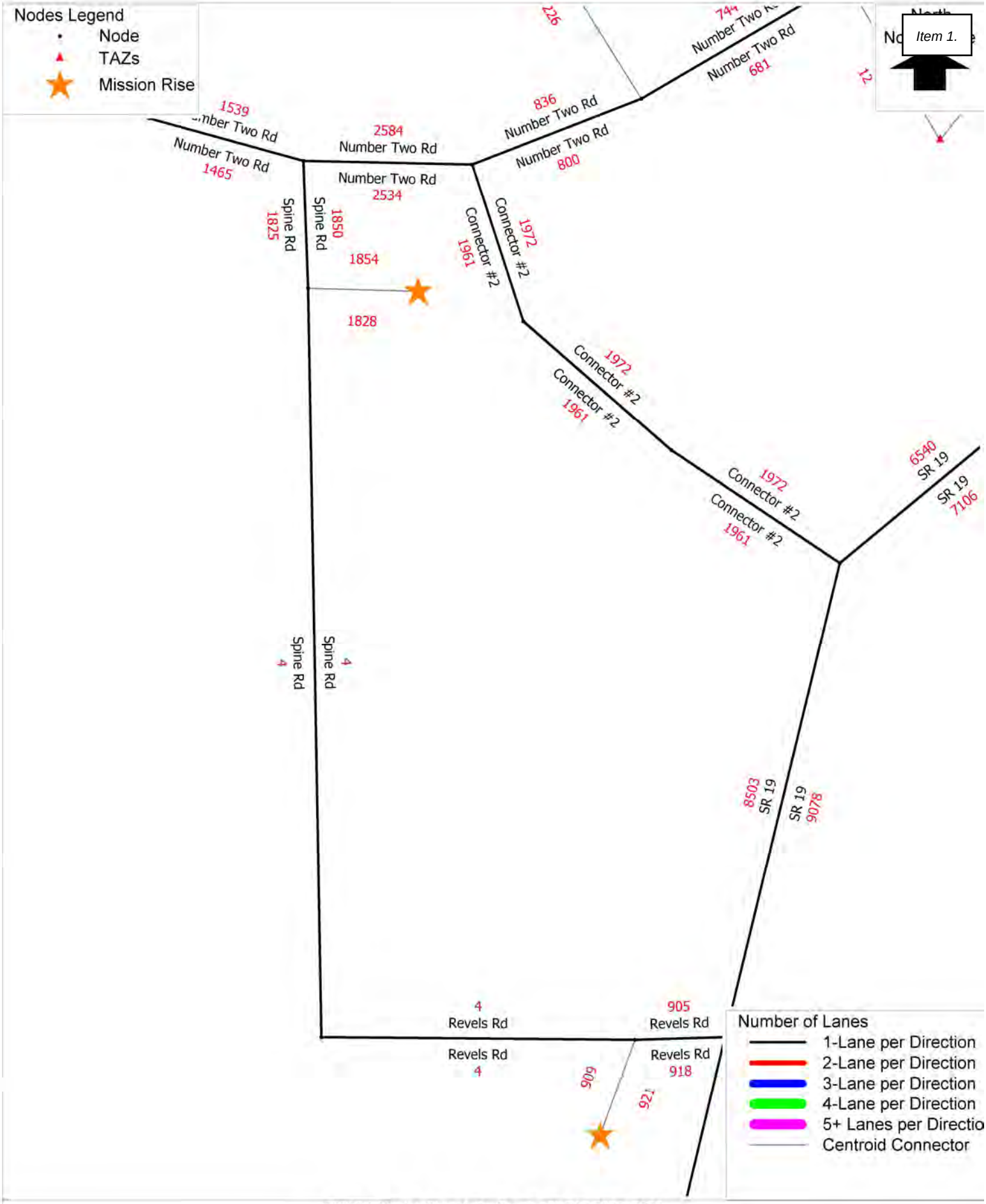
Whispering Hills
Project № 5199
Figure 5

Projected P.M. Peak Hour Intersection Volumes

Appendix J
AADT Model Plot



23017 Mission Rise - Lake County, FL TAZ 7676, 7677
Future AADT
C:\FSUTMS\D5\CFRPM7\Base\CF_2030\P23017\OUTPUT\HWYLOAD_SL_AllDay_A30.NET



23017.1 Mission Rise - Lake County, FL TAZ 7676, 7677
Future AADT
C:\FSUTMS\D5\CFRPM7

Appendix K
HCM Worksheets - Projected Conditions

HCM 6th Signalized Intersection Summary
1: SR 19 & CR 48

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	482	275	429	716	332	142
Future Volume (veh/h)	482	275	429	716	332	142
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1752	1589	1767	1811	1737	1811
Adj Flow Rate, veh/h	497	145	442	0	342	146
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	10	21	9	6	11	6
Cap, veh/h	400	323	720		491	1115
Arrive On Green	0.24	0.24	0.41	0.00	0.14	0.62
Sat Flow, veh/h	1668	1346	1767	1535	1654	1811
Grp Volume(v), veh/h	497	145	442	0	342	146
Grp Sat Flow(s),veh/h/ln	1668	1346	1767	1535	1654	1811
Q Serve(g_s), s	22.7	8.7	18.7	0.0	10.7	3.2
Cycle Q Clear(g_c), s	22.7	8.7	18.7	0.0	10.7	3.2
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	400	323	720		491	1115
V/C Ratio(X)	1.24	0.45	0.61		0.70	0.13
Avail Cap(c_a), veh/h	400	323	720		584	1115
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	36.0	30.7	22.2	0.0	14.8	7.6
Incr Delay (d2), s/veh	128.9	1.0	3.9	0.0	2.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	34.5	5.0	12.8	0.0	7.1	2.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	164.9	31.7	26.1	0.0	17.7	7.9
LnGrp LOS	F	C	C		B	A
Approach Vol, veh/h	642		442	A		488
Approach Delay, s/veh	134.8		26.1			14.8
Approach LOS	F		C			B

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	19.7	45.0		30.0		64.7
Change Period (Y+Rc), s	6.5	6.4		7.3		6.4
Max Green Setting (Gmax), s	18.5	38.6		22.7		38.6
Max Q Clear Time (g_c+I1), s	12.7	20.7		24.7		5.2
Green Ext Time (p_c), s	0.6	2.5		0.0		0.8

Intersection Summary	
HCM 6th Ctrl Delay	67.0
HCM 6th LOS	E

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
1: SR 19 & CR 48

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	713	383	119	541	365	155
Future Volume (veh/h)	713	383	119	541	365	155
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1752	1589	1767	1811	1737	1811
Adj Flow Rate, veh/h	735	199	123	0	376	160
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	10	21	9	6	11	6
Cap, veh/h	394	318	710		746	1125
Arrive On Green	0.24	0.24	0.40	0.00	0.15	0.62
Sat Flow, veh/h	1668	1346	1767	1535	1654	1811
Grp Volume(v), veh/h	735	199	123	0	376	160
Grp Sat Flow(s),veh/h/ln	1668	1346	1767	1535	1654	1811
Q Serve(g_s), s	22.7	12.7	4.3	0.0	12.0	3.5
Cycle Q Clear(g_c), s	22.7	12.7	4.3	0.0	12.0	3.5
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	394	318	710		746	1125
V/C Ratio(X)	1.86	0.63	0.17		0.50	0.14
Avail Cap(c_a), veh/h	394	318	710		814	1125
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	36.7	32.9	18.5	0.0	11.6	7.6
Incr Delay (d2), s/veh	398.5	3.8	0.5	0.0	0.5	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	82.2	7.6	3.2	0.0	7.4	2.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	435.1	36.7	19.0	0.0	12.1	7.8
LnGrp LOS	F	D	B		B	A
Approach Vol, veh/h	934		123	A		536
Approach Delay, s/veh	350.2		19.0			10.8
Approach LOS	F		B			B

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	21.1	45.0		30.0		66.1
Change Period (Y+Rc), s	6.5	6.4		7.3		6.4
Max Green Setting (Gmax), s	18.5	38.6		22.7		38.6
Max Q Clear Time (g_c+I1), s	14.0	6.3		24.7		5.5
Green Ext Time (p_c), s	0.5	0.6		0.0		0.9

Intersection Summary		
HCM 6th Ctrl Delay		210.5
HCM 6th LOS		F

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	53.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	148	4	12	13	1	65	14	618	29	37	584	50
Future Vol, veh/h	148	4	12	13	1	65	14	618	29	37	584	50
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	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	12	33	2	2	2	2	38	10	2	42	2	11
Mvmt Flow	153	4	12	13	1	67	14	637	30	38	602	52

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1418	1399	628	1392	1410	652	654	0	0	667	0	0
Stage 1	704	704	-	680	680	-	-	-	-	-	-	-
Stage 2	714	695	-	712	730	-	-	-	-	-	-	-
Critical Hdwy	7.22	6.83	6.22	7.12	6.52	6.22	4.48	-	-	4.52	-	-
Critical Hdwy Stg 1	6.22	5.83	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.22	5.83	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.608	4.297	3.318	3.518	4.018	3.318	2.542	-	-	2.578	-	-
Pot Cap-1 Maneuver	~ 109	121	483	119	138	468	784	-	-	760	-	-
Stage 1	412	396	-	441	451	-	-	-	-	-	-	-
Stage 2	407	400	-	423	428	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 85	108	483	104	123	468	784	-	-	760	-	-
Mov Cap-2 Maneuver	~ 85	108	-	104	123	-	-	-	-	-	-	-
Stage 1	400	365	-	428	438	-	-	-	-	-	-	-
Stage 2	338	388	-	375	394	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 502.8	22.2	0.2	0.6
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	784	-	-	91	290	760	-	-
HCM Lane V/C Ratio	0.018	-	-	1.858	0.281	0.05	-	-
HCM Control Delay (s)	9.7	0	-	$ 502.8	22.2	10	0	-
HCM Lane LOS	A	A	-	F	C	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	14.2	1.1	0.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

HCM 6th TWSC
2: SR 19 & W Central Ave/E Central Ave

Intersection	
Int Delay, s/veh	55.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	111	14	16	20	4	49	19	547	25	66	702	166
Future Vol, veh/h	111	14	16	20	4	49	19	547	25	66	702	166
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	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	12	33	2	2	2	2	38	10	2	42	2	11
Mvmt Flow	114	14	16	21	4	51	20	564	26	68	724	171

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1591	1576	810	1578	1648	577	895	0	0	590	0	0
Stage 1	946	946	-	617	617	-	-	-	-	-	-	-
Stage 2	645	630	-	961	1031	-	-	-	-	-	-	-
Critical Hdwy	7.22	6.83	6.22	7.12	6.52	6.22	4.48	-	-	4.52	-	-
Critical Hdwy Stg 1	6.22	5.83	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.22	5.83	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.608	4.297	3.318	3.518	4.018	3.318	2.542	-	-	2.578	-	-
Pot Cap-1 Maneuver	~ 82	94	380	89	99	516	627	-	-	816	-	-
Stage 1	301	302	-	477	481	-	-	-	-	-	-	-
Stage 2	445	430	-	308	310	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 60	74	380	61	78	516	627	-	-	816	-	-
Mov Cap-2 Maneuver	~ 60	74	-	61	78	-	-	-	-	-	-	-
Stage 1	287	250	-	454	458	-	-	-	-	-	-	-
Stage 2	379	409	-	230	257	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 655.2	48.9	0.4	0.7
HCM LOS	F	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	627	-	-	68	154	816	-	-
HCM Lane V/C Ratio	0.031	-	-	2.138	0.489	0.083	-	-
HCM Control Delay (s)	10.9	0	-	$ 655.2	48.9	9.8	0	-
HCM Lane LOS	B	A	-	F	E	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	13.7	2.3	0.3	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
3: S Florida Ave & W Central Ave

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	1	72	17	10	32	1	10	0	20	0	0	0
Future Vol, veh/h	1	72	17	10	32	1	10	0	20	0	0	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	80	80	80	80	80	80	80	80	80	80	80	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	90	21	13	40	1	13	0	25	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	41	0	0	111	0	0	170	170	101	182	180	41
Stage 1	-	-	-	-	-	-	103	103	-	67	67	-
Stage 2	-	-	-	-	-	-	67	67	-	115	113	-
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	1568	-	-	1479	-	-	794	723	954	779	714	1030
Stage 1	-	-	-	-	-	-	903	810	-	943	839	-
Stage 2	-	-	-	-	-	-	943	839	-	890	802	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1568	-	-	1479	-	-	788	716	954	753	707	1030
Mov Cap-2 Maneuver	-	-	-	-	-	-	788	716	-	753	707	-
Stage 1	-	-	-	-	-	-	902	809	-	942	831	-
Stage 2	-	-	-	-	-	-	935	831	-	866	801	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1.7	9.2	0
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	891	1568	-	-	1479	-	-	-
HCM Lane V/C Ratio	0.042	0.001	-	-	0.008	-	-	-
HCM Control Delay (s)	9.2	7.3	0	-	7.5	0	-	0
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	-

HCM 6th TWSC
3: S Florida Ave & W Central Ave

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	0	55	11	36	63	6	9	1	33	1	0	0
Future Vol, veh/h	0	55	11	36	63	6	9	1	33	1	0	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	80	80	80	80	80	80	80	80	80	80	80	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	69	14	45	79	8	11	1	41	1	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	87	0	0	83	0	0	249	253	76	270	256	83
Stage 1	-	-	-	-	-	-	76	76	-	173	173	-
Stage 2	-	-	-	-	-	-	173	177	-	97	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	1509	-	-	1514	-	-	705	650	985	683	648	976
Stage 1	-	-	-	-	-	-	933	832	-	829	756	-
Stage 2	-	-	-	-	-	-	829	753	-	910	826	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1509	-	-	1514	-	-	688	630	985	638	628	976
Mov Cap-2 Maneuver	-	-	-	-	-	-	688	630	-	638	628	-
Stage 1	-	-	-	-	-	-	933	832	-	829	733	-
Stage 2	-	-	-	-	-	-	803	730	-	871	826	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	2.6	9.3	10.7
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	893	1509	-	-	1514	-	-	638
HCM Lane V/C Ratio	0.06	-	-	-	0.03	-	-	0.002
HCM Control Delay (s)	9.3	0	-	-	7.5	0	-	10.7
HCM Lane LOS	A	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0.1	-	-	0

Intersection	
Int Delay, s/veh	18.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	47	0	135	43	0	5	49	465	38	4	725	16
Future Vol, veh/h	47	0	135	43	0	5	49	465	38	4	725	16
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	8	12	2	10	2
Mvmt Flow	52	0	150	48	0	6	54	517	42	4	806	18

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1472	1490	815	1544	1478	538	824	0	0	559	0	0
Stage 1	823	823	-	646	646	-	-	-	-	-	-	-
Stage 2	649	667	-	898	832	-	-	-	-	-	-	-
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	105	124	377	94	126	543	806	-	-	1012	-	-
Stage 1	368	388	-	460	467	-	-	-	-	-	-	-
Stage 2	458	457	-	334	384	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	96	111	377	52	113	543	806	-	-	1012	-	-
Mov Cap-2 Maneuver	96	111	-	52	113	-	-	-	-	-	-	-
Stage 1	332	385	-	415	421	-	-	-	-	-	-	-
Stage 2	409	412	-	200	381	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	93.6	217.4	0.9	0
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	806	-	-	215	57	1012	-	-
HCM Lane V/C Ratio	0.068	-	-	0.941	0.936	0.004	-	-
HCM Control Delay (s)	9.8	-	-	93.6	217.4	8.6	0	-
HCM Lane LOS	A	-	-	F	F	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	7.9	4.2	0	-	-

Intersection	
Int Delay, s/veh	21.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	34	1	94	32	0	4	153	673	51	8	556	52
Future Vol, veh/h	34	1	94	32	0	4	153	673	51	8	556	52
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	8	12	2	10	2
Mvmt Flow	38	1	104	36	0	4	170	748	57	9	618	58

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1784	1810	647	1835	1811	777	676	0	0	805	0	0
Stage 1	665	665	-	1117	1117	-	-	-	-	-	-	-
Stage 2	1119	1145	-	718	694	-	-	-	-	-	-	-
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	63	79	471	58	79	397	915	-	-	819	-	-
Stage 1	449	458	-	252	283	-	-	-	-	-	-	-
Stage 2	251	274	-	420	444	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	45	51	471	~ 32	51	397	915	-	-	819	-	-
Mov Cap-2 Maneuver	45	51	-	~ 32	51	-	-	-	-	-	-	-
Stage 1	296	450	-	166	187	-	-	-	-	-	-	-
Stage 2	164	181	-	320	436	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	168.6	$ 355	1.7	0.1
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	915	-	-	132	36	819	-	-
HCM Lane V/C Ratio	0.186	-	-	1.086	1.111	0.011	-	-
HCM Control Delay (s)	9.8	-	-	168.6	$ 355	9.4	0	-
HCM Lane LOS	A	-	-	F	F	A	A	-
HCM 95th %tile Q(veh)	0.7	-	-	8.1	4.1	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	24.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	78	77	561	133	153	833
Future Vol, veh/h	78	77	561	133	153	833
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	0	-	590	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	38	15	8	22	9	5
Mvmt Flow	81	80	584	139	159	868

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1770	584	0	0	723	0
Stage 1	584	-	-	-	-	-
Stage 2	1186	-	-	-	-	-
Critical Hdwy	6.78	6.35	-	-	4.19	-
Critical Hdwy Stg 1	5.78	-	-	-	-	-
Critical Hdwy Stg 2	5.78	-	-	-	-	-
Follow-up Hdwy	3.842	3.435	-	-	2.281	-
Pot Cap-1 Maneuver	~ 74	488	-	-	848	-
Stage 1	493	-	-	-	-	-
Stage 2	246	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 47	488	-	-	848	-
Mov Cap-2 Maneuver	~ 47	-	-	-	-	-
Stage 1	493	-	-	-	-	-
Stage 2	157	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	278.4	0	1.6
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	47	488	848	-
HCM Lane V/C Ratio	-	-	1.729	0.164	0.188	-
HCM Control Delay (s)	-	-	$ 539.6	13.8	10.2	0
HCM Lane LOS	-	-	F	B	B	A
HCM 95th %tile Q(veh)	-	-	8.1	0.6	0.7	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	37.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	100	145	849	110	109	691
Future Vol, veh/h	100	145	849	110	109	691
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	0	-	590	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	38	15	8	22	9	5
Mvmt Flow	104	151	884	115	114	720

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1832	884	0	0	999	0
Stage 1	884	-	-	-	-	-
Stage 2	948	-	-	-	-	-
Critical Hdwy	6.78	6.35	-	-	4.19	-
Critical Hdwy Stg 1	5.78	-	-	-	-	-
Critical Hdwy Stg 2	5.78	-	-	-	-	-
Follow-up Hdwy	3.842	3.435	-	-	2.281	-
Pot Cap-1 Maneuver	~ 68	326	-	-	666	-
Stage 1	350	-	-	-	-	-
Stage 2	325	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 49	326	-	-	666	-
Mov Cap-2 Maneuver	~ 49	-	-	-	-	-
Stage 1	350	-	-	-	-	-
Stage 2	232	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	300	0	1.6
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	49	326	666	-
HCM Lane V/C Ratio	-	-	2.126	0.463	0.17	-
HCM Control Delay (s)	-	-	$ 698.5	25.2	11.5	0
HCM Lane LOS	-	-	F	D	B	A
HCM 95th %tile Q(veh)	-	-	10.6	2.3	0.6	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	3.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	34	79	0	48	45
Future Vol, veh/h	0	34	79	0	48	45
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	37	86	0	52	49

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	239	86	0	0	86	0
Stage 1	86	-	-	-	-	-
Stage 2	153	-	-	-	-	-
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	749	973	-	-	1510	-
Stage 1	937	-	-	-	-	-
Stage 2	875	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	723	973	-	-	1510	-
Mov Cap-2 Maneuver	723	-	-	-	-	-
Stage 1	937	-	-	-	-	-
Stage 2	844	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.8	0	3.9
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	973	1510	-
HCM Lane V/C Ratio	-	-	0.038	0.035	-
HCM Control Delay (s)	-	-	8.8	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0.1	-

Intersection	
Int Delay, s/veh	3.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	53	66	0	45	90
Future Vol, veh/h	0	53	66	0	45	90
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	58	72	0	49	98

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	268	72	0	0	72	0
Stage 1	72	-	-	-	-	-
Stage 2	196	-	-	-	-	-
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	721	990	-	-	1528	-
Stage 1	951	-	-	-	-	-
Stage 2	837	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	696	990	-	-	1528	-
Mov Cap-2 Maneuver	696	-	-	-	-	-
Stage 1	951	-	-	-	-	-
Stage 2	809	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0	2.5
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	990	1528	-
HCM Lane V/C Ratio	-	-	0.058	0.032	-
HCM Control Delay (s)	-	-	8.9	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-

HCM 6th TWSC
7: Spine Road & Number 2 Road

Intersection	
Int Delay, s/veh	5.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	62	29	49	33	58	86
Future Vol, veh/h	62	29	49	33	58	86
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	67	32	53	36	63	93

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	99	0	225	83
Stage 1	-	-	-	-	83	-
Stage 2	-	-	-	-	142	-
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	-	-	1494	-	763	976
Stage 1	-	-	-	-	940	-
Stage 2	-	-	-	-	885	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1494	-	736	976
Mov Cap-2 Maneuver	-	-	-	-	736	-
Stage 1	-	-	-	-	940	-
Stage 2	-	-	-	-	853	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4.5	10.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	863	-	-	1494	-
HCM Lane V/C Ratio	0.181	-	-	0.036	-
HCM Control Delay (s)	10.1	-	-	7.5	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.7	-	-	0.1	-

HCM 6th TWSC
7: Spine Road & Number 2 Road

Intersection	
Int Delay, s/veh	5.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	46	65	97	39	44	70
Future Vol, veh/h	46	65	97	39	44	70
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	50	71	105	42	48	76

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	121	0	338	86
Stage 1	-	-	-	-	86	-
Stage 2	-	-	-	-	252	-
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	-	-	1467	-	658	973
Stage 1	-	-	-	-	937	-
Stage 2	-	-	-	-	790	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1467	-	610	973
Mov Cap-2 Maneuver	-	-	-	-	610	-
Stage 1	-	-	-	-	937	-
Stage 2	-	-	-	-	732	-

Approach	EB	WB	NB
HCM Control Delay, s	0	5.5	10.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	791	-	-	1467	-
HCM Lane V/C Ratio	0.157	-	-	0.072	-
HCM Control Delay (s)	10.4	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.6	-	-	0.2	-

Intersection	
Int Delay, s/veh	7.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	115	6	6	155	10
Future Vol, veh/h	11	115	6	6	155	10
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	125	7	7	168	11

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	358	11	0	0	14	0
Stage 1	11	-	-	-	-	-
Stage 2	347	-	-	-	-	-
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	640	1070	-	-	1604	-
Stage 1	1012	-	-	-	-	-
Stage 2	716	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	573	1070	-	-	1604	-
Mov Cap-2 Maneuver	573	-	-	-	-	-
Stage 1	1012	-	-	-	-	-
Stage 2	641	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.2	0	7.1
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	995	1604	-
HCM Lane V/C Ratio	-	-	0.138	0.105	-
HCM Control Delay (s)	-	-	9.2	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0.4	-

Intersection	
Int Delay, s/veh	7.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	177	10	13	146	6
Future Vol, veh/h	11	177	10	13	146	6
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	192	11	14	159	7

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	343	18	0	0	25	0
Stage 1	18	-	-	-	-	-
Stage 2	325	-	-	-	-	-
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	653	1061	-	-	1589	-
Stage 1	1005	-	-	-	-	-
Stage 2	732	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	588	1061	-	-	1589	-
Mov Cap-2 Maneuver	588	-	-	-	-	-
Stage 1	1005	-	-	-	-	-
Stage 2	659	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.5	0	7.2
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1013	1589	-
HCM Lane V/C Ratio	-	-	0.202	0.1	-
HCM Control Delay (s)	-	-	9.5	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.8	0.3	-

HCM 6th TWSC
9: Orange Blossom Road & Revels Road

Intersection	
Int Delay, s/veh	7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	0	0	5	14	7
Future Vol, veh/h	7	0	0	5	14	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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	0	0	5	15	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	5	0	-	0	19	3
Stage 1	-	-	-	-	3	-
Stage 2	-	-	-	-	16	-
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	1616	-	-	-	998	1081
Stage 1	-	-	-	-	1020	-
Stage 2	-	-	-	-	1007	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1616	-	-	-	993	1081
Mov Cap-2 Maneuver	-	-	-	-	993	-
Stage 1	-	-	-	-	1015	-
Stage 2	-	-	-	-	1007	-

Approach	EB	WB	SB
HCM Control Delay, s	7.2	0	8.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1616	-	-	-	1021
HCM Lane V/C Ratio	0.005	-	-	-	0.022
HCM Control Delay (s)	7.2	0	-	-	8.6
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

HCM 6th TWSC
9: Orange Blossom Road & Revels Road

Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	0	0	16	10	7
Future Vol, veh/h	7	0	0	16	10	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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	0	0	17	11	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	17	0	-	0	25	9
Stage 1	-	-	-	-	9	-
Stage 2	-	-	-	-	16	-
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	1600	-	-	-	991	1073
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	1007	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1600	-	-	-	986	1073
Mov Cap-2 Maneuver	-	-	-	-	986	-
Stage 1	-	-	-	-	1009	-
Stage 2	-	-	-	-	1007	-

Approach	EB	WB	SB
HCM Control Delay, s	7.3	0	8.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1600	-	-	-	1020
HCM Lane V/C Ratio	0.005	-	-	-	0.018
HCM Control Delay (s)	7.3	0	-	-	8.6
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Appendix L
Intersection Volume Projections

Project No. 23017 Mission Rise

Intersection Volumes

Counts on 7/19/2023

Period	Tgen	Enter	Exit		SF	AGR	Years	Legend
AM Peak		94	282		1.06	2.00%	10	Backg'd + {Vested} + (Project) = T

Intersection= SR 19 & CR 48 — **1**

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Adj Bg'd	The Reserve	Whisp. Hills	Talichet	Vested	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	0	1.06	0	1.20		0				0			0	0	
EB	T	0	1.06	0	1.20		0				0			0	0	
	R	0	1.06	0	1.20		0				0			0	0	
	L	326	1.06	346	1.20		415	32	14		46	23%		21	482	415 + {46} + (21) = 482
WB	T	0	1.06	0	1.20		0				0			0	0	
	R	216	1.06	229	1.20		275				0			0	275	275
	L	0	1.06	0	1.20		0				0			0	0	
NB	T	298	1.06	316	1.20		379	21	24		45		2%	5	429	379 + {45} + (5) = 429
	R	429	1.06	455	1.20		546	82	23		105		23%	65	716	546 + {105} + (65) = 716
	L	261	1.06	277	1.20		332				0			0	332	332
SB	T	92	1.06	98	1.20		118	8	14		22	2%		2	142	118 + {22} + (2) = 142
	R	0	1.06	0	1.20		0				0			0	0	

Intersection= SR 19 & Central Ave — **2**

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Adj Bg'd	The Reserve	Whisp. Hills	Talichet	Vested	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	33	1.06	35	1.20		42	62		16	78		10%	28	148	42 + {78} + (28) = 148
EB	T	3	1.06	3	1.20		4				0			0	4	4
	R	9	1.06	10	1.20		12				0			0	12	12
	L	10	1.06	11	1.20		13				0			0	13	13
WB	T	1	1.06	1	1.20		1				0			0	1	1
	R	14	1.06	15	1.20		18		47		47			0	65	18 + {47} = 65
	L	11	1.06	12	1.20		14				0			0	14	14
NB	T	356	1.06	377	1.20		452	82		42	124		15%	42	618	452 + {124} + (42) = 618
	R	23	1.06	24	1.20		29				0			0	29	29
	L	4	1.06	4	1.20		5		32		32			0	37	5 + {32} = 37
SB	T	404	1.06	428	1.20		514	32		24	56	15%		14	584	514 + {56} + (14) = 584
	R	7	1.06	7	1.20		8	24		9	33	10%		9	50	8 + {33} + (9) = 50

Intersection= Central Ave & S. Florida Ave — **3**

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Adj Bg'd	The Reserve	Whisp. Hills	Talichet	Vested	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	1	1.06	1	1.20		1				0			0	1	1
EB	T	35	1.06	37	1.20		44				0		10%	28	72	44 + (28) = 72
	R	11	1.06	12	1.20		14			3	3			0	17	14 + {3} = 17
	L	1	1.06	1	1.20		1			9	9			0	10	1 + {9} = 10
WB	T	18	1.06	19	1.20		23				0	10%		9	32	23 + (9) = 32
	R	1	1.06	1	1.20		1				0			0	1	1
	L	4	1.06	4	1.20		5			5	5			0	10	5 + {5} = 10
NB	T	0	1.06	0	1.20		0				0			0	0	
	R	3	1.06	3	1.20		4			16	16			0	20	4 + {16} = 20
	L	0	1.06	0	1.20		0				0			0	0	
SB	T	0	1.06	0	1.20		0				0			0	0	
	R	0	1.06	0	1.20		0				0			0	0	

Intersection= SR 19 & Revels Rd — **4**

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Adj Bg'd	The Reserve	Whisp. Hills	Talichet	Vested	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	2	1.06	2	1.20		2	3			3		15%	42	47	2 + {3} + (42) = 47
EB	T	0	1.06	0	1.20		0				0			0	0	
	R	5	1.06	5	1.20		6	30			30		35%	99	135	6 + {30} + (99) = 135
	L	5	1.06	5	1.20		6		37		37			0	43	6 + {37} = 43
WB	T	0	1.06	0	1.20		0				0			0	0	
	R	4	1.06	4	1.20		5				0			0	5	5
	L	3	1.06	3	1.20		4	12			12	35%		33	49	4 + {12} + (33) = 49
NB	T	306	1.06	324	1.20		389	67			67	10%		9	465	389 + {67} + (9) = 465
	R	12	1.06	13	1.20		16		22		22			0	38	16 + {22} = 38
	L	3	1.06	3	1.20		4				0			0	4	4
SB	T	410	1.06	435	1.20		522	175			175		10%	28	725	522 + {175} + (28) = 725
	R	0	1.06	0	1.20		0	2			2	15%		14	16	{2} + (14) = 16

Intersection= SR 19 & CR 455 — **5**

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Adj Bg'd	The Reserve	Whisp. Hills	Talichet	Vested	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	0	1.00	0	1.20		0				0			0	0	
EB	T	0	1.00	0	1.20		0				0			0	0	
	R	0	1.00	0	1.20		0				0			0	0	
	L	65	1.00	65	1.20		78				0			0	78	78
WB	T	0	1.00	0	1.20		0				0			0	0	
	R	43	1.00	43	1.20		52	16			16	10%		9	77	52 + {16} + (9) = 77
	L	0	1.00	0	1.20		0				0			0	0	
NB	T	394	1.00	394	1.20		473	55			55	35%		33	561	473 + {55} + (33) = 561
	R	111	1.00	111	1.20		133				0			0	133	133
	L	70	1.00	70	1.20		84	41			41		10%	28	153	84 + {41} + (28) = 153
SB	T	492	1.00	492	1.20		590	144			144		35%	99	833	590 + {144} + (99) = 833
	R	0	1.00	0	1.20		0				0			0	0	

Counts on 1/24/2023

Intersection=							Interconnect Rd & Spine Rd (Proposed)									6
Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Adj Bg'd	The Reserve	Whisp. Hills	Talichet	Vested	%Proj Ent	%Proj Ext	Project	Total	Formula
	L						**0**							**0**	**0**	
EB	T						**0**							**0**	**0**	
	R						**0**							**0**	**0**	
	L						**0**							**0**	**0**	
WB	T						**0**							**0**	**0**	
	R						**25**					10%		**9**	**34**	25 + (9) = 34
	L						**0**							**0**	**0**	
NB	T						**20**							**59**	**79**	20 + (59) = 79
	R						**0**							**0**	**0**	
	L						**20**						10%	**28**	**48**	20 + (28) = 48
SB	T						**25**							**20**	**45**	25 + (20) = 45
	R						**0**							**0**	**0**	

Intersection=							Number 2 Rd & Spine Road / North Access									7
Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Adj Bg'd	The Reserve	Whisp. Hills	Talichet	Vested	%Proj Ent	%Proj Ext	Project	Total	Formula
	L						**0**							**0**	**0**	
EB	T						**59**				3			**0**	**62**	59 + {3} = 62
	R						**15**					15%		**14**	**29**	15 + (14) = 29
	L						**30**					20%		**19**	**49**	30 + (19) = 49
WB	T						**28**				5			**0**	**33**	28 + {5} = 33
	R						**0**							**0**	**0**	
	L						**15**						15%	**43**	**58**	15 + (43) = 58
NB	T						**0**							**0**	**0**	
	R						**30**						20%	**56**	**86**	30 + (56) = 86
	L						**0**							**0**	**0**	
SB	T						**0**							**0**	**0**	
	R						**0**							**0**	**0**	

Intersection=							Revels Rd & Spine Rd / Proposed									8
Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Adj Bg'd	The Reserve	Whisp. Hills	Talichet	Vested	%Proj Ent	%Proj Ext	Project	Total	Formula
	L						**0**							**0**	**0**	
EB	T						**0**							**0**	**0**	
	R						**0**							**0**	**0**	
	L						**3**						3%	**8**	**11**	3 + (8) = 11
WB	T						**0**							**0**	**0**	
	R						**62**					25%		**54**	**116**	62 + (54) = 116
	L						**0**							**0**	**0**	
NB	T						**4**					2%		**2**	**6**	4 + (2) = 6
	R						**3**					3%		**3**	**6**	3 + (3) = 6
	L						**74**						25%	**81**	**155**	74 + (81) = 155
SB	T						**4**						2%	**6**	**10**	4 + (6) = 10
	R						**0**							**0**	**0**	

Intersection=							Revels Rd & Orange Blossom Rd / South Access									9
Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Adj Bg'd	The Reserve	Whisp. Hills	Talichet	Vested	%Proj Ent	%Proj Ext	Project	Total	Formula
	L						**7**							**0**	**7**	7
EB	T						**0**							**0**	**0**	
	R						**0**							**0**	**0**	
	L						**0**							**0**	**0**	
WB	T						**0**							**0**	**0**	
	R						**0**					5%		**5**	**5**	(5)
	L						**0**							**0**	**0**	
NB	T						**0**							**0**	**0**	
	R						**0**							**0**	**0**	
	L						**0**						5%	**14**	**14**	(14)
SB	T						**0**							**0**	**0**	
	R						**7**							**0**	**7**	7

Project No. 23017 Mission Rise

Intersection Volumes

Counts on 7/19/2023

Period	Tgen	Enter	Exit		SF	AGR	Years	Legend
PM Peak		333	196		1.06	2.00%	10	Backg'd + {Vested} + (Project) = T

Intersection= SR 19 & CR 48 — 1

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Adj Bg'd	The Reserve	Whisp. Hills	Talichet	Vested	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	0	1.06	0	1.20		0				0			0	0	
EB	T	0	1.06	0	1.20		0				0			0	0	
	R	0	1.06	0	1.20		0				0			0	0	
	L	409	1.06	434	1.20		521	92	23		115	23%		77	713	521 + {115} + (77) = 713
WB	T	0	1.06	0	1.20		0				0			0	0	
	R	301	1.06	319	1.20		383				0			0	383	383
	L	0	1.06	0	1.20		0				0			0	0	
NB	T	68	1.06	72	1.20		86	15	14		29		2%	4	119	86 + {29} + (4) = 119
	R	333	1.06	353	1.20		424	58	14		72		23%	45	541	424 + {72} + (45) = 541
	L	287	1.06	304	1.20		365				0			0	365	365
SB	T	79	1.06	84	1.20		101	23	24		47	2%		7	155	101 + {47} + (7) = 155
	R	0	1.06	0	1.20		0				0			0	0	

Intersection= SR 19 & Central Ave — 2

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Adj Bg'd	The Reserve	Whisp. Hills	Talichet	Vested	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	30	1.06	32	1.20		38	44		9	53		10%	20	111	38 + {53} + (20) = 111
EB	T	11	1.06	12	1.20		14				0			0	14	14
	R	12	1.06	13	1.20		16				0			0	16	16
	L	16	1.06	17	1.20		20				0			0	20	20
WB	T	3	1.06	3	1.20		4				0			0	4	4
	R	13	1.06	14	1.20		17		32		32			0	49	17 + {32} = 49
	L	15	1.06	16	1.20		19				0			0	19	19
NB	T	342	1.06	363	1.20		436	58		24	82		15%	29	547	436 + {82} + (29) = 547
	R	20	1.06	21	1.20		25				0			0	25	25
	L	15	1.06	16	1.20		19		47		47			0	66	19 + {47} = 66
SB	T	408	1.06	432	1.20		518	92		42	134	15%		50	702	518 + {134} + (50) = 702
	R	38	1.06	40	1.20		48	69		16	85	10%		33	166	48 + {85} + (33) = 166

Intersection= Central Ave & S. Florida Ave — 3

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Adj Bg'd	The Reserve	Whisp. Hills	Talichet	Vested	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	0	1.06	0	1.20		0				0			0	0	
EB	T	27	1.06	29	1.20		35				0		10%	20	55	35 + (20) = 55
	R	5	1.06	5	1.20		6			5	5			0	11	6 + {5} = 11
	L	16	1.06	17	1.20		20			16	16			0	36	20 + {16} = 36
WB	T	24	1.06	25	1.20		30				0	10%		33	63	30 + (33) = 63
	R	5	1.06	5	1.20		6				0			0	6	6
	L	5	1.06	5	1.20		6			3	3			0	9	6 + {3} = 9
NB	T	1	1.06	1	1.20		1				0			0	1	1
	R	19	1.06	20	1.20		24			9	9			0	33	24 + {9} = 33
	L	1	1.06	1	1.20		1				0			0	1	1
SB	T	0	1.06	0	1.20		0				0			0	0	
	R	0	1.06	0	1.20		0				0			0	0	

Intersection= SR 19 & Revels Rd — 4

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Adj Bg'd	The Reserve	Whisp. Hills	Talichet	Vested	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	3	1.06	3	1.20		4	1			1		15%	29	34	4 + {1} + (29) = 34
EB	T	1	1.06	1	1.20		1				0			0	1	1
	R	4	1.06	4	1.20		5	21			21		35%	68	94	5 + {21} + (68) = 94
	L	8	1.06	8	1.20		10		22		22			0	32	10 + {22} = 32
WB	T	0	1.06	0	1.20		0				0			0	0	
	R	3	1.06	3	1.20		4				0			0	4	4
	L	1	1.06	1	1.20		1	35			35	35%		117	153	1 + {35} + (117) = 153
NB	T	351	1.06	372	1.20		446	194			194	10%		33	673	446 + {194} + (33) = 673
	R	11	1.06	12	1.20		14		37		37			0	51	14 + {37} = 51
	L	7	1.06	7	1.20		8				0			0	8	8
SB	T	324	1.06	343	1.20		412	124			124		10%	20	556	412 + {124} + (20) = 556
	R	0	1.06	0	1.20		0	2			2	15%		50	52	{2} + (50) = 52

Intersection= SR 19 & CR 455 — 5

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Adj Bg'd	The Reserve	Whisp. Hills	Talichet	Vested	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	0	1.00	0	1.20		0				0			0	0	
EB	T	0	1.00	0	1.20		0				0			0	0	
	R	0	1.00	0	1.20		0				0			0	0	
	L	83	1.00	83	1.20		100				0			0	100	100
WB	T	0	1.00	0	1.20		0				0			0	0	
	R	55	1.00	55	1.20		66	46			46	10%		33	145	66 + {46} + (33) = 145
	L	0	1.00	0	1.20		0				0			0	0	
NB	T	476	1.00	476	1.20		571	161			161	35%		117	849	571 + {161} + (117) = 849
	R	92	1.00	92	1.20		110				0			0	110	110
	L	50	1.00	50	1.20		60	29			29		10%	20	109	60 + {29} + (20) = 109
SB	T	433	1.00	433	1.20		520	102			102		35%	69	691	520 + {102} + (69) = 691
	R	0	1.00	0	1.20		0				0			0	0	

Counts on 1/24/2023

Intersection=							Interconnect Rd & Spine Rd (Proposed)									6
Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Adj Bg'd	The Reserve	Whisp. Hills	Talichet	Vested	%Proj Ent	%Proj Ext	Project	Total	Formula
	L						**0**							**0**	**0**	
EB	T						**0**							**0**	**0**	
	R						**0**							**0**	**0**	
	L						**0**							**0**	**0**	
WB	T						**0**							**0**	**0**	
	R						**20**					10%		**33**	**53**	20 + (33) = 53
	L						**0**							**0**	**0**	
NB	T						**25**							**41**	**66**	25 + (41) = 66
	R						**0**							**0**	**0**	
	L						**25**						10%	**20**	**45**	25 + (20) = 45
SB	T						**20**							**70**	**90**	20 + (70) = 90
	R						**0**							**0**	**0**	

Intersection=							Number 2 Rd & Spine Road / North Access									7
Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Adj Bg'd	The Reserve	Whisp. Hills	Talichet	Vested	%Proj Ent	%Proj Ext	Project	Total	Formula
	L						**0**							**0**	**0**	
EB	T						**41**				5			**0**	**46**	41 + {5} = 46
	R						**15**					15%		**50**	**65**	15 + (50) = 65
	L						**30**					20%		**67**	**97**	30 + (67) = 97
WB	T						**36**				3			**0**	**39**	36 + {3} = 39
	R						**0**							**0**	**0**	
	L						**15**						15%	**29**	**44**	15 + (29) = 44
NB	T						**0**							**0**	**0**	
	R						**30**						20%	**40**	**70**	30 + (40) = 70
	L						**0**							**0**	**0**	
SB	T						**0**							**0**	**0**	
	R						**0**							**0**	**0**	

Intersection=							Revels Rd & Spine Rd / Proposed									8
Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Adj Bg'd	The Reserve	Whisp. Hills	Talichet	Vested	%Proj Ent	%Proj Ext	Project	Total	Formula
	L						**0**							**0**	**0**	
EB	T						**0**							**0**	**0**	
	R						**0**							**0**	**0**	
	L						**4**						3%	**7**	**11**	4 + (7) = 11
WB	T						**0**							**0**	**0**	
	R						**74**					25%		**104**	**178**	74 + (104) = 178
	L						**0**							**0**	**0**	
NB	T						**3**					2%		**7**	**10**	3 + (7) = 10
	R						**4**					3%		**9**	**13**	4 + (9) = 13
	L						**62**						25%	**84**	**146**	62 + (84) = 146
SB	T						**3**						2%	**3**	**6**	3 + (3) = 6
	R						**0**							**0**	**0**	

Intersection=							Revels Rd & Orange Blossom Rd / South Access									9
Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Adj Bg'd	The Reserve	Whisp. Hills	Talichet	Vested	%Proj Ent	%Proj Ext	Project	Total	Formula
	L						**7**							**0**	**7**	7
EB	T						**0**							**0**	**0**	
	R						**0**							**0**	**0**	
	L						**0**							**0**	**0**	
WB	T						**0**							**0**	**0**	
	R						**0**					5%		**16**	**16**	(16)
	L						**0**							**0**	**0**	
NB	T						**0**							**0**	**0**	
	R						**0**							**0**	**0**	
	L						**0**						5%	**10**	**10**	(10)
SB	T						**0**							**0**	**0**	
	R						**7**							**0**	**7**	7

Appendix M
Background Conditions / Buildout Conditions with Mitigation

HCM 6th Signalized Intersection Summary
1: SR 19 & CR 48

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	461	275	424	651	332	140
Future Volume (veh/h)	461	275	424	651	332	140
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1752	1589	1767	1811	1737	1811
Adj Flow Rate, veh/h	475	143	437	0	342	144
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	10	21	9	6	11	6
Cap, veh/h	400	323	720		495	1115
Arrive On Green	0.24	0.24	0.41	0.00	0.14	0.62
Sat Flow, veh/h	1668	1346	1767	1535	1654	1811
Grp Volume(v), veh/h	475	143	437	0	342	144
Grp Sat Flow(s),veh/h/ln	1668	1346	1767	1535	1654	1811
Q Serve(g_s), s	22.7	8.6	18.4	0.0	10.7	3.1
Cycle Q Clear(g_c), s	22.7	8.6	18.4	0.0	10.7	3.1
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	400	323	720		495	1115
V/C Ratio(X)	1.19	0.44	0.61		0.69	0.13
Avail Cap(c_a), veh/h	400	323	720		587	1115
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	36.0	30.6	22.1	0.0	14.7	7.6
Incr Delay (d2), s/veh	107.0	1.0	3.8	0.0	2.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	30.7	4.9	12.6	0.0	7.1	2.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	143.0	31.6	25.9	0.0	17.5	7.8
LnGrp LOS	F	C	C		B	A
Approach Vol, veh/h	618		437	A		486
Approach Delay, s/veh	117.3		25.9			14.6
Approach LOS	F		C			B

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	19.7	45.0		30.0		64.7
Change Period (Y+Rc), s	6.5	6.4		7.3		6.4
Max Green Setting (Gmax), s	18.5	38.6		22.7		38.6
Max Q Clear Time (g_c+I1), s	12.7	20.4		24.7		5.1
Green Ext Time (p_c), s	0.6	2.5		0.0		0.8

Intersection Summary			
HCM 6th Ctrl Delay		59.0	
HCM 6th LOS		E	

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
1: SR 19 & CR 48

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	636	383	115	496	365	148
Future Volume (veh/h)	636	383	115	496	365	148
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1752	1589	1767	1811	1737	1811
Adj Flow Rate, veh/h	656	199	119	0	376	153
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	10	21	9	6	11	6
Cap, veh/h	394	318	710		750	1125
Arrive On Green	0.24	0.24	0.40	0.00	0.15	0.62
Sat Flow, veh/h	1668	1346	1767	1535	1654	1811
Grp Volume(v), veh/h	656	199	119	0	376	153
Grp Sat Flow(s),veh/h/ln	1668	1346	1767	1535	1654	1811
Q Serve(g_s), s	22.7	12.7	4.1	0.0	12.0	3.4
Cycle Q Clear(g_c), s	22.7	12.7	4.1	0.0	12.0	3.4
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	394	318	710		750	1125
V/C Ratio(X)	1.66	0.63	0.17		0.50	0.14
Avail Cap(c_a), veh/h	394	318	710		818	1125
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	36.7	32.9	18.4	0.0	11.6	7.5
Incr Delay (d2), s/veh	309.7	3.8	0.5	0.0	0.5	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	66.4	7.6	3.1	0.0	7.4	2.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	346.4	36.7	18.9	0.0	12.1	7.8
LnGrp LOS	F	D	B		B	A
Approach Vol, veh/h	855		119	A		529
Approach Delay, s/veh	274.3		18.9			10.8
Approach LOS	F		B			B

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	21.1	45.0		30.0		66.1
Change Period (Y+Rc), s	6.5	6.4		7.3		6.4
Max Green Setting (Gmax), s	18.5	38.6		22.7		38.6
Max Q Clear Time (g_c+I1), s	14.0	6.1		24.7		5.4
Green Ext Time (p_c), s	0.5	0.6		0.0		0.8

Intersection Summary	
HCM 6th Ctrl Delay	161.4
HCM 6th LOS	F

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
1: SR 19 & CR 48

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	482	275	429	716	332	142
Future Volume (veh/h)	482	275	429	716	332	142
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1752	1589	1767	1811	1737	1811
Adj Flow Rate, veh/h	497	145	442	0	342	146
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	10	21	9	6	11	6
Cap, veh/h	531	428	531		393	954
Arrive On Green	0.32	0.32	0.30	0.00	0.15	0.53
Sat Flow, veh/h	1668	1346	1767	1535	1654	1811
Grp Volume(v), veh/h	497	145	442	0	342	146
Grp Sat Flow(s),veh/h/ln	1668	1346	1767	1535	1654	1811
Q Serve(g_s), s	25.6	7.3	20.6	0.0	12.1	3.7
Cycle Q Clear(g_c), s	25.6	7.3	20.6	0.0	12.1	3.7
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	531	428	531		393	954
V/C Ratio(X)	0.94	0.34	0.83		0.87	0.15
Avail Cap(c_a), veh/h	560	452	531		393	954
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	29.3	23.0	28.8	0.0	19.4	10.8
Incr Delay (d2), s/veh	22.9	0.5	14.1	0.0	18.5	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	18.5	3.9	15.7	0.0	10.3	2.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	52.1	23.5	42.9	0.0	37.9	11.1
LnGrp LOS	D	C	D		D	B
Approach Vol, veh/h	642		442	A		488
Approach Delay, s/veh	45.7		42.9			29.9
Approach LOS	D		D			C

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	20.0	33.0		35.4		53.0
Change Period (Y+Rc), s	6.5	6.4		7.3		6.4
Max Green Setting (Gmax), s	13.5	26.6		29.7		46.6
Max Q Clear Time (g_c+I1), s	14.1	22.6		27.6		5.7
Green Ext Time (p_c), s	0.0	1.0		0.5		0.8

Intersection Summary	
HCM 6th Ctrl Delay	40.0
HCM 6th LOS	D

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
1: SR 19 & CR 48

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	713	383	119	541	365	155
Future Volume (veh/h)	713	383	119	541	365	155
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1752	1589	1767	1811	1737	1811
Adj Flow Rate, veh/h	735	199	123	0	376	160
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	10	21	9	6	11	6
Cap, veh/h	759	613	365		440	710
Arrive On Green	0.46	0.46	0.21	0.00	0.11	0.39
Sat Flow, veh/h	1668	1346	1767	1535	1654	1811
Grp Volume(v), veh/h	735	199	123	0	376	160
Grp Sat Flow(s),veh/h/ln	1668	1346	1767	1535	1654	1811
Q Serve(g_s), s	38.4	8.5	5.3	0.0	10.1	5.3
Cycle Q Clear(g_c), s	38.4	8.5	5.3	0.0	10.1	5.3
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	759	613	365		440	710
V/C Ratio(X)	0.97	0.32	0.34		0.85	0.23
Avail Cap(c_a), veh/h	767	619	365		440	710
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	23.8	15.6	30.3	0.0	29.1	18.2
Incr Delay (d2), s/veh	24.7	0.3	2.5	0.0	15.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	25.3	4.3	4.4	0.0	8.7	4.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	48.4	15.9	32.8	0.0	44.1	18.9
LnGrp LOS	D	B	C		D	B
Approach Vol, veh/h	934		123	A		536
Approach Delay, s/veh	41.5		32.8			36.6
Approach LOS	D		C			D

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	16.6	24.9		48.1		41.5
Change Period (Y+Rc), s	6.5	6.4		7.3		6.4
Max Green Setting (Gmax), s	10.1	18.5		41.2		35.1
Max Q Clear Time (g_c+I1), s	12.1	7.3		40.4		7.3
Green Ext Time (p_c), s	0.0	0.4		0.3		0.8

Intersection Summary						
HCM 6th Ctrl Delay			39.2			
HCM 6th LOS			D			

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Appendix N

Lake County Land Development Code (LDC)

2. Turn Lanes

Turn lanes consist of left-turn lanes and right-turn lanes (deceleration lanes). Turn lanes shall be installed on the road which is being accessed at the proposed entrance(s) to the development, as deemed necessary by the County Manager or Designee. The County Manager or Designee may also require turn lanes at adjacent or nearby intersections in lieu of, or in addition to, turn lanes at the development entrances.

Conditions which are to be considered in determining the need for turn lanes include the following:

a) If the property accessing the road is projected to generate 500 or more vehicle trips per day, or 50 or more vehicle trips in any hour;

b) If a traffic analysis indicates that turn lanes would be necessary to maintain capacity on fronting roads and/or on adjacent or nearby intersections.

c) If entrances are proposed at locations where grade, topography, site distance, traffic, or other unusual conditions indicate that turn lanes would be needed for traffic safety. The need for turn lanes to accommodate right turn movements and left turn movements shall be based upon anticipated traffic distribution and projected turning movement volumes among other considerations, including traffic safety.

C. *Traffic Analysis*

1. Transportation Concurrency Management System

Transportation Concurrency Management System is administered by the Lake-Sumter Metropolitan Planning Organization (LSMPO). All information regarding traffic study could be found on LSPMO website www.lakesumtermpo.com/concurrency/index.aspx

D. *Road Classification*

1. Arterial Roads

An arterial road is a route providing service which is relatively continuous and of relatively high traffic volume, long average trip length, high operating speed and of high mobility importance.

Arterial roads are grouped into the following sub-categories:

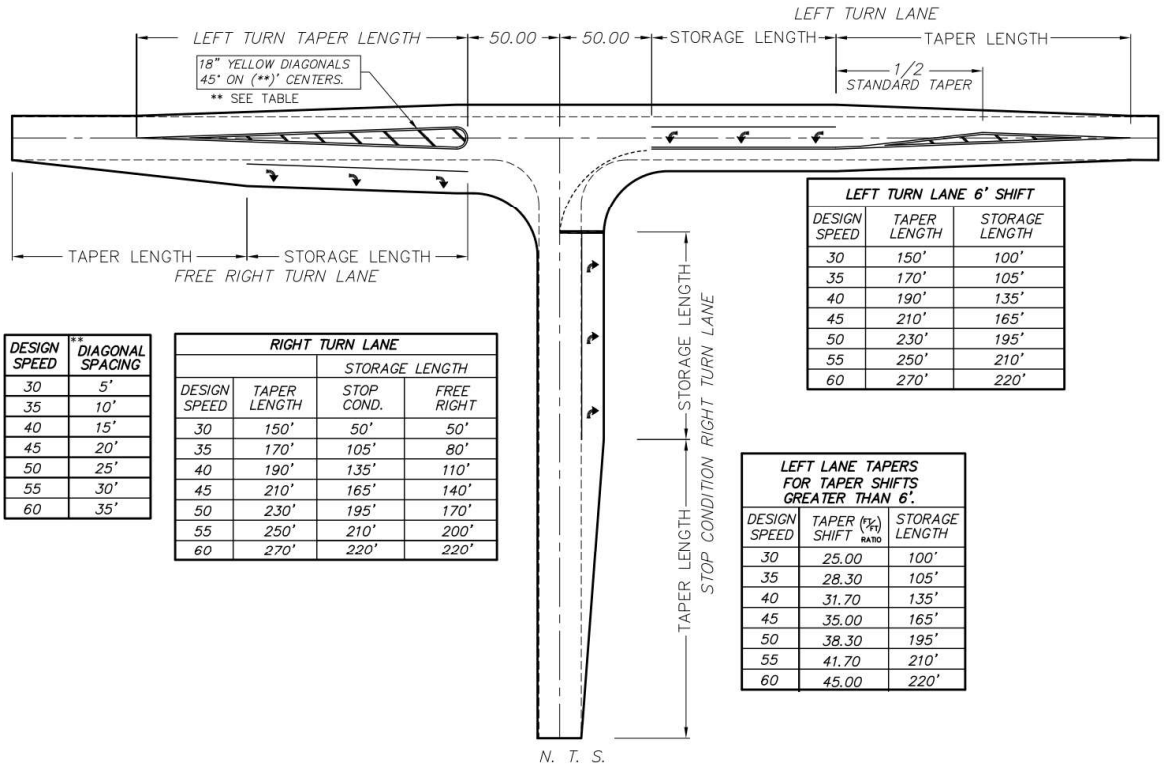
a) Principal Arterial
b) Minor Arterial

The classification of roads as arterials shall be based upon criteria established by the Florida Department of Transportation utilizing their most recent, adopted functional classification system.

2. Collector Roads

A collector road is a route providing services which is of relatively moderate traffic volume, moderate trip length and moderate operating speed. Collector roads collect and distribute the traffic between local roads and arterial roads and serves as a linkage between land access and mobility needs.

LAKE COUNTY STANDARD TURN LANES



LEFT TURN LANE 6' SHIFT		
DESIGN SPEED	TAPER LENGTH	STORAGE LENGTH
30	150'	100'
35	170'	105'
40	190'	135'
45	210'	165'
50	230'	195'
55	250'	210'
60	270'	220'

DESIGN SPEED	** DIAGONAL SPACING
30	5'
35	10'
40	15'
45	20'
50	25'
55	30'
60	35'

RIGHT TURN LANE			
		STORAGE LENGTH	
DESIGN SPEED	TAPER LENGTH	STOP COND.	FREE RIGHT
30	150'	50'	50'
35	170'	105'	80'
40	190'	135'	110'
45	210'	165'	140'
50	230'	195'	170'
55	250'	210'	200'
60	270'	220'	220'

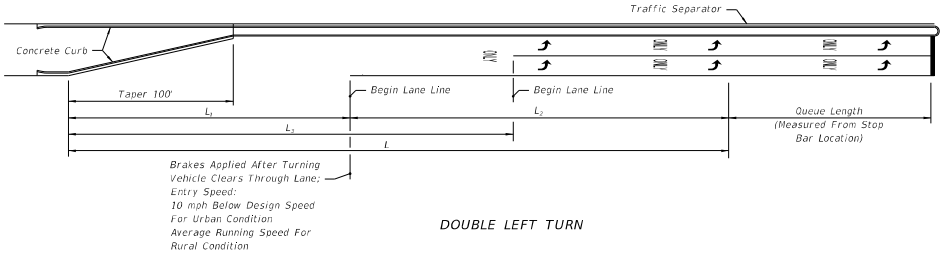
LEFT LANE TAPERS FOR TAPER SHIFTS GREATER THAN 6'.		
DESIGN SPEED	TAPER SHIFT (W/Y1) RATIO	STORAGE LENGTH
30	25.00	100'
35	28.30	105'
40	31.70	135'
45	35.00	165'
50	38.30	195'
55	41.70	210'
60	45.00	220'

O:_CAD STANDARDS\DWG\Turn LanesR1.dwg (02/06/2007)

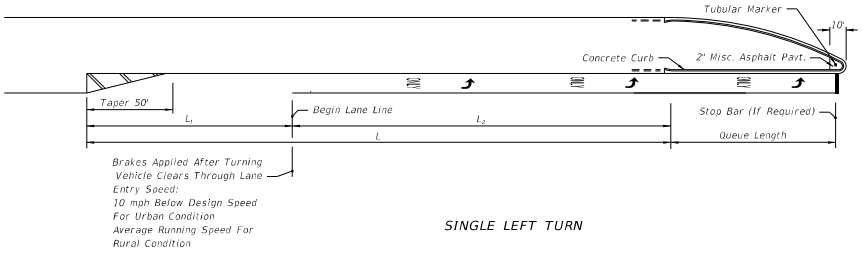
THIS SHOULD BE USED AS A GUIDE LINE ONLY.
ALL DESIGNS SHALL BE SUBMITTED FOR REVIEW.

Appendix O
FDOT Design Manual Exhibit 212-1

MEDIAN TURN LANES
MINIMUM DECELERATION LENGTHS



DOUBLE LEFT TURN

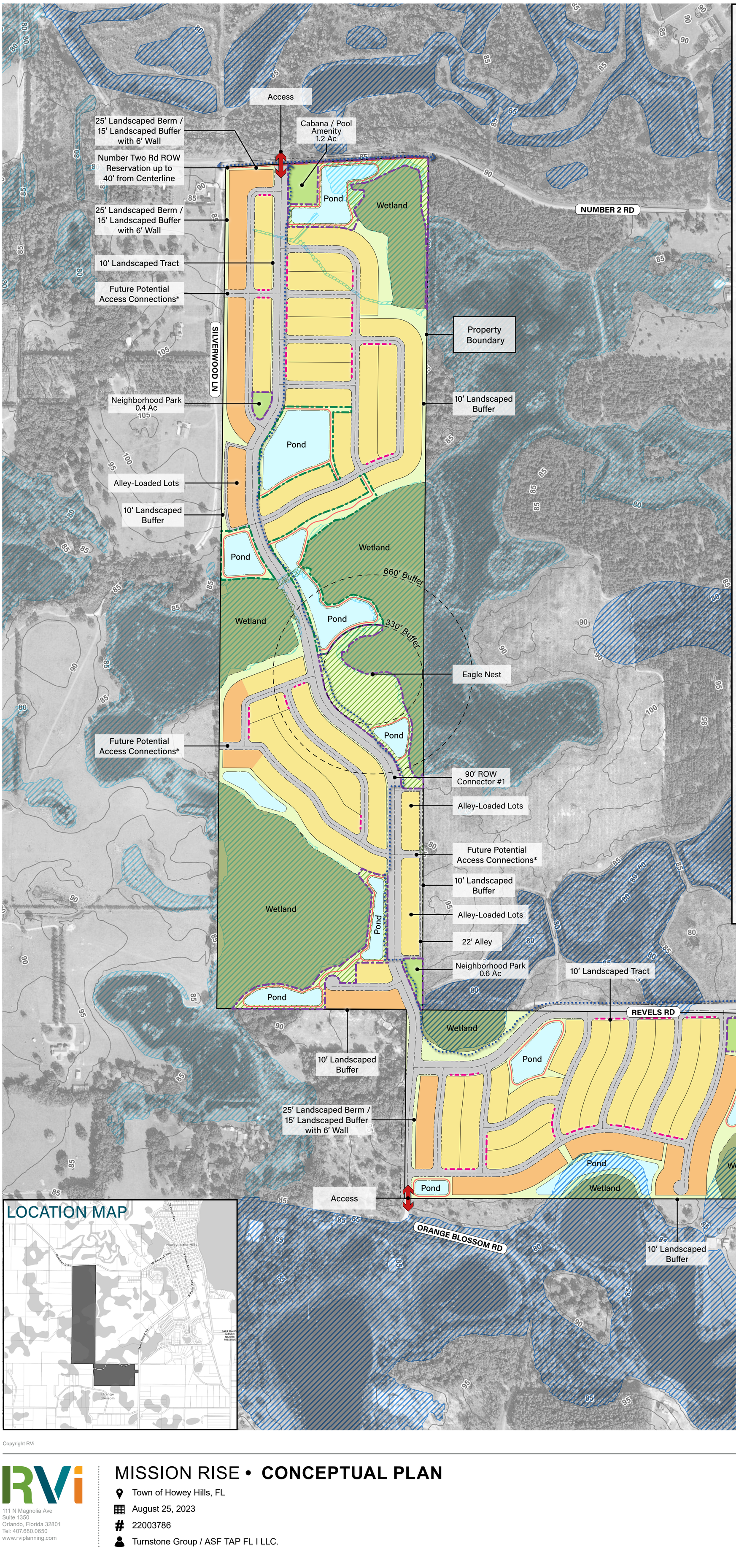


SINGLE LEFT TURN

MEDIAN TURN LANES								
			URBAN CONDITIONS			RURAL CONDITIONS		
Design Speed (mph)	Entry Speed (mph)	Clearance Distance L_1 (ft.)	Brake To Stop Distance L_2 (ft.)	Total Decel. Distance L (ft.)	Clearance Distance L_3 (ft.)	Brake To Stop Distance L_2 (ft.)	Total Decel. Distance L (ft.)	Clearance Distance L_3 (ft.)
35	25	70	75	145	110	——	——	——
40	30	80	75	155	120	——	——	——
45	35	85	100	185	135	——	——	——
50	40/44	105	135	240	160	185	290	160
55	48	125	——	——	——	225	350	195
60	52	145	——	——	——	260	405	230
65	55	170	——	——	——	290	460	270

NOT TO SCALE

EXHIBIT 212-1
01/01/2022



DEVELOPMENT SUMMARY

Total Property Acreage	**+/- 243.3 Ac**
Total Wetlands	**+/- 60.1 Ac**
Impacted Wetlands	+/- 0.3 Ac
Preserved Wetlands	+/- 59.8 Ac
Required Open Space (25%)	**+/- 60.8 Ac**
Additional Wetlands	**+/- 29.4 Ac**
Developable (Net Land Area)	**+/- 153.1 Ac**

Max. Number of Residential Units	**499 du**
Unit Type:	**Single Family - Detached**
Unit Sizes:	
55′ x 120′	
75′ x 120′	

OPEN SPACE ACREAGE [1]

Required (Min 25%)	**+/- 60.8 Ac**
Provided (26.8%)	**+/- 65.4 Ac**
Stormwater	+/- 19.1 Ac
Misc. Open Space	+/- 15.9 Ac
Wetlands[2]	+/- 30.4 Ac
Public Recreation[3]	**+/- 12.4 Ac**

NON-RESIDENTIAL ACREAGE

Required (Min 15%)	**+/- 23.0 Ac**
Provided (15.5%)	**+/- 23.8 Ac**
Civic (Required 5%)	+/- 1.3 Ac
Amenities[1]	+/- 3.5 Ac
Stormwater[1]	+/- 7.7 Ac
Regional Park System[1]	+/- 8.3 Ac
Regional Multimodal Trail[1]	+/- 3.0 Ac

RESIDENTIAL ACREAGE

Required (Max. 85%)	**+/- 130.0 Ac**
Provided (84.5%)	**+/- 129.3 Ac**

NOTES:

1. Stormwater, amenities, multimodal trail, and additional open space areas located in non-residential tracts are not included in required Open Space calculations.
2. Up to 50% of required Open Space can be from Preserved Wetland.
3. Min. 10% of usable Open Space has to be designated as Public Recreation.
4. The community will feature complimentary architectural styles including craftsman, bungalow, Florida cracker, low country, Florida vernacular, or similar.
5. Trees preservation will be in accordance with LDC 7.11.02 and 7.11.03

* Future Potential Access Connections will be provided subject to obtaining legal access from adjacent parcels.

LOCATION MAP

LEGEND

- Public Recreation Area
- Pedestrian Paths
- Non-Residential Area
- End-cap Parallel Parking
- Multimodal Trail
- ROW Reservation

FLOOD ZONE

- A
- AE

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MISSION RISE • **CONCEPTUAL PLAN**

- Town of Howey Hills, FL
- August 25, 2023
- # 22003786
- Turnstone Group / ASF TAP FL I LLC.

0 300′ 600′

SCALE: 1" = 300′

The plan is conceptual in nature. Final densities, layout, development parameters, calculations, and site conditions may change upon further development of the Preliminary and/or Master Site Plan, and upon evaluation of topographic survey, water management and existing historic and specimen trees to remain.

DEVELOPMENT SUMMARY

Total Property Acreage	**+/- 243.3 Ac**
Phase 1	+/- 69.1 Ac
Phase 2	+/- 97.6 Ac
Phase 3	+/- 76.6 Ac

PHASE DEVELOPMENT

	55′ Lots	75′ Lots	Total
Phase 1	150	41	170
Phase 2	100	13	112
Phase 3	166	29	193
Total	416	83	499

NOTES:

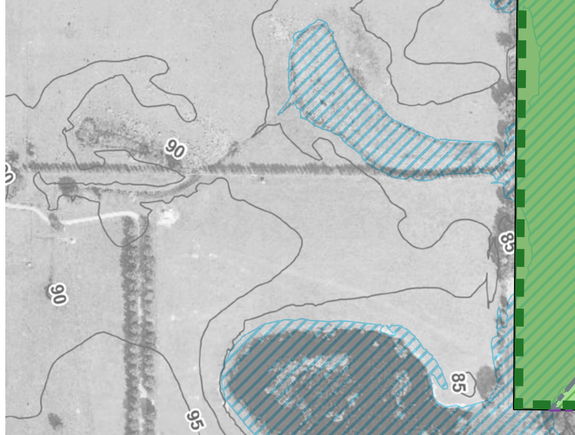
1. Specific number of units to be developed in each phase will be determined at Subdivision Plan stage, not to exceed 499 units in total for the project.

Phase 3

Phase 2

Phase 1

LOCATION MAP



LEGEND

- Public Recreation
- Pedestrian Paths
- Non-Residential
- End-cap Parallel Parking
- Multimodal Trail

FLOOD ZONE

- A
- AE

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MISSION RISE • **PHASING PLAN**

Town of Howey Hills, FL

August 25, 2023

22003786

Turnstone Group / ASF TAP FL I LLC.

0 300′ 600′

SCALE: 1" = 300'

The plan is conceptual in nature. Final densities, layout, development parameters, calculations, and site conditions may change upon further development of the Preliminary and/or Master Site Plan, and upon evaluation of topographic survey, water management and existing historic and specimen trees to remain.

PARKS & TRAILS PROGRAM

TRAIL HEAD SITE

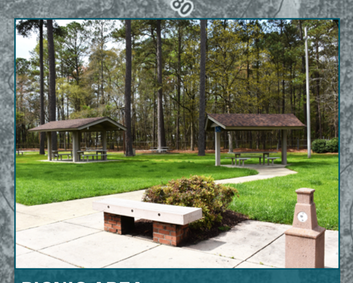
MULTIMODAL TRAIL

WETLAND ENGAGEMENT

BIKE MAINTENANCE STATION

COOLING STATION

WATER STATION



PICNIC AREA

GATHERING AREAS

Cabana / Pool Amenity

Regional Park with benches, picnic tables, cooling stations, bike maintenance stations, pet stations, exercise stations, flex fields and/or gathering areas.

NUMBER 2 RD

Pond

Wetland

Future Hillside Groves Multimodal Trail

SILVERWOOD LN

Neighborhood Park with benches, picnic tables, exercise stations, flex fields, gathering areas, tot lot, and/or dog park.

Pond

Pond

Wetland

Wetland

Pond

Pond

Regional Park with benches, picnic tables, cooling stations, bike maintenance stations, pet stations, exercise stations, flex fields and/or gathering areas.

Wetland

Pond

Pond

Neighborhood Park with benches, picnic tables, exercise stations, flex fields, gathering areas, tot lot, and/or dog park.

Wetland

REVELS RD

Pond

Pond

Trail Head Site

Cabana / Pool Amenity

Trail Head Site Access Road

Pond

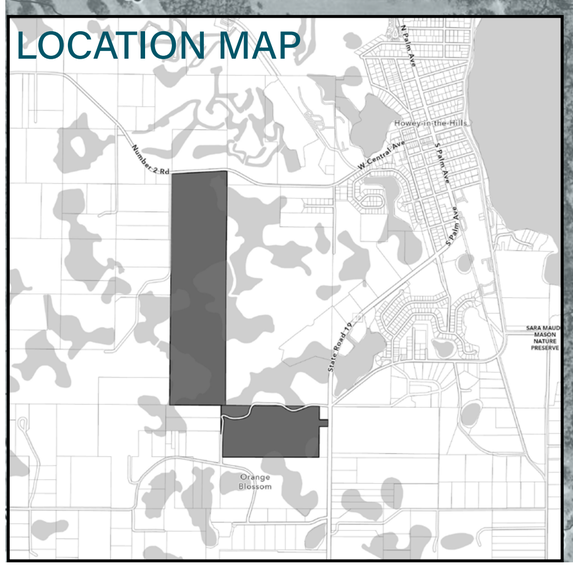
Wetland

Wetland

S PALM AVE

Regional Park with benches, picnic tables, cooling stations, bike maintenance stations, pet stations, exercise stations, flex fields and/or gathering areas.

LOCATION MAP



LEGEND

- Pedestrian Paths
- Multimodal Trail
- Trail Head Site (Civic)
- Amenity/Pocket Parks
- Regional Park System
- Stormwater
- Wetlands
- Mis. Open Space

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MISSION RISE • PARKS, TRAILS & OPEN SPACE PLAN

Town of Howey Hills, FL

August 25, 2023

22003786

Turnstone Group / ASF TAP FL I LLC.

0 300’ 600’

SCALE: 1” = 300’

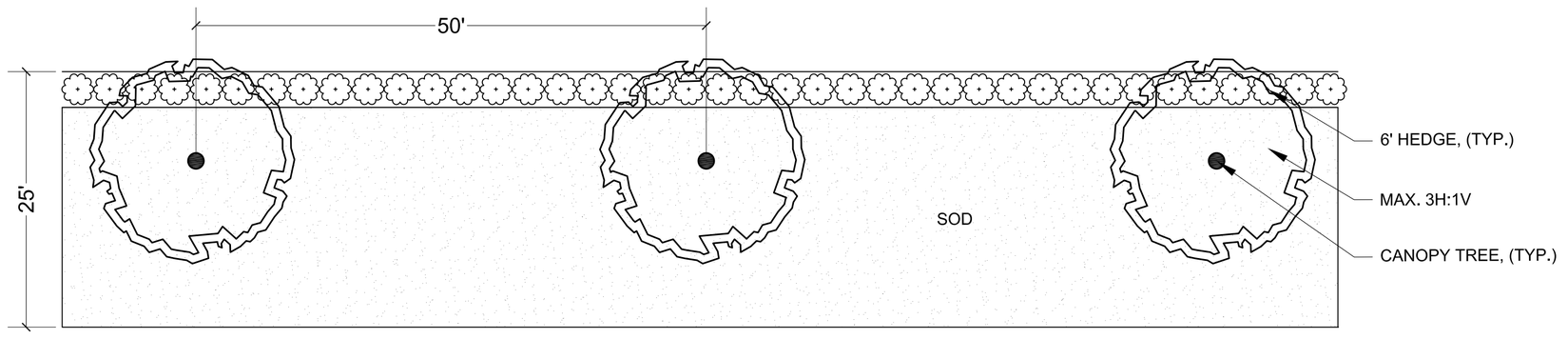
The plan is conceptual in nature. Final densities, layout, development parameters, calculations, and site conditions may change upon further development of the Preliminary and/or Master Site Plan, and upon evaluation of topographic survey, water management and existing historic and specimen trees to remain.

RESIDENTIAL BUFFERS

25’ LANDSCAPE BUFFER, TYPICAL

A landscaped berm with a total depth of at least 25 feet and no steeper than 3H:1V. The berm shall be at least three feet (3’) in height and the berm together with the landscaping, shall comprise a continuous screen of at least 5 and one half feet (5.5’) at time of planting and six feet (6’) within one year of planting. Canopy trees shall also be planted every 50 feet along the berm.

For single family subdivisions, these buffers shall be on common property and dedicated to the homeowners’ association for ownership and maintenance responsibilities.

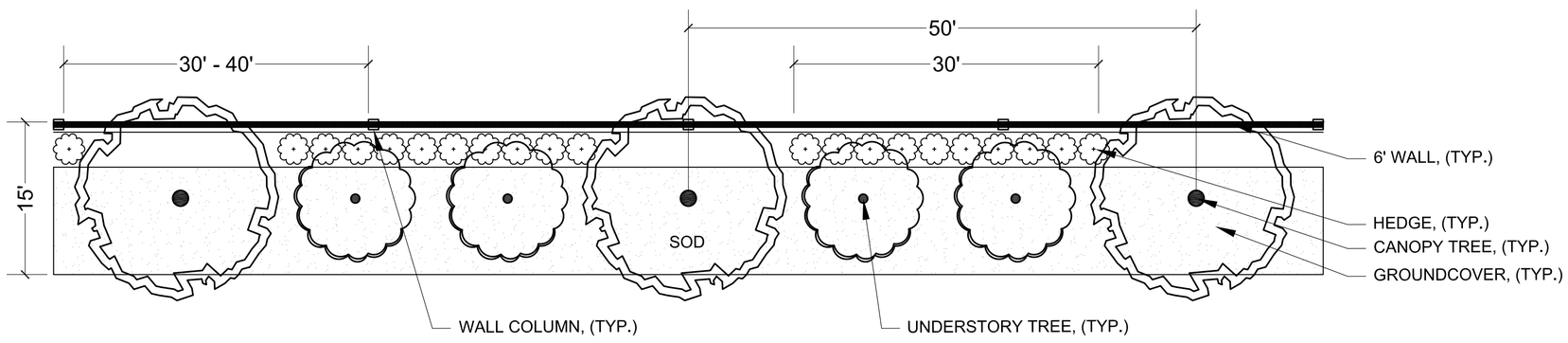


15’ LANDSCAPE BUFFER, TYPICAL

A landscaped wall buffer with a minimum depth of 15 feet. The wall shall maintain a height of six feet (6’) from grade on highest side and all walls shall have a decorative exterior (no exposed block). Acceptable materials for wall faces are brick, stucco or stone or a combination of those materials. Wall columns shall have a maximum spacing of thirty feet (30’) on walls up to two hundred feet (200’) in length and forty feet (40’) on walls more than two hundred feet (200’) in length. Wall columns may extend up to two feet (2’) above the height of the wall.

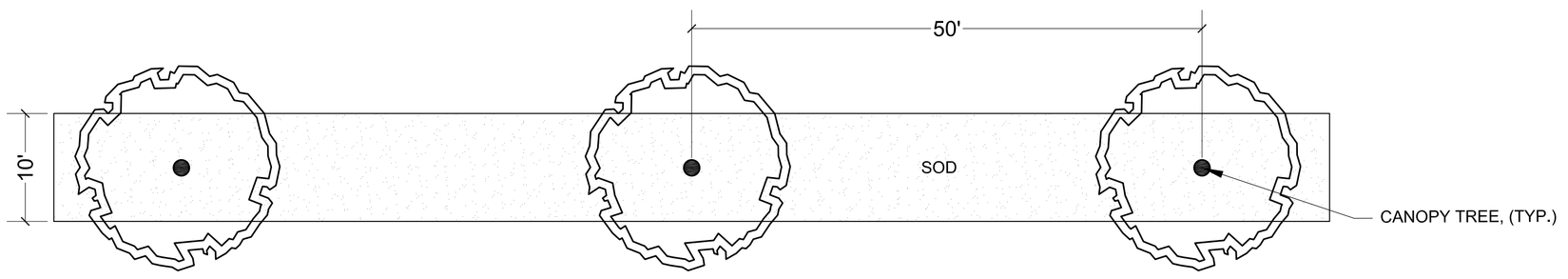
Within each fifty-foot (50’) increment along the wall, two (2) canopy trees, two (2) understory trees, and 30 linear feet of shrubs shall be planted. The trees shall not be closer than five feet (5’) to a walk or wall. The shrubs shall be at least 30” in height at time of planting.

For single family subdivisions, these buffers shall be on common property and dedicated to the homeowners’ association for ownership and maintenance responsibilities.



10’ LANDSCAPE BUFFER, TYPICAL

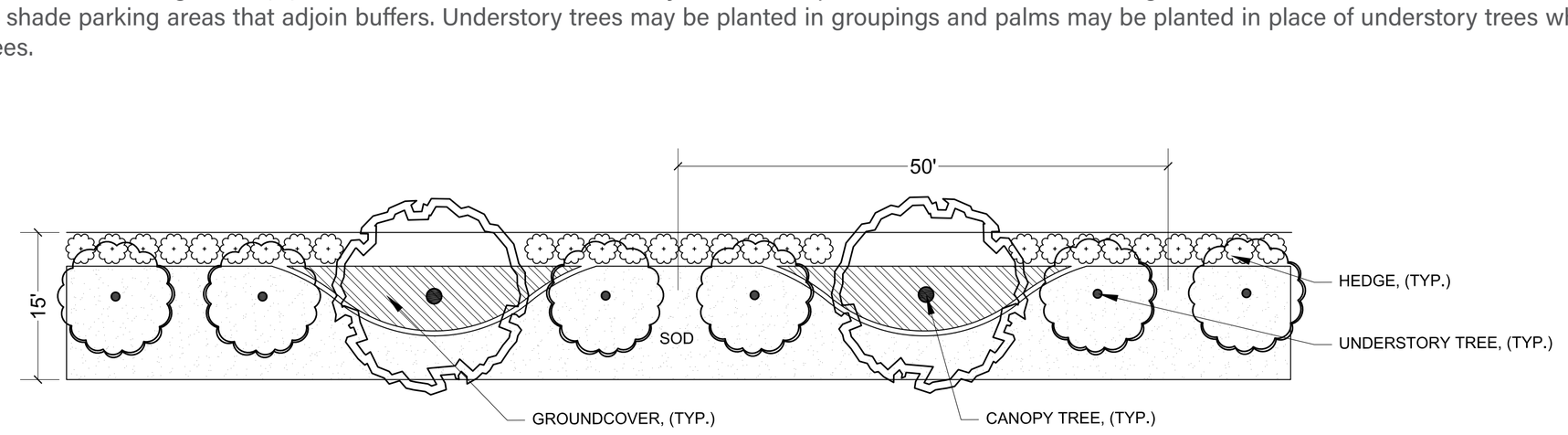
Ten-foot-wide (10’) landscaped buffer with trees spaced no more than 50 feet on center.



NON-RESIDENTIAL BUFFERS

15’ LANDSCAPE BUFFER, TYPICAL

The landscaped buffer shall contain at least one (1) canopy tree, two understory trees and 30 linear feet of shrubs and ground cover for each 50 linear feet of buffer. Canopy tress shall be located no less than five feet (5’) and no more than eight feet (8’) from sidewalks and other walkways in order to provide shade while minimizing conflicts between tree roots and sidewalks. Similarly, canopy trees shall be used to shade parking areas that adjoin buffers. Understory trees may be planted in groupings and palms may be planted in place of understory trees when clustered in groupings of three or more trees.



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MISSION RISE • **BUFFER TYPICALS**

Town of Howey Hills, FL

August 25, 2023

22003786

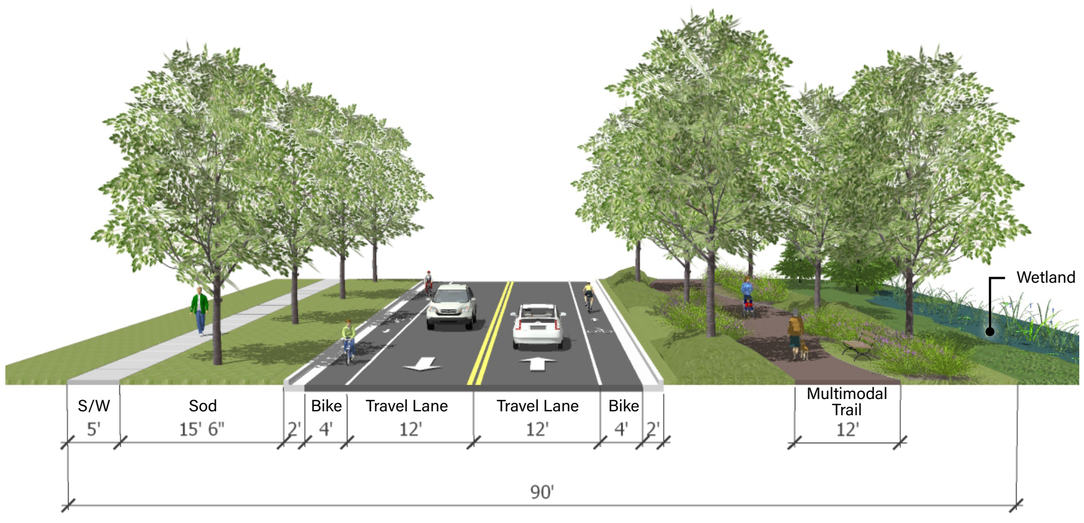
Turnstone Group / ASF TAP FL I LLC.

0 10’ 20’

SCALE: 1” = 10’

The plan is conceptual in nature. Final densities, layout, development parameters, calculations, and site conditions may change upon further development of the Preliminary and/or Master Site Plan, and upon evaluation of topographic survey, water management and existing historic and specimen trees to remain.

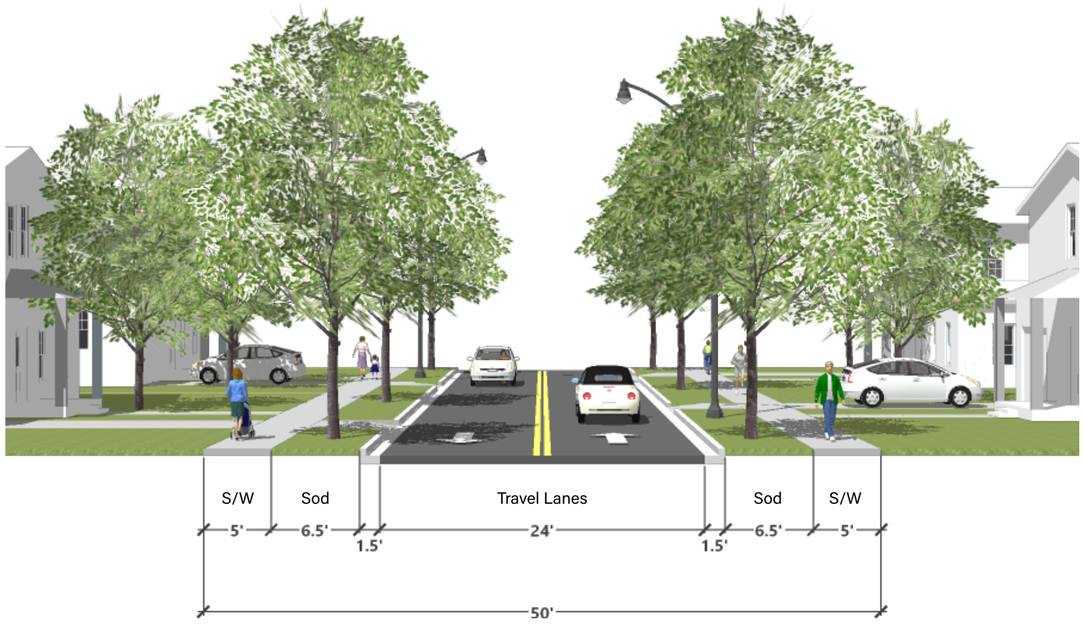
SPINE ROAD
90′ ROW WITH BIKE LANE & 12′ MULTIMODAL TRAIL



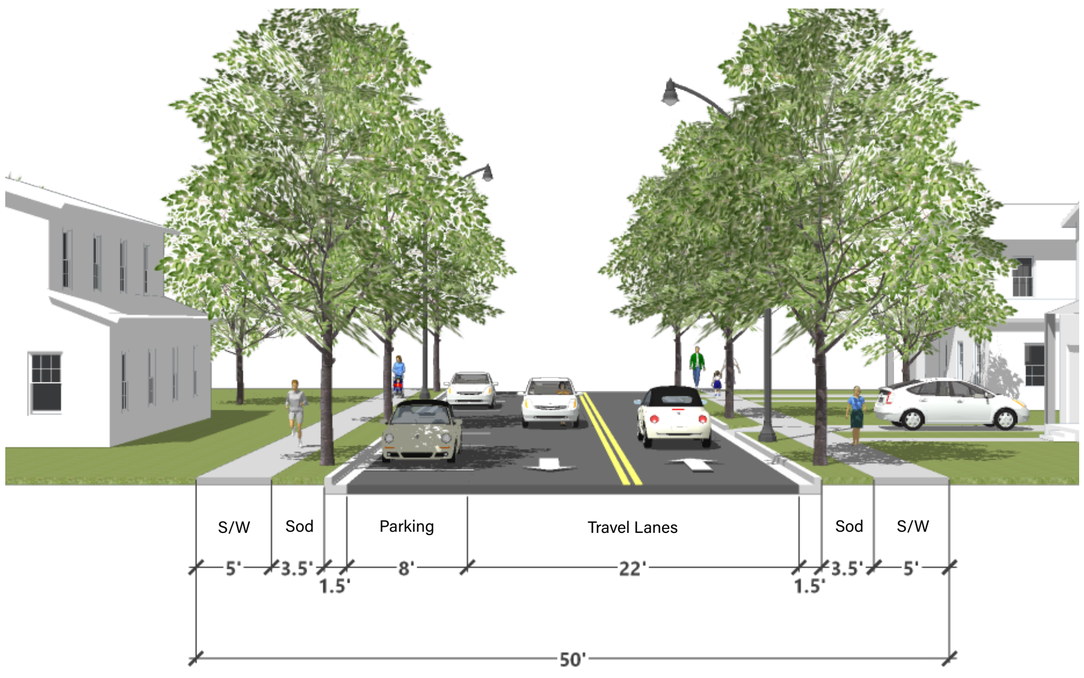
NOTE:

Multimodal Trail is intended to meander in and out of the proposed ROW. Final location may vary based on grading, utilities & final engineering.

NEIGHBORHOOD ROAD
OPTION 1 - 50′ ROW

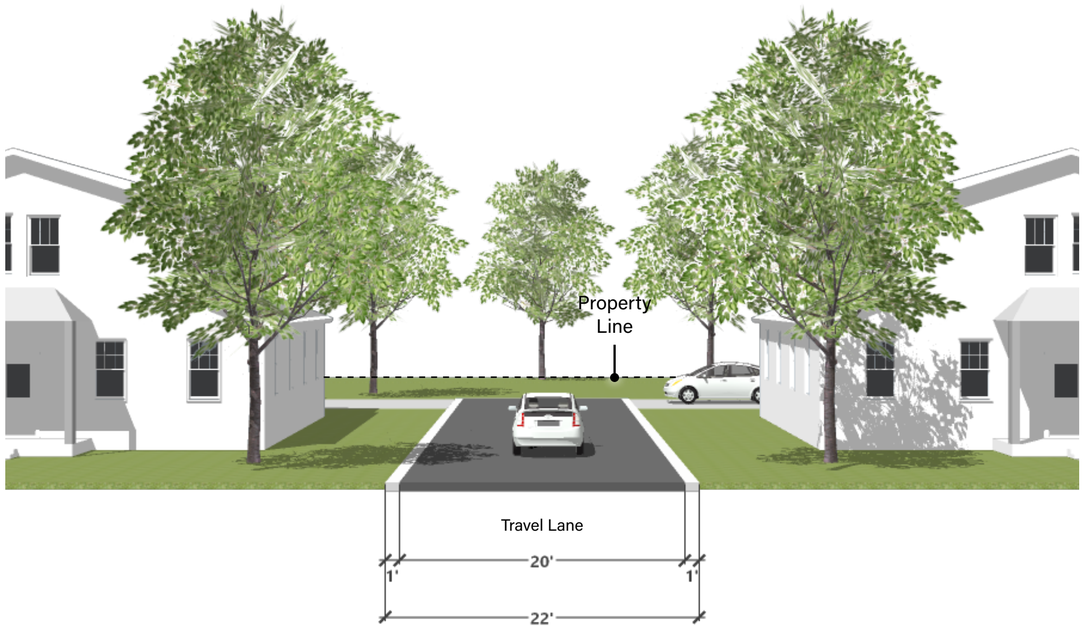


OPTION 2 - 50′ ROW WITH PARKING ON ONE SIDE

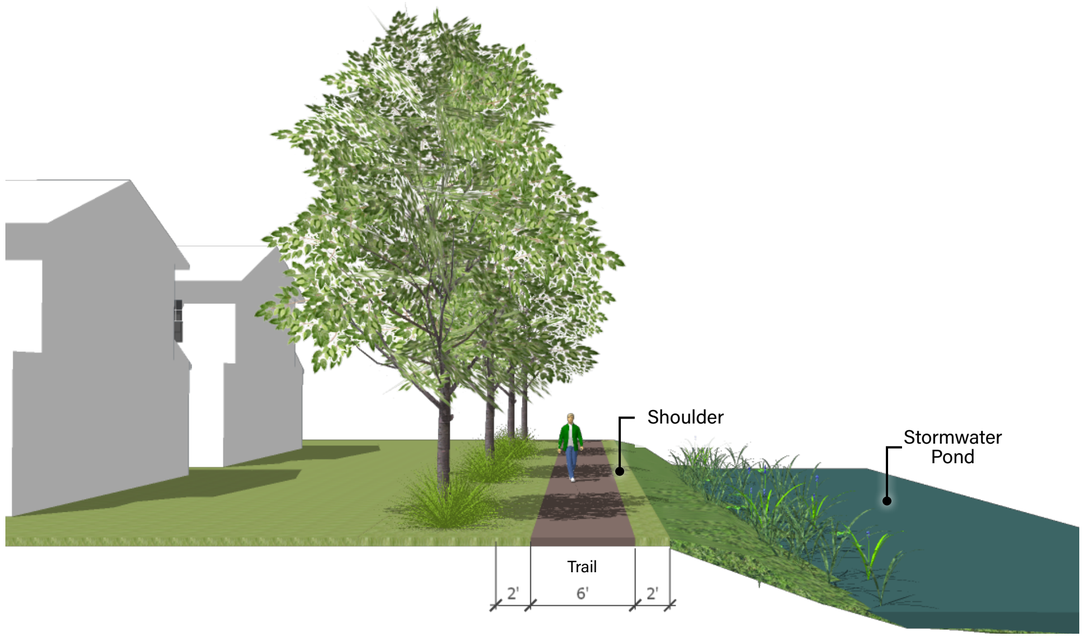


ALLEY ROAD
OPTION 1 - PARALLEL 22′ ROW

OPTION 2 - PAIRED 22′ ROW



PEDESTRIAN PATH
6′ TRAIL



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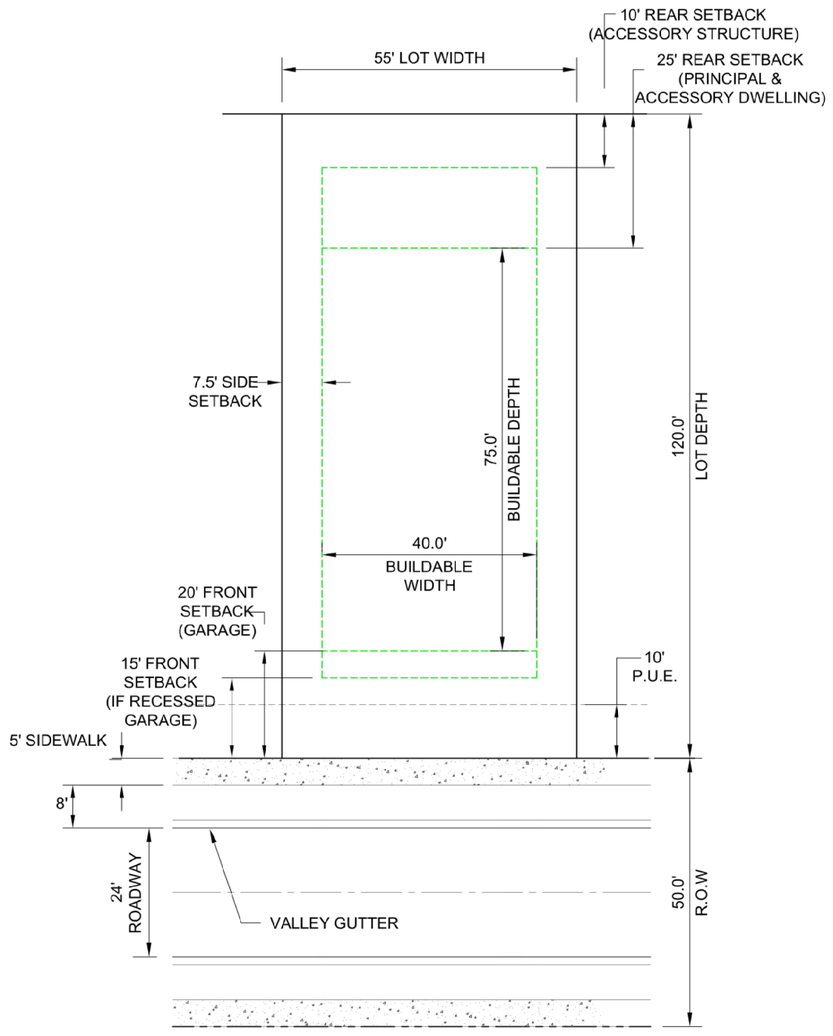
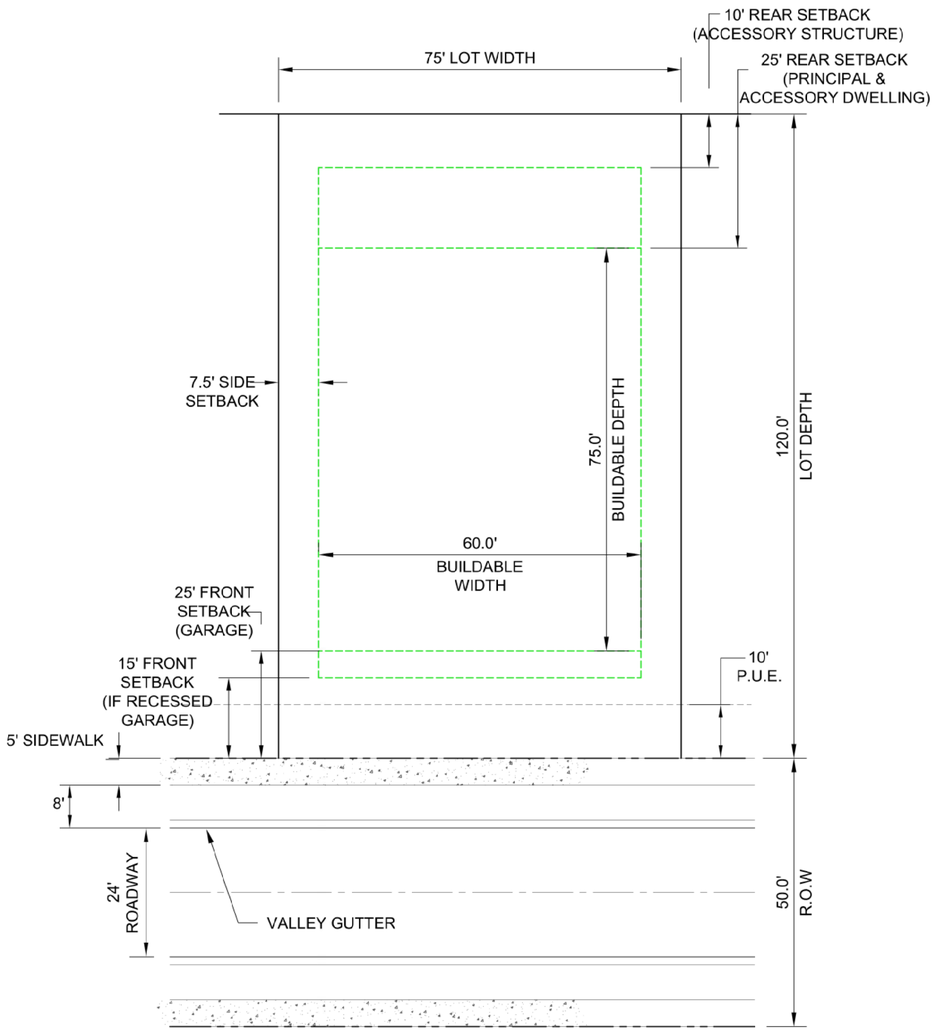
MISSION RISE • **STREET CROSS SECTIONS**

Town of Howey Hills, FL
August 25, 2023
22003786
Turnstone Group / ASF TAP FL I LLC.

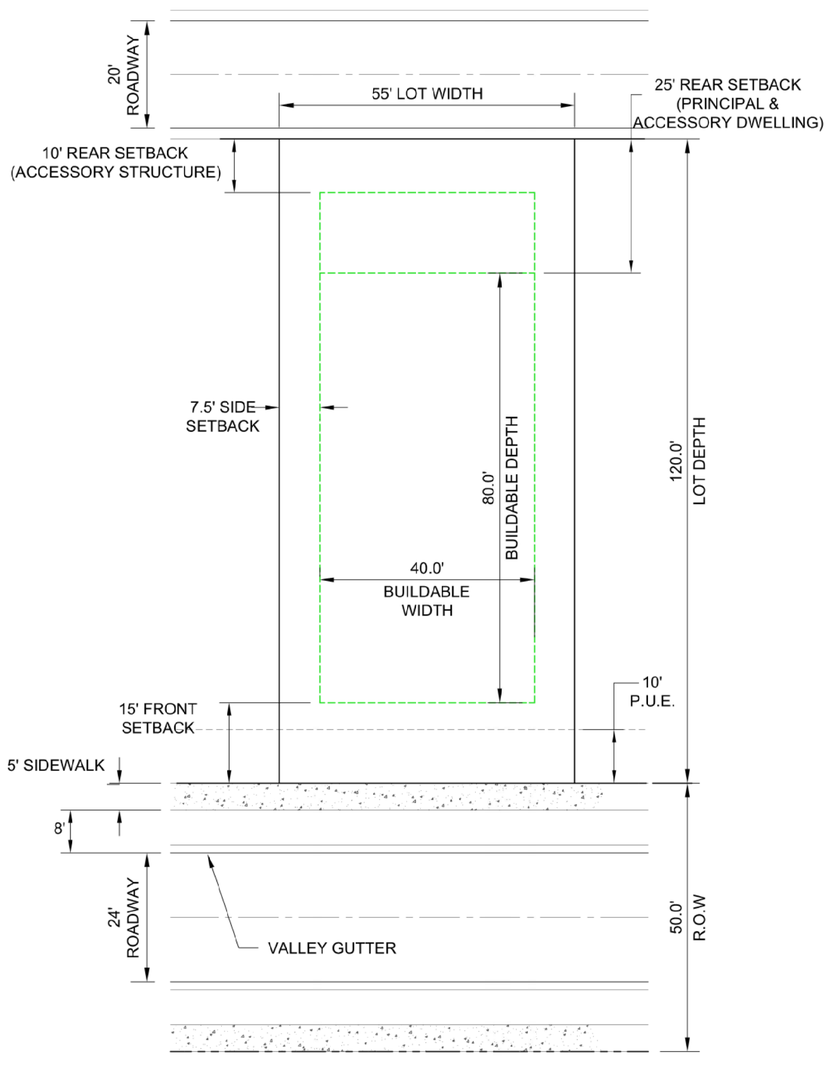
55′ LOT
FRONT LOAD GARAGE



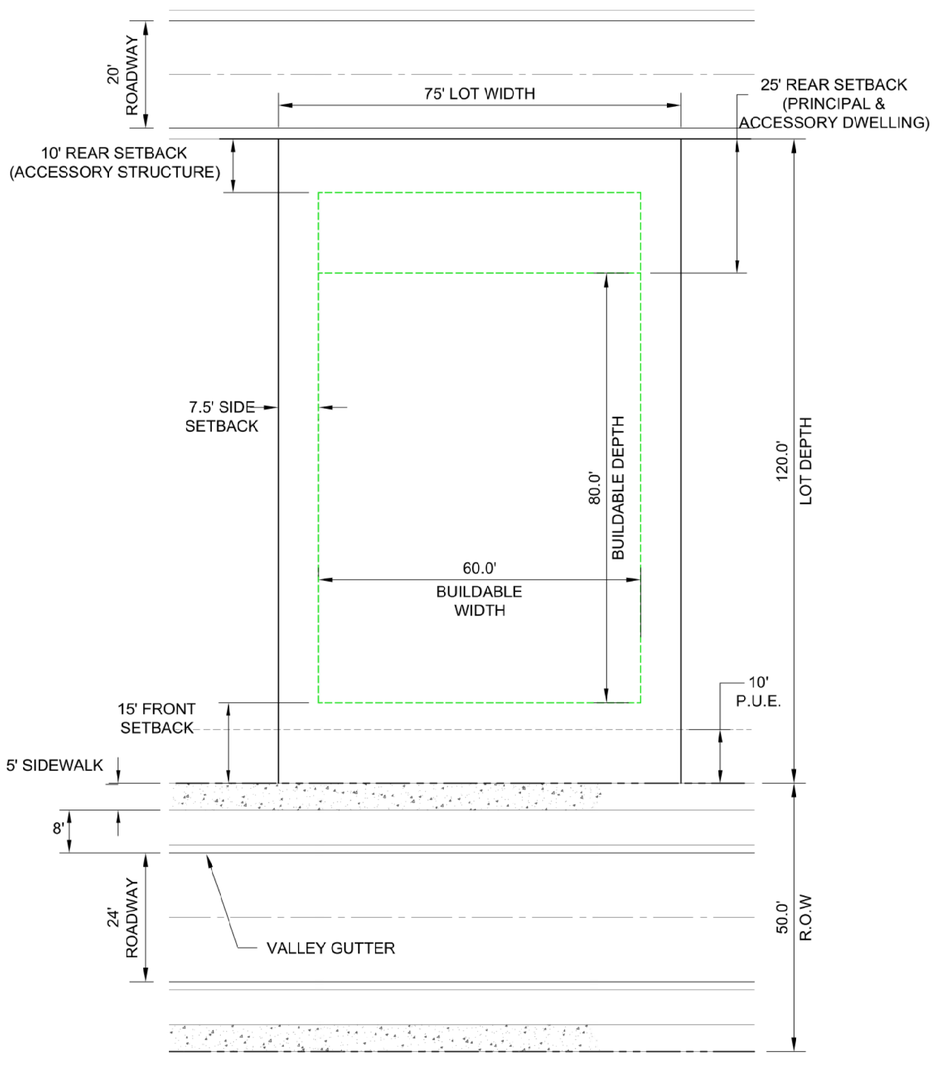
75′ LOT
FRONT LOAD GARAGE



55′ LOT
REAR LOAD GARAGE



75′ LOT
REAR LOAD GARAGE



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MISSION RISE • **LOT FIT**

Town of Howey Hills, FL

August 25, 2023

22003786

Turnstone Group / ASF TAP FL I LLC.

0 20' 40'

SCALE: 1" = 20'

The plan is conceptual in nature. Final densities, layout, development parameters, calculations, and site conditions may change upon further development of the Preliminary and/or Master Site Plan, and upon evaluation of topographic survey, water management and existing historic and specimen trees to remain.

August 25, 2023

Thomas A. Harowski, AICP
Town of Howey-in-the-Hills
101 N. Palm Ave., P.O. Box128,
Howey-In-The-Hills, Florida 34737

RE: Mission Rise PUD

Dear: Mr. Harowski

Enclosed please find responses to Staff's comments below in bold. The following items are resubmitted in response to Staff''s comments:

1. Conceptual Land Use Plan
2. Developer's Agreement
3. Traffic Impact Analysis (to be provided 8/29)

VILLAGE MIXED USE CRITERIA:

The Village Mixed Use classification has a set of specific criteria the development must meet. These are set out in Policy 1.1.1 and Policy 1.1.2 of the Future Land Use Element. Policy 1.1.4 includes essential information on open space and density calculation and Policy 1.2.2 sets out the minimum open space requirements. The criteria for VMU are reviewed below:

1. Residential development can occupy a maximum of 85% of the net land area of the project. (Net land area is the total land area of the project less wetlands and waterbodies. In this case the net land area is reported as approximately 153 acres.) The maximum allowable land area to be devoted to residential development is 130 acres. The submittal states that the project allocates 129 acres to residential use.

   RESPONSE: Acknowledged.

2. Non-residential development must occupy 15% of the net land area but not more than 30% of the net land area. In previous development plans for the subject property, it was accepted that the property does not have reasonable commercial development potential, but other options for non-residential use are available. For example, a church site could be proposed. In one previous submittal the Town agreed to allow the allow the land area devoted to a regional bicycle facility to count towards the non-residential component, and the current submittal appears to be offering that option again.

   In this case the proposed regional bicycle trail is located within the central collector road right-of-way and is not specifically an allocated land use. The project requires 23 acres of non-residential use. The applicant claims to meet this requirement by providing a civic use site (1.2 acres), community amenities (3.6 acres), a regional park (8.3 acres), and stormwater ponds (7.7 acres). More definition is needed to determine whether the regional

park is a qualified use. Most of the park area falls within the eagle nest buffer area, and no information has been provided about proposed recreation and park uses. The stormwater pond allocation also needs to be further reviewed to determine if it qualifies as a non-residential use. If the use supports residential development, then it should be counted as residential land.

RESPONSE: As demonstrated on Sheet 1 of the Conceptual Land Use Plan, a total of 23.8 AC (15.5%) of net land area will be dedicated towards non-residential uses. Please see Sheet 3 of the Conceptual Land Use Plan, where additional detail on the proposed regional multiuse trail and park system has been provided. The multiuse trail has been revised to meander outside of the Collector Road ROW. Further, the previously designated 1.2 AC Civic Site is proposed to be developed as a trail head to act as an anchor for the multiuse trail system. Any stormwater ponds included in park areas are not included in the overall open space calculation.

3. A minimum of 5.0% of the non-residential land area of the project needs to be devoted to public/civic buildings. (1.14 acres required.) Again, this could be a church site, or it could be community center buildings or similar buildings open to the public and devoted to civic activities. The concept plan proposes a civic use site along the SR 19 frontage. The specific use is not declared, and the site is not integrated into the overall project design.

   RESPONSE: The 1.2 AC Civic Site will be developed as a trail head to support the multiuse trail system included within the project.

4. Public recreation area is required at a minimum of 10% of the usable open space. (Open space that is not wetland or waterbodies). This requirement is calculated at a minimum of 3.0 acres. Two neighborhood parks totaling one acre have been identified and the proposed regional park is identified at 8.3 acres.

   RESPONSE: Acknowledged.

5. Total open space is required to be a minimum of 25% of the project area. Wetland areas may account for only half of this requirement. Required open space is calculated on the gross project area or 60.8 acres in this case. Total open space is reported as 65.4 acres or 27% of the project area. Stormwater ponds can only count toward the open space requirement if they are designed as natural pond areas and supported with trails. The proposal does show walking trails located with pond areas.

   RESPONSE: Acknowledged.

PUD/DEVELOPMENT AGREEMENT:

1. The applicant has provided a draft development agreement along with the updated concept plan. Section 4.10.09 of the land development code lists the minimum items that need to be included in the conceptual plan package. A review of this code section notes the following deficiencies:

   - 4.10.09 A. The developer's name was not shown on the concept plan document.
   - 4.10.09 N. The number of units by type and lot size for the project and each phase were not shown

RESPONSE: The property owner, ASF TAP FL I LLC is the current applicant/developer. A home builder has not yet been selected for this project. This is noted on Sheets 1-6 of the Conceptual Land Use Plan.

Please see Sheet 2 for a tabulation of the proposed number of units by lot size for each phase of the proposed PUD. Please note that the proposed phasing and allocation of units by phase is approximated, and subject to change during the subdivision plan stage. A note to this effect has been added to Sheet 2 of the Conceptual Land Use Plan.

TRAFFIC IMPACT ASSESSMENT:

1. The Town has approved a methodology for the traffic study and is awaiting the report. In addition to the standard traffic analysis, the study should take note and comment on Number 2 Road. The road is substandard in width and to the extent that this affects the road capacity this should be noted and included in the traffic study. Note also that Number 2 Road is prescriptive right-of-way for most of its length, and this may affect any study recommendations regarding widening.

   RESPONSE: The Traffic Impact Analysis based on the approved methodology has been included in the application materials. This study assigns Number 2 Road as having a reduced volume due to it being a substandard facility.

ENVIRONMENTAL CONSIDERATIONS

1. In reviewing the proposed plan, the Town will need to consider whether the full clear zone around the eagle's nest should be preserved rather than allowing residential development within the 660-foot area. The application states that the buffer areas are in accord with federal guidelines. For any proposed development within the 660-foot area documentation should be provided to demonstrate compliance with the guidelines.

   As noted previously, the proposed regional park needs to be further detailed with regard to planned improvements and how these improvements comply with federal eagle nest protections.

   As an alternative, staff suggests excluding development from the central area around the wetlands core. While few homes are proposed for this area, the plan shows excavating upland areas for stormwater retention. These are some of the most heavily treed areas on the site and should not be removed to support a function that can easily be located elsewhere on the site. The development in this area should be limited to the collector road crossing. A sketch of the subject area has been attached. A tree survey will be required for each phase of the project as it is presented for preliminary subdivision approval. Trees within areas designated for preservation will not need to be surveyed or considered for replacement under the Town's tree protection requirements.

   RESPONSE: The development proposed within the 330' and 660' buffers around the eagle's nest are permissible under relevant State and Federal guidelines.

   At this stage, a detailed tree survey has not been completed for the subject property. The PUD will comply with all requirements of the LDC regarding tree

protection. A note to this effect has been added to the Conceptual Land Use Plan, please refer to Sheet 1.

CONCEPT PLAN COMMENTS

1. Actual lot sizes are a policy decision for the Planning Board and Town Council to approve. Please note that the Town has not been approving lot widths below 75 feet across recent project submittals, and at least some members of Council will have difficulty with 75-foot wide lots.

   RESPONSE: Acknowledged. In response to feedback received at the neighborhood workshop, conducted on August 3, 2023, additional tracts of 75-foot-wide lots have been included in the plan.

2. The plan could take better advantage of the terrain by locating the multi-use trail outside of the collector road right-of-way when possible. This placement will open ROW the door for consideration of the trail as a component of the non-residential area requirement.

   RESPONSE: The multiuse trail design has been updated to locate the trail outside of the Collector Road ROW.

3. Lake County will require additional right-of-way for Number Two Road and will be the permitting agency for the intersection and other external road improvements.

   RESPONSE: Acknowledged. The Applicant is in coordination with Lake County regarding Number Two Road. ROW dedication for Number Two Road has been demonstrated on the Conceptual Land Use Plan. Per Lake County's Public Works Department, Number Two Road is planned as an 80' ROW.

4. Access points for vehicular use are appropriately located, with the following notes
   - Revels Road will need to be improved from the project boundary to the intersection with Orange Blossom Road.
   - The connection with Hilltop Groves will need to be coordinated with the Hilltop Groves development plan to ensure the connection is in the proper location. The Town is currently reviewing a final subdivision plan which will specifically locate the connector road.
   - The Revels Road connection at SR 19 will need to be coordinated with the Hilltop Grove development plan

   RESPONSE: Acknowledged. Any roadway improvements will be provided by the Developer as required by the detailed traffic study.

5. The design of the major collector needs to plan for a median and turn lanes at intersections. The two cross-section provided do not include a landscaped median area. Where properties have direct access from the collector road, periodic openings can be provided

   RESPONSE: As discussed at the DRC meeting on August 10, 2023, the Collector Road cross-section is proposed without a median, but will include 4' bike lanes as well as a 12' multi-use trail.

6. Where a lot must access from the central collector road, the lot sizes need to be larger than 55-foot wide to minimize the number of driveways in this segment.

   RESPONSE: No lots are proposed to have direct access from the Collector Road.

7. The on-street parking proposal needs to be reviewed with regard to placement of the parking. Based on the cross-sections the road width could vary from block to block which might be confusing.

   RESPONSE: Acknowledged. The proposed roadway sections are consistent with the details provided in Table 8.02.02 of the LDC.

8. Where 55-foot lots are proposed, access should be from an alley to avoid a continuous garage-scape street view. Paired one-way alleys may be workable.

   RESPONSE: Any 55-foot-wide lots along the Collector Road have been designed with alley access to prevent a garage-scape street view.

9. Is there any intent to consider housing options such as assisted living or nursing home? Providing a potential site for these types of uses might be another way of meeting the non-residential land area requirement.

   RESPONSE: The multiuse trail and park system is proposed to meet the project's non-residential land area requirement. Please see Sheet 3 of the Conceptual Land Use Plan for further detail.

10. The parcel has an opportunity to create a significant park area in the open space adjacent to Wetland Area 1 and link with bicycle and pedestrian trails.

    RESPONSE: Acknowledged. Further detail on the multiuse trail and park system has been provided on Sheet 3.

11. Each neighborhood area should contain some type of appropriate park facility. Why does phase 2 and phase 3 have a neighborhood park but none is proposed in phase 1? Why do phases one and three have an amenity center while phase 2 does not?

    RESPONSE: While the project is constructed in phases, it is expected that park and amenities will be shared across the project.

12. The civic use parcel needs to be fully integrated into the project design. As shown there is no internal access to the parcel, and there is no assurance that access can be provided from SR 19.

    RESPONSE: Vehicular access from Revels Road to the Civic Site (trail head) has been demonstrated on the Conceptual Land Use Plan, Sheet 3.

13. The plan appears to show wetland impacts in the northern section along what looks to be a ditch line. Is this in fact wetland area?

    RESPONSE: No, it is areas within Flood Zone A.

14. There also appears to be a wetland impact on the parcel proposed for the Phase 1 amenity center. If this is in fact a wetland impact, it needs to be preserved as it cannot be filled to create building sites.

    RESPONSE: Acknowledged. The impacted wetland in the Phase 1 amenity center is a surface water (cow pond). The Conceptual Land Use plan has been revised to exclude this surface water.

DEVELOPMENT AGREEMENT COMMENTS

1. Page 3 of the agreement proposes a minimum street frontage of 20 feet. The code requires a minimum of 30 feet for lots on cul-de-sacs and curves to ensure that adequate area is available for driveway connections. The lots must meet the minimum lot width at the building line. Staff sees no reason to vary from the code minimum standard.

   RESPONSE: Please see the revised Development Agreement where the minimum street frontage has been updated to 30 feet.

2. Page 3 proposes maximum lot coverage of 80%. A calculation of actual lot coverage based on the proposed lot areas and setbacks estimates the lot coverage for 55 x 120 lots at 51% and for the 75 x 120 lots at 53%. There should be no need to allow lot coverages in excess of 60%.

   RESPONSE: Maximum lot coverage has been decreased to 60%.

3. Page 3 refers to rear setbacks as shown on the conceptual use plan. Rear building setbacks need to be a minimum of 25 feet to allow adequate room for swimming pools and pool decks when the Town's 10-foot setback for swimming pool is applied.

   RESPONSE: Rear setbacks have been revised as requested for a principal structure setback of 25' and accessory structure setback of 10'.

4. The paragraph on wastewater service on page 4 should be modified to allow for other treatment options than exclusively negotiating with the CDD. Current Town policy supports other options.

   RESPONSE: Please see the revised Development Agreement.

5. The paragraph on the option for the Town to commit to oversizing utility lines needs to allow more time. There is no reason to artificially terminate this option within three months of approval of the agreement. The deadline for the Town to seek oversizing lines should be tied to the final subdivision approval for each phase of the project. Allowing oversizing of lines at this point allows for more time for the Town to adequately assess overall service needs while still allowing for the adjustment of engineering design to support increased pipe sizing.

   RESPONSE: Please see the revised Development Agreement.

6. With regard to reclaimed water service, the agreement needs to state that potable water will not be used for irrigation.

RESPONSE: Please see the revised Development Agreement.

7. The reference on page 5 to connection of the project street network with adjacent property needs to state, “shall be provided”. The Town will provide for coordination of the location of interconnections of the street network.

   RESPONSE: Please see the revised Development Agreement.

8. The development agreement language in Section 2 page 7 needs to be amended to include standards regarding what constitutes a major amendment. Major amendments would include changes to the conceptual street layout, changes in lot types and sizes, changes in land uses or changes in the allocation of land uses within the project.

   RESPONSE: Please see the revised Development Agreement.

ENGINEERING REVIEW COMMENTS

1. Provide a traffic impact analysis for review.

   RESPONSE: The Traffic Impact Analysis based on the approved methodology has been included in the application materials.

2. The main N-S spine road and realigned Revels Road should be designed using Option1, not Option 2. They should not have driveway connections or on-street parking. They should have full pedestrian accommodation including the multi-use trail and raised crosswalks/speed tables at key points along its length connecting the trail and sidewalks to amenity, open space, and park areas.

   RESPONSE: Acknowledged, the revised Conceptual Land Use Plan proposes Option 1 for the Collector Roadway design. This has further been updated to increase the width of the multiuse trail to 12’.

3. The neighborhood roads should meet the town’s current road standard..

   RESPONSE: The proposed roadway sections are consistent with the details provided in Table 8.02.02 of the LDC.

4. For the sections of neighborhood roads with end-cap parallel parking, a wider right-of-way should be provided to accommodate the additional pavement..

   RESPONSE: The proposed roadway sections are consistent with the details provided in Table 8.02.02 of the LDC.

DEVELOPMENT AGREEMENT

1. Section 1. (f) Wetlands: Wetland impacts and buffering shall also be subject to the Town’s land development regulations as well as the St Johns River Water Management District.

   RESPONSE: Please see the revised Development Agreement.

2. Section 1. (j) Transportation, Streets and Sidewalks: Revels Road and the Spine Road must have a minimum 90-foot right-of-way, 2' curb and gutter, and a minimum 32-foot-wide pavement with 12-foot travel lanes and 4' curb lanes.

   RESPONSE: Please see the revised Development Agreement.

Thank you in advance for your consideration of the above information. If you require further information, please do not hesitate to contact me at 607.216.2390 or rlopes@rviplanning.com

Sincerely,

RVi Planning + Landscape Architecture

Rhea Lopes, AICP
Project Manager

Enclosures

cc: Alexis Crespo, RVi Planning + Landscape Architecture
Jason Humm, ASF TAP FL I LLC
Jonathan Huels. Lowndes Law Group

.

DEVELOPMENT SUMMARY

Total Property Acreage	**+/- 243.3 Ac**
Total Wetlands	**+/- 60.1 Ac**
Impacted Wetlands	+/- 0.3 Ac
Preserved Wetlands	+/- 59.8 Ac
Required Open Space (25%)	**+/- 60.8 Ac**
Additional Wetlands	**+/- 29.4 Ac**
Developable (Net Land Area)	**+/- 153.1 Ac**

Max. Number of Residential Units	**499 du**
Unit Type:	**Single Family - Detached**
Unit Sizes:	
55′ x 120′	
75′ x 120′	

OPEN SPACE ACREAGE [1]

Required (Min 25%)	**+/- 60.8 Ac**
Provided (26.8%)	**+/- 65.4 Ac**
Stormwater	+/- 19.1 Ac
Misc. Open Space	+/- 15.9 Ac
Wetlands[2]	+/- 30.4 Ac
Public Recreation[3]	**+/- 12.4 Ac**

NON-RESIDENTIAL ACREAGE

Required (Min 15%)	**+/- 23.0 Ac**
Provided (15.5%)	**+/- 23.8 Ac**
Civic (Required 5%)	+/- 1.3 Ac
Amenities[1]	+/- 3.5 Ac
Stormwater[1]	+/- 7.7 Ac
Regional Park System[1]	+/- 8.3 Ac
Regional Multimodal Trail[1]	+/- 3.0 Ac

RESIDENTIAL ACREAGE

Required (Max. 85%)	**+/- 130.0 Ac**
Provided (84.5%)	**+/- 129.3 Ac**

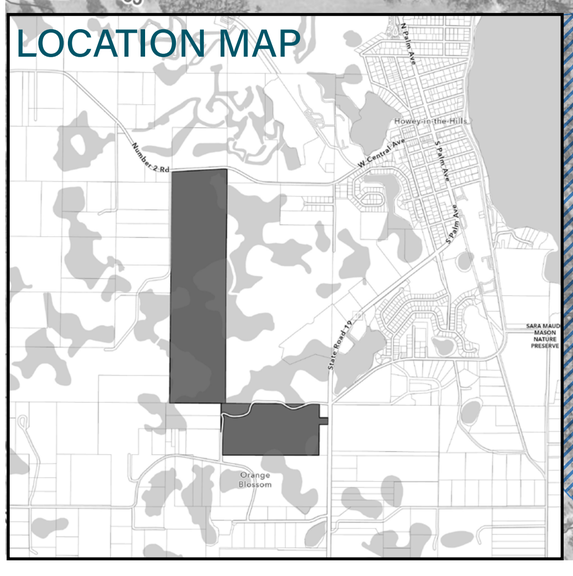
NOTES:

1. Stormwater, amenities, multimodal trail, and additional open space areas located in non-residential tracts are not included in required Open Space calculations.
2. Up to 50% of required Open Space can be from Preserved Wetland.
3. Min. 10% of usable Open Space has to be designated as Public Recreation.
4. The community will feature complimentary architectural styles including craftsman, bungalow, Florida cracker, low country, Florida vernacular, or similar.
5. Trees preservation will be in accordance with LDC 7.11.02 and 7.11.03

* Future Potential Access Connections will be provided subject to obtaining legal access from adjacent parcels.

Access
Cabana / Pool Amenity 1.2 Ac
25′ Landscaped Berm / 15′ Landscaped Buffer with 6′ Wall
Number Two Rd ROW Reservation up to 40′ from Centerline
25′ Landscaped Berm / 15′ Landscaped Buffer with 6′ Wall
10′ Landscaped Tract
Future Potential Access Connections*
Pond
Wetland
NUMBER 2 RD
SILVERWOOD LN
Property Boundary
Neighborhood Park 0.4 Ac
10′ Landscaped Buffer
Pond
Alley-Loaded Lots
10′ Landscaped Buffer
Wetland
Pond
660′ Buffer
Wetland
Pond
330′ Buffer
Eagle Nest
Future Potential Access Connections*
Pond
90′ ROW Connector #1
Alley-Loaded Lots
Future Potential Access Connections*
10′ Landscaped Buffer
Alley-Loaded Lots
22′ Alley
Wetland
Pond
Neighborhood Park 0.6 Ac
10′ Landscaped Tract
Access
Pond
REVELS RD
Wetland
Cabana / Pool Amenity 1.4 Ac
Trail Head Site Access Road
Trail Head Site 1.3 Ac
15′ Landscaped Non-Residential Buffer
10′ Landscaped Buffer
25′ Landscaped Berm / 15′ Landscaped Buffer with 6′ Wall
Pond
Pond
Wetland
Pond
Wetland
S PALM AVE
Access
ORANGE BLOSSOM RD
10′ Landscaped Buffer

LOCATION MAP



LEGEND

- Public Recreation Area
- Pedestrian Paths
- Non-Residential Area
- End-cap Parallel Parking
- Multimodal Trail
- ROW Reservation

FLOOD ZONE

- A
- AE

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111 N Magnolia Ave
Suite 1350
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Tel: 407.680.0650
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MISSION RISE • **CONCEPTUAL PLAN**

Town of Howey Hills, FL
August 25, 2023
22003786
Turnstone Group / ASF TAP FL I LLC.

0 300′ 600′
SCALE: 1″ = 300′

The plan is conceptual in nature. Final densities, layout, development parameters, calculations, and site conditions may change upon further development of the Preliminary and/or Master Site Plan, and upon evaluation of topographic survey, water management and existing historic and specimen trees to remain.

DEVELOPMENT SUMMARY

Total Property Acreage	**+/- 243.3 Ac**
Phase 1	+/- 69.1 Ac
Phase 2	+/- 97.6 Ac
Phase 3	+/- 76.6 Ac

PHASE DEVELOPMENT

	55′ Lots	75′ Lots	Total
Phase 1	150	41	170
Phase 2	100	13	112
Phase 3	166	29	193
Total	416	83	499

NOTES:

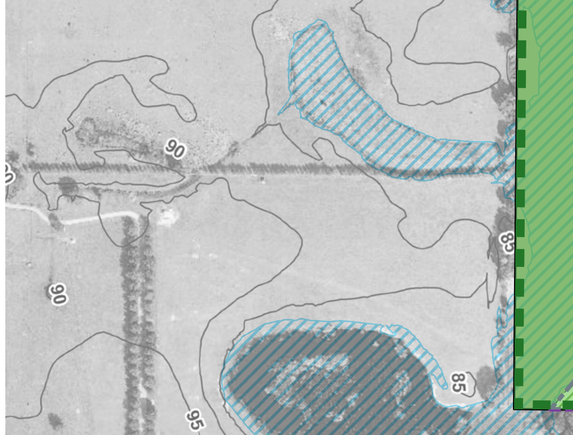
1. Specific number of units to be developed in each phase will be determined at Subdivision Plan stage, not to exceed 499 units in total for the project.

Phase 3

Phase 2

Phase 1

LOCATION MAP



LEGEND

- Public Recreation
- Pedestrian Paths
- Non-Residential
- End-cap Parallel Parking
- Multimodal Trail

FLOOD ZONE

- A
- AE

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MISSION RISE • **PHASING PLAN**

- Town of Howey Hills, FL
- August 25, 2023
- # 22003786
- Turnstone Group / ASF TAP FL I LLC.

0 300′ 600′

SCALE: 1" = 300'

The plan is conceptual in nature. Final densities, layout, development parameters, calculations, and site conditions may change upon further development of the Preliminary and/or Master Site Plan, and upon evaluation of topographic survey, water management and existing historic and specimen trees to remain.

PARKS & TRAILS PROGRAM

TRAIL HEAD SITE

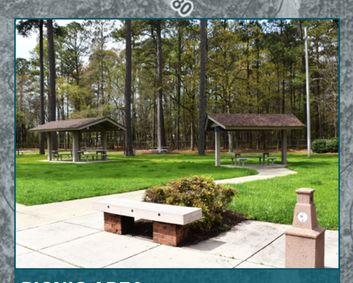
MULTIMODAL TRAIL

WETLAND ENGAGEMENT

BIKE MAINTENANCE STATION

COOLING STATION

WATER STATION



PICNIC AREA

GATHERING AREAS

Cabana / Pool Amenity

Regional Park with benches, picnic tables, cooling stations, bike maintenance stations, pet stations, exercise stations, flex fields and/or gathering areas.

NUMBER 2 RD

Pond

Wetland

Future Hillside Groves Multimodal Trail

SILVERWOOD LN

Neighborhood Park with benches, picnic tables, exercise stations, flex fields, gathering areas, tot lot, and/or dog park.

Pond

Pond

Wetland

Wetland

Pond

Pond

Regional Park with benches, picnic tables, cooling stations, bike maintenance stations, pet stations, exercise stations, flex fields and/or gathering areas.

Wetland

Pond

Pond

Neighborhood Park with benches, picnic tables, exercise stations, flex fields, gathering areas, tot lot, and/or dog park.

Wetland

REVELS RD

Pond

Pond

Trail Head Site

Cabana / Pool Amenity

Trail Head Site Access Road

Pond

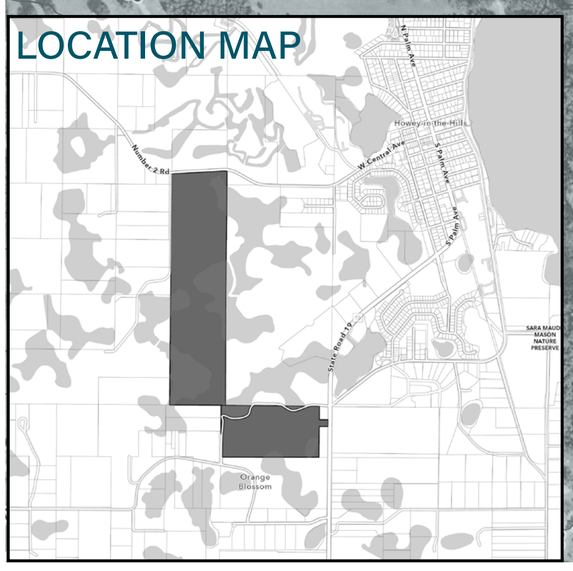
Wetland

Wetland

S PALM AVE

Regional Park with benches, picnic tables, cooling stations, bike maintenance stations, pet stations, exercise stations, flex fields and/or gathering areas.

LOCATION MAP



LEGEND

- Pedestrian Paths
- Multimodal Trail
- Trail Head Site (Civic)
- Amenity/Pocket Parks
- Regional Park System
- Stormwater
- Wetlands
- Mis. Open Space

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MISSION RISE • PARKS, TRAILS & OPEN SPACE PLAN

Town of Howey Hills, FL

August 25, 2023

22003786

Turnstone Group / ASF TAP FL I LLC.

0 300’ 600’

SCALE: 1” = 300’

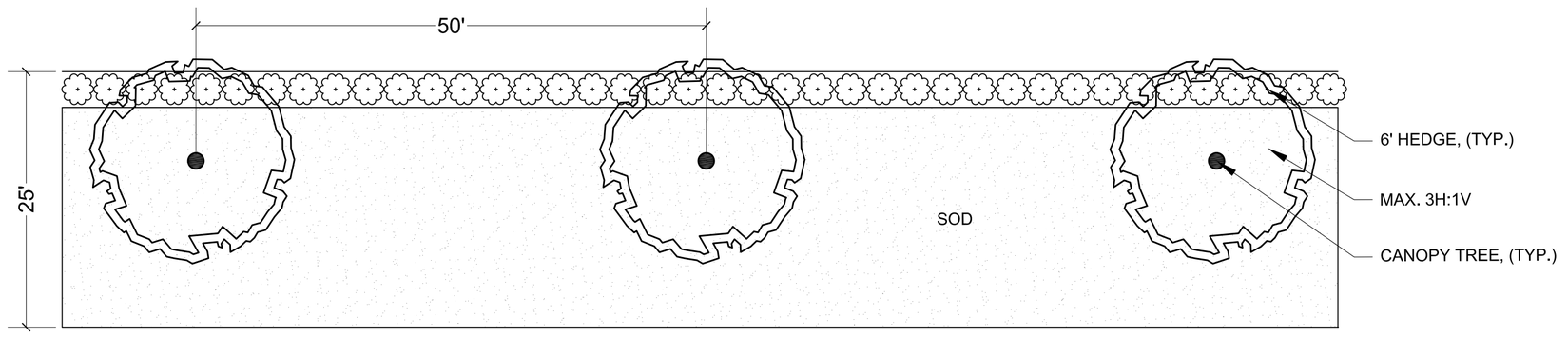
The plan is conceptual in nature. Final densities, layout, development parameters, calculations, and site conditions may change upon further development of the Preliminary and/or Master Site Plan, and upon evaluation of topographic survey, water management and existing historic and specimen trees to remain.

RESIDENTIAL BUFFERS

25’ LANDSCAPE BUFFER, TYPICAL

A landscaped berm with a total depth of at least 25 feet and no steeper than 3H:1V. The berm shall be at least three feet (3’) in height and the berm together with the landscaping, shall comprise a continuous screen of at least 5 and one half feet (5.5’) at time of planting and six feet (6’) within one year of planting. Canopy trees shall also be planted every 50 feet along the berm.

For single family subdivisions, these buffers shall be on common property and dedicated to the homeowners’ association for ownership and maintenance responsibilities.

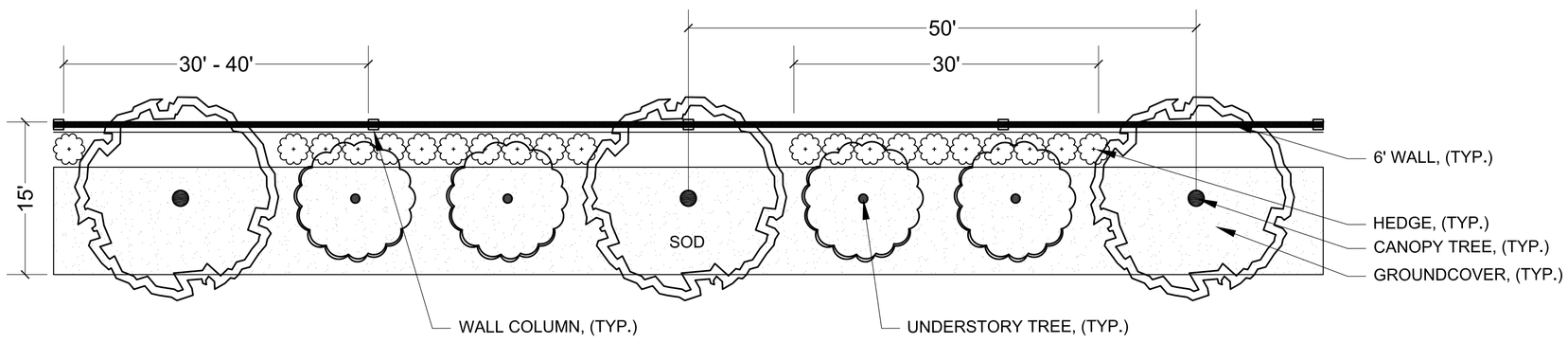


15’ LANDSCAPE BUFFER, TYPICAL

A landscaped wall buffer with a minimum depth of 15 feet. The wall shall maintain a height of six feet (6’) from grade on highest side and all walls shall have a decorative exterior (no exposed block). Acceptable materials for wall faces are brick, stucco or stone or a combination of those materials. Wall columns shall have a maximum spacing of thirty feet (30’) on walls up to two hundred feet (200’) in length and forty feet (40’) on walls more than two hundred feet (200’) in length. Wall columns may extend up to two feet (2’) above the height of the wall.

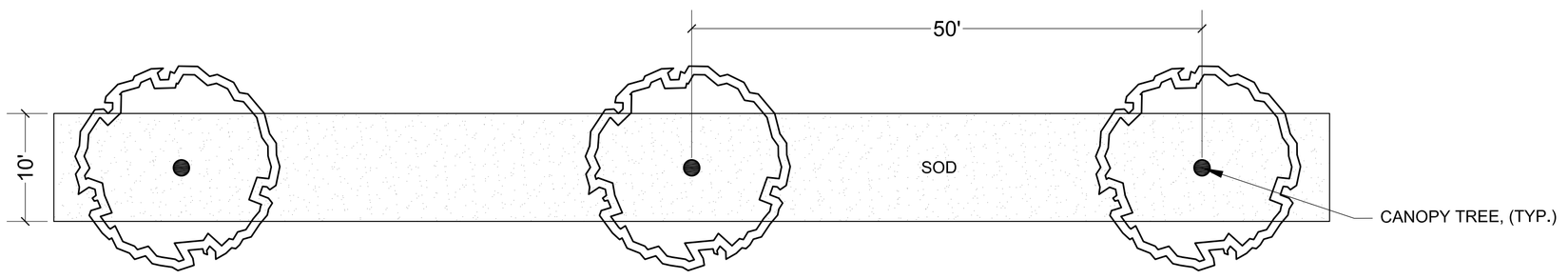
Within each fifty-foot (50’) increment along the wall, two (2) canopy trees, two (2) understory trees, and 30 linear feet of shrubs shall be planted. The trees shall not be closer than five feet (5’) to a walk or wall. The shrubs shall be at least 30” in height at time of planting.

For single family subdivisions, these buffers shall be on common property and dedicated to the homeowners’ association for ownership and maintenance responsibilities.



10’ LANDSCAPE BUFFER, TYPICAL

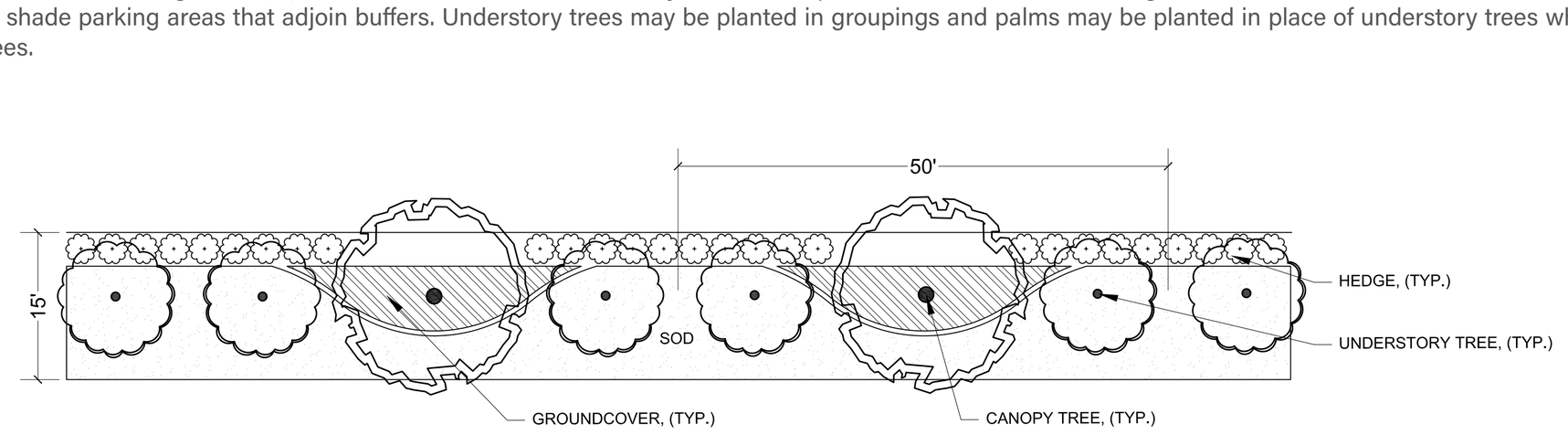
Ten-foot-wide (10’) landscaped buffer with trees spaced no more than 50 feet on center.



NON-RESIDENTIAL BUFFERS

15’ LANDSCAPE BUFFER, TYPICAL

The landscaped buffer shall contain at least one (1) canopy tree, two understory trees and 30 linear feet of shrubs and ground cover for each 50 linear feet of buffer. Canopy tress shall be located no less than five feet (5’) and no more than eight feet (8’) from sidewalks and other walkways in order to provide shade while minimizing conflicts between tree roots and sidewalks. Similarly, canopy trees shall be used to shade parking areas that adjoin buffers. Understory trees may be planted in groupings and palms may be planted in place of understory trees when clustered in groupings of three or more trees.



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MISSION RISE • **BUFFER TYPICALS**

Town of Howey Hills, FL

August 25, 2023

22003786

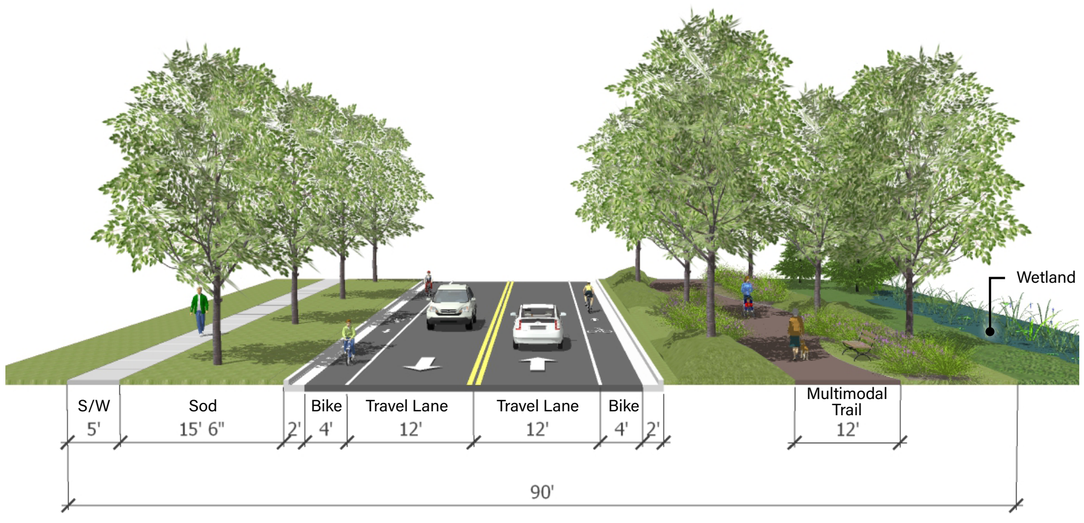
Turnstone Group / ASF TAP FL I LLC.

0 10’ 20’

SCALE: 1” = 10’

The plan is conceptual in nature. Final densities, layout, development parameters, calculations, and site conditions may change upon further development of the Preliminary and/or Master Site Plan, and upon evaluation of topographic survey, water management and existing historic and specimen trees to remain.

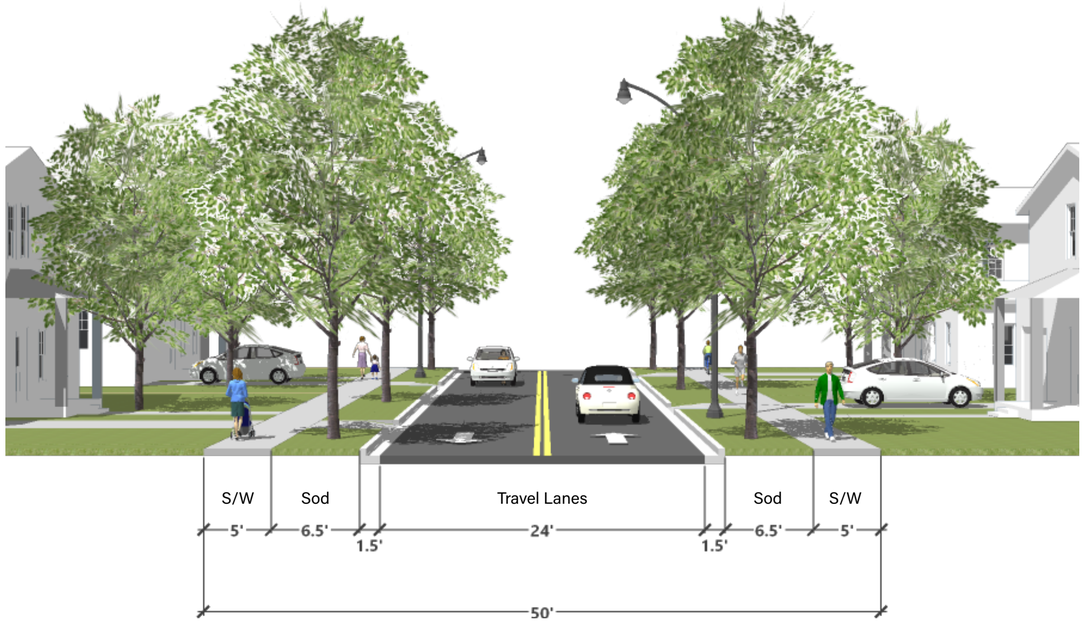
SPINE ROAD
90′ ROW WITH BIKE LANE & 12′ MULTIMODAL TRAIL



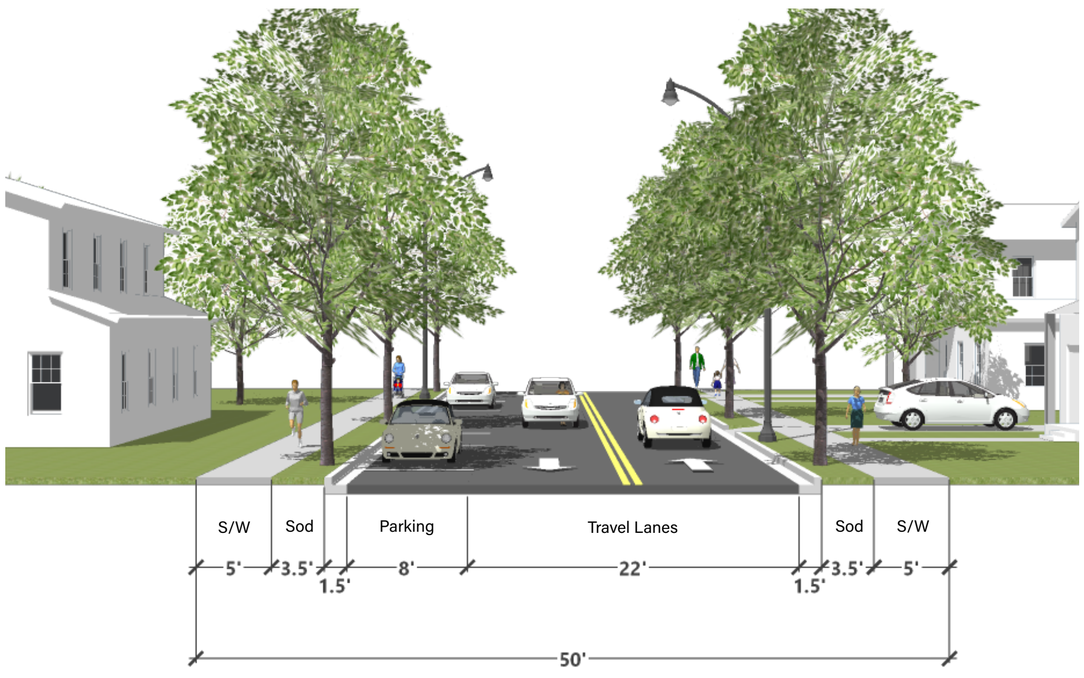
NOTE:

Multimodal Trail is intended to meander in and out of the proposed ROW. Final location may vary based on grading, utilities & final engineering.

NEIGHBORHOOD ROAD
OPTION 1 - 50′ ROW

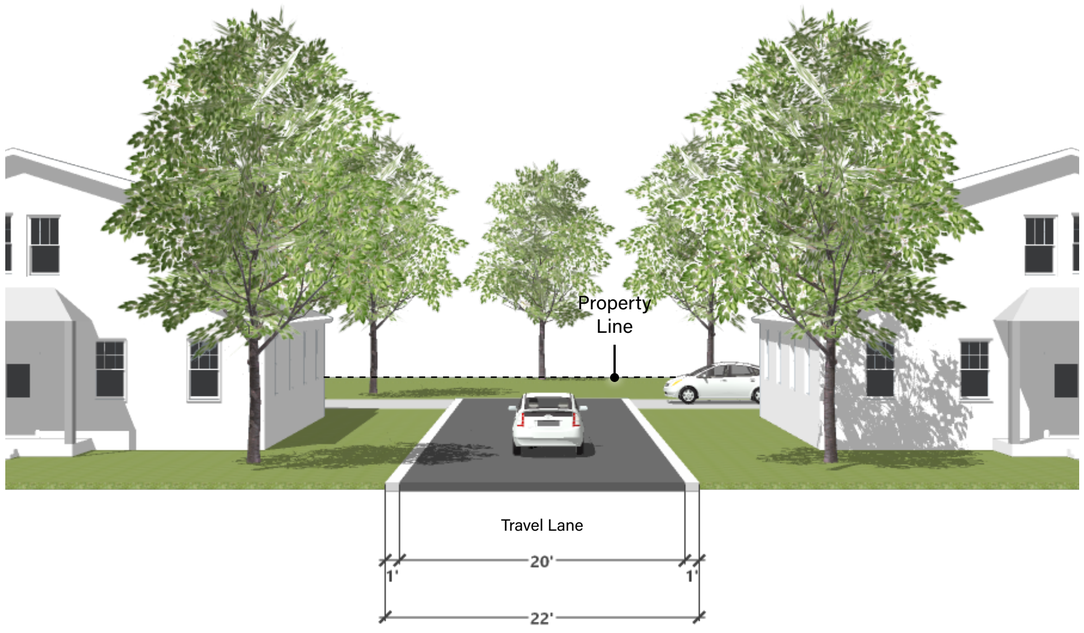


OPTION 2 - 50′ ROW WITH PARKING ON ONE SIDE

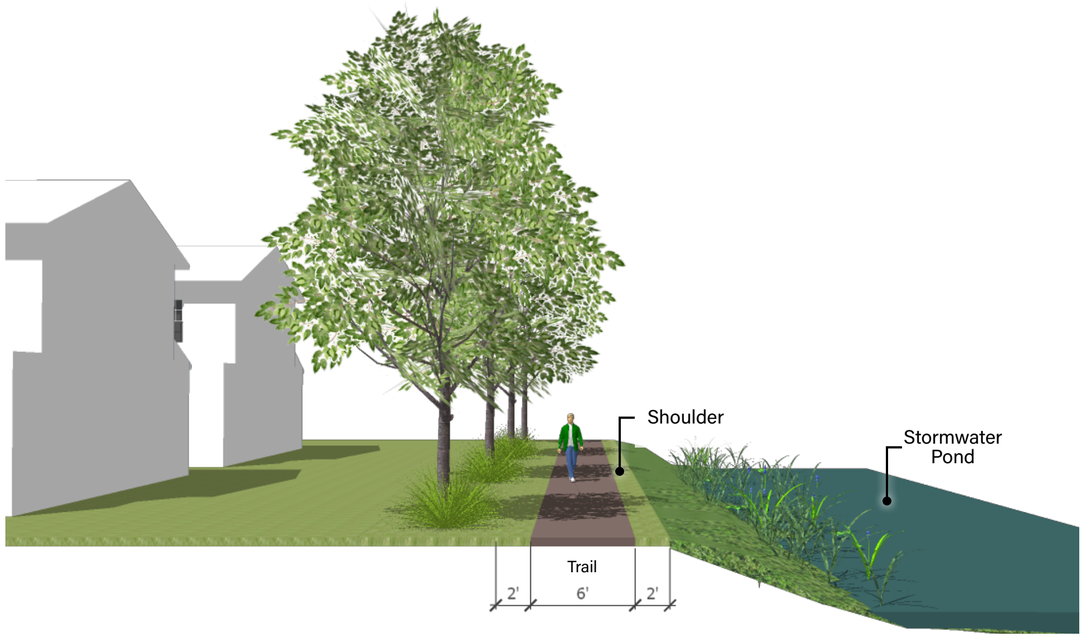


ALLEY ROAD
OPTION 1 - PARALLEL 22′ ROW

OPTION 2 - PAIRED 22′ ROW



PEDESTRIAN PATH
6′ TRAIL



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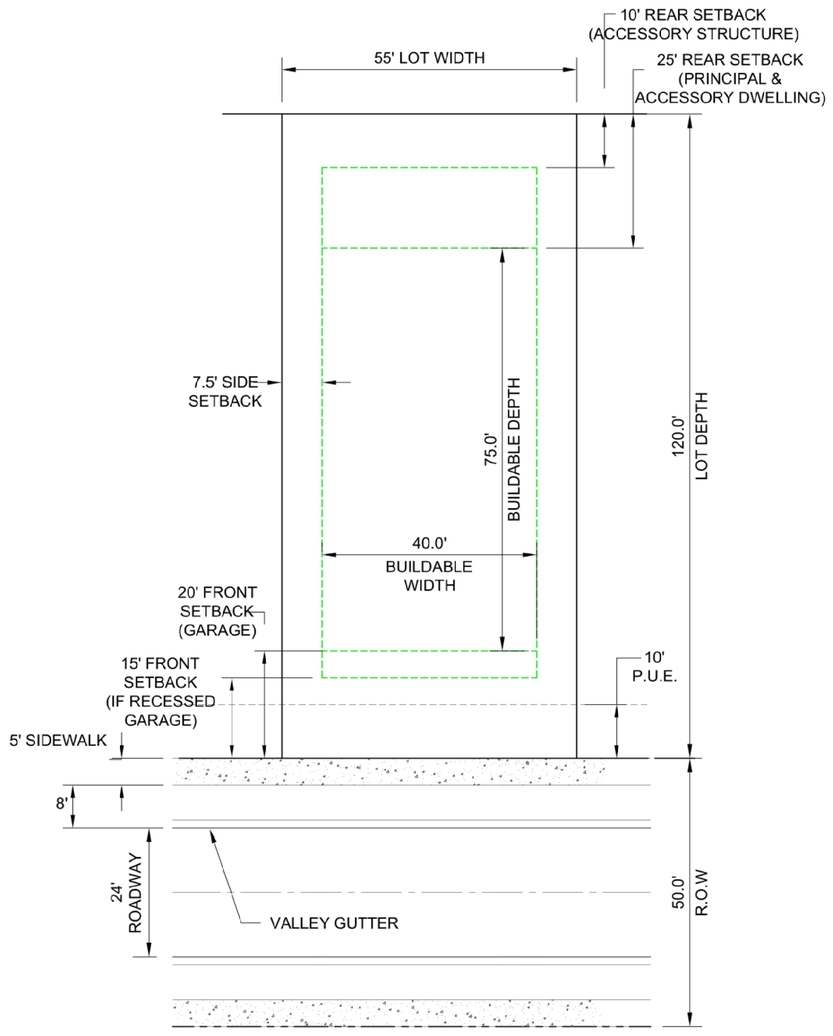
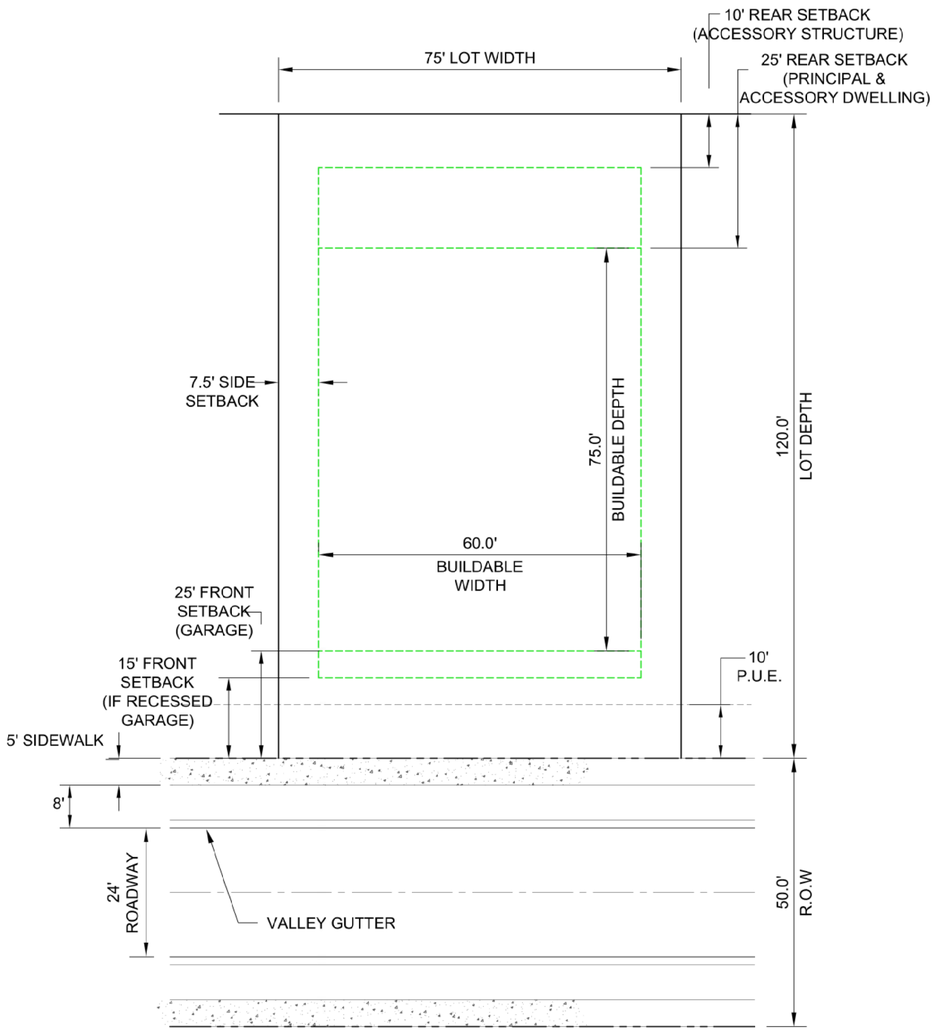
MISSION RISE • **STREET CROSS SECTIONS**

Town of Howey Hills, FL
August 25, 2023
22003786
Turnstone Group / ASF TAP FL I LLC.

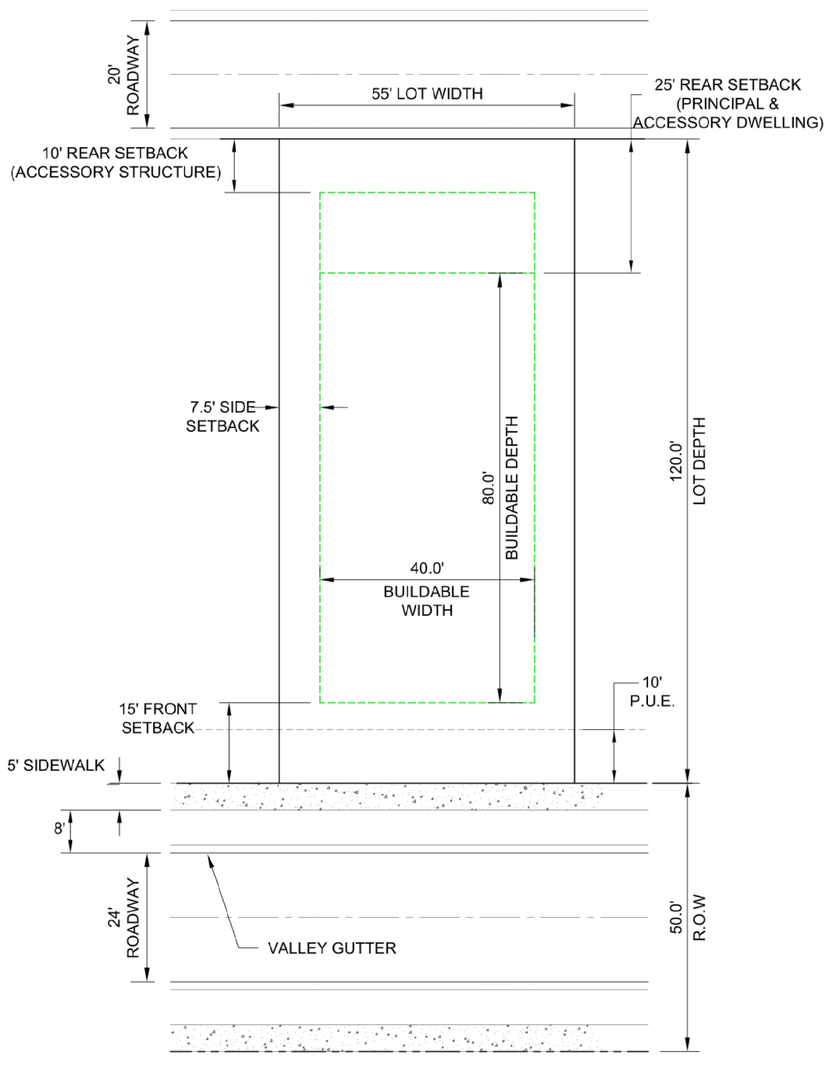
55′ LOT
FRONT LOAD GARAGE



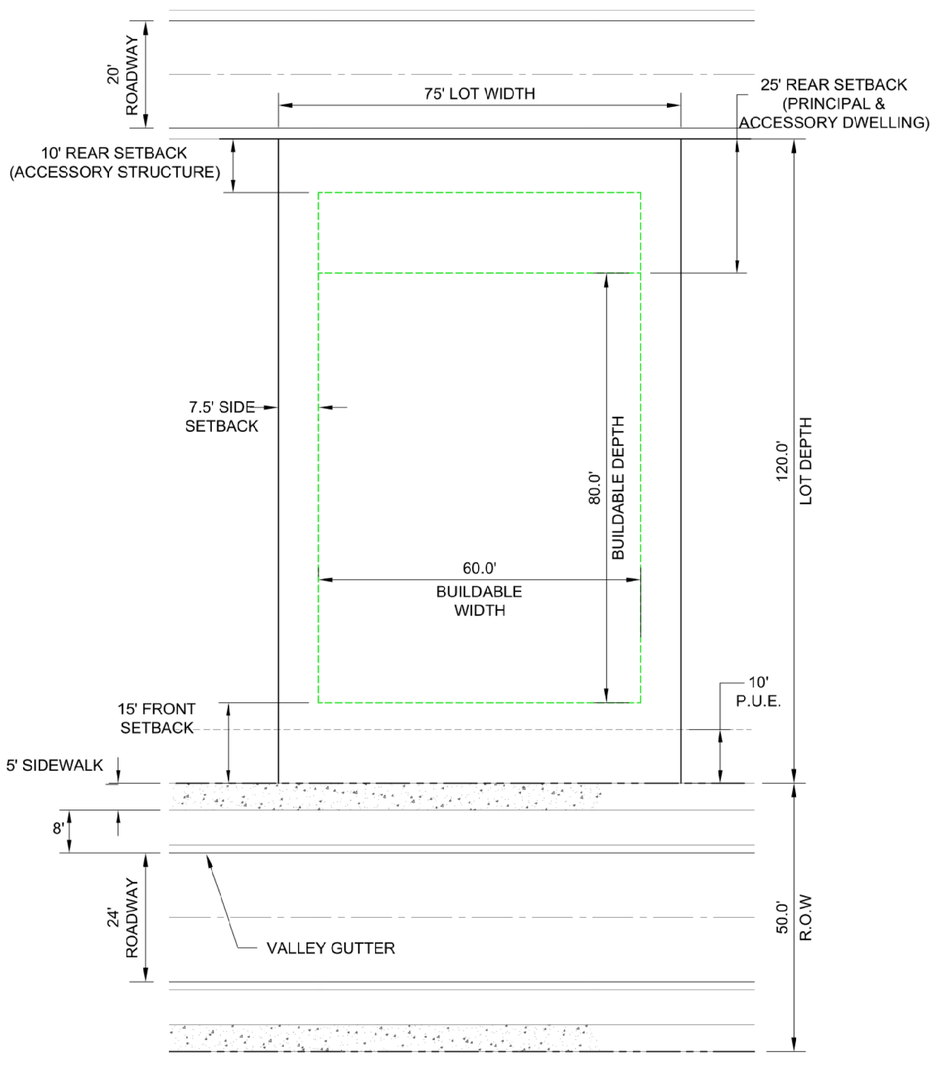
75′ LOT
FRONT LOAD GARAGE



55′ LOT
REAR LOAD GARAGE



75′ LOT
REAR LOAD GARAGE



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MISSION RISE • **LOT FIT**

Town of Howey Hills, FL

August 25, 2023

22003786

Turnstone Group / ASF TAP FL I LLC.

0 20' 40'

SCALE: 1" = 20'

The plan is conceptual in nature. Final densities, layout, development parameters, calculations, and site conditions may change upon further development of the Preliminary and/or Master Site Plan, and upon evaluation of topographic survey, water management and existing historic and specimen trees to remain.

This instrument prepared by and should be returned to:
Thomas J. Wilkes
GrayRobinson
301 East Pine Street, Suite 1400
Orlando, Florida 32801

MISSION RISE PUD
DEVELOPMENT AGREEMENT

This **MISSION RISE PUD DEVELOPMENT AGREEMENT** ("Agreement") is made as of the _____ day of _____, 2023 ("Effective Date"), between the **Town of Howey in the Hills**, Florida, a Florida municipal corporation (the "Town"), and **ASF TAP FL I, LLC,** a Delaware limited liability company (the "Owner").

RECITALS

A. The Owner owns approximately 243 acres of property more particularly described in Attachment A to this Agreement ("the Property").

B. The Property is within the corporate limits of the Town. The Town has assigned the Property a future-land-use designation of Village Mixed Use and has zoned the Property for PUD - Planned Unit Development.

C. The Owner intends to develop and use the Property as a mixed-use planned development consisting of single-family residential, civic and public uses more specifically set forth herein ("the Project"), to be known as the "Mission Rise PUD."

D. The Town and Owner enter into this Agreement to set forth the terms and conditions of approval negotiated between them for the development and use of the Property as the Mission Rise PUD.

NOW, THEREFORE, the Town and the Owner agree as follows:

Section 1. Land development and uses. Development and use of the Property is subject to the following conditions, requirements, restrictions, and terms:

(a) **General**. Development of the Project and use of the Property shall be governed by this Agreement, the Town's Comprehensive Plan, the Town's Land Development Code ("LDC") and Code of Ordinances ("Town Code"), and all other applicable state laws and regulations and Town ordinances and rules. Where in conflict, the terms of this Agreement shall supersede and prevail over the LDC and Town Code, but only to the extent of the conflict.

In the Conceptual Land Use Plan for the Project the term "conceptual" means the location of land uses on the site, including areas for residential development, open space, stormwater management, parks, and roads in relation to the site area and other uses on the site. Subsequent plan development may refine the details based on detailed engineering design. "Conceptual" does not mean or contemplate the modification of proposed housing types or the relocation of land uses and roads other than minor adjustments dictated by engineering needs and best practices.

Unless otherwise noted, the definition of terms in this Agreement shall be the same as the definitions set forth in the LDC.

(b) **Phasing**. The Project will be developed in multiple phases, as shown on the Conceptual Land Use Plan. Each phase must be designed and built to operate independently with all necessary public services and utilities infrastructure, including roads, multimodal trails and master stormwater systems, consistent with Conceptual Land Use Plan. Revisions to the phasing schedule shall be considered as minor amendments to this Agreement, which may be approved by Town Council with no formal amendment to this Agreement required.

(c) **Purpose**. The purpose of the Mission Rise PUD is to:

1. Create an attractive and high-quality single-family housing development compatible with the scale and character of existing residential development and land uses in the Town;
2. Develop a residential area that is safe, comfortable and attractive for and to pedestrians;
3. Create a community with direct visual and physical access to open land, with a strong community identity, and with amenities in the form of community open space;
4. Provide a network of open space for future homeowners; and
5. Provide a variety of lot sizes and housing choices for diverse age and income groups and residential preferences.

(d) **Land uses**. The Conceptual Land Use Plan for the Project is contained in Attachment B and is an integral part of the approval of the Project. Elements in the Concept Plan include single-family detached homes, civic uses, multimodal trails and approximately 65.4 acres of open space.

(e) **Development standards**.

Setbacks
The setbacks for single family residential lots shall be as shown on the Conceptual Land Use Plan for the Project.

Lot Size
A range of lot sizes shall be provided in order to create variety and offer opportunity for different income households. Minimum lot size will be 55' x 120'. The Project may consist of up to 592 total single-family residential detached lots of 55' x 120' and 75' x 120'.

Dwelling Size

The minimum dwelling size for all single-family residences shall be 1,400 square feet of heated/air-conditioned space under roof plus a two-car garage with a minimum of 400 square feet. Maximum dwelling size shall be 4,600 square feet of heated/air-conditioned space under roof.

Lot Width
The minimum lot width at building line shall be 55 feet with a minimum street frontage of 30 feet.

Lot Coverage
Lots shall have a maximum lot coverage of 60% based on the proposed setbacks shown on the Conceptual Land Use Plan for the Project .

Height of Structures
No residential structure may exceed 35 feet in height

Building Design
Building design shall be in accordance with the Architectural Requirements of the Town's LDC and will comply specifically with the design requirements of LDC Sections 4.06.02 and 4.06.03.

The following principles seek to promote a high-quality development that will create a sense of place and community through the development of the site.

- Housing styles, shapes and materials shall meet the Towns Land Development Regulations.
- The different housing types shall be integrated architecturally in order to give the development a harmonious appearance.
- The creation of visual richness shall be considered when choosing materials and details. Local characteristics are encouraged.
- Side entrances for garages are encouraged.
- A variety of roof heights, pitches and materials will be encouraged.
- Landscaping shall be incorporated into the overall design as a means of linking the development areas with the open spaces.
- Each exterior wall for a single-family home must be a minimum of two materials and a minimum of two colors. Primary facades must have one base color and a complementary wall material may be used to meet the second color requirement.
- Block face restrictions may be reduced to 300 linear feet. The same house model may not be used more than three times within a single block face. For purposes of this requirement, a different house model is a different floor plan, not the same floor plan flipped in a different direction and not the same floor plan with a different exterior treatment.

(f) **Wetlands**. Impacts to wetlands, if any, and wetland buffering shall be subject to the St. Johns River Water Management District regulations.

(g) **Potable water, wastewater, and reclaimed water**. For potable water and wastewater service, well and septic systems are not allowed. The Project must be connected to and

served by the Town's potable-water and wastewater systems prior to a certificate of occupancy being issued for a structure in the Project (except temporary construction uses).

Except as may be set forth otherwise in this Agreement, the Owner must install all on-site potable-water, wastewater, and reclaimed-water infrastructure and connect to central water and wastewater systems, and to the Town's reclaimed-water system when available at the Property boundary, all at no cost to the Town. The Owner must pay potable-water, wastewater, and reclaimed-water capital and connection charges, impact fees, and other Town rates, fees, and charges, either applicable currently or in the future.

1. *Potable Water*. The Town will provide potable water, and may in the future provide reclaimed water, to the Project in accordance with its applicable ordinances, resolutions, operating regulations, policies and procedures. The Town will provide potable water to the Property in sufficient quantities for development of the Project as contemplated herein, subject to the limitations and requirements of permits issued to the Town from time to time by the St. John's River Water Management District in connection with water consumption.

The Owner shall construct, at no expense to the Town, all off-site potable-water-system facilities, lines, pumps, valves, control structures, and appurtenances (other than water-treatment plants) necessary to serve the Project. The construction and route of off-site lines and other structures shall be done according to engineering plans prepared by the Owner and approved by the Town Manager. Potable water shall not be used for irrigation.

2. *Wastewater*. The Town will provide wastewater-collection and transmission service to the Project, transmitting Project wastewater to the Central Lake Community Development District ("CDD") or another wastewater utility service provider with available capacity to treat and dispose the Project's wastewater ("Wastewater Utility"). The Owner must obtain from the CDD or Wastewater Utility a contract right for the Project to receive treatment and disposal of its wastewater at such provider's treatment and disposal facilities.

The Owner shall construct, at no expense to the Town, all off-site wastewater-system facilities, lines, lift stations, pumps, valves, control structures, and appurtenances (other than wastewater-treatment plants and disposal facilities) necessary to serve the Project. The construction and route of off-site lines, lift stations, pumps, and other structures shall be done according to engineering plans prepared by the Owner and approved by the Town Manager.

3. *Town Option to Oversize Water and Wastewater Lines*. Within 270 days of the effective date of the Owner's contract right to receive wastewater-treatment and –disposal service, as referenced above, the Town may elect to oversize the off-site lines, pumps, improvements, or other facilities or appurtenances for the Town's water or wastewater system, or for both. If the Town elects to oversize one or both systems, it must inform the Owners in writing of the specifications for the oversizing(s) within the 270-day period. The Town shall reimburse the Owner for the difference in the increase in cost of design, materials and construction to oversize the improvements based on plans and cost estimates provided by the Owner to the Town and approved by the Town Manager, which approval shall not be unreasonably withheld, conditioned or delayed. The Town shall reimburse the Owners for the difference in the costs within 60 days following (i) completion of the improvements and (ii) receipt by the Town of documentation

reasonably demonstrating that the Owner has completed the work and has incurred the costs attributable to the over-sizing, all in keeping with the plans and cost estimate previously approved by the Town Manager.

4. *Permit-Induced Costs, Restrictions, Requirements, and Risks.* Under state and federal laws and regulations, the Town may provide its potable-water and wastewater services to the Property and the Owner and its successors only if the Town first has been issued certain required permits. The Owner acknowledges that the permits are inevitably conditioned with requirements and restrictions that typically impose costs and risks. The Owner further acknowledges that, for the Town to operate its potable-water and wastewater systems in an orderly, dependable, and cost-effective manner, the Town must have the ability legally to spread the costs and risks among customers and property owners benefiting from the services. The Owner acknowledges, therefore, that (i) from time to time the Town may impose rates, fees, and charges and may issue potable-water system and wastewater-system regulations and policies that impose restrictions and requirements on its customers and benefiting property owners, such as the Owner and it successors, and (ii) so long as the Owner or successors are required to pay only their fair share for such rates, fees, and charges, then the imposition of such rates, fees, and charges and the issuance of such system regulations are not prohibited by or otherwise a breach of this Agreement.

5. *Reclaimed Water*. The Owner must install reclaimed water lines as required by the Town's Code of Ordinances, and shall obtain reclaimed-water service for the Project when the Town constructs reclaimed-water lines to the Project's boundaries. Until such time as the Town supplies reclaimed water, the Owner and its successors shall use the reclaimed water lines to irrigate properties within the Project boundaries, but only with stormwater from on-site stormwater-retention ponds or with sources other than potable water as may be approved by the Town and St. John's River Water Management District. Except for installation of reclaimed lines at the time of development as noted above, connection to reclaimed water after the development of the Project may not result in additional costs to the Owner or developer.

(h) **Solid Waste**. Solid Waste collection shall be pursuant to Town regulations.

(i) **Drainage**. The maintenance, repair, and replacement of the drainage system shall be the responsibility of the homeowners association(s).

(j) **Transportation**

Street and Sidewalks

There must be ingress and egress points to Revels Road, County Number Two Road and Orange Blossom Road at final buildout of the Project in the approximate location shown on the Conceptual Land Use Plan. The access at County Road Number Two must be a full intersection subject to review and approval by Lake County. Future access connections at the western and eastern boundaries of the property will also be provided, as shown on the Conceptual Land Use Plan, subject to further coordination with the Town on specific location of interconnections of the street network and the Owner obtaining legal access to the adjacent parcels without imposition of any fees or costs, other than customary fees and costs the Owner incurs in negotiating such access with the owners of adjacent parcels.

Revels Road and the Spine Road must have a minimum 90-foot right-of-way, curb and gutter, and a minimum 24-foot-wide pavement with minimum 12-foot travel lanes. All other internal neighborhood roads must have a minimum 50-foot right-of-way, curb and gutter, and a minimum 24-foot-wide pavement with minimum 12-foot travel lanes, which may be reduced to 11-foot travel lanes when adjacent to on-street parking. All alley roads must have a minimum 22-foot right-of-way, curb and gutter, and a minimum 20-foot-wide pavement. Provision must be made in the rights-of-way for underground utilities.

The Project must have a connected street system that serves vehicles, pedestrians and bicycles and that connects to recreation facilities and adjacent residential/community areas. Revels Road, the Spine Road and all neighborhood roads within the Project must be public, dedicated to and maintained by the Town. No streets in the Project may be gated or otherwise restricted or obstructed by the Owner, by a homeowners' or property owners' association, or by any other person or entity.

All portions of the development must be accessible by a direct, convenient, attractive, safe, and comfortable system of pedestrian facilities. The development must provide appropriate pedestrian amenities. A multimodal trail with minimum width of twelve feet must be constructed within each phase of the Project consistent with Conceptual Land Use Plan and the Town's bicycle/pedestrian plan. The multimodal trail and all sidewalks within rights-of-way must be dedicated to and maintained by the Town.

Transportation Concurrency and Proportionate Fair Share Mitigation

The Project must undergo concurrency review. The Owner must complete and submit for review prior to final development order a traffic-impact analysis.

If the results of the traffic-impact analysis require any mitigation for traffic generation, the Town and the Owner will work together and with any other applicable jurisdiction as required by applicable law to address such mitigation requirements through Owner's funding of its proportionate fair share of traffic improvements. Payment of the Owner's fair share must be made in pro-rata amounts upon the issuance of each building permit.

(k) **Schools**. The Project must apply for concurrency review at Lake County Public Schools. The school district has a specific application process. The Project must be shown to have appropriate school concurrency before building permits are issued.

(l) **Landscaping Requirements**. All landscaping and buffer requirements shall be in accordance with the LDC and as illustrated on the Conceptual Land Use Plan with the exception of the following:

1. All buffer, street, and canopy trees planted at the Project will be a minimum of a 2" caliper;
2. the Owner shall require homebuilders to plant at least one canopy tree for each single-family lot of at least 3" DBH; and
3. the developer will replace the equivalent of 30% of total tree-inches removed.

All trees planted at the Project shall adhere to the current guidelines established by the Florida Grades and Standards for nursery-grown trees and must be Florida grade #1 or better.

Developer must install street trees along the roadway where common areas abuts the road as required by the LDC.

(m) **Tree Protection**. Under no circumstances may any tree, regardless of size or species, be removed from any designated wetland or conservation easement. Trees proposed to be maintained on -site must comply with LDC requirements. No construction activity, equipment or material is permitted inside a tree protection barrier.

(n) **Lighting**. Decorative street lighting (Sanibel fixture, a Duke Energy standard fixture) must be installed (i) at every intersection, (ii) at the end of each cul-de-sac, and (iii) at intervals of 300 feet or as approved otherwise by the Town Manager. Street lighting must be installed by the Owner. All lighting must be directional, shielded lighting designed to minimize light pollution. All lighting must be maintained by the HOA.

(o) **Utilities**. All utilities must be underground.

(p) **Signage**. Entrance signs and informational signage may be located in buffers, setbacks/and or signage easements as approved by the Planning and Zoning Board. The Owner shall present a sign plan for review and approval by the Planning and Zoning Board with the final site plan for each phase of the Project. The Town Council has approved use by the Owner and/or builder(s) of vertical marketing flags, also known as feather banners, with the following stipulations:

1. Feather banners must be placed no less than 200 feet apart.
2. A maximum of 10 feather banners, in total.
3. Feather banners cannot be placed within the right of way.
4. Feather banners cannot be located offsite of PUD property.
5. Feather banners cannot exceed 12 feet in height.
6. Feather banners must be replaced or removed if they become faded, torn, or tattered.
7. Feather banners must be removed when 90% of the homes in the development have received building permit approval.

Billboards and pole signs are prohibited. Unless defined differently in the LDC, a pole sign is a permanent sign supported by at least one upright pole, pylon, or post secured to the ground, with the bottom of the sign face four feet or higher above the finished grade. All additional signage not previously approved must be in compliance with the requirements in the LDC.

(q) **Maintenance of Common Areas**. Maintenance of all common areas within the Project is the responsibility of the homeowners' association(s) for the affected subdivision.

(r) **Prohibited Uses**. No manufactured or modular homes are allowed.

Section 2. Amendments. Any amendments to the Conceptual Land Use Plan that occur after the effective date of this Agreement shall take effect only if and when approved by the Town

Council or Town staff as applicable. Major amendments shall include items such as changes to the location of individual land uses; any increase in the total number of residential units; or relocation of roads and routes for pedestrian and bicycle facilities. Major amendments shall be approved by the Town Council in the manner required by law or otherwise as determined by Town Council, which may include public notice(s) and hearing(s). Minor amendments shall include items such as minor adjustments of roads, trails and pedestrian ways based on more detailed site-specific data; modifications to the phasing schedule; adjustments to utility locations based on more detailed engineering data; or adjustments to parks and open space based on more detailed subdivision design. Minor amendments may be approved by the Town Manager without referral to the Planning and Zoning Board or Town Council. Whether a proposed amendment is major or minor will be determined by the Town Manager. Minor amendments to the Conceptual Land Use Plan shall automatically be incorporated into this Agreement and shall modify or replace the Conceptual Land Use Plan in Attachment B to the extent of such amendment to the Conceptual Land Use Plan, without the necessity for an amendment to this Agreement.

Section 3. **Notices**. All notices or payments required to be made hereunder shall be made at the following addresses:

To Town:	Sean O'Keefe, Town Manager Town of Howey-in-the-Hills 101 North Palm Avenue Howey-in-the-Hills, FL 34737 sokeefe@howey.org
With copies to:	John Brock, CMC, Town Clerk Town of Howey-in-the-Hills 101 North Palm Avenue Howey-in-the-Hills, FL 34737 jbrock@howey.org Thomas J. Wilkes, Town Attorney Gray Robinson, P.A. 301 East Pine Street, Suite 1400 Orlando, FL 32801 twilkes@gray-robinson.com
To Owner:	Jason Humm 1170 Peachtree Street NE, Suite 1150 Atlanta, GA 30309 jhumm@turnstonegroup.com
With copies to:	Rhea Lopes, AICP RVI Planning + Landscape Architecture 10150 Highland Manor Dr, Suite 450 Tampa FL 33610 rlopes@rviplanning.com

Mike Ripley
Land Advisors
399 Carolina Ave, Suite 200
Winter Park, Florida 32789
MRipley@landadvisors.com

Jonathan Huels
Lowndes
215 North Eola Drive
Orlando, Florida 32801
Jonathan.huels@lowndes-law.com

Section 4. Severability. If any provision or portion of this Agreement is declared by a court of competent jurisdiction to be void, unconstitutional, or unenforceable, then all remaining provisions and portions of this Agreement shall remain in full force and effect. To that end, this Agreement is declared to be severable.

Section 5. Binding Effect. This Agreement runs with the land and is binding on and enforceable by and against the parties hereto and all their successors in interest. However, no Lot Owner shall have the obligations imposed on the Owner as the developer of the Project under this Agreement. For that purpose, a "Lot Owner" means an end-user of a lot created within the Property with a completed residential unit constructed thereon, for which a certificate of occupancy has been issued. Each party covenants to each other party that this Agreement is a legal, valid, and binding agreement, enforceable against the party in accordance with its terms.

Section 6. Negotiated Agreement. The land uses, densities, intensities, and other conditions of approval of the Project have been negotiated and agreed to by the Owner and the Town. The Conceptual Land Use Plan and this Agreement together constitute an agreement between the parties with the knowledge that the Owner's successors in title, the future homeowners, and other landowners within the Property, as well as the Town and its affected property owners and residents, all will rely justifiably on the agreed-to land uses, densities, and intensities authorized hereby for the Property. For that reason, the Owner and the Owner's successors in interest have the contract right to develop the PUD with the uses, densities, and intensities approved by the Town, subject to the restrictions and requirements in the conditions of approval set forth in this Agreement. Neither the Owner (and its successors in interest) nor the Town shall have the right in the future to rezone or downzone the property, or otherwise alter the uses, densities and intensities, or delete, waive or amend any conditions of approval except through an amendment to the Plan negotiated and approved by the Town Council and the owner of the then-subject parcel. This section shall survive the termination and expiration of this Agreement.

Section 7. Homeowners' Association(s).

(a) **Association Responsibilities**. A homeowner's association and/or a property owner's association ("HOA") must be created by the Owner. Membership in the HOA shall be mandatory for all property owners within the Project. The HOA shall be responsible for

maintaining all parks, open-space and buffer areas, streetlights, stormwater-management areas and drainage systems, entrance features, boundary walls and/or fences, access tracts, and landscaped tracts within the Project.

(b) **Requirement for Plat Recording**. Before a plat may be recorded for the Property and the Project, the Owner shall furnish to the Town copies of the pertinent documents for the homeowners' or property owners' association or associations, plus the covenants, conditions and restrictions for the Property, setting forth the requirements and restrictions enumerated in this section 7 and other applicable parts of this Agreement.

Section 8. Additional Requirements.

(a) **Letter of credit**. Construction and dedication to the Town of the public facilities and improvements required under this Agreement for each phase of the Project will be a condition precedent to final plat approval for such phase. In lieu of construction and dedication, however, the Owner may post a letter of credit or performance bond with the Town for 125% of the cost of such improvements not completed at the time of plat, in which event this condition precedent to final plat approval will be deemed satisfied.

(b) **Conveyances to the Town**. Property dedicated or otherwise conveyed to the Town under this Agreement must be free and clear of encumbrances unless and to the extent an encumbrance is acceptable to the Town. Encumbrances discovered after the Effective Date of this Agreement must be removed or resolved by the Owner or its successor developer prior to dedication or conveyance of the affected property to the Town.

(c) **Changes in status of land**. Until completion of the Project, the Owner or its successor developer of the Project has a continuing duty (i) to disclose promptly to the Town all changes in ownership, encumbrances, and other matters of record affecting the Property and (ii) to resolve all issues, title or otherwise, that may be identified by the Town as a result of such changes. Failure to disclose such changes or to resolve resulting issues may result in delay in issuance of development permits.

(d) **Developer representations binding**. If at Town Council hearings on the approval of the Project the Owner makes a written or oral promise or representation, and if the promise or representation was relied upon by Town Council in approving the Project or otherwise acted to induce or materially influence Town Council in its vote to approve the Project, the promise or representation is a condition of approval of the Project. The promise or representation is binding on the Owner and its successors and enforceable by the Town against the Owner and its successors as if set forth fully in this Agreement.

Section 9. Governing Law. This Agreement shall be governed by the laws of the State of Florida. Venue for any judicial proceeding pertaining to the Agreement shall be in the Fifth Judicial Circuit of Florida, in Lake County, Florida.

Section 10. Effective Date; Termination.

(a) **Effective Date**. This Agreement shall take effect upon the Effective Date above, or on the date when it has been executed by both the Town Council and the Owner, whichever is later.

(b) **Termination**. This Agreement shall remain in effect unless and until terminated under one of the following conditions:

1. If as of the second anniversary of the Effective Date of this Agreement an Owner's contract right to treatment and disposal services by the CDD, as required under Section 1(g)1 above, has not taken effect, the Town may terminate this Agreement by vote of its Town Council. The vote must occur no later than (i) the third anniversary of the Effective Date or (ii) the CDD Contract Date, whichever occurs first. The "CDD Contract Date" is the date on which the Owner's contract right to treatment and disposal services by the CDD takes effect.

2. If as of the second anniversary of the CDD Contract Date no building permit for a residential unit in the Project has been issued, the Town may terminate this Agreement by vote of its Town Council. The vote must occur no later than (i) the third anniversary of the CDD Contract Date or (ii) the date a building permit is issued, whichever occurs first.

3. If as of the fifth anniversary of the CDD Contract Date no building permit for a residential unit in the second phase of the Project has been issued, the Town may terminate this Agreement by vote of its Town Council, but only as it applies to development of the second phase. The vote must occur no later than (i) the sixth anniversary of the CDD Contract Date or (ii) the date a building permit is issued for a residential unit in the second phase, whichever occurs first. Termination of the Agreement for this reason will not act to preclude the Owner or its successor from completing the first phase of the Project.

4. If as of the tenth anniversary of the CDD Contract Date no building permit for a residential unit in the third phase of the Project has been issued, the Town may terminate this Agreement by vote of its Town Council, but only as it applies to development of the third phase. The vote must occur no later than (i) the eleventh anniversary of the CDD Contract Date or (ii) the date a building permit is issued for a residential unit in the third phase, whichever occurs first. Termination of the Agreement for this reason will not act to preclude the Owner or its successor from completing the first or second phase of the Project.

Termination of this Agreement, in whole or in part, under this section shall be without prejudice to the Owner or its successor to apply for Town approvals to undertake or continue development of the Property in accordance with the circumstances and land-development regulations then existing in the Town.

Section 11. Recording. This Agreement shall be recorded by the Town, at the Owner's expense, in the Public Records of Lake County, Florida, and shall constitute a covenant running with the land.

Section 12. Authority. This Agreement is entered into by the Town under the home-rule powers granted to it by the Florida constitution (including specifically Article VIII, Section 2(b) thereof), the home-rule powers granted municipalities by statute (including specifically Chapter

166, Florida Statutes), and the Town's Charter. This Agreement does not constitute a "development agreement" under the Florida Local Government Development Agreement Act.

Section 13. Entire Agreement. This Agreement constitutes the entire agreement of the parties with respect to the transactions contemplated herein. It supersedes all prior understandings or agreements between the parties relating to the Property and the Project. No amendment to the terms of this Agreement shall be effective unless in writing signed by all parties hereto. Amendments to this Agreement will take effect and will be binding against the Town only if approved by a vote of the Town Council.

Section 14. Waiver. The failure of a party hereto to insist upon or enforce any right or privilege granted hereunder shall not constitute or operate as a waiver thereof and nothing shall constitute a waiver of any party's right to insist upon strict compliance with the terms hereof. However, any party may waive in writing the benefit of any provision or condition for its benefit which is contained herein. Waivers of material provisions of either this Agreement or the Town's LDC will be valid and binding against the Town only if approved by a vote of the Town Council.

[Signature pages follow]

IN WITNESS WHEREOF, the parties are signing this Agreement as of the Effective Date or, if later, the date by which both parties have fully executed this Agreement.

TOWN OF HOWEY IN THE HILLS, FLORIDA

By: its Town Council

By: _____
Hon. Martha McFarlane, Mayor

Attest:

By: _____
John Brock, CMC, Town Clerk

Approved as to form and legality:
(for the use and reliance of the Town only)

_____
Thomas J. Wilkes, Town Attorney

STATE OF FLORIDA
COUNTY OF LAKE

The foregoing instrument was executed, sworn to and acknowledged before me this ____ day of _____, 2023, by Martha McFarlane, as Mayor of the Town of Howey in the Hills.

(SEAL)

_____
Signature of Notary

_____
Name of Notary Public
(Typed, Printed or stamped)

Personally Known ____ OR Produced Identification ____
Type of Identification Produced:

IN WITNESS WHEREOF, the parties have executed this instrument as of the day and year first above written.

Signed, sealed and delivered
in the presence of:

"WITNESSES"

_____
Printed Name: _____

_____
Printed Name: _____

"OWNER"

ASF TAP FL I, LLC, a Delaware limited liability company

By: _____
Printed Name: _____
As its: _____

STATE OF FLORIDA
COUNTY OF _____

The foregoing instrument was executed, sworn to and acknowledged before me by means of ____ physical presence or _____ online notarization, this _____ day of _____, 2022, by _____, as _____ of **ASF TAP FL I, LLC.**, a Delaware limited liability company, on its behalf.

(SEAL)

_____
Signature of Notary Public

_____
Name of Notary Public
(Typed, Printed or stamped)

Personally Known ____ ***OR*** Produced Identification _____
(Type of Identification Produced)

Attachment A
To
MISSION RISE PUD DEVELOPMENT AGREEMENT

LEGAL DESCRIPTION

Attachment B
To
MISSION RISE PUD DEVELOPMENT AGREEMENT

CONCEPTUAL LAND USE PLAN